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ANNUAL REPORT

OF THE

COMMISSIONER OF PATENTS

FOR

THE YEAR 1890.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1891.

ANNUAL REPORT
OF THE
COMMISSIONER OF PATENTS
TO CONGRESS,
FOR THE YEAR ENDING DECEMBER 31, 1890.

Laid before the Senate by the Vice-President February 3, 1891, referred to the Committee on Patents, and ordered to be printed.

DEPARTMENT OF THE INTERIOR,

UNITED STATES PATENT OFFICE,

Washington, D. C., January 31, 1891.

*To the Senate and House of Representatives of the
United States of America in Congress assembled:*

It is provided by section 494 of the Revised Statutes that—

the Commissioner of Patents shall lay before Congress in the month of January, annually, a report giving a detailed statement of all moneys received for patents, for copies of records or drawings, or from any other source whatever; a detailed statement of all expenditures for contingent and miscellaneous expenses; a list of all patents which were granted during the preceding year, designating under proper heads the subjects of such patents; an alphabetical list of all the patentees, with their places of residence; a list of all patents which have been extended during the year, and such other information of the condition of the Patent Office as may be useful to Congress or the public.

The history of this bureau for the past year has been, so far as relates to the amount of business successfully transacted, one of continued growth and prosperity. The aggregate number of applications for patents and for the registration of trade-marks and labels has exceeded that of any preceding year in the history of the Patent Office, and the number of patents granted and trade-marks and labels registered has correspondingly increased. This increase is due partly to the natural growth and expansion of the industries of the country, accompanied by a corresponding increase in the products of inventive genius, and is partly due to special efforts on the part of the entire force employed to prevent the work from falling into arrears, as a result of added burdens thereby imposed. At the same time the conditions under which the work has been done have remained practically the same. There has been no increase in room whatever, and no substantial increase in the force employed.

THE NEED OF ADDITIONAL ROOM.

The first need of the Patent Office is additional room. During the past year the utmost effort and ingenuity have been rendered necessary in order to find space even for copies of patents as they have been produced from week to week. The income from these copies during the past year has been upward of \$60,000. They have been stored in various parts of the building, upon different floors, in different halls and corridors, and only by the most careful systemization is a searcher, however experienced, enabled to know in what hall, corridor, or cranny he must look in order to find a particular patent. During the past year the Office has been compelled to appropriate to other uses one of the rooms occupied by inventors and

their attorneys for the purpose of inspecting their pending applications, and the consequence is that the remaining room, the floor-space of which is only 23 feet square, is overcrowded and every day occupied by more than thirty persons at a time. An effort is now being made to restore to the inventors and their attorneys the use of the other room formerly occupied by them. This will be accomplished, if at all, by walling off a space in the already-crowded model halls. The Scientific Library, containing about 60,000 volumes, is crowded into disconnected rooms and galleries, appropriated from one of the model halls. The rooms of the examining divisions are overcrowded; some of them are unhealthy at best; others are rendered unhealthy by their crowded condition. From all parts of the Office arises a daily demand for additional room, which cannot be supplied, but which must, nevertheless, be supplied if the Patent Office is to do its work at all. It is nearly ten years since my predecessors directed attention to this imperative need. Not a report has been made to Congress during the intervening decade which did not dwell upon the necessity for additional room, and with increasing emphasis from year to year. Meanwhile the amount of work annually transacted has nearly doubled; meanwhile the records and copies have vastly accumulated; meanwhile the number of rooms and the extent of space occupied by the Patent Office have become gradually less and less. During the last six years the patrons of the Patent Office have paid into the Treasury over a million of dollars in excess of every expenditure of every kind, either by the Patent Office or by the Department of the Interior for the benefit of the Patent Office. The net income of the present year is greater than it was during the year before. Last year it was greater than during the prior year. The inventors of the country cannot understand why their money is taken while adequate facilities are denied. The policy of making the Patent Office a permanent source of revenue—a bureau of taxation for the general purposes of the Government—has never been advocated, so far as I know, by any one. The time will soon arrive when it will be impossible to discharge the functions of this bureau unless some provision is made to afford relief for its overcrowded condition; and I earnestly request that that relief may be afforded.

OFFICIAL GAZETTE.

The present edition of the OFFICIAL GAZETTE consists of 7,000 copies, of which 2,953 copies are furnished

to subscribers, at five dollars per year, and 3,576 copies are distributed to public libraries, members of Congress, and public officers in accordance with the provisions of the act of Congress of May 18, 1872. Of the remaining copies a large portion are sold and delivered in miscellaneous numbers, the special orders for miscellaneous copies aggregating nearly 5,000 during the last calendar year. The necessity of reproducing the numbers from January to July after the first edition of 6,500 copies had been exhausted increased the expense of photolithographing the OFFICIAL GAZETTE over that of the previous year; but the contract for the fiscal year ending June 30, 1891, entitles the Office to 7,000 copies at the same aggregate price at which 6,500 copies had been furnished heretofore. The contract was made with the Norris Peters Company, which succeeded to the photolithographic business built up and managed by Norris Peters.

Unquestionably this work should be done by the Patent Office; but with the present room, force, and facilities it is impracticable.

The acts appropriating money for the photolithographing have for several years contained the following provision:

Said photolithographing or otherwise producing plates and copies referred to in this and the preceding paragraph to be done under the supervision of the Commissioner of Patents and in the city of Washington, if it can there be done at reasonable rates.

Under this provision in the last appropriation act the photolithographic work of the Patent Office for the present fiscal year has been contracted for in accordance with the practice which has prevailed for many years. The prices are the same as paid during previous years, excepting that, as I have stated, 7,000 copies are furnished at the same aggregate price which has heretofore been paid for 6,500 copies. This reduction was believed to be due the Office as a reasonable recognition of the advantage derived by the contractors from the corresponding increase of work in preparing drawings for patents and copies. No claim has been made to me, or to my knowledge by any competitor or expert, that the rates paid are not reasonable within the meaning and intention of the act making provision therefor.

INCREASE IN FORCE.

The work of the Office requires a larger number of examiners, with a slight increase also in the clerical force. The examining divisions at present are thirty in number. This has been the case since July 1, 1888. The number of applications filed during the year 1888 was 35,797. During the year 1889 the number was 40,575; for 1890 the number of applications, exclusive of applications for the registration of trade-marks and labels, was 41,048. Not only has the number of applications increased one-seventh since the number of examining divisions was fixed at thirty, but new classes of invented articles have come into being, thereby creating a necessity for new examining divisions. In my opinion there should be at the very least two new examining divisions, with a complete corps of examiners, clerks, copyists, and laborers for such divisions, and such a further increase of force as would be rendered necessary in order to conduct the augmented operations of the other divisions of the Office.

I am deeply impressed with the fact that the pace

kept up in the Patent Office now, as in all recent years, is inconsistent with that high degree of care in conducting examinations which the patent system calls for. The Government undertakes on behalf of the inventor not only to give him a patent, if his improvement is new and useful, but to conduct a painstaking examination in order to ascertain what the fact may be in that regard. The search for anticipatory devices and processes should continue until a moral certainty is reached that further search would be unavailing. A patent should evidence such painstaking care in examination that upon its face it should warrant a preliminary injunction, and there can be but little doubt that the continuance of the "American" examination system depends upon so conducting examinations into the novelty of alleged inventions as to make the seal of the Patent Office create a powerful if not a conclusive presumption that the patent is valid. I am aware that after the most exhaustive examination there would still remain a margin of possibility that an anticipatory device or description has been overlooked. No examiner can possibly be aware of all that has been done which has not found a place in patents or in printed publications; but in this age of printing and publicity there is no reason why an examination should not be made sufficiently careful and exhaustive to afford a practical guarantee that the patent granted is a valid patent. I look forward to the day when a sufficient portion of the surplus funds paid into the Patent Office will be withheld from the Treasury to afford the amplest facilities for prosecuting the work of examination until the presumption that the field of research is exhausted shall amount to a moral certainty.

LABORATORY.

The Patent Office still awaits a suitable laboratory. The great number of applications for patents relating to metallurgical, chemical, and electrical inventions renders it necessary that a completely-equipped laboratory should be at the services of Examiners and applicants for patents. At present the Examiners are compelled to determine questions by the exercise of judgment, based upon general information, which everywhere else than in the Patent Office are determined by practical test and experiment. Complaints are not infrequent that applications are unduly delayed when the only method of adequately determining whether a patent should be granted—to wit, the method of experiment and test—is not available. An inconsiderable sum would secure the necessary apparatus and appliances. What is needed is suitable room or rooms, and the merest fragment of the surplus fund which the inventors have paid into the Office during the current year would be sufficient to equip a laboratory that would meet every requirement.

SALARIES.

The salary of the Assistant Commissioner of Patents is \$3,000 per annum. It is less than that of either of the Deputy Commissioners of Pensions or than that of the Assistant Commissioner of the General Land Office. His duties require the highest legal and scientific ability. Owing to the large number of appeals which come before the head of the Office in a judicial

capacity, the Assistant Commissioner is daily called upon to hear and decide important controversies, involving large pecuniary interests, as well as to assist in all the processes of executive management. In the absence of the Commissioner the entire management of the bureau devolves upon him. No officer of the Government discharging such important duties is so inadequately paid.

The salaries of the Examiners-in-Chief and principal Examiners are also inadequate. The present salary of the principal Examiners was fixed in 1848. A sum which was compensatory forty years ago is not a just equivalent for the same services now. Aside from the fact that all salaries have been increased on account of the increased cost of living, the present Examiners of the Patent Office do far more and better work than formerly. Owing to the wonderful progress in every art, they are required to be much more learned; they are experts in their several departments of scientific thought and acquisition; they are learned in the law, and as heads of divisions they are called upon to exercise administrative ability. What I have said of principal Examiners is true in proportionate degree of the assistant Examiners. The Patent Office cannot expect to maintain an examining corps of the highest order of ability unless the salaries are made commensurate with the services rendered.

In this bureau there are seventy-six employés classed as copyists receiving a salary of \$720 per annum. Prior to the last appropriation act these copyists were known as "skilled laborers," although their duties were for the most part clerical. In June, 1888, these skilled laborers were brought within the classified service by Executive order. Since that time all vacancies in such grade have been filled through the Civil Service Commission in the methods prescribed by law. At the present time one-half of the seventy-six copyists have passed the civil service examination. As the matter now stands there is a disposition on the part of the copyists receiving this salary to seek transfers to other bureaus in which for the same services the compensation is \$900 per annum. Not only is this the case, but difficulty is experienced in filling vacancies when they occur in this grade. A considerable number of persons who have been certified for appointment during the past year have declined to accept their appointments, upon the ground that the compensation is not sufficient and is less than that paid for equivalent services in other bureaus. When it is remembered that these copyists are engaged in transcribing patents, assignments, and other important documents and papers, and that a high degree of care and intelligence is required therefor, it will be conceded that this discrimination against the employés of the Patent Office is unjust in principle and unwise as matter of policy.

MODEL ROOM.

The model halls contain about 154,000 models. The number added during the past year was 535. The present practice of the Office dispenses with models excepting when required by the Commissioner. The work of repairing models, which was abruptly suspended during 1886, has been resumed in earnest during the past year, and is now progressing as rapidly

as the available force for that purpose will permit. There are 25,000 models which require repairing to a greater or less extent. The models contained in the model halls are not only of great interest to the public at large, who evince their interest by visiting them daily in large numbers, but they are of almost inestimable advantage to the examiners by enabling them to conduct their investigations expeditiously. A considerable per cent. of the applications for patents received from day to day are found to be met and anticipated by the contents of the model cases. I regard it as nothing less than a public calamity that the Office was several years ago compelled to suspend the reception of models, excepting in special instances, for want of space in which to store and exhibit them. A public gallery containing specimens of all the inventions of the past ten years would furnish an exhibition of industrial growth of marvelous interest and value, and would be of vast assistance to inventors and examiners in enabling them to readily ascertain whether inventions for which protection is sought have been patented previously. I venture to express the hope that the time will come when models will again be required in connection with all applications, and that when that time arrives an effort will also be put forth to obtain specimens of the more important inventions which have been patented during the intervening period.

SCIENTIFIC LIBRARY.

A vast amount of work has been done in the Scientific Library during the past year in arranging and indexing books and patents. This library at present consists of 59,856 volumes. During the past year 1,713 volumes have been added. During the calendar year the amount expended for books and for the transportation of publications (\$2,670.86) has been distributed as follows:

Periodicals and foreign serials	\$659 99
Law books and non-technical books for use of examiners.	299 30
Technical works	1,004 22
Law books for law library.....	108 70
Transportation	598 65

The exchange of the OFFICIAL GAZETTE authorized by Congress in the last appropriation act has resulted in a practical increase in the fund available for the purchase of books.

ABRIDGMENT OF PATENTS.

In my report to Congress for the calendar year 1889 I dwelt at some length upon the desirability of a classified abridgment of patents, and called attention to the fact that such work was begun about ten years ago, Congress having made an appropriation of \$10,000 for that purpose. No subsequent appropriation was made, however, so that nothing further has been done, and no money has been available for the publication of the digest even as far as completed. In the report referred to the advantages of such a digest were summed up in the following language:

In the first place, it would be of the greatest value in facilitating the labors of this Office by lessening the work of examiners, and, excepting as the number of applications should greatly increase in the future, would permit of a decrease in the number of the force. It would also be the means of preventing the granting of worthless patents through the failure to discover apt references—a failure which must result in a certain small percentage of cases so long as Examiners are deprived of the most efficient means of conducting their investigations. It would enable the patrons of the Office to prepare their cases intelligently, and by enabling them to readily ascertain the state of the art pertaining

to a supposed new invention would, in a vast number of cases, cause the withholding of applications which now take up the time of Examiners to no useful purpose. It would to a very great extent transfer the work of examination from the Patent Office to the offices of attorneys, and thus afford great relief in the present overburdened condition of the examining divisions. It would enable patentees and manufacturers to definitely understand the extent of their rights as secured by patents, and by disseminating knowledge of what has been done in all the various arts would prevent inventors from traversing the ground occupied by predecessors in their noble pursuit. It would be remunerative to the Government, because such a digest would meet with a ready sale among inventors and manufacturers, and the entire cost of its preparation and publication would soon be reimbursed. And finally it is indispensable if the United States would keep pace with other nations in whatever pertains to the development of its patent system.

LEGISLATION.

Date of Letters Patent, Section 4885.

Section 4885 of the Revised Statutes provides that—every patent shall bear date as of a day not later than six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent; and if the final fee is not paid within that period the patent shall be withheld.

This section of the law permits an inventor to wait six months after the allowance of his application and after notice sent before paying the final fee, and yet it requires that the patent shall bear date not later than six months from the sending of such notice of allowance. The Office can do nothing toward preparing the Letters Patent until the final fee is paid, after which payment between two and three weeks must elapse before the patent is fully prepared for signature. In order to issue the patent upon the day of its date it has long been the practice of the Office to send a second notice of allowance in cases where the fee is paid so late that the patent cannot be ready for signature within the six months prescribed by law. This practice seems to be the only practicable one; but it certainly does not commend the statute which makes it necessary. I recommend such an alteration of this section as will remedy the defect which has been pointed out. One remedy which has been suggested is to require all patents to be granted as of the day on which the application was allowed and the patentee notified, six months being allowed for the payment of the final fee, as heretofore. Another method is to provide that the patent shall bear date not later than seven months after the allowance of the application and the sending of the notice. The latter method, which is perhaps the preferable one, would permit the Office to begin preparing the patent for signature after the payment of the final fee in all cases, and would also afford sufficient time to permit the issues for a given week to bear date the same day, in accordance with the present practice. It would probably be unwise to shorten the period for paying the final fee, as the present practice of making payment within six months has become so firmly established that numerous forfeitures would inevitably result from requiring the fee to be paid during a shorter period.

Trade-Marks.

Trade-marks are now registered when used in foreign commerce and in commerce with the Indian tribes. The question of registering trade-marks used in interstate commerce is presented in a new aspect by the adhesion of the United States to the International Union for the Protection of Industrial Property. Article 6 of the convention acceded to provides:

Every trade or commercial mark regularly deposited in the

country of origin shall be admitted to deposit and so protected in all the other countries of the union.

Additional legislation would seem to be required to enable citizens of the United States to lay a basis for registration abroad by first effecting domestic registration when their trade-marks are used in commerce among the States, and also to enable aliens to secure by appropriate Congressional action the benefit of the treaty stipulations. Again, section 7 of the act to reduce the revenue and equalize duties on imports and for other purposes, approved October 1, 1890, provides that no article of imported merchandise which shall copy or simulate the name or trade-mark of any domestic manufacture or manufacturer shall be admitted to entry at any custom-house of the United States, and that any domestic manufacturer who has adopted trade-marks may require his name and residence and a description of his trade-marks to be recorded in books which shall be kept for that purpose in the Department of the Treasury, &c. No provision seems to be made in said act for determining whether the manufacturer registering the mark is the owner thereof, or for determining to which one of two or more persons or parties claiming the same mark the title thereof belongs. Under the law as it now exists the Commissioner of Patents is clothed with power to settle such questions *prima facie* for all the purposes of registration, and suitable statutory provisions and rules prescribed by departmental authority regulate the methods of procedure to be followed. It would seem to be the part of wisdom to extend the authority of the Commissioner so as to include the registration of trade-marks used in interstate commerce in some manner consistent with the law already providing for registration in the Treasury Department. Such legislation would enable the Department of the Treasury to have the benefit of the investigations and conclusions of the Patent Office, and would at the same time provide a single system of registration and a single place for registration for all trade-marks employed in connection with any department of commerce within the regulative power of Congress.

Charge for Certified Copies of Printed Matter.

There should be a law authorizing the Commissioner to furnish certified copies of printed patents at the same rates as are now charged for uncertified printed copies of patents, with the additional fee prescribed by law for the official certificate. As the law now stands ten cents per hundred words must be charged for a certified copy of a printed patent, although the same patent could be furnished unaccompanied by a certificate for the maximum price of twenty-five cents no matter how many words it might contain.

Limitation of Patents.

Attention is again respectfully directed to the existing law which provides that patents granted for inventions which have been patented in a foreign country shall be so limited as to expire at the same time with the foreign patent. The attention of Congress has been directed to this subject in all or nearly all the reports of Commissioners of Patents in recent years. No adequate reason can be given why an American patentee should pay the penalty of having

the term of his patent shortened because he has elected to patent his invention abroad. The practical difficulties of administering the present law in this bureau are very great. It is manifestly impossible to certainly ascertain whether or not a patent has been granted in foreign countries prior to the very day on which the American patent is to issue. Again, the American inventor is often compelled to forego the benefits designed to result from the International Union for the Protection of Industrial Property by the necessity of applying for a foreign patent before his patent can be granted in due course in this country. He must apply in foreign countries within seven months from the date when he files his application in this country or he loses the benefit of the period of priority conferred upon citizens and subjects of nations which are parties to the Union; but in many cases the American patent cannot be granted until the expiration of a longer period than seven months from the date of filing the application. In such a case the patentee must consent to have his American term shortened or, as I have already stated, forego the benefits of the period of priority as against subjects of other nations which he might otherwise enjoy.

Interference Proceedings.

Section 4904 of the Revised Statutes requires that when an application is made for a patent which in the opinion of the Commissioner would interfere with any pending application, or with any unexpired patent, he shall institute proceedings to determine the question of priority of invention. The statute evidently contemplates a single proceeding, resulting in the grant of a patent to the prevailing party, unless such party has already received his patent. It not infrequently happens, however, that when the successful party is about to go out with his patent a stranger to the previous proceedings files an application, and as the law now stands a second interference is instituted with all its prolixity of procedure, thereby detaining the first applicant for still another period of controversy, and unduly postponing the time when the true inventor shall come into the enjoyment of his rights, and also the time when seventeen years later the public shall be entitled to enter into the unrestricted use and enjoyment of the new art or manufacture. I am sorry to add that it is currently believed that in some cases new parties enter the field not so much to obtain a patent for themselves as to obstruct and postpone the rights of meritorious inventors. In my opinion a law providing that a party prevailing upon the first proceeding shall be permitted to take his patent, and that subsequent applicants shall contest priority with a patentee instead of with an applicant, would be found to constitute a practical remedy for some of the incidental evils of the system as it at present exists.

Refundment of Moneys Paid by Mistake.

For many years it has been the practice of the Patent Office to refund moneys paid by actual mistake, such as a payment in excess, or when not required by law, or by neglect or misinformation on the part of the Office. This practice is based upon a rule established by the Commissioner of Patents with the approval of the Secretary of the Interior under authority conferred by section 483 of the Revised Statutes. The

amount refunded during the past year was \$13,394.45. It is found in practice that the course prescribed by the rule is the only one adapted to the transaction of the business of the Office. The fees paid, although amounting to a considerable sum in the aggregate, consist, for the most part, of very small items. Practically speaking, refundments must be made by the Commissioner of Patents, or not at all, in the great majority of instances. I am satisfied that this course of business in respect of refundments of moneys, which is found to be necessary, should stand upon a more satisfactory basis than an Office rule. I know of no reason why a statute should not be enacted directly authorizing the Commissioner to make refundments out of any moneys in his hands in all cases where payments made have been by actual mistake, such as payments in excess, or when not required by law, or by neglect or misinformation on the part of the Office. By no possibility could detriment result if such a law were enacted. Under the system of accounts now employed the accounts of the Patent Office are thoroughly examined every month by expert officials of the Treasury Department; and the Commissioner, the Chief Clerk, and the Financial Clerk are all bonded officers.

THE CONFERENCE AT MADRID.

In my last annual report I directed attention to the conference at Madrid of the members of the International Union for the Protection of Industrial Property, then about to be held in April, 1890. It was pointed out that there was reason to believe that the "period of priority" accorded to inventors for "depositing" their inventions or applications in other countries than their own was agreed upon without taking into full consideration the peculiar feature of the American patent system, which requires a careful examination after the application has been filed and before a patent is granted. At the same time I expressed the opinion that the United States should be represented at the conference by delegates learned in matters pertaining to the American law of patents and trademarks, in order that through the efforts of such delegates a change might, if possible, be effected which would make the treaty subserve the needs of American inventors seeking patents in foreign countries. As a means of accomplishing this result it was suggested that Article 4 of the final protocol might ultimately be so amended as to make the seven months' right of priority run from the date of publication of the patent first applied for instead of from the date of the application itself.

In accordance with these suggestions an act was passed authorizing the Secretary of State to appoint delegates, and Examiner F. A. Seely, of this Office, and Mr. Francis Forbes, of New York, were appointed. These delegates, acting in conjunction with the United States Minister at Madrid, represented the United States at said conference, and although well-directed efforts, prosecuted with zeal and ability, were put forth by them they were not able to bring about the result anticipated.

CENTENNIAL CELEBRATION.

The first American patent law went into effect on

the 10th day of April, 1790; the hundredth year dating from that event has therefore terminated. It is in contemplation, however, to celebrate the beginning of the second century of the patent system. The movement in the direction of such a celebration originated outside of official circles, and had its origin in the recognition of the influence, both beneficent and marvelous, which the patent system has exerted. The century ending in 1890 had seen more of material progress than many preceding centuries had witnessed. During the same period of one hundred years the American patent system had been in being, and along with other systems in other countries, most of them of more recent origin, had stimulated and protected inventions and inventors. It was impossible to overlook the coincidence or to disregard the lesson thereby suggested. It was impossible that the vast human interest which invests everything pertaining to the Patent Office should not obtain expression, and it would have excited an unbounded surprise if the opportunity afforded had not been seized upon. It is now too early to forecast and announce in detail the exercises that will take place, but the time selected is the 8th of April, 1891, and the two succeeding days. There is every reason to expect that the celebration will be worthy of the occasion and of the transcendent importance to the American people of their patent system.

BUSINESS OF THE PATENT OFFICE.

The following statements exhibit in detail the business received and transacted by the Office during the last calendar year. In general it may be stated that the total number of applications received, including mechanical applications, designs, and reissues, and excluding applications for the registration of trademarks and labels, was 41,048; that the total number of patents granted, including mechanical patents, designs, and reissues, was 26,292; that the total number of registrations was 1,719; that the total receipts were \$1,340,373.66, and that the total expenditures were \$1,099,297.74, leaving a surplus of \$241,074.92 to be turned into the Treasury of the United States, making a total balance in the Treasury to the credit of the Patent fund of \$3,872,745.24.

RECEIPTS.

Detailed statement of all moneys received for patents, for copies of records or drawings, or from any source whatever.

Applications:	
Cash received.....	\$1,152,891 54
Cash refunded.....	4,998 00
Net cash.....	1,147,893 54
Certificates of deposit.....	51,910 00
Total cash and certificates.....	1,199,803 54
Copies:	
Cash received.....	106,453 62
Cash refunded.....	4,676 64
Net cash.....	101,776 98
Certificates of deposit.....	748 50
Total cash and certificates.....	102,525 48
Recording assignments:	
Cash received.....	22,818 38
Cash refunded.....	1,230 46
Net cash.....	21,587 92
Certificates of deposit.....	250 00
Total cash and certificates.....	21,837 92

Subscription to Official Gazette:	
Cash received.....	13,467 57
Cash refunded.....	83 35
Net cash.....	13,384 22
Certificates of deposit.....	84 50
Total cash and certificates.....	13,468 72
Registration of labels:	
Cash received.....	4,993 00
Cash refunded.....	2,406 00
Net cash.....	2,587 00
Certificates of deposit.....	150 00
Total cash and certificates.....	2,737 00
Aggregates.	
Cash received.....	\$1,300,624 11
Cash refunded.....	13,394 45
Net cash.....	1,287,229 66
Certificates of deposit.....	53,143 00
Total cash and certificates.....	1,340,372 66

EXPENDITURES.

Amount expended by this Office under the several appropriations from January 1, 1890, to December 31, 1890.

Salaries.....	\$657,505 15
Official Gazette.....	61,439 20
Photolithographing.....	95,063 80
Scientific library.....	1,954 43
Transportation of publications to foreign governments.....	410 40
Total.....	816,372 98

*Approximate amount reported by the Department of the Interior as expended on account of this Office from January 1, 1890, to December 31, 1890.**

Stationery.....	\$9,368 45
Postage on foreign matter.....	1,361 20
Printing and binding.....	241,743 86
Watch force.....	16,600 00
Furniture.....	7,592 42
Carpets.....	512 17
Ice.....	550 76
Telephones.....	469 10
Washing towels.....	120 78
Sundries.....	4,606 02
Total.....	282,924 76

Aggregate amount of expenditures..... 1,099,297 74

RECEIPTS OVER EXPENDITURES.

Total receipts.....	\$1,340,372 66
Total expenditures.....	1,099,297 74

Receipts over expenditures..... 241,074 92

Statement of balance in the Treasury of the United States on account of the patent fund.

Amount to the credit of the fund January 1, 1890..	\$3,631,670 32
Amount of receipts during the year 1890.....	1,340,372 66
Total.....	4,972,042 98
Deduct expenditures for the year 1890.....	1,099,297 74
Balance January 1, 1891.....	3,872,745 24

SUMMARY OF THE BUSINESS OF THE PATENT OFFICE.

Number of applications for patents for inventions.....	39,884
Number of applications for patents for designs.....	1,046
Number of applications for reissues of patents.....	118
Total number of applications.....	41,048

*A literal compliance with the provisions of the statute requiring "a detailed statement of all expenditures for contingent and miscellaneous expenses" is not possible, for the reason that the contingent fund for the several bureaus of this Department was consolidated by the act of March 3, 1883, and hence no part of that fund is disbursed by the Patent Office, and I am furnished only with an approximate sum expended on behalf of the Patent Office.

Number of caveats filed	2,311
Number of applications for registration of trade-marks	1,087
Number of applications for registration of labels	875
Number of disclaimers filed	5
Number of appeals on the merits	1,330
Total	6,208
Total number of applications, &c., requiring investigation and action	47,356
Number of patents issued, including designs	26,208
Number of patents reissued	84
Total	26,292
Number of trade-marks registered	1,415
Number of labels registered	304
Total	1,719
Number of patents expired during the year	11,616
Number of patents withheld for non-payment of final fees	3,559

The following tables exhibit the business of the Patent Office during the year 1890:

PATENTS ISSUED.

Patents issued to citizens of the United States, with the ratio of population to each patent granted.

States and Territories.	Patents and designs.	One to every—
Alabama	103	14,689
Arizona Territory	14	4,258
Arkansas	95	11,875
California	640	1,887
Colorado	184	2,240
Connecticut	937	796
Delaware	51	3,303
District of Columbia	235	980
Florida	51	7,674
Georgia	165	11,135
Idaho	12	7,032
Illinois	2,152	1,778
Indian Territory	8	.....
Indiana	670	3,272
Iowa	437	4,375
Kansas	352	4,054
Kentucky	252	7,375
Louisiana	137	8,164
Maine	192	3,443
Maryland	297	3,509
Massachusetts	2,096	1,068
Michigan	980	2,136
Minnesota	379	3,434
Mississippi	55	23,447
Missouri	809	3,311
Montana	53	2,493
Nebraska	225	4,706
Nevada	12	3,813
New Hampshire	172	2,189
New Jersey	1,112	1,299
New Mexico Territory	16	9,599
New York	4,585	1,308
North Carolina	74	21,864
North Dakota	40	4,567
Ohio	1,762	2,084
Oklahoma Territory	4	15,458
Oregon	82	3,826
Pennsylvania	2,641	1,990
Rhode Island	273	1,265
South Carolina	75	15,348
South Dakota	59	5,573
Tennessee	180	9,819
Texas	303	7,258
Utah Territory	30	6,930
Vermont	101	3,291
Virginia	177	9,355
Washington	64	5,459
West Virginia	95	8,029
Wisconsin	634	2,660
Wyoming	8	7,588
United States Army	9	.....
United States Navy	9	.....
Total	24,103	.....

Patents granted to citizens of foreign countries.

Argentina Republic	3
Austria-Hungary	71
Belgium	18
Brazil	2
Canada	371
Chili	2
Colombia	1
Cuba	11

Denmark	8
England	721
France	178
Germany	452
Hawaii	4
India	1
Ireland	21
Italy	6
Japan	2
Mexico	14
Netherlands	6
Newfoundland	3
New South Wales	17
New Zealand	7
Norway	3
Portugal	1
Queensland	1
Roumania	2
Russia	12
Scotland	40
South Africa	1
South Australia	5
Spain	7
Sweden	32
Switzerland	56
Turkey	1
Venezuela	3
Victoria	19
West Indies	3
Total	2,105

The following tables present a comparative statement of the business of the Patent Office since the enactment of the statute of 1836 and exhibit in detail the business of the Office during the last calendar year:

Comparative statement of the business of the Office from 1837 to 1890, inclusive.

Year.	Applications.	Caveats filed.	Patents and reissues.	Cash received.	Cash expended.	Surplus.
1837 .....	.....	.....	436	\$29,289 08	\$33,506 98	.....
1838 .....	.....	.....	520	42,123 54	37,402 10	\$4,721 44
1839 .....	.....	.....	325	37,260 00	34,543 51	2,716 49
1840	735	228	473	38,056 51	39,020 67	.....
1841	847	312	495	40,413 01	52,666 87	.....
1842	761	391	517	36,505 68	31,241 48	5,264 20
1843	819	315	510	35,315 81	30,776 96	4,538 85
1844	1,045	380	495	42,509 26	36,244 73	6,264 53
1845	1,240	452	504	51,076 14	39,335 65	11,680 49
1846	1,272	448	638	50,364 16	46,158 71	4,105 45
1847	1,531	553	569	63,111 19	41,878 35	21,232 84
1848	1,628	607	652	67,576 69	58,905 84	8,670 85
1849	1,955	595	1,068	80,752 98	77,716 44	3,036 54
1850	2,193	602	993	86,927 05	80,100 95	6,816 10
1851	2,258	760	872	95,738 61	86,916 93	8,821 68
1852	2,639	996	1,019	112,056 34	95,916 91	16,739 43
1853	2,673	901	961	121,527 45	132,869 83	.....
1854	3,328	868	1,844	163,789 84	167,146 32	.....
1855	4,435	906	2,012	216,459 35	179,540 33	36,919 02
1856	4,960	1,024	2,506	192,588 02	199,931 02	.....
1857	4,771	1,010	2,896	196,132 01	211,582 09	.....
1858	5,364	934	3,695	203,716 16	193,193 74	10,522 42
1859	6,225	1,097	4,504	245,942 15	210,278 41	35,663 74
1860	7,653	1,084	4,778	256,352 59	252,820 80	3,531 79
1861	4,643	700	3,329	187,354 44	221,491 91	.....
1862	5,038	824	3,532	215,754 99	182,810 39	32,944 60
1863	6,014	787	4,184	195,538 29	189,414 14	6,179 15
1864	6,932	1,063	5,025	240,919 78	229,868 00	11,051 98
1865	10,664	1,937	6,016	348,791 84	274,199 34	74,592 50
1866	15,269	2,723	9,458	495,065 38	361,724 28	133,341 10
1867	21,276	3,597	13,026	646,551 92	639,263 32	7,318 60
1868	20,420	3,705	13,410	651,565 06	628,679 77	52,886 09
1869	19,271	3,624	13,997	693,145 81	486,430 78	206,715 03
1870	19,171	3,273	13,333	669,456 76	557,149 19	112,307 57
1871	19,472	3,366	13,056	678,716 46	560,535 08	118,181 38
1872	18,246	3,090	13,613	669,726 39	665,591 36	34,135 03
1873	20,414	3,248	12,864	703,191 77	691,178 98	12,012 79
1874	21,602	3,181	13,599	738,278 17	679,288 41	58,989 76
1875	21,638	3,094	14,837	743,453 36	721,657 71	21,795 65
1876	21,425	2,697	15,595	757,987 65	652,542 60	105,445 05
1877	20,308	2,809	14,187	732,342 85	613,152 62	119,190 23
1878	20,260	2,755	13,444	725,375 55	593,082 89	132,292 66
1879	20,059	2,620	13,213	703,931 47	529,988 97	174,292 50
1880	23,012	2,490	13,947	749,665 32	538,865 17	210,820 15
1881	26,059	2,406	16,584	853,665 89	605,173 28	248,492 61
1882	31,522	2,553	19,267	1,009,219 45	689,567 67	325,351 78
1883	35,577	2,741	22,383	1,146,240 00	675,234 86	471,005 14
1884	35,600	2,582	20,413	1,075,798 80	970,579 76	105,219 04
1885	35,717	2,552	24,233	1,188,098 15	1,024,378 85	163,710 30
1886	35,968	2,513	22,508	1,154,551 40	992,503 40	162,047 95
1887	35,613	2,622	21,477	1,144,509 60	994,472 22	150,037 38
1888	35,797	2,251	20,420	1,118,576 10	973,108 78	145,467 32
1889	40,575	2,481	24,158	1,281,728 05	1,052,955 96	228,772 09
1890	41,048	2,311	26,232	1,340,372 66	1,099,297 74	241,094 72

Statement showing the number of the first patent, Design patent, and reissued patent, and the number of the first certificate of registration of a Trade-Mark and a Label issued in each calendar year since July 28, 1836, when the present series of numbers of Letters Patent commenced, together with the total number of each issued during the year.

[The number of patents granted prior to the commencement of this series of numbering (July 28, 1836) was 9,957.]

Year.	Number of first patent and certificate issued in each calendar year.					Number of patents and certificates of registration issued during each calendar year.						
	Patents.	Designs.	Reissues.	Trade-Marks.	Labels.	Patents.	Designs.	Reissues.	Total patents.	Trade-Marks.	Labels.	Total certificates.
1836 (July 28)	1					109						
1837	110					436						
1838	546					515		6				
1839	1,061		1			404		13				
1840	1,465		20			458		10				
1841	1,923		30			490		6				
1842	2,413		36			488		13				
1843	2,901	1	49			494	14	11	519			
1844	3,395	15	60			477	12	7	496			
1845	3,872	27	67			476	17	11	504			
1846	4,348	44	78			566	59	13	638			
1847	4,914	103	91			495	60	14	569			
1848	5,409	163	105			583	46	23	652			
1849	5,992	209	128			989	49	30	1,068			
1850	6,981	258	158			884	83	26	993			
1851	7,865	341	184			757	90	25	872			
1852	8,632	431	209			890	109	20	1,019			
1853	9,512	540	229			846	86	29	961			
1854	10,358	626	258			1,759	57	28	1,844			
1855	12,117	683	286			1,891	70	51	2,012			
1856	14,008	753	337			2,316	107	83	2,506			
1857	16,324	860	420			2,686	113	97	2,896			
1858	19,010	973	517			3,467	142	126	3,695			
1859	22,477	1,075	643			4,165	108	231	4,504			
1860	26,642	1,183	874			4,363	183	232	4,778			
1861	31,005	1,366	1,106			3,040	142	147	3,329			
1862	34,045	1,508	1,253			3,221	195	116	3,532			
1863	37,266	1,703	1,369			3,781	176	227	4,184			
1864	41,047	1,879	1,594			4,638	139	248	5,025			
1865	45,685	2,018	1,844			6,099	221	296	6,616			
1866	51,784	2,239	2,140			8,874	294	290	9,458			
1867	60,658	2,533	2,430			12,301	325	400	13,026			
1868	72,959	2,858	3,390			12,544	446	420	13,410			
1869	85,503	3,304	3,250			12,957	506	534	13,997			
1870	98,460	3,810	3,784		1	12,157	737	439	13,333	121		121
1871	110,617	4,547	4,223		122	11,687	905	464	13,056	486		486
1872	122,304	5,442	4,687		608	12,200	884	529	13,613	491		491
1873	134,504	6,336	5,216		1,099	11,616	747	501	12,864	492		492
1874	146,120	7,083	5,717		1,591	12,230	886	483	13,599	559	232	791
1875	158,350	7,969	6,200		2,150	13,291	915	631	14,837	1,138	232	1,370
1876	171,641	8,884	6,831		3,288	14,172	802	621	15,595	959	472	1,431
1877	185,813	9,686	7,452		4,247	12,920	699	568	14,187	1,216	392	1,608
1878	198,733	10,385	8,920		5,463	12,345	590	509	13,444	1,455	492	1,947
1879	211,078	10,975	8,529		6,918	12,133	592	488	13,213	872	355	1,227
1880	223,211	11,567	9,017		7,790	12,926	515	506	13,947	349	203	552
1881	236,137	12,082	9,523		8,139	15,548	565	471	16,584	836	202	1,038
1882	251,685	12,647	9,904		8,973	18,135	861	271	19,267	947	304	1,251
1883	269,820	13,508	10,265		9,920	21,196	1,020	167	22,383	902	906	1,808
1884	291,016	14,528	10,432		10,822	19,147	1,150	116	20,413	1,021	513	1,534
1885	310,163	15,678	10,545		11,843	23,331	773	129	24,233	1,067	391	1,458
1886	333,494	16,451	10,677		12,910	21,797	595	116	22,508	1,029	378	1,407
1887	355,291	17,046	10,793		13,939	20,429	949	99	21,477	1,133	330	1,513
1888	375,720	17,935	10,892		15,072	19,585	835	86	20,506	1,059	327	1,386
1889	395,305	18,830	10,978		16,131	23,360	723	75	24,158	1,229	319	1,548
1890	418,665	19,553	11,053		17,360	25,322	886	84	26,292	1,415	304	1,719
1891	443,987	20,439	11,137		18,775	6,403						

Herewith accompanying this report are lists of indexes, arranged in yearly form, of all patents granted during the calendar year 1890, properly classified under subjects of invention, and alphabetical lists of all patentees, with their places of residence. No patents were extended during the year.

Very respectfully, your obedient servant,

C. E. MITCHELL,

Commissioner.

ALPHABETICAL LIST

OF

PATENTEEES FOR THE YEAR 1890.

[Patentees of Designs, Trade-Marks, and Labels, and parties who have filed Disclaimers follow this in separate indexes, but precede the Alphabetical List of Inventions.]

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Specification.	Drawing.	Volume.	Page.
Aarons, Gusta, Milwaukee, Wis. Window fire-escape.....	433,061	July 29	3171	816	52	641
Abbe, Edwin W., New Britain, Conn. Bottle-stepper.....	423,978	Mar. 25	2446	649	50	1623
Abbe, Ernst, and P. Rudolph, assignors to C. Feiss, Jena, Saxe-Weimar, Germany. Photographic objective.....	435,271	Aug. 26	2830	749	52	1332
Abbé, Max F., Soho, N. J. Pressure-regulator.....	429,591	June 10	745	179	51	1625
Abbott, Americus M. (See McClure, Frank, assignor.)						
Abbott, Benjamin J. (See Benton, Charles H., assignor.)						
Abbott, Benjamin J., Chicago, Ill. Machine for dressing car-wheels.....	443,928	Dec. 30	3728	953	53	2021
Abbott, Benjamin J., assignor of two-thirds to F. M. Atkinson and C. H. Benton, Chicago, Ill. Machine for dressing car-wheels.....	436,295	Sept. 9	1414	368 369	52	1652
Abbott, Charles W., Rumney, N. H. Mechanism for smoothing surfaces of wood.....	437,911	Oct. 7	359	104	53	70
Abbott, David S., Olean, N. Y. Sawing-machine.....	443,231	Dec. 23	2633	676	53	1801
Abbott, Edmund F. (See Nunn, Arthur C., assignor.)						
Abbott, Henry. (See Hamilton, Emery M., assignor.)						
Abbott, Henry, Newark, N. J. Interchangeable stem-winding-watch movement.....	432,256	July 15	1897	488	52	383
Abbott, Henry, Newark, N. J. Interchangeable stem-winding-watch movement.....	432,290	July 15	1963	502	52	395
Abbott, Henry, Newark, N. J. Interchangeable stem-winding-watch movement.....	432,291	July 15	1965	502	52	395
Abbott, Henry, Newark, N. J. Type-writing machine.....	437,371	Sept. 30	3210	836	52	2015
Abbott, Henry, Newark, N. J. Type-writing machine.....	437,372	Sept. 30	3211	837	52	2015
Abbott, Henry, Newark, N. J. Inking-pad for type-writing machines.....	443,032	Dec. 16	2253	579	53	1720
Abbott, James, Blaina, county of Monmouth, England. Machinery or apparatus for cleaning tin and terno plates.....	428,994	May 27	2974	763 764	51	1428
Abbott, John K. (See Edney, Samuel R., assignor.)						
Abbott, Jonathan P., Cleveland, Ohio. Eaves-trough hanger.....	425,591	Apr. 15	1762	473	51	360
Abbott, Jonathan P., Cleveland, Ohio. Eaves-trough angle or molding.....	435,552	Sept. 2	267	74	52	1126
Abbott, Warren M. (See Flagler, Harvey K., assignor.)						
Abbott, Warren M., assignor of one-half to H. K. Flagler, Boston, Mass. Apparatus for burning liquid fuel.....	438,790	Oct. 21	1714	459	53	339
Abel, Durham O., Youngstown, Ohio. Mowing-machine.....	425,968	Apr. 22	2359	625	51	483
Abel, Frederick A., London, and J. Dewar, Cambridge, England. Gelatinous explosive.....	425,648	Apr. 15	1858		51	379
Abel, Wilfred J., New York, N. Y. Tail-piece for musical instruments.....	421,466	Feb. 18	1524	395	50	869
Abernethy, William J. (See Robinson, Clark, assignor.)						
Abraham, Isaac B., San Francisco, Cal. Adjustable and removable armor for ships.....	419,301	Jan. 14	983	260 261	50	208
Abraham, John D., Cincinnati, Ohio. Closing device for water-tanks.....	424,158	Mar. 25	2703	719	50	1672
Abraham, John H., and E. K. Martin, assignors to Conestoga Cigar Machine Company, Lancaster, Pa. Cigar-bunching machine.....	419,983	Jan. 21	2001	526	50	418
Abraham, Martha L., Chicago, Ill. Bed-pan.....	421,467	Feb. 18	1524	395	50	869
Abrahams, Albert, Evansville, Ind. Burglar-alarm.....	424,243	Mar. 25	2813	752	50	1695
Abrahams, John W., assignor to J. Davis, Allegheny, Pa. Joint for rain-water conductors.....	428,262	May 20	1875	471	51	1194
Abrahams, John W., assignor of one-half to J. T. Bealor, Allegheny, Pa. Joint for sheet-metal tubing.....	430,458	June 17	2103	518	51	1897
Abrahamson, Peter, San Francisco, Cal. Window-ventilator.....	428,739	May 27	2607	661	51	1355
Abrahamson, Peter, San Francisco, Cal. Oven-door.....	431,159	July 1	186	47	52	39
Abrams, Alexander J. (See Officer, John A., assignor.)						
Abrams, Charles E., Chatham, N. Y. Chuck.....	435,475	Sept. 2	136	39	52	1401
Abrams, D. Albert, et al. (See Minton, Albert K., assignor.)						
Abrams, Gustav, assignor of two-thirds to C. Postenson and A. G. Bergstrom, Hopkins, Minn. Rotary steam-engine.....	437,076	Sept. 23	2709	708	52	1915
Abrams, John K., Little Falls, N. Y. Pencil-rack.....	431,802	July 8	1310	328	52	265
Abrams, Milton, assignor of one-half to F. L. McGahan, Indianapolis, Ind. Feed-water heater and purifier.....	423,653	Mar. 18	1958	515	50	1523
Abrell, Paul B., Newark, N. J. Machine for making pills.....	429,803	June 10	1050	258	51	1653
Abshagen, Ernest, assignor of five-eighths to G. M. Clark, H. M. and W. H. Hubbard, Chicago, Ill. Electric cooking apparatus.....	442,932	Dec. 16	2105	542	53	1690
Abshagen, Ernest, assignor of five-eighths to G. M. Clark, H. M. and W. H. Hubbard, Chicago, Ill. Electric steam and hot-water generator.....	442,933	Dec. 16	2107	542	53	1690
Abshagen, Ernest, assignor of five-eighths to A. W. Brewerton, G. M. Clark, and H. M. and W. H. Hubbard, Chicago, Ill. Electric heater.....	436,864	Sept. 23	2400	627	52	1854
Absons, Ernest, Sedan, Franco. Apparatus for making nails for heddles.....	426,898	Apr. 29	3744	977	51	765
Accioli de Azevedo Basto, Carlos, Rio de Janeiro, Brazil. Alarm-lock.....	422,695	Mar. 4	492	125 126 127	50	1230
Accles, James G., London, county of Middlesex, England. Machine-gun.....	426,356	Apr. 22	2916	766 767	51	595

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Accumulator Company. (See Prescott, George B., Jr., assignor.)						
Accurate Time Stamp Company. (See Stahlberg, Charles, assignor.)						
Acheson, Edward G. (See Wiley and Acheson.)						
Acker, Finley. (See Hardinge, George F., assignor.)						
Acker, Washington L., and G. W. Kirkpatrick, assignors to H. M. Kirkpatrick, Macedon, N. Y. Grain-drill	437,373	Sept. 30	3313	838	52	2016
Ackerly, Aaron A., Chicago, Ill. Switch-stand	431,834	July 8	1267	318	52	256
Ackerman, Harry, Jersey City, N. J. Car-coupling link	422,105	Feb. 25	2447	646	50	1051
Ackerman, Jasper L., Lowell, Ind. Clamp	442,934	Dec. 16	2109	542	53	1691
Ackerman, Joseph, Mansfield, Ohio. Hame	420,027	Jan. 28	2077	549	50	441
Ackerman, Philip M., Gates, N. Y. Clothes-pin	431,551	Aug. 19	1695	444	52	1108
Ackerman, William J., Grand Rapids, Mich. Burglar-alarm	438,127	Oct. 7	697	{ 189 190 }	{ 53 }	134
Ackerman, William J., Malcom, Wis. Logging-skid	441,047	Nov. 18	2265	587	53	1060
Ackley, Nathan E., Fitchburg, Mass. Mechanism for operating the decks of paper-machines	424,159	Mar. 25	2704	719	50	1673
Acme Burnishing Company. (See Thuerk, Samuel O., assignor.)						
Acme Electric Company. (See Beach, Ralph H., assignor.)						
Acme Hay Harvester Company. (See Alden and Kirk, assignors.)						
Acme Roll Paper Company. (See Chapman, Thomas P., assignor.)						
Acme Shear Company. (See Wheeler, Dwight, assignor.)						
Acorn Steam Boiler and Heating Company. (See Shaw, John, assignor.)						
Adair, James, New York, N. Y. Undershirt	421,038	Feb. 11	920	237	50	747
Adair, James, New York, N. Y. Electrically-propelled vehicle	421,887	Feb. 25	2137	561	50	995
Adair, James, New York, N. Y. Metallic matting	424,445	Apr. 1	1	1	51	3
Adam, George H., assignor of one-half to J. H. Stotsenburg, New Albany, Ind. Steam-engine	424,446	Apr. 1	2	1	51	3
Adam, Gustav, Sebnitz, Germany. Stop-valve	436,884	Sept. 23	2438	636	52	1862
Adamant Manufacturing Company. (See Ruston, Hopkins, and Ruston, assignors.)						
Adamanta Manufacturing Company. (See Kissel, Albert, assignor.)						
Adami, Conrad, Boston, assignor to J. W. Tufts, Medford, Mass. Soda-water dispensing apparatus	439,923	Nov. 4	444	{ 115 116 }	{ 53 }	695
Adams, Albert W. (See Evans and Adams.)						
Adams, Alonzo P. (See Norris, George E., assignor.)						
Adams, Alonzo P. (See Wiles, Thomas S., assignor.)						
Adams, Arthur W., Kansas City, assignor of one-half to F. E. Nipher, St. Louis, Mo. Moving contact for electric railways	442,002	Dec. 2	586	159	53	1377
Adams, Benjamin F. (See Gardner and Adams.)						
Adams, Benjamin F., Brooklyn, N. Y. Refrigerator-car	433,759	Aug. 5	475	123	52	848
Adams, Charles, St. Louis, Mo. Reducing iron ores with heated gases	431,694	Aug. 19	1946	{ 506 507 }	{ 52 }	1155
Adams, Charles, St. Louis, Mo., assignor of one-half to R. W. Carroll and F. Protzman, Sr., Pittsburg, Pa. Apparatus for the manufacture of iron and steel	431,863	July 8	1311	{ 328 329 }	{ 52 }	265
Adams, Charles, assignor of one-half to R. W. Carroll and F. Protzman, Sr., Pittsburg, Pa. Reducing iron ore	431,864	July 8	1314	{ 329 330 }	{ 52 }	265
Adams, Charles H., Mohawk, assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Bending-pliers	429,989	June 10	1337	332	51	1740
Adams, Cornele B., Walthourville, Ga. Recording-anemoscope	420,219	Jan. 28	2387	{ 634 635 636 }	{ 50 }	499
Adams, Dean, <i>et al.</i> (See Wagemann, Edmund, assignor.)						
Adams, Dewey F., Providence, R. I. Jewelry	421,022	Feb. 11	895	231	50	742
Adams, Dewey F., Providence, R. I. Hinge-joint for jewelry	424,529	Apr. 1	139	40	51	29
Adams, Don B., Fort Worth, Tex. Snap-hook	443,630	Dec. 30	3273	843	53	1932
Adams, Edgar J., <i>et al.</i> (See Muterspaugh, Andrew R., assignor.)						
Adams, Elmon A., assignor of one-half to F. W. Evans, Washington, D. C. Apparatus for use in the construction of dry walls	428,327	May 20	1978	498	51	1216
Adams, Frank, and U. J. Virgin, New Orleans, La. Portable stove or furnace	422,899	Mar. 11	821	213	50	1301
Adams, Frank L., Saginaw, Mich. Combined horseshoe-sharpener, drill, and saw-gum-mer	422,045	Feb. 25	2352	621	50	1035
Adams, Fredrick T., Toledo, Ohio. Furnace for burning natural gas	422,562	Mar. 4	285	72	50	1190
Adams, G. N., <i>et al.</i> (See Marsh, Leonardo M., assignor.)						
Adams, George B., Irvington, N. J. Knob	434,650	Aug. 19	1871	489	52	1141
Adams, George B., Irvington, assignor to C. L. Nesler, Clinton, N. J. Clip for retaining the springs within the mouths of self-closing bags or pouches	419,745	Jan. 21	1631	434	50	344
Adams, George B., Newark, N. J., assignor to Eagle Pencil Company, of New York. Pencil-clasp	436,591	Sept. 16	1899	499	52	1750
Adams, George D., Detroit, Mich. Detonator for flag-staffs, &c.	426,423	Apr. 29	3045	797	51	629
Adams, George E., Providence, R. I. Button	420,650	Feb. 4	322	83	50	627
Adams, George E., Providence, R. I. Locket	429,757	Feb. 4	455	120	50	653
Adams, George Q., Quincy, Ill., assignor to Adams Power Fence Machine Company, New York, N. Y. Fence-making machine	422,172	Feb. 25	2541	{ 671 672 }	{ 50 }	1069
Adams, Gideon S., Camden, N. J. Combination cartridge loading and unloading tool	428,328	May 20	1979	498	51	1216
Adams, Harvey A., Marseilles, Ill. Time-recorder	438,831	Oct. 21	1794	479	53	354
Adams, Herbert W., and P. N. Tryon, San Francisco, Cal. Veil-fastener	428,159	May 20	1712	434	51	1165
Adams, Henry A., Sandwich, Ill. Corn-sheller	426,748	Apr. 29	3532	922	51	723
Adams, Isaac, West Leroy, assignor of one-half to Advance Thresher Company, Battle Creek, Mich. Straw-stacker	427,945	May 13	1405	355	51	1094
Adams, James A., Atlanta, Ga. Feeding mechanism for sewing-machines	443,888	Dec. 30	3662	944	53	2009
Adams, James A., assignor of one-half to J. T. Stocks and G. W. Henderson, Atlanta, Ga. Woven fabric composed of excelsior	435,719	Sept. 2	530	140	52	1477
Adams, James J., Cienfuegos, Cuba, and L. W. Tracy, assignors to said Tracy and J. E. Granniss, New York, N. Y. Apparatus for the treatment of cane-juice	435,784	Sept. 2	627	{ 165 166 }	{ 52 }	1495
Adams, John, administrator. (See Barnard, James J.)						
Adams, John, Nashville, Tenn. Hydrocarbon-burner	427,819	May 13	1207	304	51	1058
Adams, John, Nashville, Tenn. Hydrocarbon-burner	427,820	May 13	1208	304	51	1058
Adams, John, Nashville, Tenn. Hydrocarbon-burner	427,946	May 13	1406	355	51	1095
Adams, John A., Salsersville, Ky. Churn	423,710	Mar. 18	2038	537	50	1538
Adams, John D., <i>et al.</i> (See Wagemann, Edmund, assignor.)						
Adams, Mary C., Atlantic City, N. J. Clothes-rack for houses or exhibiting garments in stores	438,517	Oct. 14	1273	344	53	250
Adams, Orsemas T. X. (See Adams, Phineas H., Jr., and O. T. X.)						
Adams, Peter, assignor to C. G. and W. J. Shepard, Buffalo, N. Y. Toy pistol	430,411	June 17	2032	501	51	1884
Adams, Phineas H., Jr., and O. T. X., Chicago, Ill. Metallic red-packing	432,717	July 22	2616	669	52	529

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Adams Power Fence Machine Company. (See Adams, George Q., assignor.)						
Adams, Robert. (See Taylor, Edward H., assignor.)						
Adams, Robert, Southwark, county of Surrey, England. Combined door check and closer.	437,547	Sept. 30	3488	910	52	2072
Adams, Robert E., et al. (See Young, William F., assignor.)						
Adams, S. William C., Reading, Mich. Mop	424,750	Apr. 1	484	132	51	95
Adams, Samuel L., Jr., St. George, Utah Ter. Bridle-bit	428,197	May 20	1762	445	51	1175
Adams, Stephen J., et al. (See Elwood, Campbell G., assignor.)						
Adams, Stephen J., Pittsburg, Pa. Pipe-ball	427,722	May 13	1050	263	51	1027
Adams, Stephen J., Pittsburg, Pa. Pipe-ball	433,585	Aug. 5	215	58	52	798
Adams, Stephen J., Pittsburg, Pa. Mold for tubular articles	433,586	Aug. 5	217	58	52	799
Adams, Stephen J., Pittsburg, Pa. Bottom board for sand molds	433,587	Aug. 5	219	58	52	799
Adams, Stephen J., Pittsburg, Pa. Mold and bed for forming castings	433,588	Aug. 5	220	59	52	799
Adams, Stephen J., Pittsburg, Pa. Pipe-molding ball	433,589	Aug. 5	222	59	52	799
Adams, Stephen J., Pittsburg, Pa. Mold for tubular articles	433,590	Aug. 5	224	59	52	800
Adams, Thomas, assignor to Hensel Colladay Company, Philadelphia, Pa. Machine for covering umbrella or parasol ribs	428,873	May 27	2801	712	51	1394
Adams, Thomas E., Cleveland, Ohio. Electric-railway system	419,618	Jan. 21	1441	387	50	309
Adams, Walter H., Stamford, Conn. Tripod for rock-drills	421,468	Feb. 18	1526	395	50	860
Adams, Walter H., Stamford, Conn. Rock-drill	425,532	Apr. 15	1676	447	51	343
Adams, Walter S., assignor to J. G. Brill Company, Philadelphia, Pa. Actuating device for car-brakes	424,160	Mar. 25	2705	720	50	1673
Adams, Washington L., Montclair, N. J., assignor to Scovill & Adams Company, New York, N. Y. Photographic camera	436,391	Sept. 16	1584	418	52	1693
Adams & Westlake Company. (See Willits, Ward W., assignor.)						
Adams, William, Ansonia, Conn. Mold for casting	440,801	Nov. 18	1872	482	53	985
Adams, William B., assignor of one-half to T. M. Elliott, Greenfield, Ohio. Adjustable prop for clothes-lines	442,763	Dec. 16	1805	467	53	1631
Adams, William G., Philadelphia, Pa. Valve	422,744	July 22	2660	680 681	52	538
Adams, William H., Hackett, Ark. Hay-press	424,161	Mar. 25	2707	720	50	1673
Adams, William W., Ozark, Ark. Tramping attachment for cotton or hay presses	421,644	Feb. 18	1796	469	50	921
Adamson, Andrew J., Sabetha, Kans. Apparatus for roasting and treating sorghum and sugar-cane	428,439	May 20	2148	540	51	1250
Adamson, Andrew J., Sabetha, Kans. Napkin and towel supporter	434,857	Aug. 19	2164	567	52	1199
Adamson, George P., et al. (See Hart, Edward, assignor.)						
Adcock, Edmund. (See Norton and Adcock.)						
Addax Basting Machine Company. (See Harlow and Bartlett, assignors.)						
Addicks, Walter R. (See Greenough, Jones, and Addicks.)						
Addicks, Walter R., Boston, Mass. Apparatus for forcing oil or similar liquids	428,874	May 27	2802	712	51	1394
Addicks, Walter R., Boston, Mass. Heater for hydrocarbon liquids	423,214	Dec. 23	2607	671	53	1796
Addison, Hiram M., Cleveland, Ohio. Pruning-saw	437,764	Oct. 7	144	45	53	30
Addison, Robert, assignor of one-half to A. F. Mills, Pasadena, Cal. Portable centrifugal lawn-sprinkler	437,322	Sept. 30	3117	815	52	1997
Addy, Charles J., Malden, assignor to Tapley Machine Company, Boston, Mass. Burnishing-machine	419,997	Jan. 21	2029	535	50	423
Addy, Charles J., Malden, assignor to Tapley Machine Company, Boston, Mass. Heel-burnishing machine	432,471	July 15	2226	575 576	52	447
Addy, Charles J., Malden, assignor to Tapley Machine Company, Boston, Mass. Burnishing-machine	433,387	July 29	3637	938	52	735
Addy, Charles J., Malden, Mass., assignor to Tapley Machine Company, Portland, Me. Heel-burnishing machine	443,420	Dec. 23	2925	753	53	1857
Addy, Richard, assignor of two-thirds to W. J. and J. H. Arthur and L. Conklin, Wallingford, Conn. Steam-engine	425,361	Apr. 8	1409	375 376	51	283
Addyston Pipe and Steel Company. (See Schiefer, Andrew, assignor.)						
Adee & Co., Fred. (See Adee, Fred., assignor.)						
Adee & Co., Fred. (See Smith, Benjamin C., assignor.)						
Adee, Fred, Brooklyn, assignor to F. Adee & Co., New York, N. Y. Water-closet	436,451	Sept. 16	1679	442 443	52	1710
Adelmann, Philipp A., Metz, Germany. Apparatus for removing the waste liquids from vaginal injections	425,559	Apr. 15	1713	458	51	351
Adeney, Walter E., and L. Saunderson, Kingstown, county of Dublin, Ireland. Arc-light carbon	421,469	Feb. 18	1527		50	869
Adershold, Luna J., Waco, Ga. Machine for making wire braces	434,311	Aug. 12	1313	342	52	1023
Adjustable Hat and Bonnet Holder Company. (See Wilson, Sarah E. L., assignor.)						
Adkins, Samuel L., Hind's Creek, Tenn. Railway-gate	419,619	Jan. 21	1444	388	50	309
Adkins, Samuel S., St. Louis, Mo., assignor to Hall & Brown Wood Working Machine Company, of Missouri. Split wooden pulley	423,300	Mar. 11	1430	372	50	1414
Adler, Abraham S., Baltimore, Md. Shoemaker's measure	428,875	May 27	2804	713	51	1395
Adler, Henry, Allegheny, Pa. Fender	420,853	Feb. 4	625	160	50	681
Adler, I. Richard, et al. (See Finch, Arthur L., assignor.)						
Adler, Samuel, Baltimore, Md. Neckscarf	430,360	June 17	1966	483	51	1871
Adley, Richard S., Muskegon, Mich. Extension-ladder	428,995	May 27	2976	764	51	1429
Admire, Joshua, assignor to W. Presser and L. Carroll, Smith's Valley, Ind. Corn-planter	424,447	Apr. 1	3	1, 2	51	3
Adriance, John W., Racine, Wis. Lumber-drier	423,301	Mar. 11	1431	372 373	50	1415
Adsit, Frank H., Geneva, Pa. Ditching-hoe	424,244	Mar. 25	2814	752	50	1695
Advance Thresher Company. (See Adams, Isaac, assignor.)						
Advance Thresher Company. (See Campbell, Elmer, assignor.)						
Adey, James S., Odebolt, Iowa. Air-blast-regulating device for fanning-mills	432,352	July 15	2046	527	52	410
Aenchbacher, Gottlieb A., Atlanta, Ga. Car-truck	434,125	Aug. 12	1031	267	52	967
Aerated Fuel Company. (See Bullard, James H., assignor.)						
Agee, Reuben M., and E. Lane, Canton, Mo. Rail-joint	425,396	Apr. 15	1471	395	51	303
Agee, Reuben M., and E. Lane, Canton, Mo. Railway-joint	430,052	June 10	1447	359	51	1760
Agnew, Erwin, et al. (See Reckenzaun, Anthony, assignor.)						
Ahearn, Michael. (See Hobart and Ahearn.)						
Ahlberg, Peter, Detroit, Mich. Adjustable window-screen	419,397	Jan. 14	1129	299	50	237
Ahlberg, Peter, Detroit, Mich. Window-screen	419,398	Jan. 14	1130	299	50	238
Ahlström, Alfred C., assignor to C. Schneider and H. Gianella, Philadelphia, Pa. Steam-engine	422,328	Feb. 25	2798	736	50	1117
Ahlum, Alvin F., Memphis, Tenn. Sieve or sifter	423,019	Mar. 11	997	262	50	1333
Ahlum, Alvin F., Memphis, Tenn. Can	426,651	Apr. 29	3375	685	51	693
Ahrens, Ella H., Philadelphia, Pa. Broiler-support	439,569	Oct. 28	2942	782	53	578

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Ahrens, John T., <i>et al.</i> (See Haslam, John P., assignor.)						
Aiken, Henry. (See Young, Robert O., assignor.)						
Aiken, Henry, Homestead, Pa. Furnace-roof.....	420,487	Feb. 4	89	21	50	581
Aiken, Henry, Homestead, Pa. Rolling-mill.....	421,039	Feb. 11	921	237 238 239	50	747
Aiken, Henry, Homestead, Pa. Counter-balance for metal-shears, &c.....	421,537	Feb. 18	1638	422 423	50	890
Aiken, Henry, Homestead, Pa. Metallurgical plant.....	423,199	Mar. 11	1371	331	50	1386
Aiken, Henry, Homestead, Pa. Shear-table.....	426,487	Apr. 29	3134	423 424	51	646
Aiken, Henry, Homestead, Pa. Crane.....	439,264	Oct. 28	2476	664 665 666	53	489
Aiken, Henry, Pittsburg, Pa. Manufacturing axles.....	426,652	Apr. 29	3376	855 886	51	693
Aiken, Henry, Pittsburg, Pa. Apparatus for the manufacture of axles.....	426,653	Apr. 29	3377	886 887	51	693
Aiken, Henry, Pittsburg, Pa. Metal-shears.....	438,339	Oct. 14	1020	277 278	53	201
Aiken, Henry, Pittsburg, Pa. Mill appliance.....	439,828	Nov. 4	295	74, 75	53	665
Aiken, Henry, Pittsburg, Pa. Mill appliance.....	439,829	Nov. 4	297	75	53	666
Aiken, Henry, Pittsburg, Pa. Mechanism for operating tapping-bars.....	439,924	Nov. 4	447	116	53	695
Aiken, Henry, Pittsburg, Pa. Feed-table for rolling-mills.....	439,925	Nov. 4	448	116 117	53	696
Aiken, James A., assignor to H. E. Edwards, Jackson, Mich. Combined chuck and bit.....	427,821	May 13	1209	304	51	1058
Aiken, William A. (See Huntington, Charles W., assignor.)						
Aikenhead, Thomas W., Brooklyn, N. Y. Shirt.....	419,812	Jan. 21	1735	459	50	364
Aikins, Frederick T., Toronto, Canada. Storm-screen for windows.....	443,345	Dec. 23	2821	725	53	1837
Aims, William D. P., Jr., Philadelphia, Pa. Filter.....	433,710	Aug. 5	396	101	52	833
Ainley, Harry F., London, England. Machine for cutting square holes.....	438,791	Oct. 21	1715	460	53	339
Ainslie, Cochran & Co. (See Frizell, Joseph P., assignor.)						
Ainslie, David A., Richmond, Va. Trolley for electrical railways.....	436,571	Sept. 16	1864	491	52	1743
Ainsworth, William, Accrington, county of Lancaster, R. P. Strachan, and G. Henshaw, Bristol, county of Gloucester, England. Apparatus for printing paper bags in connection with paper-bag-making machinery.....	419,399	Jan. 14	1132	300	50	238
Airey, Robert W. (See Greene, Barton M., assignor.)						
Aifken, Robert W., assignor of one-half to R. Laws, Buffalo, N. Y. Connecting-rod.....	425,119	Apr. 8	1047	279	51	211
Aitkin, William J. (See Fox, Christian, assignor.)						
Ajax Envelope Company. (See Clarke, George R., assignor.)						
Akerley, Charles H. (See McBean, George, assignor.)						
Akers, John H., Washington, D. C. Horse-detacher.....	440,455	Nov. 11	1295	335	53	867
Akers, John M., Alliance, Ohio. Coin-controlled blow-tester.....	436,819	Sept. 23	2258	603	52	1834
Akers, Robert E., Lehigh, Ind. Ter. Suspension-bridge.....	418,777	Jan. 7	180	43, 44	50	40
Akers, William P., Fort Worth, assignor of one-half to M. R. Lindsey, Jacksborough, Tex. Velocipede.....	433,508	Aug. 5	100	28	52	776
Akron Iron Company. (See Hadfield, Reuben, assignor.)						
Aktiebolaget Lactoserin. (See Rehnström, Albert W., assignor.)						
Aktiebolaget Separator. (See Bechtolsheim, Clemens v., assignor.)						
Aktiebolaget Separator. (See Laval, Carl G. P. de, assignor.)						
Alabama Metal Wheel Company. (See Seale, Elias A., assignor.)						
Alavoine, François A. M., Beauvais, France. Gas-washer.....	422,173	Feb. 25	2545	672	50	1070
Albee, Henry C., Chicago, Ill. Lathe.....	429,297	June 3	291	69, 70	51	1525
Alberger, John L., Buffalo, N. Y. Purifying water for boilers and salt-making.....	443,186	Dec. 23	2555	656	53	1755
Albers, Joseph, assignor of one-half to J. Zeis, Corvallis, Oreg. Gate.....	435,785	Sept. 2	629	166	52	1496
Albetsen, Charles, Ashkum, Ill. Cultivator.....	427,142	May 6	186	48	51	848
Albert, Aaron B., Indianapolis, Ind. Folding chair.....	428,032	May 13	1528	387	51	1120
Albert, Charles F., Philadelphia, Pa. String for musical instruments.....	443,809	Dec. 30	3558	912	53	1998
Albert, Heinrich, Lauenstein, Germany. Watch.....	427,653	May 13	939	235	51	1006
Albert, Richard S., <i>et al.</i> (See Ramsay, Henry A., assignor.)						
Albert, Otto, New York, N. Y. Stamp-canceller.....	436,111	Sept. 9	1142	298	52	1599
Albertson, Edward D., assignor of one-half to P. H. Grimm, Glen Cove, N. Y. Game apparatus.....	419,096	Jan. 7	671	176	50	141
Albertson, Kerr F., <i>et al.</i> (See Barnes, Lewis, assignor.)						
Albertson, William C., <i>et al.</i> (See Barnes, Lewis, assignor.)						
Albin, Herman, Louisville, Ky. Umbrella or parasol frame.....	428,661	May 27	2475	629	51	1330
Albion Manufacturing Company. (See Gale, Horatio, assignor.)						
Albrecht, Hermann, Philadelphia, Pa. Machine for cutting meat and other substances.....	435,383	Sept. 2	1	1	52	1375
Albright, Chester E., Muncy, Pa. Purse.....	439,086	Oct. 28	2185	587	53	437
Albright, James H., Laurelton, Pa. Cultivator.....	423,711	Mar. 18	2039	538	50	1538
Alcock, Alfred U., and H. Galopin, Melbourne, Victoria. Arc lamp.....	430,260	June 17	1772	440 441	51	1834
Alden, Charles W., assignor of one-half to C. A. Tarbox, Stockton, Cal. Car-brake handle.....	422,683	Mar. 4	476	121	50	1227
Alden, Horace A., and J. E. Kirk, assignors to Acme Hay Harvester Company, Peoria, Ill. Horse hay-rake.....	432,165	Sept. 9	1231	318 319	52	1612
Alden, John E., Lake George, N. Y. Combination step-ladder, table, and platform.....	419,906	Jan. 21	1888	496	50	396
Alden, John F., Rochester, N. Y. Lift-bridge.....	431,101	July 1	104	26, 27	52	23
Alden Type Machine Company. (See Johnson and Low, assignors.)						
Alden, Weston P., Randolph, Mass. Shoe.....	421,470	Feb. 18	1538	395	50	870
Alderman, Charles N., Streator, Ill. Car-coupling.....	443,841	Dec. 30	3605	927	53	1997
Alderman, Olinthus G., Cedar Falls, Iowa. Throat and chest protector.....	443,842	Dec. 30	3606	927	53	1998
Alderson, Matthew W., Bozeman, Mont., assignor to American Doll Company, New York, N. Y. Hand for dolls.....	440,986	Nov. 18	2173	562	53	1043
Aldrich, Fred H., Cadillac, Mich. Electric-light fixture.....	432,965	July 29	2017	775	52	611
Aldrich, George W., assignor of one-half to W. Green, Brooklyn, N. Y. Faucet-fastener.....	431,791	July 8	1200	299	52	243
Aldrich, Homer M., Battle Creek, Mich. Counting apparatus.....	430,910	June 24	2839	697	51	2047
Aldrich, Homer M., Battle Creek, Mich. Paper-jogger.....	439,337	Oct. 28	2604	694	53	514
Alexander, Anson C. (See Ellsworth and Alexander.)						
Alexander, Cornelius C., Hartford City, Ind. Sliding and swinging gate.....	428,160	May 20	1713	434	51	1165
Alexander, George W., Holly Springs, La. Fence.....	422,684	Mar. 4	476	121	50	1227
Alexander, Horace C., Bonham, Tex. Hobby-horse.....	430,459	June 17	2103	519	51	1897
Alexander, Hugh B., Geneva, Ill. Street-pavement.....	438,046	Oct. 7	579		53	110
Alexander, John A., Ardmore, Ind. Ter. Car-coupling.....	441,387	Nov. 25	2850	735	53	1177
Alexander, John R., Pittsburg, Pa. Door for boiler-furnaces.....	436,555	Sept. 16	1842	485	52	1739

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Alexander, Linden C. (See Hope and Alexander.)						
Alexander, Louis, Brooklyn, N. Y. Sliding guard for eyeglasses	441,917	Dec. 2	444	119	53	1352
Alexander, Oliver G. (See Legg, Alexander, and Legg.)						
Alexander, Oscar. New York, N. Y. Couch or lounge	429,750	June 10	973	{ 238 239 }	{ 51	1670
Alexander, Phoebus H. (See Dey, Harry E., assignor.)						
Alexander, Phoebus H. (See Field, Stephen D., assignor.)						
Alexander, Robert, Jersey City, N. J. Refining crude asphaltum	435,198	Aug. 26	2719	718	52	1311
Alexander, Samuel. (See Alexander and Paterson.)						
Alexander, Silas W., Letart Falls, Ohio. Barrel-head fastener	419,097	Jan. 7	672	176	50	141
Alexander, Thomas and S., Kirkintilloch, county of Dumbarton, and R. Paterson, Glasgow, county of Lanark, Scotland. Apparatus for making oil-gas	419,098	Jan. 7	672	{ 176 177 }	{ 50	142
Alexander, William B., et al. (See Phillips, Columbus, assignor.)						
Alexander, William W., assignor to Gill-Alexander Electric Manufacturing Company, Kansas City, Mo. Magnetic-power equalizer	430,606	June 24	2337	573	51	1951
Alexander, William W., assignor to Gill-Alexander Electric Manufacturing Company, Kansas City, Mo. Electro-mechanical combination-lock	430,607	June 24	2338	573	51	1951
Alexander, William W., assignor to Gill-Alexander Electric Manufacturing Company, Kansas City, Mo. Electro-mechanical combination-lock	430,608	June 24	2341	573	51	1951
Alexandre, Arthur, Paris, France. Spinning-top	438,460	Oct. 14	1201	{ 325 326 }	{ 53	236
Alexius, Guido C., Covington, La. Brick shot	421,804	Feb. 18	2004	529	50	961
Alfinan, Harry, Mobile, Ala. Umbrella	420,375	Jan. 28	2615	694	50	541
Alford, John W., Collierville, Tenn. Thill-coupling	419,171	Jan. 14	791	209	50	171
Alford, William C., Hazelton, Kans. Animal-yoke	432,503	July 22	2271	589	52	463
Alford, William D., G. O. Rinnan, and F. V. De Coppet, assignors to Cincinnati Ice Machine Company, Cincinnati, Ohio. Ice-machine	434,904	Aug. 26	2295	605	52	1231
Alfred, James W., Lewistown, Pa. Duplicating-car	421,645	Feb. 18	1798	469	50	921
Alfred, James W., Lewistown, Pa. Lifting-jack	437,077	Sept. 23	2710	708	52	1915
Alger, Fred L., Greenville, Mich. Machine for exterminating potato-bugs	422,277	Feb. 25	2715	714	50	1101
Alkier, Franz C., Wieselburg-on-the-Erlauf, Austria-Hungary. Obtaining acetic acid and methyl alcohol	431,243	July 1	321	.....	52	65
Allan, Frank B., et al. (See Mason, Edward J., assignor.)						
Allbritten, Elizabeth A., et al. (See Arnold, Sidney, assignor.)						
Allechin, Frank W., Northampton, county of Northampton, England. Merry-go-round, &c.	418,833	Jan. 7	269	65, 66	50	57
Allechin, Frank W., Northampton, county of Northampton, England. Roundabout	420,758	Feb. 4	455	{ 121 122 }	{ 50	653
Allderdice, Winslow, assignor of one-half to J. Dana, Warren, Ohio. Rolls for reducing and straightening metal rods	427,238	May 6	403	105	51	890
Alleigh, Edward W., Chicago, Ill., assignor, by mesne assignments, to National Embossing Machine Company, of New Jersey. Machine for ornamenting wood and other compressible material. (Reissue)	11,121	Nov. 18	2394	620	53	1085
Alleigh, Edward W., Chicago, Ill., assignor, by mesne assignments, to National Embossing Machine Company, of New Jersey. Two-part cylinder and die for ornamenting wood and other compressible material. (Reissue)	11,122	Nov. 18	2395	620	53	1085
Alleigh, Edward W., Chicago, Ill., assignor, by mesne assignments, to National Embossing Machine Company, of New Jersey. Machine for ornamenting wood and other compressible material. (Reissue)	11,133	Dec. 16	2342	{ 597 598 }	{ 53	1736
Allen, Aaron B., Pueblo, Colo. Car-coupling	430,460	June 17	2104	519	51	1897
Allen, Adoniram J., Lockport, N. Y. Hat-hanger	430,028	Jan. 28	2077	549	50	441
Allen, Alvin, Girard, Kans. Follower-operating mechanism for baling-presses	419,813	Jan. 21	1736	{ 459 460 }	{ 50	365
Allen, Alvin, Girard, Kans. Baling-press	420,598	Feb. 4	229	59	50	609
Allen, Arthur T., Sheffield, England. Tent and lawn-tennis peg	443,560	Dec. 30	3157	811	53	1911
Allen, Augustus L., Poughkeepsie, and G. W. Harris, Rondout, N. Y. Apparatus for the manufacture of gas	440,456	Nov. 11	1296	{ 335 336 }	{ 53	867
Allen, Chancellor C. (See Crockett and Allen.)						
Allen, Charles. (See Allen and Goulden, assignors.)						
Allen, Charles A., Chicago, Ill. Vaporizer	439,317	Oct. 28	2575	687	53	508
Allen, Charles H., et al. (See Armington and Briggs, assignors.)						
Allen, Charles J. (See Koch, Eberhard, assignor.)						
Allen, Charles W., Toronto, Ontario, Canada. Bag-holder	432,966	July 29	3018	775	52	611
Allen, Chauncey F., Woodbury, and J. E. Doolittle, Bridgeport, Conn. Corset-clasp	439,231	Oct. 28	2422	650	53	479
Allen, David H., Miamisburg, Ohio. Wagon-body	434,905	Aug. 26	2298	606	52	1231
Allen, Dwight P., assignor to Worcester Elevator Company, Worcester, Mass. Hydraulic valve for elevators	423,105	Mar. 11	1136	295	50	1358
Allen, Dwight P., assignor to Worcester Elevator Company, Worcester, Mass. Hydraulic-elevator plunger	437,880	Oct. 7	313	93	53	61
Allen, Edgar, Chicago, Ill., assignor of one-half to M. S. Heath, Beebe Plain, Vt. Watch-movement holder	437,636	Sept. 30	3604	943	52	2096
Allen, Edward B., Harwich Port, Mass. Fire-escape	422,685	Mar. 4	477	122	50	1227
Allen, Edward B., Portland, Me., assignor to Singer Manufacturing Company of New Jersey. Clamp for button-hole sewing-machines	439,087	Oct. 28	2186	587	53	437
Allen, Edward R., Buffalo, assignor of one-half to E. M. Parmelee, Dansville, N. Y. Water-gage	443,063	Dec. 16	2295	588	53	1729
Allen, Edward T. (See Skinner, Henry E., assignor.)						
Allen, Ellbridge G., New Haven, Conn. Sleeping-car	440,295	Nov. 11	1033	265	53	818
Allen, Ethan, et al. (See Harmon, Orville S., assignor.)						
Allen, Ethel L. (See Hofele, Ferdinand W., assignor.)						
Allen, Eugene E., Grand Rapids, Mich. Instrument for the transfusion of blood	425,015	Apr. 8	904	239	51	183
Allen, Eugene E., Grand Rapids, Mich., assignor to C. H. Truax, Chicago, Ill. Instrument for the transfusion of blood	424,944	Apr. 8	789	211	51	161
Allen, Francis, Kansas City, Kans. Oven-thermometer	420,568	Feb. 4	197	51	50	603
Allen, Frank H., Norwich, Conn., assignor to Morgan Envelope Company, Springfield, Mass. Package of paper	442,214	Dec. 9	919	{ 243 244 }	{ 53	1449
Allen, Frank P., Port Gaines, Ga. Cannon-pinion for watches	443,384	Dec. 23	2878	740	53	1848
Allen, Frederick M., et al. (See Welteroth, Henry J., assignor.)						
Allen, George B., San Leandro, Cal. Baling-press	443,172	Dec. 23	2516	644	53	1776
Allen, George G., Malden, Mass. Type-setting and printing machine	427,947	May 13	1407	{ 355 356 357 }	{ 51	1095
Allen, Horace R., Indianapolis, Ind. Operating-chair	439,088	Oct. 28	2189	{ 588 589 }	{ 53	437
Allen, Howard D., Bristol, Conn. Curtain-rod fixture	419,302	Jan. 14	996	261	50	208

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Allen, Israel, Taunton, Mass. Railway-frog	431,427	July 1	604	151	52	122
Allen, James, Alliston, Canada. Horseshoeing-jack	443,346	Dec. 23	2322	725	53	1837
Allen, James B., Providence, R. I. Puzzle	436,751	Sept. 16	2160	567	52	1890
Allen, James W., Eureka Springs, Ark. Combined evaporator, baker, and ventilator for cooking-stoves	439,990	Nov. 4	555	146	53	716
Allen, John H., Goldthwaite, Tex. Bridle-bit	422,900	Mar. 11	821	213	50	1301
Allen, John H., Keyser, W. Va. Nut-lock	435,766	Sept. 2	630	166	52	1496
Allen, John R., <i>et al.</i> (See Colony, Charles W., assignor.)						
Allen, Joseph, and S. Goulden, Newark, N. J., assignors of one-third to C. Allen, Toronto, Canada. Alarm-bell	428,198	May 20	1763	446	51	1175
Allen, L. C. (See Hunt, Franklin B., assignor.)						
Allen, Levi G., Sandy Creek, N. Y. Vehicle-pole tip	437,960	Oct. 7	435	121	53	83
Allen, Levi G., Sandy Creek, N. Y. Holdback for vehicles	439,368	Oct. 28	2653	706	53	522
Allen, Nathaniel, Lowell, assignor to J. Battles, Lawrence, Mass. Wagon-jack	420,400	Jan. 28	2653	703	50	549
Allen, Richard N., Cleveland, Ohio. Car-wheel	419,172	Jan. 14	792	209	50	171
Allen, Richard N., Cleveland, Ohio. Car-wheel	421,471	Feb. 18	1529	396	50	870
Allen, Richard N., Cleveland, Ohio. Electro-magnetic locomotive	429,107	June 3	1	1	51	1473
Allen, Richard N., Cleveland, Ohio. Gear pinion or wheel	429,108	June 3	2	1	51	1473
Allen, Richard N., Cleveland, Ohio. Car-wheel	435,672	Sept. 2	459	122	52	1463
Allen, Robert C., Grove City, Pa. Singletree-support	440,987	Nov. 18	2175	562	53	1043
Allen, Samuel L., Cinnaminson, N. J. Seed-planter	420,131	Jan. 28	2326	615	50	488
Allen, Samuel L., Cinnaminson, N. J. Potato-digger	424,945	Apr. 8	791	211	51	161
Allen, Samuel L., Cinnaminson, N. J. Cultivator	424,946	Apr. 8	793	212	51	162
Allen, Thomas E., Amsterdam, N. Y. Vehicle-spring	423,440	May 20	2149	540	51	1250
Allen, Thomas H., Toronto, Canada. Propelling-power	443,347	Dec. 23	2823	725	53	1837
Allen, W. W. (See Anderson, John P., assignor.)						
Allen, William B., Longview, Tex. Awning	419,580	Jan. 14	1378	369	50	299
Allen, William H., <i>et al.</i> (See Goldsmith, Frederick E., assignor.)						
Allen, William H., <i>et al.</i> (See Ruttick, Charles R., assignor.)						
Allen, William H., Melrose, and C. Lovell, Boston, Mass. Rubber compound	438,595	Oct. 14	1389	-----	53	274
Alley, Henry, Wenham, assignor to F. E. Merriman, Boston, Mass. Bee-swarmers	430,104	June 17	1541	383	51	1789
Alley, Moses E., Madison, Wis. Device for supplying superheated steam to furnaces	431,682	July 8	1027	257	52	209
Alley, Moses E., Madison, Wis. Furnace	431,928	July 8	1394	354	52	281
Alley, Rufus P., assignor to United States Indicator Company, Chicago, Ill. Street-indicator	428,582	May 20	2350	597	51	1288
Allgemeine, Elektrizitäts-Gesellschaft. (See Dolivo-Dobrowolsky, Michael v., assignor.)						
Alliance Twine Company. (See Lowry, George A., assignor.)						
Allibone, Alfred J. (See Buchhop and Allibone.)						
Alliger, Has Brouck, Rondout, N. Y. Can-opener	432,263	July 29	3473	896	52	702
Alkin, Josiah B., Marvell, Ark. Machine for delivering cotton	429,493	June 3	599	147	51	1586
Aling, Edward H., Rogers Park, Ill. Tool for driving combined stoppers and pouring-nozzles into bottles	430,618	Nov. 4	1	1	53	607
Aling, Edward H., Rogers Park, assignor to L. H. Thomas Company, Chicago, Ill. Stopper and pouring nozzle for ink-bottles	432,924	July 22	2033	752	52	591
Allington & Curtis Manufacturing Company. (See Kutsche, Oswald, assignor.)						
Allington, William E., <i>et al.</i> (See Olmsted, David, assignor.)						
Allington, William E., East Saginaw, Mich. Dust-collector	418,835	Jan. 7	273	67	50	58
Allington, William E., East Saginaw, Mich. Dust-collector	418,836	Jan. 7	276	67, 68	50	59
Allington, William E., East Saginaw, Mich. Pneumatic fuel-feeding apparatus	426,611	Apr. 29	3312	869 870	51	682
Allington, William E., East Saginaw, and W. H. Curtis, Jackson, Mich. Dust-collector	418,834	Jan. 7	272	66	50	57
Allis & Co., E. P. (See Gray, William D., assignor.)						
Allis & Co., Edward P. (See Birkholz, Hans, assignor.)						
Allis, Horace G., <i>et al.</i> (See Wagemann, Edmund, assignor.)						
Allis, Thomas V., and R. H. Wolf, New York, N. Y. Metallic door-mat	421,040	Feb. 11	925	239	50	748
Allis, William W. (See Hanson, Dempsey B., assignor.)						
Allis, William W. (See Hinkley, George M., assignor.)						
Allis, William W. (See Hinkley and Schofield, assignors.)						
Allis, William W., <i>et al.</i> (See Gowans, James A., assignor.)						
Allison, Frank W., Salem, Ohio. Support for service-pipe cocks	436,011	Sept. 9	973	255	52	1568
Allison, Fletcher D., Gallipolis, Ohio. Combined blacking-case and chair	426,090	Apr. 22	2534	668	51	515
Allison, James F., Detroit, Ala. Fish-trap	439,991	Nov. 4	556	147	53	716
Allison, Oscar W., Rochester, N. Y. Tobacco-feeding mechanism for cigarette-machines	424,443	Mar. 25	3165	839	50	1763
Alloway, Samuel. (See Isenberg and Alloway.)						
Alsop, Thomas, and E. Nice, Philadelphia, Pa. Music-leaf turner	426,899	Apr. 29	3745	978	51	765
Allyn, John H., assignor, by mesne assignments, to Eureka Oven Slide Works, (Limited,) Whitesborough, N. Y. Oven-grate	434,970	Aug. 26	2387	632	52	1248
Allyn, William B., Baldwin, Wis. Tying attachment for sausage-stuffing machines	429,875	June 10	1167	289	51	1706
Almond, Thomas R., New York, N. Y. Rotary engine	418,665	Jan. 7	1	1	50	3
Almond, Thomas R., New York, N. Y. Rotary steam-engine	423,585	Mar. 18	1837	484	50	1500
Almond, Thomas R., New York, N. Y. Flexible tube	424,044	Mar. 25	2543	673	50	1642
Almond, Thomas R., New York, N. Y. Rotary engine	428,740	May 27	2609	661	51	1355
Almond, Thomas R., New York, N. Y. Flexible tube	434,748	Aug. 19	2017	527	52	1169
Almstrom, August, Scranton, Kans. Seed-planter	421,888	Feb. 25	2138	561	50	995
Almy, Darwin, Bristol, R. I. Steam-generator	434,226	Aug. 12	1183	307 308	52	997
Almy, Darwin, Providence, R. I. Steam-generator	434,227	Aug. 12	1185	308	52	997
Almy, Ferdinand B., Providence, R. I. Presser-foot for sewing-machines	419,303	Jan. 14	987	261	50	209
Alpenburg, Louis. (See Alpenburg, Victor and L.)						
Alpenburg, Victor and L., assignors to F. Bianchi, New York, N. Y. Artificial flower	419,746	Jan. 21	1633	-----	50	344
Alpha Glass and Metal Company. (See Pennycook, John T., assignor.)						
Alsberg, Meinhard, New York, N. Y. Manufacturing red lead	431,026	July 1	1	-----	52	3
Alsford, Egbert, <i>et al.</i> (See Paul, George D., assignor.)						
Alson, John, assignor of three-fourths to E. J. Thelin, T. and F. Lundin, Jr., Chicago, Ill. Antiseptic lotion	428,033	May 13	1529	-----	51	1120
Alsop, James N., Owensborough, Ky. Money-changing machine	434,312	Aug. 12	1315	342 343	52	1023
Alsop, James N., assignor of one-half to J. Gilmour, Owensborough, Ky. Money-changing machine	420,896	Feb. 4	701	180 181	50	696
Alspach, Samuel S., Thornville, Ohio. Farm-gate	442,843	Dec. 30	3607	928	53	1998
Alston, J. W., <i>et al.</i> (See Kinney, Jesse, assignor.)						
Alston, William H., Adrian, Ill. Band-cutter and feeder	429,876	June 10	1169	289 290	51	1707
Altekruse, William, Glandorf, Ohio. Block-puzzle	430,502	June 17	2169	533	51	1911
Altemus, George W., Jr., Camden, N. J. Puzzle-box	430,261	June 17	1774	441	51	1834

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Alten, Nickolas. (See Hack and Alten.)						
Althen, Daniel, Beatrice, Nebr. Door or window for ice-boxes.	426,700	Apr. 29	3453	905	51	707
Althouse, Milo J., Waupun, Wis. Grinding-mill	421,063	Feb. 11	957	{ 246 247	{ 50	754
Altick, Harry M., Dayton, Ohio. Camera	422,686	Mar. 4	478	122	50	1298
Altman, Bernard, <i>et al.</i> (See Connolly, William A., assignor.)						
Altman, David, Macon, Ga. Car-coupling	435,787	Sept. 2	631	166	52	1496
Altman, Julius, <i>et al.</i> (See Connolly, William A., assignor.)						
Altman, Thornton F., assignor of one-half to E. L. McClain, Greenfield, Ohio. Clothes-line prop.	438,131	Oct. 14	707	193	53	143
Altman, Victor, <i>et al.</i> (See Connolly, William A., assignor.)						
Alton, George H. (See Thomson and Alton.)						
Alton, George H., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Screw-nut	422,361	Mar. 4	1	1	50	1137
Alton, George H., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Double-pole switch	428,586	May 27	2365	601	51	1311
Alton, George H., and W. O. Wakefield, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Commutator for dynamos, motors, &c.	421,222	Feb. 11	1183	304	50	797
Alton, George H., and E. W. Rice, Jr., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric cut-out	440,685	Nov. 18	1669	431	53	948
Alvord, James B. (See Simpson and Alvord.)						
Alvord, Lucius, Homer, N. Y. Stanchion	434,012	Aug. 12	842	{ 221 222	{ 52	929
Aluminum Brass and Bronze Company. (See Morse, Charles S., assignor.)						
Alzugaray, José B., Oporto, Portugal. Crucible-furnace	428,441	May 20	2150	540	51	1250
Alward, Charles G., Meridian, N. Y. Transplanting-machine	423,200	Mar. 11	1273	332	50	1386
Amaker, Adam P., St. Matthews, S. C. Spark arrester and extinguisher	427,532	May 13	767	191	51	973
Aman, Leo, assignor of one-half to T. F. Hogan, St. Louis, Mo. Rail-joint	434,631	Aug. 19	1833	479	52	1135
Amaron, Auguste, Denens, Switzerland. Watch	442,301	Dec. 9	1045	{ 274 275	{ 53	1473
Amberg, Abe M., <i>et al.</i> (See Tracy, William P., assignor.)						
Amber, Russell P., De Funiak Springs, Fla. Hydrocarbon-oil burner	442,163	Dec. 9	843	226	53	1435
Amblor, William, assignor of part to J. and S. Rhodes, Bradford, England. Apparatus for the manufacture of glass bottles	443,033	Dec. 16	2254	579	53	1721
Amborn, George, Jr., Pawtucket, R. I. Expanding reamer	430,105	June 17	1542	383	51	1789
Amborn, George, Jr., assignor to Campbell Machine Company, Pawtucket, R. I. Wax-thread sewing machine	425,722	Apr. 15	1974	{ 524 525	{ 51	402
Ambrose, Robert L., Burden, assignor to Rand Drill Company, New York, N. Y. Piston-packing ring	421,646	Feb. 18	1799	470	50	922
Ambrose, Robert L., Burden, assignor to Rand Drill Company, New York, N. Y. Hose-coupling	421,647	Feb. 18	1800	470	50	922
Amelang, Charles A., Baltimore, Md. Horse-stopping device	431,309	July 1	420	104	52	86
Amelung, August, Unionville, N. Y. Roundabout	439,369	Oct. 28	2654	706	53	522
American Arithmometer Company. (See Burroughs, William S., assignor.)						
American Automatic Spray Perfume Company. (See Mayrhofer, Joseph C., assignor.)						
American Bell Telephone Company. (See Beach, Franklin G., assignor.)						
American Bell Telephone Company. (See Carty, John J., assignor.)						
American Bell Telephone Company. (See Culbertson, John N., assignor.)						
American Bell Telephone Company. (See Hayes, Hammond V., assignor.)						
American Bell Telephone Company. (See Rosebrugh, Abner H., assignor.)						
American Bell Telephone Company. (See Stut, John C. H., assignor.)						
American Bit Brace Company. (See Wilcox, Lewis C., assignor.)						
American Button Fastener Company. (See Griswold, George M., assignor.)						
American Button Fastener Company. (See Richards, Francis H., assignor.)						
American Car Door Company. (See Wagner and Seath, assignors.)						
American Cash Register Company. (See Herr, Homer A., assignor.)						
American Dental Manufacturing Company. (See Halsey, Louis M., assignor.)						
American Doll Company. (See Alderson, Matthew F., assignor.)						
American Electric Meter Company. See Mehren, Jacob F., assignor.)						
American Extractor Company. (See Hyatt, John W., assignor.)						
American Fire Hose Manufacturing Company. (See Sibley, Edwin E., assignor.)						
American Fire Proof Steel Car Company. (See Green, William W., assignor.)						
American Granite Company. (See McEnerney, John, assignor.)						
American Heading Manufacturing Company. (See Carver, James W., assignor.)						
American Indicator and Improvement Company. (See Kneffer, John, assignor.)						
American Injector Company. (See Murdock, Horace B., assignor.)						
American Live Stock Express Company. (See Holmes, Benjamin F., assignor.)						
American Meter Company. (See Logue, Hugh, assignor.)						
American Nut Lock Company. (See Thomas, Charles H., assignor.)						
American Optical Company. (See Underwood, John K., assignor.)						
American Postal Machines Company. (See Ethridge, Martin V. B., assignor.)						
American Patents Company. (See Reach, Robert, assignor.)						
American Patents Company. (See Shibe, Benjamin F., assignor.)						
American Pin Company. (See Jones, Arthur E., assignor.)						
American Pneumatic Tool Company. (See Park, Walter E., assignor.)						
American Postal Machines Company. (See Ethridge, Frank N., assignor.)						
American Prepared-Food Company. (See Van Gilder, Samuel G., assignor.)						
American Press Association. (See Cummings, John R., assignor.)						
American Rail-Joint Lock Company. (See Dubé and Messier, assignors.)						
American Ring Company. (See Andrews, Clayton C., assignor.)						
American Ring Company. (See Nobbs, Edward P., assignor.)						
American Roll Paper Company. (See Crowder, David F., assignor.)						
American Roll Paper Company. (See Ehrlich, Leo, assignor.)						
American Roll Paper Company. (See Knight, Edward S., assignor.)						
American Roll Paper Company. (See Nentrup, John H., assignor.)						
American Roll Paper Company. (See Pickles, Charles K., assignor.)						
American Roll Paper Company. (See Rabich, William, assignor.)						
American Roll Paper Company. (See Rein, Gustavus, assignor.)						
American Roll Paper Company. (See Tivy, William H., assignor.)						
American Roller Bearing Company. (See Cooke, Ernest W., assignor.)						
American Screw Company. (See Rogers, Charles D., assignor.)						
American Semaphore Company. (See Stitzel, Frederick, assignor.)						
American Ship Windlass Company. (See Peirce, George, assignor.)						
American Ship Windlass Company. (See Whitney, Edwin H., assignor.)						

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American Shoe Tip Company. (See Taylor, Eugene H., assignor.)						
American Spring Company. (See Sedgwick, Frederick, assignor.)						
American Steam Gage Company. (See Lohbiller, Anton, assignor.)						
American Steel Barge Company. (See McDougall, Alexander, assignor.)						
American Steel Car Wheel Company. (See Freeman, Sullivan A., assignor.)						
American Steel Gear Company. (See Cooper, Howard W., assignor.)						
American Steel Gear Company. (See Munz, Theodore C., assignor.)						
American Stock Food and Fibre Company. (See Burnet, Sears, and Burnham, assignors.)						
American Stock Food and Fibre Company. (See Sears and Burnham, assignors.)						
American Store Railway Company. (See Cole, William R., assignor.)						
American Straw Board Company. (See Lowe, William S., assignor.)						
American Tobacco Company. (See Kinney, Francis S., assignor.)						
American Valve and Governor Company. (See Schmid, Charles, assignor.)						
American Vehicle Company. (See Schaefer, Peter, assignor.)						
American Waltham Watch Company. (See O'Hara, Daniel, assignor.)						
American Waltham Watch Company. (See Olney, William D., assignor.)						
American Waltham Watch Company. (See Schmalz and Firnbach, assignors.)						
American Wheel Company. (See Cotton, Charles W., assignor.)						
American Wheel Company. (See Cotton, Margedant, Gardner, and Margedant, assignors.)						
American Wire Fastening Company. (See Severance, John N., assignor.)						
American Writing Machine Company. (See Boyer, John J., assignor.)						
American Writing Machine Company. (See Fairfield and Francis, assignors.)						
American Writing Machine Company. (See McCormack, Ulysses S., assignor.)						
American Writing Machine Company. (See Yost, George W. N., assignor.)						
American Zylonite Company. (See Kipper and Jarvis, assignors.)						
American Zylonite Company. (See Mowbray, George M., assignor.)						
Americanite Manufacturing Company. (See Smolianoff, Sergey D., assignor.)						
Ames, Adelbert, Highlands, N. J. Lead-pencil sharpener	422,485	Mar. 4	178	49	50	1170
Ames, Almon, Berkeley, assignor to R. J. Davis, San Francisco, Cal. Pile covering	433,609	Aug. 5	250	67	52	805
Ames, Almon, Berkeley, assignor to R. J. Davis, San Francisco, Cal. Machine for turning and preparing piles or spars	442,471	Dec. 9	1307	338	53	1524
Ames, Charles E. (See Frohisher, Benjamin C., assignor.)						
Ames, Charles H., et al. (See Johnson, Charles L., assignor.)						
Ames & Frost Company. (See Bryant, Fred L., assignor.)						
Ames, Harry F. (See Todd, Benjamin F., assignor.)						
Ames, John, Jr. (See Bonner, Joseph C., assignor.)						
Ames, Joseph H. (See Stevenson, John S., assignor.)						
Ames, Timothy K., assignor of one-half to J. D. Carter, Wilmington, Del. Rheostat	441,918	Dec. 2	445	119	53	1352
Amet, Edward H., assignor to himself and H. A. Streeter, Chicago, Ill. Coin-operated display apparatus	423,654	Mar. 18	1959	516	50	1524
Amis, Joseph M., deceased; J. C. Weaver, Luray, Va., administrator, assignor to J. J. Sheehy, Washington, D. C. Lamp-extinguisher	431,423	July 1	598	150	52	121
Amme, Julius H., Cleveland, Ohio. Mute for stringed instruments	433,192	July 29	3373	872	52	681
Ammon, John, Stoughton, Wis. Sled-knee	428,876	May 27	2807	713	51	1395
Amos, Jacob. (See Silberstein and Amos.)						
Amos, Mark, Westbury-on-Trym, County of Gloucester, England. Standard for wire fencing	442,622	Dec. 30	3254	836	53	1929
Amos, William, Providence, R. I. Coupling-joint	420,220	Jan. 23	2390	636	50	500
Amos, William, Providence, R. I. Combined heater and spark-conveyer for railway-cars	435,199	Aug. 26	2722	719	52	1311
Ams, Max, New York, N. Y. Apparatus for smoking fish and meat	418,666	Jan. 7	3	1	50	3
Ams, Max, New York, N. Y. Preserving fish or meat	423,545	Mar. 18	1786	469	50	1490
Ams, Max, New York, N. Y. Making lined cans	426,091	Apr. 22	2535	668	51	516
Amnden, Charles M., Jersey City, N. J. Door	423,504	July 22	2272	589	52	463
Amstutz, Noah S., assignor to himself, C. W. Foote, and F. C. Goff, Cleveland, Ohio. Mining-machine	433,881	Aug. 5	658	170 171	52	885
Amusement Machine Company. (See Kennedy, Diss, and Rosenfield, assignors.)						
Anable, Henry B., assignor to G. H. Treadwell, Albany, N. Y. Interchangeable die	424,636	Apr. 1	308	78, 79	51	61
Anchor Buggy Company. (See Uckotter, Herman H., assignor.)						
Anchors, William N. (See Gourley, John L., assignor.)						
Anderl, Adalbert, Schwandorf, Bavaria, Germany. Steam-jet marine plow	420,670	Feb. 4	342	90	50	630
Andersen, Christen P., Copenhagen, Denmark. Detergent	421,223	Feb. 11	1184		50	797
Andersen, Frederik V., and J. O. Girdlestone, London, England. Dynamo-electric machine and motor	440,908	Nov. 18	2048	529 530	53	1018
Andersen, Johan M., Boston, Mass. Trolley-pole-supporting mechanism	431,684	July 8	1034	259	52	210
Andersen, Johan M., Boston, Mass. Trolley-pole	438,219	Oct. 14	836	227	53	167
Andersen, Johan M., assignor of one-half to A. Anderson, Boston, Mass. Friction-clutch pulley	430,053	June 10	1447	360	51	1760
Andersen, Johan M., assignor of one-half to A. Anderson, Boston, Mass. Switch-board	430,054	June 10	1449	360	51	1760
Andersen, Richard C., Pawnee City, Nebr. Automatic mop wringer and washer	422,487	Mar. 4	179	49	50	1170
Andersen, Richard C., Pawnee City, Nebr. Elevator	434,372	Aug. 12	1404	368 369	52	1041
Andersen, Richard C., Pawnee City, Nebr. Cooking utensil	439,768	Nov. 4	207	54	53	649
Andersen, Albert. (See Andersen, Johan M., assignor.)						
Anderson, Alfred I., Odell, N. D. Device for weighing grain	430,244	June 17	1748	435 436	51	1829
Anderson, Allen A., and T. G. Hamrick, Somerville, Tenn. Car-coupling	440,122	Nov. 11	745	197	53	763
Anderson, Anders G., West Oakland, Cal. Tension device for belts	429,877	June 10	1170	290	51	1707
Anderson, Andrew, Hastings, Minn. Cut-off and filtering-joint	443,810	Dec. 30	3559	912	53	1988
Anderson, Andrew G., and F. G. Hansen, Chicago, Ill. Folding bed	438,132	Oct. 14	708	193	53	143
Anderson, Andrew T., Trinity, Tex. Lumber-kiln	422,106	Feb. 25	2449	646 647	50	1051
Anderson, Andrew W., Minneapolis, Minn. Grave-decorating device	423,546	Mar. 18	1787	469	50	1491
Anderson, Anton G., assignor to Illinois Malleable Iron Company, Chicago, Ill. Gas and water box for streets	439,408	Oct. 21	2117	568	53	417
Anderson, Arthur A., Indianapolis, Ind. Pocket for fare-conveyers	438,832	Oct. 21	1798	479	53	354
Anderson, Benjamin B., et al. (See Blanchard, Allen I., assignor.)						
Anderson, Bernhard C. J., Chicago, Ill. Embossing and edge-shaping roller for moldings	422,486	Mar. 4	178	49	50	1170
Anderson, Bernhard C. J., Chicago, Ill. Machine for ornamenting strips of composition or for coating moldings therewith	443,421	Dec. 23	2926	753 754	53	1858
Anderson, Carl G., and J. Tregoning, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Burr-remover	423,979	Mar. 25	2447	649 650	50	1623
Anderson, Charles. (See Oliver and Anderson.)						
Anderson, Charles, assignor to South Bend Iron Works, South Bend, Ind. Reversible mold-board plow	424,400	Mar. 25	3095	822	50	1749

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Anderson, Charles, assignor to South Bend Iron Works, South Bend, Ind. Sulky-plow ...	422,295	May 20	1929	{ 484 485 257 258 259	{ 51	1206
Anderson, Charles, assignor to South Bend Iron Works, South Bend, Ind. Sulky-plow ...	431,683	July 8	1029	{ 257 258 259	{ 52	210
Anderson, Charles A., Symco, Wis. Combined punching and shearing machine	432,108	July 15	1681	432	52	343
Anderson, Charles A., Caseyville, Ky. Seed-dropping attachment for plows	434,749	Aug. 19	2018	527	52	1169
Anderson, Charles A., Rockford, Ill. Cultivator-shovel	436,911	Sept. 23	2484	649	52	1870
Anderson, Charles A., assignor of one-half to W. J. Millard and W. J. Pugh, Clayville, N. Y. Folding umbrella or parasol	438,461	Oct. 14	1202	326	53	236
Anderson, Christian A., and J. Fogarty, Kaukauna, Wis.; said Fogarty assignor to said Anderson. Friction-clutch	425,482	Apr. 15	1604	428	51	329
Anderson, E. Willoughby. (See Green, James D., assignor.)						
Anderson, E. Willoughby. (See McGear, Thomas J., assignor.)						
Anderson, Edwin, Tryon City, N. C. Shingle-sawing machine	437,342	Sept. 30	3145	{ 823 824	{ 52	2003
Anderson, Francis C., <i>et al.</i> (See Stanley, Merritt F., assignor.)						
Anderson, Frank, Peekskill, N. Y. Automatic telegraph	426,749	Apr. 29	3534	922	51	723
Anderson, Frank, Peekskill, N. Y. Apparatus for rectifying electric currents	429,109	June 3	3	2	51	1473
Anderson, Frank, Peekskill, N. Y. Apparatus for preparing and translating secret messages	431,792	July 8	1201	299	52	243
Anderson, Frank, Peekskill, N. Y. Automatic telegraphy	431,793	July 8	1202	300	52	243
Anderson, Frank, Peekskill, N. Y. Automatic telegraph	431,794	July 8	1203	{ 300 301	{ 52	243
Anderson, Frank E., East Orange, N. J. Scouring and washing apparatus	430,817	June 24	2702	662	51	2021
Anderson, Frank P. (See Grozier and Anderson.)						
Anderson, George K., Memphis, Tenn. Tachygraphy and type-writing machine	440,341	Nov. 11	1098	282	53	830
Anderson, George V., assignor of seven-sixteenths to C. W. Gouert, Wilmington, Del. Leather-glazing machine	426,225	Apr. 22	2740	717	51	557
Anderson, George V., and C. W. Gouert, Wilmington, Del. Toy	434,750	Aug. 19	2020	528	52	1169
Anderson, Gilbert R. (See McKenzie, Kenneth, assignor.)						
Anderson, Hans J., Lake Mills, Wis. Money-registering device	419,620	Jan. 21	1446	388	50	310
Anderson, Harry, Philadelphia, Pa. Handle for lock-knobs	428,442	May 20	2151	541	51	1251
Anderson, Henry, San Francisco, Cal. Metallic roofing	418,860	Jan. 7	315	76	50	66
Anderson, Henry, assignor to R. J. Davis, San Francisco, Cal. Pile-covering	419,998	Jan. 21	2030	535	50	423
Anderson, Henry C., <i>et al.</i> (See Stanley, Merritt F., assignor.)						
Anderson, Henry C., Whitesborough, Tex. Animal-trap	434,751	Aug. 19	2021	528	52	1170
Anderson, Henry C., assignor of one-half to H. H. Robertson, Whitesborough, Tex. Clasp	440,243	Nov. 11	942	242	53	804
Anderson, Henry C., assignor to J. B. Choice, Whitesborough, and C. C. Clemans, Grayson County, Tex. Washing-machine	426,978	Apr. 29	3850	1006	51	785
Anderson, Henry C., assignor to W. F. Davis and J. B. Choice, Whitesborough, Tex. Churn	426,979	Apr. 29	3851	1006	51	785
Anderson, Henry L., and W. Witte, Chicago, Ill. Egg-carrier	419,621	Jan. 21	1449	389	50	310
Anderson, James C. (See Hull and Anderson.)						
Anderson, James C., Highland Park, Ill. Brick-kiln	424,245	Mar. 25	2815	753	50	1695
Anderson, James C., Highland Park, Ill. Burning brick	424,246	Mar. 25	2817	{ 753 754	{ 50	1696
Anderson, James C., Highland Park, Ill. Method of and apparatus for burning brick	424,247	Mar. 25	2818	754	50	1696
Anderson, James C., Highland Park, Ill. Brick-kiln	424,248	Mar. 25	2820	{ 754 755	{ 50	1696
Anderson, James C., Highland Park, Ill. Brick-kiln	424,249	Mar. 25	2821	755	50	1696
Anderson, James C., Highland Park, Ill. Brick-kiln	424,250	Mar. 25	2822	755	50	1697
Anderson, James C., Highland Park, Ill. Making clay building-blocks in imitation of stone	424,251	Mar. 25	2823	756	50	1697
Anderson, James C., Highland Park, Ill. Composition for ornamental brick	424,252	Mar. 25	2825	756	50	1697
Anderson, James C., Highland Park, Ill. Composition for ornamental brick	424,253	Mar. 25	2825	756	50	1697
Anderson, James C., Highland Park, Ill. Composition for ornamental brick	424,254	Mar. 25	2826	756	50	1697
Anderson, James C., Highland Park, Ill. Building-block	424,255	Mar. 25	2827	756	50	1697
Anderson, James C., Highland Park, Ill. Cable-grip	430,412	June 17	2034	501	51	1285
Anderson, James C., Highland Park, Ill. Brick-kiln	441,272	Nov. 25	2677	{ 695 696	{ 53	1145
Anderson, James J., Chicago, Ill. Rail-chair	419,814	Jan. 21	1738	460	50	365
Anderson, James J., Marlborough, Mass. Stamping-machine	435,384	Sept. 2	3	1	52	1375
Anderson, James J., assignor of one-half to N. Brosseau and E. D. Norton, Chicago, Ill. Rail-joint	436,572	Sept. 16	1865	491	52	1744
Anderson, James M., assignor to Crane Company, Kansas City, Mo. Water-closet	429,494	June 3	600	147	51	1586
Anderson, Jesse N., Conway, Mo. Box-fastener	427,723	May 13	1051	263	51	1028
Anderson, Jesse N., assignor of one-half to O. M. Gunderson, Conway, Mo. Saddle-bags	427,637	Sept. 30	3605	943	52	2096
Anderson, Johanna, Braceville, Ill. Washing-machine	428,996	May 27	2979	764	51	1429
Anderson, John (See McCoy, Andrew T., assignor.)						
Anderson, John A., Wakefield, Mass. Canopy-support for children's carriages	430,324	June 17	1717	427	51	1823
Anderson, John A. E., assignor of one-half to C. Lenox, Lebanon, Ind. Fence	423,201	Mar. 11	1276	332	50	1387
Anderson, John B., and J. H. Hope, Hamilton, Ontario, Canada. Head-rest	418,935	Jan. 7	451	110	50	94
Anderson, John G., Alexander, N. C. Tobacco-hanger	425,384	Apr. 8	1312	351	51	264
Anderson, John P., assignor of one-half to W. W. Allen, Olsburg, Kans. Snap-hook	424,637	Apr. 1	309	79	51	61
Anderson, John P., and J. F. Miller, Saranac, Mich. Washing-machine	427,031	May 6	1	1	51	811
Anderson, John R., Macon, Ga. Veterinary remedy	423,893	Mar. 25	2305	753	50	1597
Anderson, John T., Chicago, Ill. Bow-facing oar	420,925	Feb. 11	753	195	50	715
Anderson, John W., Lancaster, Pa. Washing-machine	429,831	June 10	1096	270	51	1693
Anderson, Joseph. (See Lorang, Anderson, and Larsson.)						
Anderson, Joseph R., Philadelphia, Pa. Parallel-ruler	433,264	July 29	3474	897	52	702
Anderson, Joseph R., assignor of two-thirds to F. B. and C. H. Reeves, Philadelphia, Pa. Mirror-hanger for bureaus, &c.	434,632	Aug. 19	1834	479	52	1135
Anderson, Josiah B., assignor to G. H. Heath, Boston, Mass. Apparatus for preserving food	427,822	May 13	1210	305	51	1058
Anderson, Lee, assignor of three-fourths to T. Broad, T. F. Reilly, Paris, Tex., and G. McMullan, Fort Smith, Ark. Nut-lock	419,956	Jan. 14	1410	377	50	296
Anderson, Lee, assignor of two-thirds to J. Martin and T. Broad, Paris, Tex. Hame-fastener	428,059	May 20	1571	399	51	1137
Anderson, Lee, assignor of two-thirds to T. Broad, J. Martin, and L. P. Harrison, Paris, Tex. Top-prop	428,060	May 20	1571	399	51	1137
Anderson, Leonard, Detroit, Mich. Governor for steam-engines	441,630	Dec. 2	1	1	53	1263
Anderson, Lewis C. (See Yoakum, Robert, assignor.)						
Anderson, Louis, Chicago, Ill. Heating-furnace	440,237	Nov. 11	933	240	53	802
Anderson, Mons, <i>et al.</i> (See Loe, Syver, assignor.)						
Anderson, Niels, Andubon, Iowa. Spring-motor	440,123	Nov. 11	747	197	53	763
Anderson, Olof, and F. J. Stetter, Defiance, Ohio. Carpet-stretcher	434,103	Aug. 12	988	252	52	959

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Anderson, Peter, Salt Lake City, Utah. Pump	428,997	May 27	2980	{ 764 765 }	51	1429
Anderson, Richard K. (See Krutsch and Anderson.)						
Anderson, Robert J. (See Dorton and Earle, assignors.)						
Anderson, Samuel W. (See Volz, John A., assignor.)						
Anderson, Silas R., Erdice, Pa. Post-driver	434,620	Aug. 19	1804	{ 470 471 }	52	1130
Anderson, Thomas. (See Miller and Anderson.)						
Anderson, Thomas E., Memphis, Tenn. Combined cotton chopper and cultivator	438,975	Oct. 21	2015	538	53	396
Anderson, Valerius D., Cleveland, Ohio. Apparatus for treating refuse	430,795	June 24	2660	653	51	2013
Anderson, Villette, Washington, D. C. Device for teaching numbers to children	431,102	July 1	108	28	52	23
Anderson, W. C. (See Jones, David D., assignor.)						
Anderson, William, Westminster, England. Mounting ordnance	422,002	Feb. 25	2292	{ 604 605 }	50	1024
Anderson, William, Westminster, England. Recoil-check for heavy ordnance	424,448	Apr. 1	4	2, 3	51	3
Anderson, William, Westminster, England. Recoil-check for ordnance	424,947	Apr. 8	795	{ 213 214 }	51	162
Anderson, William, Westminster, England. Mounting for heavy ordnance	439,570	Oct. 28	2944	782	53	578
Anderson, William, Westminster, England, assignor of one-half to L. Raskazoff, St. Petersburg, Russia. Mortar-mounting	422,003	Feb. 25	2293	{ 604 605 606 }	50	1024
Anderson, William, Erith, assignor to Revolving Purifier Company, Limited, London, England. Eccentric revolving water-purifier	443,736	Dec. 30	3442	883	53	1965
Anderson, William, Erith, assignor to Revolving Purifier Company, Limited, London, England. Revolving purifier for water	443,737	Dec. 30	3443	883	53	1965
Anderson, William B. (See Fant and Anderson.)						
Anderson, William G. (See Pennock, Lee J., assignor.)						
Anderson, William H., Riverside, Cal. Package-tie	437,548	Sept. 30	3490	911	52	2073
Anderson, William H., Riverside, Cal. Treadle-pump	439,992	Nov. 4	557	147	53	717
Anderson, William R. (See Bretland, Alfred L., assignor.)						
Anderson, William R. (See Clouse, William, assignor.)						
Anderson, William R., Tiffin, Ohio. Nut-tapping machine	429,878	June 10	1172	{ 290 291 }	51	1707
Anderson, William W., assignor of one-half to J. H. Curry, Wilksburg, Pa. Coke-oven	420,897	Feb. 4	703	181	50	696
Anderson, Willis, Magee's Corners, N. Y. Holdback-strap	438,747	Oct. 21	1657	444	53	328
Anderson, Zachariah J., Fort Worth, Tex. Baling-press	426,900	Apr. 29	3746	978	51	765
Andersson, Carl, Copenhagen, Denmark. Lubricating device	423,202	Mar. 11	1277	332	50	1387
Andlauer, Raymond, Kansas City, Kans. Attachment for gasoline-stoves	435,272	Aug. 26	2831	749	52	1332
Andres, Albert, Nieder Walluf, Germany. Heel-making machine	440,342	Nov. 11	1101	{ 282 283 }	53	830
Andres, George S., San Francisco, Cal. Apparatus for making extracts	436,623	Sept. 16	1937	509	52	1757
Andres, George S., San Francisco, Cal. Apparatus for making extracts	436,624	Sept. 16	1939	509	52	1758
Andretta, Vincenzo, New York, N. Y. Upper	431,761	July 8	1146	286	52	233
Andrew, George T. (See Sandham, Henry, assignor.)						
Andrew, William E., Atlantic Highlands, N. J. Car-ventilator	426,750	Apr. 29	3536	923	51	724
Andrews, Abram P., Dover, N. H., assignor of one-half to T. T. Dodge, Portland, Me. Storm-window fastener	443,348	Dec. 23	2824	725	53	1837
Andrews, Adolphus Y., assignor to Langfeld Brothers & Company, Philadelphia, Pa. Writing-desk	434,040	Aug. 12	881	232	52	937
Andrews, Albert. (See Townsend, Andrews, and Townsend.)						
Andrews, Albert F., Avon, Conn. Safety-fuse	424,449	Apr. 1	7	3	51	4
Andrews, Alden C., Chicago, Ill. Leather-softening machine	430,165	July 17	1617	{ 403 404 }	51	1804
Andrews, Clayton C., assignor to American Ring Company, Waterbury, Conn. Sheet-metal knob	423,203	Mar. 11	1278	333	50	1387
Andrews & Company, A. H. (See Andrews, Schustek, and Costello, assignors.)						
Andrews & Company, A. H. (See Costello, Thomas H., assignor.)						
Andrews & Company, A. H. (See Holbrook, Frederick A., assignor.)						
Andrews, David C., and J. F. Seery, New York, N. Y. Hydrocarbon-burner	419,304	Jan. 14	988	262	50	209
Andrews, Edgar L., Sterling, Ill. Railway-track cleaner	433,433	Aug. 5	1	1	52	751
Andrews, Edward M., Freeport, Mich. Fence	422,046	Feb. 25	2354	621	50	1035
Andrews, Edward N., New York, N. Y. Thread-cutting and drilling machine	427,948	May 13	1408	356	51	1095
Andrews, Emery, Kennebunk, Me., assignor to Leatheroid Manufacturing Company, of Maine. Compound for parchmentizing paper	420,615	Feb. 4	268	.....	50	617
Andrews, Emery, Kennebunk, Me., assignor to Leatheroid Manufacturing Company, of Maine. Composition of matter for use in the mechanic arts	428,544	May 20	2285	.....	51	1276
Andrews, Emery, Kennebunk, Me., assignor to Leatheroid Manufacturing Company, of Maine. Electric insulator	428,545	May 20	2286	581	51	1276
Andrews, Emery, Kennebunk, Me., assignor to Leatheroid Manufacturing Company, of Maine. Textile fabric	433,388	July 29	3638	939	52	735
Andrews, Emery, Kennebunk, Me., assignor to Leatheroid Manufacturing Company, of Maine. Trunk	433,389	July 29	3639	939	52	735
Andrews, George M., South Shore, S. D. Animal-trap	438,133	Oct. 14	709	194	53	143
Andrews, Herbert L., D. Schustek, and T. H. Costello, assignors to A. H. Andrews & Company, Chicago, Ill. Dovetail joint	419,133	Jan. 7	720	189	50	151
Andrews, Jacob R., and E. F. Kelley, assignors to Bath Iron Works, Bath, Me. Steam windlass and capstan	429,404	June 3	463	{ 109 110 }	51	1560
Andrews, James, and G. Lindenthal, Allegheny, Pa. Construction of light-houses	438,976	Oct. 21	2016	538	53	397
Andrews, Marion A., Syracuse, N. Y. Journal-bearing	429,554	June 3	664	167	51	1603
Andrews, Marion A., Syracuse, N. Y. Axle-mounting	432,109	July 15	1682	432	52	343
Andrews, Roderick B. (See Morton and Andrews.)						
Andrews, Samuel S., Knoxville, Iowa. Fire-escape	433,115	July 29	3259	839	52	658
Andrews, Sarah. (See De Young and Andrews.)						
Andrews, Wallace C., New York, N. Y. Apparatus for the purification of gas	426,092	Apr. 22	2536	668	51	516
Andrews, Wallace C., New York, N. Y. Purifying gas	426,093	Apr. 22	2537	668	51	516
Andrews, Wallace C., New York, N. Y. Vulcanizing wood	430,055	June 10	1450	.....	51	1760
Andrews, William S. (See Robbins, Arthur C., assignor.)						
Angell, Albert. (See Hawkins, John J., assignor.)						
Angell, Edward F., Chicago, Ill. Curling-iron	420,325	Jan. 28	2542	674	50	528
Angell, Edward G., and L. F. Picard, Juniata, Nebr.; said Picard assignor to said Angell. Measuring-gage	437,549	Sept. 30	3491	911	52	2073
Angell, Edwin A., Boston, Mass. Show and sale case	428,877	May 27	2807	714	51	1395
Angell, Edwin E., Boston, assignor of one-half to E. B. Welch, Cambridge, Mass. Canning-machine	439,851	Nov. 4	332	85, 86	53	672

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Angell, Eugene H., Ouray, Colo. Railway-rail cutter.....	435,476	Sept. 2	137	39	52	1401
Angell, William T. (See Taylor and Angell.)						
Angell, William T., St. Louis, Mo., and C. G. Taylor, Ann Arbor, Mich. Rumble.....	440,820	Nov. 18	1908	490	53	991
Angerer, Victor. (See Quinn and Angerer.)						
Angerer, Victor, assignor to W. Wharton, Jr., and Company, Incorporated, Philadelphia, Pa. Rail-joint.....	431,835	July 8	1268	318	52	257
Angerer, Victor, and C. A. Psilander, assignors to W. Wharton, Jr., and Company, Incorporated, Philadelphia, Pa. Portable cross-over for railways.....	432,292	July 15	1968	{ 502 503 }	52	396
Angerer, Victor, and H. E. Brett, assignors to W. Wharton, Jr., and Company, Incorporated, Philadelphia, Pa. Machine for forming railway-chairs.....	434,228	Aug. 12	1187	{ 309 310 }	52	998
Angerer, Victor, and E. Samuel, assignors to W. Wharton, Jr., and Company, Incorporated, Philadelphia, Pa. Railway tie-plate.....	438,395	Oct. 14	1103	300	53	217
Angermann, Julius, Berlin, Germany. Thread-tension mechanism for sewing-machines.....	422,691	Mar. 4	485	{ 123 124 }	50	1229
Anglo-American Electric Light Manufacturing Company. (See Sorley, Charles, assignor.)						
Anguish, Henry G., Chittenango, N. Y. Buckle.....	419,173	Jan. 14	793	209	50	171
Angus, Charles, assignor of one-half to J. R. Nangle, Albany, N. Y. Tobacco-pipe.....	437,765	Oct. 7	145	45	53	30
Angus, Charles, and J. R. Nangle, Albany, N. Y. Bag-holder.....	421,648	Feb. 18	1802	470	50	922
Angwin, James A., Oakland, Cal. Machine for applying hose-couplings.....	423,106	Mar. 11	1138	295	50	1359
Annajah, Lewis, London, England. Fire-escape.....	418,879	Jan. 7	353	85	50	74
Annable, Edwin G., Norwich, Vt. Lantern-holder.....	438,792	Oct. 21	1717	460	53	340
Annin, Joseph, Brooklyn, N. Y. Hand-truck.....	421,649	Feb. 18	1803	470	50	922
Annis, Thomas, assignor of one-half to C. Willard and W. C. Williams, Battle Creek, Mich. Attachment for windmills.....	432,110	July 15	1683	432	52	344
Anrig, Joseph, Newark, N. J. Embroidery-frame.....	437,912	Oct. 7	361	104	53	70
Ansell, John H., assignor of one-half to A. Blakely, Alpena, Mich. Machine for making spools.....	440,734	Nov. 18	1753	451	53	964
Ansley, Frederick. (See Hayes, Ansley, and Eschenbrenner.)						
Ansonia Brass and Copper Company. (See Woodward, George W., assignor.)						
Antes, Joseph B., Rockford, Ill. Ink-well.....	430,911	June 24	2841	697	51	2047
Anthony, Johann, Flensburg, Germany. Machine for planing and jointing barrel-staves.....	439,089	Oct. 28	2196	589	53	438
Anthony, Gustave C., Levallois-Perret, France. System for the isolation of buildings, &c.....	440,938	Nov. 18	2103	546	53	1029
Anthony, Abram B., Schenectady, N. Y. Automatic gate for railway-crossings.....	419,305	Jan. 14	991	262	50	209
Anthony & Company, E. & H. T. (See Anthony, Richard A., assignor.)						
Anthony & Company, E. & H. T. (See Bartlett, Dudley, assignor.)						
Anthony & Company, E. & H. T. (See Bedford, Joseph T., assignor.)						
Anthony & Company, E. & H. T. (See Lewis, William H., assignor.)						
Anthony, Edgar W., Brookline, Mass. Range.....	435,006	Aug. 26	2440	646	52	1257
Anthony, Richard A., assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic-plate holder.....	439,808	Nov. 4	262	66	53	659
Anthony, William A., assignor to Mather Electric Company, Manchester, Conn. Starting-switch for electric motors.....	421,090	Feb. 11	998	{ 255 256 }	50	761
Anthony, William A., Hartford, assignor to Mather Electric Company, Manchester, Conn. Fuse-plug.....	427,823	May 13	1211	305	51	1058
Anti-Kalsomine Company. (See Haire, John C., assignor.)						
Antonides, Peter, Freehold, assignor of one-half to F. Worrell, Mattawan, N. J. Potato-digger.....	436,296	Sept. 9	1416	{ 369 370 }	52	1653
Anton, Frederic M., Monongahela City, Pa. Miner's-lamp wick.....	431,733	July 8	1112	276	52	226
Anton, George, Monongahela City, Pa. Miner's lamp.....	431,734	July 8	1113	276	52	226
Appel, August. (See Freckmann, Ballay, and Appel.)						
Appel, Isaac M., Baltimore, Md. Overalls.....	440,988	Nov. 18	2175	563	53	1043
Appel, Isaac M., Baltimore, Md. Overalls.....	440,989	Nov. 18	2176	563	53	1043
Appenzeller, David K., Chambersburg, Pa. Price-card fastener and exhibitor.....	437,078	Sept. 23	2712	708	52	1915
Apperson, Richard D., Little Rock, Ark. Car-wheel.....	428,998	May 27	2983	765	51	1430
Applebaker, Joseph, Marshfield, Wis. Sleigh-knee.....	439,370	Oct. 28	2654	706	53	522
Appleby, John F., Minneapolis, Minn. Cable-railway-grip attachment.....	421,538	Feb. 18	1639	423	50	890
Appleby, Joseph, Birmingham, England. Drive-chain.....	441,815	Dec. 2	298	80	53	1322
Applegarth, Rufus W., Baltimore, Md. Inlet-cock for water coil boilers.....	421,224	Feb. 11	1185	304	50	797
Applegate Boot and Shoe Lasting Company. (See Cunningham, Patrick, assignor.)						
Applegate, David C. (See Colles, Kitchell, and Applegate.)						
Appelquist, Charles J., Ellendale, N. D. Anti-friction hub.....	421,539	Feb. 18	1641	424	50	890
Appleton, Charles J., assignor to E. Karsen's Sons, New York, N. Y. Feeding attachment for circular-knitting machines.....	425,362	Apr. 8	1413	377	51	284
Appleton Manufacturing Company. (See Stone, Herbert F., assignor.)						
Appleton, William H., New York, N. Y., assignor to A. W. Sulloway, Franklin Falls, N. H. Work-transferring mechanism for knitting-machines.....	439,571	Oct. 28	2945	{ 782 783 }	53	579
Appleton, William H., New York, N. Y., assignor to A. W. Sulloway, Franklin Falls, N. H. Work-transferring mechanism for knitting-machines.....	439,585	Oct. 28	2967	788	53	583
Appley, Harrison V., Grand Rapids, Mich. Elevator or hoist fire-escape.....	425,924	Apr. 15	2258	{ 588 599 }	51	454
Apsley, John, assignor of one-half to C. Heap, Rochdale, England. Instrument for slaughtering cattle.....	422,687	Mar. 4	480	122	50	1228
Appleyard, Arthur E., Boston, Mass. Switch attachment for street-railway cars.....	426,980	Apr. 29	3852	1007	51	785
Appleyard, Arthur E., Boston, assignor of one-half to H. L. Millis and J. S. Folsom, Millis, Mass. Means for switching or guiding railway-cars.....	426,751	Apr. 29	3539	923	51	724
Appleyard, Arthur E., Boston, assignor of one-half to H. L. Millis and J. S. Folsom, Millis, Mass. Safety device for street-cars.....	443,738	Dec. 30	3443	{ 883 884 }	53	1965
Applin, Joseph, Philadelphia, Pa. Car-seat.....	430,413	June 17	2035	501	51	1885
Apps, Alfred, London, England. Electric arc lamp.....	438,134	Oct. 14	711	194	53	114
Aramburu, Ricardo, Seville, Spain. Producing photo-mechanical printing-plates.....	437,170	Sept. 23	2882		52	1946
Aramburu, Frederick, Seville, Spain, assignor to R. Dominguez, Havana, Cuba. Nautical magnetic tracer apparatus.....	437,169	Sept. 23	2878	{ 748 749 750 }	52	1945
Archer, Andrew. (See Emme, Charles A., assignor.)						
Archer, George W., assignor to Archer Manufacturing Company, Rochester, N. Y. Barber's chair attachment.....	436,327	Sept. 16	1469	383	52	1671
Archer, James G., Brookfield, Mo. Pole for hay-gatherers.....	437,471	Sept. 30	3367	881	52	2049
Archer, John B., Washington, D. C. Snow and ice melter.....	422,278	Feb. 25	2716	715	50	1101
Archer, John B., Washington, D. C. Glass-furnace.....	427,654	May 13	941	236	51	1006
Archer, John B., Washington, D. C. Muffle-furnace.....	430,414	June 17	2036	502	51	1885
Archer, John B., Washington, D. C. Apparatus for the manufacture of gas.....	433,926	Aug. 5	714	{ 185 186 }	52	896
Archer, John B., Washington, D. C. Apparatus for manufacturing gas.....	434,621	Aug. 19	1805	{ 471 472 }	52	1130

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Archer, John B., Washington, D. C. Apparatus for the manufacture of gas.....	435,720	Sept. 2	531	{ 140 141 }	52	1478
Archer Manufacturing Company. (See Archer, George W., assignor.)						
Archer & Pancoast Manufacturing Company. (See Brown, James E., assignor.)						
Archer & Pancoast Manufacturing Company. (See Brown, James E. and J. F., assignors.)						
Archibald, Jabez B., Lincoln, Nebr. Inkstand.....	440,354	Nov. 11	957	245	53	807
Arcus, Sinclair, Chicago, Ill. Washing-machine.....	439,552	Nov. 4	334	86	53	673
Arden, Harry B., New York, N. Y. Device for turning the arms of derricks.....	424,530	Apr. 1	139	40, 41	51	29
Arey, Clarence O., Cleveland, Ohio. Furnace attachment.....	438,281	Oct. 14	939	253	53	185
Argerbright, Daniel, Troy, Ohio. Folding bedstead.....	433,845	Aug. 5	604	157	52	874
Argerbright, Daniel, assignor of two-thirds to P. J. Gates and C. T. Ziegenfelder, Troy, Ohio. Carriage-sunshade.....	442,935	Dec. 16	2110	543	53	1691
Arkell, James, Canajoharie, N. Y. Machine for making paper bags.....	425,197	Apr. 8	1181	313	51	239
Arkell, James, Canajoharie, N. Y. Delivery mechanism for paper-bag machines.....	427,289	May 6	404	105	51	890
Arkell, James, Canajoharie, N. Y. Device operated by the edges of moving webs.....	428,363	May 20	2032	511	51	1228
Arkless, William. (See Day, Patrick L., assignor.)						
Arlington Manufacturing Company. (See Colburn and France, assignors.)						
Arlington Mills. (See Petzold, Charles G., assignor.)						
Armbrister, George L. (See McPherson and Armbrister.)						
Armstrong, James A., Staunton, Va. Safety attachment.....	437,550	Sept. 30	3492	911	52	2073
Armeny, Gynlo, New York, N. Y. Fountain-pen.....	429,405	June 3	465	110	51	1560
Armeny, Gynlo, New York, N. Y. Gem-setting.....	432,007	July 15	1523	387	52	313
Armes, Willard O. (See McDowell, Samuel J., assignor.)						
Armington, William W., and H. A. Briggs; said Armington assignor to said Briggs, C. W. and S. S. Hopkins, and C. H. Allen, Norwich, Conn. Fire-arm.....	429,110	June 3	5	2	51	1473
Armistead, Thomas E., Mazomanie, Wis. Blind.....	425,723	Apr. 15	1976	{ 525 526 }	51	402
Armitage, Marriott, Long Island City, N. Y., and C. Topham, Philadelphia, Pa., assignors to J. Wild and J. Cartledge, Brooklyn, N. Y. Drop-box mechanism for looms.....	422,279	Feb. 25	2718	{ 715 716 }	50	1102
Arns, Edward. (See Johnson, Charles C., assignor.)						
Arns, Edward W., Lansingburg, assignor to W. & L. E. Gurley, Troy, N. Y. Solar surveying-instrument.....	423,894	Mar. 25	2305	609	50	1597
Armstead, Taswell B., Chicago, Ill. Key-fastener.....	423,107	Mar. 11	1140	295	50	1359
Armstrong, Albert, assignor to Overman Carriage Company, Cincinnati, Ohio. Thill-coupling.....	432,174	July 15	1786	459	52	363
Armstrong, Albert J., Coronado, Cal. Boot-calk.....	442,003	Dec. 2	588	159	53	1378
Armstrong, Allen A., Kent, Ohio. Device for attaching umbrella-tops to bows.....	422,688	Mar. 4	481	122	50	1228
Armstrong, Charles G., assignor to G. A. Harmount, Chicago, Ill. Battery-carbon.....	418,837	Jan. 7	279	68	50	59
Armstrong, Charles G., Englewood, assignor to himself and G. A. Harmount, Chicago, Ill. District-telegraph alarm-box.....	418,778	Jan. 7	181	44	50	40
Armstrong, Edward, Allegheny, Pa. System of distributing cooling-liquids for refrigerating purposes.....	431,502	July 1	726	181	52	145
Armstrong, Edward P., South Coventry, Conn. Attachment for saw-mills.....	426,357	Apr. 22	2916	{ 767 768 }	51	595
Armstrong, Frank, Bridgeport, Conn. Machine for setting up bicycle-wheels and putting on rubber tires.....	422,689	Mar. 4	482	123	50	1228
Armstrong, George W., and W. A. Rankin, New Lisbon, Ohio. Screen.....	419,907	Jan. 21	1890	497	50	396
Armstrong, Hannah. (See Armstrong, John, assignor.)						
Armstrong, Harry W., Verona, Pa. Valve-gear.....	431,735	July 8	1114	{ 276 277 }	52	227
Armstrong, Henry C., D. E. Bigelow, and G. L. Osborn, Ashland, Wis. Car-coupling.....	428,546	May 20	2286	581	51	1276
Armstrong, John, assignor to H. Armstrong, Vine Creek, Kans. Corn-shocker.....	425,969	Apr. 22	2360	625	51	483
Armstrong, John, assignor to H. Armstrong, Vine Creek, Kans. Corn-shocker.....	430,609	June 24	2344	{ 573 574 }	51	1952
Armstrong, John, assignor to H. Armstrong, Vine Creek, Kans. Harvester.....	436,392	Sept. 16	1586	{ 418 419 }	52	1693
Armstrong, John, assignor to H. Armstrong, Vine Creek, Kans. Corn-harvester.....	436,885	Sept. 23	2439	637	52	1862
Armstrong, Lewis, Worcester, Mass. Bench-vise.....	433,973	Aug. 12	800	208	52	921
Armstrong, Lewis D., Lock Haven, Pa. Apparatus for recovering soda.....	440,124	Nov. 11	748	197	53	764
Armstrong Manufacturing Company. (See Carstensen, Larns F., assignor.)						
Armstrong Manufacturing Company. (See Cash, Arthur W., assignor.)						
Armstrong Manufacturing Company. (See Hansen, Mads L., assignor.)						
Armstrong, Mitchell & Co., W. G. (See Grenfell, Hubert H., assignor.)						
Armstrong, Samuel H. (See Wages and Armstrong.)						
Armstrong, William. (See Bell and Armstrong.)						
Armstrong, William. (See Glover and Armstrong.)						
Armstrong, William J., assignor of one-half to G. F. Jones, Baltimore, Md. Game apparatus.....	443,889	Dec. 30	3663	944	53	2009
Arnd, Julius. (See Wyland, William H., assignor.)						
Arnemann, Wilhelm, Hamburg, Germany. Pitching-machine.....	440,296	Nov. 11	1035	266	53	818
Arnemann, Wilhelm, Hamburg, Germany. Pitching-machine.....	440,297	Nov. 11	1036	266	53	819
Arner, Emil. (See Sommerfeld, Heinrich, assignor.)						
Arner, John H., New Mahoning, Pa. Composition for center-pieces, &c.....	423,108	Mar. 11	1141	.....	50	1359
Arnett, William D., Parma, Idaho. Dam.....	422,901	Mar. 11	822	213	50	1301
Arnett, William D., Parma, Idaho. Dam.....	422,902	Mar. 11	823	213	50	1301
Arnold, Ferdinand J., Chateaufauf-on-the-Loire, France, and M. A. de Palacio, Bilbao, Spain. Means for transporting loads.....	425,724	Apr. 15	1978	{ 526 527 }	51	402
Arnold, Anna M. (See Arnold, Satterlee, assignor.)						
Arnold, Benjamin, East Greenwich, R. I. Tube or case for holding drawings.....	423,712	Mar. 18	2041	538	50	1539
Arnold, Benjamin, East Greenwich, R. I. Instrument for marking.....	426,094	Apr. 22	2539	609	51	516
Arnold, Charles H., et al. (See Wilson, William H., assignor.)						
Arnold, Charles H., Chicago, Ill. Folding sofa or settee.....	425,483	Apr. 15	1606	429	51	329
Arnold, Charles L., Wilmington, N. C. Sleeping-car.....	426,424	Apr. 29	2646	797	51	629
Arnold, Craig R., Sharen Hill, Pa. Railway-car telegraph.....	442,347	Dec. 9	1120	292	53	1486
Arnold, Daniel J. C., New London, Ohio. Spring-bearing for wheelbarrows.....	442,655	May 13	943	237	51	1007
Arnold, Daniel J. C., New London, Ohio. Detachable furniture-joint.....	434,229	Aug. 12	1190	310	52	998
Arnold, Daniel J. C., and C. B. Post, New London, Ohio. Wheel.....	419,488	Jan. 14	1258	334	50	265
Arnold, Edward M., Pawtucket, R. I. Hot-water heater.....	430,415	June 17	2037	502	51	1885
Arnold, Eli E., Philadelphia, Pa. Bedstead attachment.....	427,533	May 13	770	192	51	973
Arnold, Eli E., Philadelphia, Pa. Support for curtains.....	433,509	Aug. 5	101	28	52	776
Arnold, Eli E., Philadelphia, Pa. Clothes-drier.....	439,853	Nov. 4	336	87	53	673
Arnold, Emmett, Burnt Hills, N. Y. Hoof-expander.....	422,488	Mar. 4	181	50	50	1171
Arnold, Ernest M., Thompson, Conn. Oil-burner.....	433,639	Aug. 5	289	77	52	813

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Arnold, Ezra P., Rockland, Mass. Thread-controlling device for wax-thread sewing-machines	421,889	Feb. 25	2139	561	50	995
Arnold, F. H. (See Fletcher, James R., assignor.)						
Arnold, George W., Toronto, Ontario, Canada. Baling-press	421,472	Feb. 18	1530	396	50	870
Arnold, James M., Chicago, Ill. Lubricator for elevators	427,351	Sept. 30	3161	827	52	2006
Arnold, John, Forty Fort, Pa. Agricultural implement	419,027	Jan. 7	573	{ 144 145 }	50	121
Arnold, Orville M., <i>et al.</i> (See Arnold, Samuel S., assignor.)						
Arnold, Phineas, Canal Dover, Ohio. Drier-car	419,306	Jan. 14	992	262	50	210
Arnold, Phineas, Canal Dover, Ohio. Paving-block	422,690	Mar. 4	484	123	50	1229
Arnold, Phineas, Canal Dover, Ohio. Brick-drier	434,313	Aug. 12	1316	{ 343 344 }	52	1024
Arnold, Rawdon, <i>et al.</i> (See Brady, Frank, assignor.)						
Arnold, Rouse H. (See Staples and Arnold.)						
Arnold, Samuel G., Chester, Conn. Carpenter's roll-gage	435,027	Aug. 26	2469	654	52	1263
Arnold, Samuel S., assignor of two-thirds to D. F. MacMillan and O. M. Arnold, Toronto, Ontario, Canada. Corner-protector for trunks	420,759	Feb. 4	458	122	50	654
Arnold, Satterlee, Morristown, N. J., assignor to A. M. Arnold, Brooklyn, N. Y. Pit-man	422,489	Mar. 4	182	50	50	1171
Arnold, Sidney, assignor of three-fourths to E. A. Allbritten and M. E. Hoover, Lee's Summit, Mo. Neck-yoke	427,949	May 13	1411	357	51	1096
Arnold, Will F., Nashville, Tenn., assignor of one-half to R. W. Jennings, Jr., Seattle, Wash., and J. N. McGill, Washington, D. C. Haversack	427,493	May 6	700	176	51	950
Arnold, William B., North Abington, Mass. Boot or shoe	418,779	Jan. 7	184	44	50	41
Arnold, William B., North Abington, Mass. Box-toe	421,064	Feb. 11	969	247	50	755
Arnold, William S. (See Glass and Arnold.)						
Arnold, Joh. W., Nuremberg, Bavaria, Germany. Toy building-block	419,099	Jan. 7	674	177	50	142
Arons, Axel, Cumberland, Wis. Stump-puller	431,929	July 8	1385	354	52	281
Arp, Arthur E., Spirit Lake, Iowa. Game-counter	438,977	Oct. 21	2017	538	53	397
Arp, William C., <i>et al.</i> (See Turner, James J., assignor.)						
Arpin, Daniel J., Grand Rapids, Wis. Rut-cutter	430,361	June 17	1967	483	51	1871
Arringdale, Richard H. L., Radford, Va. Sash-balance	442,502	Dec. 9	1366	350	53	1536
Arthur, Charles, East Orange, and H. Bamberger, Newark, N. J. Fan attachment for rocking-chairs	424,589	Apr. 1	235	63	51	48
Arthur, John H., <i>et al.</i> (See Addy, Richard, assignor.)						
Arthur, Joseph, New York, N. Y. Theatrical appliance	438,978	Oct. 21	2018	539	53	397
Arthur, William J., <i>et al.</i> (See Addy, Richard, assignor.)						
Arvine, Freeling W., New Brighton, assignor to F. Len, Brooklyn, N. Y. Apparatus for testing the burning qualities of oil	431,795	July 8	1207	301	52	244
Asbury, Thomas H. (See Baker and Asbury.)						
Asch, Paul. (See Baer, Abraham L., assignor.)						
Aschenbach, Bruno, assignor of one-half to J. A. Vey, St. Joseph, Mo. Window-frame	431,639	July 8	939	235	52	195
Aschenbach, Georg H., assignor of one-half to A. L. Jackson, Washington, D. C. Nipple-holder	429,832	June 10	1098	271	51	1693
Ash, Joseph S., assignor of one-half to C. B. Cowan, Canal Winchester, Ohio. Dust-collector	435,165	Aug. 26	2672	706	52	1302
Ashbaugh, James W., Crossenville, Ohio. Latch	443,489	Dec. 30	3053	785	53	1891
Ashbaugh, John I., Chattanooga, Tenn. Electrical heater	428,443	May 20	2152	541	51	1251
Ashbrook, Lewis D., Cardington, Ohio. Electric belt	437,079	Sept. 23	2713	709	52	1915
Ashcroft, John, New York, N. Y. Grate-bar	423,465	Mar. 18	1667	440	50	1169
Ashcroft Manufacturing Company. (See Calkins, Almon B., assignor.)						
Ashtenden, Henry H., Waterbury, Conn. Flame-extinguisher for oil-stoves	424,948	Apr. 8	796	214	51	162
Ashford, James A., San Antonio, Tex. Vehicle-wheel	443,034	Dec. 16	2257	580	53	1721
Ashley, Howard M., Ferrybridge, county of York, England. Machine for making glass bottles	433,062	July 29	3172	816	52	641
Ashley, James M. (See Bradshaw and Ashley.)						
Ashly, Lucius E., assignor of one-half to A. Clark, Stockton, Cal. Ditching and grading scraper	433,116	July 29	3260	839	52	658
Ashmead, Frank M., <i>et al.</i> (See Lewis, James, assignor.)						
Ashmead, Frank M., <i>et al.</i> (See Taylor, William G., assignor.)						
Ashmead, Seely W., assignor of one-third to T. B. Crews and J. M. O'Shea, St. Louis, Mo. Anti-friction bearing	426,701	Apr. 29	3455	905	51	708
Ashmead, Seely W., assignor of two-thirds to J. M. O'Shea and T. B. Crews, St. Louis, Mo. Car-buffer	439,338	Oct. 28	2605	694	53	514
Ashmore, Samuel D., Girard, Kans. Door-check	431,310	July 1	421	104	52	86
Ashton, Francis M., Lima, Ohio. Pipe-testing gage	438,597	Oct. 21	1395	379	53	281
Ashton, Francis M., Lima, Ohio. Electrical water-alarm	438,598	Oct. 21	1397	379	53	281
Ashworth, Arthur, Manchester, England. Indigo solution	437,638	Sept. 30	3607		52	2096
Ashworth, Elijah. (See Ashworth, George and E.)						
Ashworth, Elijah and G., Manchester, county of Lancaster, England. Carding-engine cylinder	421,153	Feb. 11	1086	279	50	780
Ashworth, George. (See Ashworth, Elijah and G.)						
Ashworth, George and E., Manchester, England. Carding-engine	442,936	Dec. 16	2111	543	53	1691
Ashworth, James, Denver, Colo. Stove for consuming straw, hay, &c.	430,912	June 24	2842	697	51	2047
Ashworth, James T., Bristol, Conn. Stopping mechanism for knitting-machines	427,534	May 13	771	192	51	974
Ashworth, John, Somerville, Mass. Covered elastic endless band	423,713	Mar. 18	2042	538	50	1539
Ashworth, John, Chicago, Ill. Alarm-lock	433,640	Aug. 5	291	77, 78	52	813
Ashworth, John J., Manchester, county of Lancaster, England. Manufacturing woven fabrics	428,296	May 20	1932	485	51	1307
Ashworth, Richard J., assignor to Waterbury Manufacturing Company, Waterbury, Conn. Shade-holder	442,410	Dec. 9	1219	314	53	1506
Ashworth, Robert, Providence, R. I. Back-bend apparatus for card-setting machines	427,950	Mar. 13	1412	357	51	1096
Askew, Charles B. (See Bain, Foré, assignor.)						
Asmus, Fredrick F., Hull Prairie, Ohio. Wrench	423,509	Mar. 18	1733	457	50	1482
Asmus, Fredrick F., Hull Prairie, Ohio. Music-leaf turner	429,711	June 10	922	226	51	1660
Asselin, Olive, Ottawa, Ontario, Canada. Bag-holder	426,981	Apr. 29	3853	1007	51	785
Assheton Duplicating Register Company. (See Assheton, William, assignor.)						
Assheton, William, St. Louis, Wis. Autographic register	422,872	Mar. 4	754	{ 192 193 }	50	1281
Assheton, William, St. Louis, Mo., assignor to Assheton Duplicating Register Company, of Illinois. Autographic register	429,495	June 3	601	147	51	1587
Asterlin, Frank J. (See Gira and Asterlin.)						
Atha, Benjamin, Newark, N. J. Casting ingots	425,846	Apr. 15	2153	574	51	435
Atherton, Garrick M., Howard, Kans. Water-elevator	418,861	Jan. 7	316	77	50	66

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Atherton, James B. (See Bishop, James D., assignor.)						
Atherton, James B. (See Stillman, Francis H., assignor.)						
Atherton, James B., <i>et al.</i> (See Ball, George M., assignor.)						
Atherton Machine Company. (See Horrocks, George, assignor.)						
Atherton, William M. (See Bloom and Atherton.)						
Atkins & Company, E. C. (See Krieger, Andrew, assignor.)						
Atkins & Company, E. C. (See Millard, William, assignor.)						
Atkins & Company, E. C. (See Miner, James H., assignor.)						
Atkins & Company, E. C. (See Ralya, William S., assignor.)						
Atkins & Company, E. C. (See Roberts, Nate H., assignor.)						
Atkins, Edward E. (See Ross and Atkins.)						
Atkins, Elijah, Birmingham, England. Holder for lamp-globes.	439,090	Oct. 28	2197	589	53	439
Atkins, George, Cleveland, Ohio. Making planished sheet-steel.	440,298	Nov. 11	1036		53	819
Atkins, George W., Clarion, Pa. Thill-coupling.	435,273	Aug. 26	2833	749	52	1332
Atkins, Jearum, Washington, D. C. Hydraulic steering apparatus for vessels	439,716	Nov. 4	132	35, 36	53	633
Atkins, John, Detroit, Mich., assignor of one-half to A. T. A. Nelson, Cincinnati, Ohio. Vehicle-pole	425,847	Apr. 15	2158	574	51	436
Atkins, Joseph L., Washington, D. C. Lock-trimming	429,854	Feb. 4	626	161	50	621
Atkinson, Edward, Brookline, Mass. Cooking apparatus.	424,949	Apr. 8	797	214	51	163
Atkinson, F. M., <i>et al.</i> (See Abbott, Benjamin J., assignor.)						
Atkinson, George F., San Francisco, Cal. Pincushion.	443,739	Dec. 30	3446	884	53	1966
Atkinson, John O., South Charleston, Ohio. Folding feed trough or rack.	436,112	Sept. 9	1144	299	52	1599
Atkinson, Mahlon B., assignor of one-half to D. W. Stockstill, Washington, D. C. Brick-machine	434,230	Aug. 12	1191	311	52	998
Atkinson, Robert, Baltimore, Md. Candle for killing insects	424,590	Apr. 1	237		51	48
Atkinson, William B., Franklin, Ky. Game-counter.	433,265	July 29	3475	897	52	763
Atkinson, William H., Brooklyn, N. Y. Fishing-reel attachment	442,302	Dec. 9	1046	275	53	1473
Atlas Iron and Brass Works. (See Ehrmann, John D., assignor.)						
Atock, Martin, Dublin, Ireland. Locomotive-boiler	423,406	Mar. 18	1583	415	50	1453
Atterbury, Thomas B., Pittsburg, Pa. Incandescent-electric-light bulb	427,951	May 13	1413	357	51	1096
Atwater, Eugene A., St. Louis, Mo. Crate for trunks.	432,925	July 22	2934	752	52	591
Atwater, Richard, Meriden, Conn. Quoin	434,906	Aug. 26	2299	606	52	1231
Atwood, Dustin. (See Kilian, Conrad J., assignor.)						
Atwood Electric Company. (See Atwood, La Motte C., assignor.)						
Atwood, La Motte C., assignor to Atwood Electric Company, St. Louis, Mo. Magneto-electric machine	436,113	Sept. 9	1145	299	52	1599
Atwood, Leonard. (See Harrington, Walter E., assignor.)						
Atwood, Leonard, Philadelphia, Pa. Cog-wheel	430,818	June 24	2704	662	51	2021
Atwood, Leonard, Philadelphia, Pa. Gear-wheel	430,819	June 24	2705	662	51	2021
Atwood, Leonard, Philadelphia, Pa. Pole for supporting electric wires	433,266	July 29	3477	897	52	703
Atwood, Leonard, Philadelphia, Pa. Trolley or contact-support for electric cars	435,166	Aug. 26	2673	706	52	1302
Atwood, Leonard, Philadelphia, Pa. Gear-wheel	441,460	Nov. 25	2981	767	53	1202
Atwood, Lewis J., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Argand burner	435,130	Aug. 26	2622	694	52	1292
Atwood, Lewis J., assignor to Plume and Atwood Manufacturing Company, Waterbury, Conn. Argand lamp	436,093	Sept. 9	1105	286	52	1593
Atwood, Lewis J., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Holder for electric-light shades.	437,008	Sept. 23	2613	683	52	1895
Atwood, Lewis J., and F. W. Tobey, assignors to Plume and Atwood Manufacturing Company, Waterbury, Conn. Lamp-burner	419,747	Jan. 21	1634	435	50	344
Anchut, Henry, Emporium, Pa. Refuse-burner, water-heater, and steam-generator	437,009	Sept. 23	2614	683	52	1895
Anerswald, Herman M., St. Joseph, Mo. Horse-collar fastener	435,721	Sept. 2	532	141	52	1478
Anerswald, Herman M., St. Joseph, Mo. Horse-collar fastening	432,722	Sept. 2	533	141	52	1478
Augé, Eugene, Montpellier, France. Making soda-alum	420,483	Feb. 4	90		50	581
Augé, Eugene, Montpellier, France. Crystallizing soda-alum	435,129	Aug. 26	2621		52	1292
Augsburger, H. H. (See Goldsmith, Frederick E., assignor.)						
Augsburger, John, Trenton, Ohio. Gate	430,610	June 24	2346	574	51	1952
Augustine, Charley C., Muscatine, Iowa. Wrench	426,161	Apr. 22	2644	695	51	538
Ault, William H., <i>et al.</i> (See Wheeler, Charles G., assignor.)						
Aultman, Miller & Company. (See Koller, Moses A., assignor.)						
Aultman, Riley J., Shanesville, Ohio. Fence-machine	418,667	Jan. 7	4	2	50	3
Aumann, Louis A., and J. W. Cummock, Chicopee, Mass., and G. W. Stafford, Providence, R. I. Shedding mechanism for looms.	437,472	Sept. 30	3369	881	52	2049
Aurand, William L., and G. F. Trackler, Forest, Ohio. Rail-joint	432,812	July 22	2776	710	52	560
Aurnhammer, Frank, Holyoke, Mass. Hydrogen-lamp	432,590	July 22	2462	619	52	489
Aurora Vapor Stove Company. (See Pope, Charles A., assignor.)						
Ausman, Jonas H. (See Johnson, Elmer E., assignor.)						
Austermuhl, David, Jr., Cramer's Hill, N. J. Bolt	423,109	Mar. 11	1142	296	50	1359
Austin, Alvin J., Shelby, Nebr. Egg-beater	428,999	May 27	2984	765	51	1430
Austin, Charles D. (See Fogarty and Buchanan, assignors.)						
Austin, Frank A., <i>et al.</i> (See Barry, William, assignor.)						
Austin, Frank R., Tuckerton, N. J. Check-punch	434,496	Aug. 19	1611	421	52	1091
Austin, Frederick C. (See Bunnell, Morton G., assignor.)						
Austin, Frederick C. (See Cameron, Arthur, assignor.)						
Austin, Frederick C. (See Cameron and Schumaker, assignors.)						
Austin, Frederick C. (See Edwards, William J., assignor.)						
Austin, John W., Pilot Point, Tex. Wire-tightener	442,503	Dec. 9	1367	350	53	1536
Austin, Nelson E., Danbury, Conn. Apparatus for hoisting and manipulating blocks of stone	433,669	Aug. 5	339	87	52	822
Austin, Nelson E., Danbury, Conn. Lathe-chuck	438,135	Oct. 14	711	194	53	144
Austin, Nelson E., Danbury, Conn. Drill-chuck	440,255	Nov. 11	958	246	53	807
Austin, Nelson E., Danbury, Conn. Drill-chuck	443,490	Dec. 30	3053	785	53	1891
Austin, Oscar P., Washington, D. C. Resurfacing phonogram-blanks.	429,079	May 27	3120		51	1455
Austin, Robert H. (See Marston, Warren C., assignor.)						
Austin, Thomas J., assignor of one-half to E. A. and R. B. Hearn, Belle Plain, Tex. Gate	439,460	Oct. 28	2790	744	53	548
Austin, William L. (See Dunbar and Austin.)						
Austin, William P., New York, N. Y. Trap	424,162	Mar. 25	2708	720	50	1673
Australian Knitting Company. (See Kinsey, Peter S., assignor.)						
Autenrieth, Ernst F. (See Hutchinson and Autenrieth.)						
Autenrieth, Ernst F., New York, assignor to Glen Cove Machine Company, Limited, Brooklyn, N. Y. Machine for splitting, surfacing, and matching boards.	440,802	Nov. 18	1873	482	53	985

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Automatic Cigar Seller Company. (See Ellis, George A., assignor.)						
Automatic Cigar Seller Company. (See Thompson, Charles H., assignor.)						
Automatic Electric Exchange Company. (See Ford, William H., assignor.)						
Automatic Electric Switch Company. (See Whittingham, George H., assignor.)						
Automatic Gas Governor Company. (See Morris, Theodore, assignor.)						
Automatic Machine Company. (See Dowst, Samuel M., assignor.)						
Automatic Machine Company. (See Dowst, Samuel M. and C. O., assignors.)						
Automatic Phonograph Exhibition Company. (See Gilliland, Ezra T., assignor.)						
Automatic Staple Nailing Machine Company. (See Coupal, Peter A., assignor.)						
Automatic Store Service Company. (See Church, Frank S., assignor.)						
Automatic Switch Company. (See Whittingham, George H., assignor.)						
Antiphone Company. (See Morris, Henry B., assignor.)						
Auvil, John P., Gaudeville, W. Va. Swing	439,265	Oct. 28	2478	665	53	489
Auw, Ivan v., assignor to Liebenroth, Von Auw & Co., New York, N. Y. Musical album	428,795	May 27	2686	682	51	1371
Avera, Harlow D., Rocky Mount, N. C. Railway-joint	433,314	July 29	3544	915	52	716
Avera, Harlow D., Rocky Mount, N. C. Railway-joint	442,004	Dec. 2	589	159	53	1378
Averell, Ellicott D., assignor of one-half to C. M. Dennison, Brooklyn, N. Y. Cell-case	429,406	June 3	465	110	51	1560
Averell, John D., Manchester, N. J. Inhaler	432,782	July 22	2728	697	52	550
Averell, John D., Brooklyn, N. Y. Apparatus for generating illuminating water-gas	439,461	Oct. 28	2792	741	53	548
Averell, John D., assignor of part to J. H. Doscher, Brooklyn, N. Y. Apparatus for the manufacture of gas	422,692	Mar. 4	487	{ 124 125 }	{ 50 }	1929
Averell, John D., deceased, Brooklyn, N. Y.; J. A. Averell, executrix. Apparatus for generating illuminating water-gas	443,951	Dec. 30	3767	962	53	2027
Averell, Julia A., executrix. (See Averell, John D.)						
Avers, Louis, Marion, Ohio. Rail-joint fastener	430,503	June 17	2169	534	51	1911
Avery, Edward N., assignor of one-half to C. A. Slayton, Tecumseh, Mich. Hay-rack	430,611	June 24	2347	574	51	1952
Avery, Frederick C., assignor of one-half to C. L. Jenness, Chicago, Ill. Vise	429,105	May 27	3157	814	51	1463
Avery, Henry W., assignor to Avery Stamping Company, Cleveland, Ohio. Car-wheel	429,407	June 3	466	110	51	1560
Avery, Henry W., assignor to Avery Stamping Company, Cleveland, Ohio. Metallic wheel	429,408	June 3	467	111	51	1560
Avery, John G. (See Park, Gilbert, assignor.)						
Avery, John G., Spencer, Mass. Expansion-pulley	443,561	Dec. 30	3159	812	53	1911
Avery Planter Company. (See Berrien, Leonard B., assignor.)						
Avery, Richard B., and R. F. Smith, San Diego, Cal. Hydrocarbon-burner	428,587	May 27	2366	601	51	1311
Avery & Sons, B. F. (See Holsclaw, Wilford H., assignor.)						
Avery & Sons, B. F. (See Laughlin, John L., assignor.)						
Avery Stamping Company. (See Avery, Henry W., assignor.)						
Avery Stamping Company. (See Coit, Charles H., assignor.)						
Avery Stamping Company. (See Judd, Fred. W., assignor.)						
Avery, William, assignor of one-half to J. R. Prouty, Spencer, Mass. Machine for fitting soles onto boots or shoes	426,752	Apr. 29	3540	924	51	724
Avet, Henri, Turin, Italy. Apparatus with feathering-blades for obtaining motive power	441,461	Nov. 25	2982	768	53	1302
Avis, John W., Andersonville, Tenn. Wagon-brake	434,055	Aug. 12	897	236	52	940
Avis, Walter H., Dovercourt, assignor to R. C. Fisher, Toronto, Ontario, Canada. Rotary engine	427,952	May 13	1414	357	51	1096
Avis, Walter H., assignor to R. C. Fisher, Toronto, Canada. Machine for making cordage	441,734	Dec. 2	163	43	53	1293
Axtell, Henry A., Montague, Mass. Sawing-machine	431,714	July 8	1080	{ 269 270 }	{ 52 }	220
Axtell, Walter M., Fruit Vale, Cal. Railway-crossing	442,411	Dec. 9	1220	315	53	1507
Ayers, William H. H. (See Smith, William L., assignor.)						
Aycock, John A. (See Aycock, William C. and J. A.)						
Aycock, William C. and J. A., assignors of one-half to J. A. Brooks, Griffin, Ga. Blind-stile-horing machine	423,110	Mar. 11	1142	296	50	1360
Ayer, Albert E. (See Mesick and Ayer.)						
Ayer, Alfred, Lake Weir, Fla. Orange-grader	435,200	Aug. 26	2723	719	52	1312
Ayer, Clark H., Boston, Mass. Voltaic shoe	422,107	Feb. 25	2450	647	50	1052
Ayer, George S. (See Furber and Ayer.)						
Ayer, John M., Chicago, Ill. Apparatus for producing gaseous fuel	432,718	July 22	2616	{ 669 670 }	{ 52 }	530
Ayers, Alexander C. (See Stephens, Samuel, assignor.)						
Ayers, Frank J., Burlington, Wis. Safety-overcheck	419,400	Jan. 14	1135	301	50	238
Ayers, George M., Pittsfield, Pa. Cant-hook	437,080	Sept. 23	2714	709	52	1916
Ayers, Samuel C., assignor to Bigelow Carpet Company, Clinton, Mass. Machine for washing yarn, &c.	441,735	Dec. 2	166	44	53	1294
Ayres, Asher, et al. (See Smith and Fox, assignors.)						
Ayres, Charles H., Hightstown, N. J. Potato-digger	430,330	June 17	1922	{ 470 471 }	{ 51 }	1862
Ayres, Edward F., assignor of one-half to T. H. Foster, Danbury, Conn. Preserving fruit, &c.	437,323	Sept. 30	3118	816	52	1998
Ayres, William B. (See Benner and Ayres.)						
Bährnhelm, Ludwig, Stockholm, and A. Fernander, Kärfta, Sweden. Quick-match	442,164	Dec. 9	845		53	1435
Baatz, August F., Bellingham, Wash. Railway-brake	434,971	Aug. 26	2388	632	52	1248
Babb, John H. (See Campbell, George W., assignor.)						
Babbe, Frederick H. B., Santa Rosa, Cal. Portable bedstead	434,552	Aug. 19	1696	444	52	1108
Babbitt, Benjamin T. (See Hermann, Henry, assignor.)						
Babbitt, Edmond H., St. Louis, Mo., assignor to G. D. Barnard & Company, East St. Louis, Ill. Roller book-shelf	420,898	Feb. 4	704	181	50	696
Babbitt, Edmond H., and L. Stockstrom, assignors to G. D. Barnard & Co., St. Louis, Mo. Paper-file	419,999	Jan. 21	2031	536	50	423
Babbitt, George R., Providence, R. I. Cut-off-valve gear	439,619	Nov. 4	2	1	53	607
Babbitt, Seth W., Meriden, Conn. Bicycle-saddle	435,385	Sept. 2	5	1, 2	52	1376
Babbitt, Seth W., assignor to Wilcox Silver Plate Company, Meriden, Conn. Brush	419,597	Jan. 14	1410	377	50	296
Babbitt, Seward S., Pittsburg, Pa. Slide-valve for engines	436,393	Sept. 16	1587	419	52	1693
Babbitt, Seward S., Pittsburg, Pa. Steam-engine governor	436,394	Sept. 16	1589	420	52	1694
Babbitt, Seward S., Allegheny, and A. Randolph, assignors to said Babbitt and Robinson-Rea Manufacturing Company, Pittsburg, Pa. Governor for steam-engines	435,083	Aug. 26	2553	{ 673 674 }	{ 52 }	1279
Babcock, Charles M., Garrattsville, N. Y. Computing spring-scales	421,805	Feb. 18	2005	529	50	961
Babcock, Erskine L., Cuyahoga Falls, Ohio. Friction-clutch	429,298	June 3	295	70	51	1526
Babcock, Ezra S., Walworth, assignor of one-half to P. M. Green, Milton, Wis. Compound metal-working machine	434,231	Aug. 12	1194	311	52	999
Babcock, George H., Plainfield, N. J. Apparatus for projecting combustible missiles	429,592	June 10	745	179	51	1625
Babcock, George H., Plainfield, N. J. Projecting missiles	430,056	June 10	1451	369	51	1761
Babcock, George H., Plainfield, N. J. Series of roofing-tiles	430,362	June 17	1968	484	51	1871
Babcock, George H., Plainfield, N. J. Roofing and sheathing tile	430,363	June 17	1969	484	51	1871
Babcock, George H., Plainfield, N. J. Roofing-tile	430,364	June 17	1970	484	51	1872

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Babcock, George H., Plainfield, N. J. Roofing-tile.....	430,365	June 17	1970	{ 484 485 }	51	1872
Babcock, George H., Plainfield, N. J. Roofing and sheathing tile.....	430,366	June 17	1971	485	51	1872
Babcock, George H., Plainfield, N. J. Hip-tile for roofing.....	430,367	June 17	1972	486	51	1872
Babcock, George H., Plainfield, N. J. Valley-tile for roofing.....	430,368	June 17	1973	486	51	1873
Babcock, George H., Plainfield, N. J. Gable-tile for roofing.....	430,369	June 17	1975	487	51	1873
Babcock, George H., Plainfield, N. J. Ridge-tile for roofs.....	430,370	June 17	1976	487	51	1873
Babcock, George H., Plainfield, N. J. Corner-tile for sheathing.....	430,371	June 17	1977	{ 487 488 }	51	1874
Babcock, Ransom, Wataga, Ill. Heating-drum.....	436,452	Sept. 16	1681	443	52	1710
Babcock, William D. (See Turner, Lewis A., assignor.)						
Babcock, William L. (See Kubler, John, assignor.)						
Babendreier, Charles A. L., Baltimore, Md., assignor to L. C. Brickenstein, Lititz, Pa. Steam-boiler feeder.....	437,551	Sept. 30	3493	{ 911 912 }	52	2073
Babo, Arthur v., Seattle, Wash. Device for transmitting power.....	419,386	Jan. 14	1110	293	50	234
Bach, Jens A. (See Harmer, Joseph J., assignor.)						
Bach, John L., Buffalo, N. Y. Filter.....	439,091	Oct. 28	2198	589	53	439
Bach, Matthew W., assignor of one-half to M. W. Baldwin, Ottawa, Ill. Horse-collar fastener.....	423,714	Mar. 18	2043	539	50	1539
Bach, Matthew W., assignor of one-half to M. W. Baldwin, Ottawa, Ill. Horse-collar fastener.....	414,232	Aug. 12	1196	311	52	999
Bach, Wilhelm F., Chicago, Ill. Washing-machine.....	432,047	Oct. 7	580	158	53	110
Bache, Richard M., Philadelphia, Pa. Bipolar prostatic electrolyzer.....	429,710	Feb. 4	390	104	50	641
Bachelder, Elmer N., and F. E. Lovejoy, Portland, Me. Automatic weighing-scales.....	423,204	Mar. 11	1278	333	50	1387
Bachelder, Elmer N., and F. E. Lovejoy, Portland, Me. Measuring-vessel.....	432,353	July 15	2047	527	52	410
Bachellerie, Charles L., Paris, France. Process of and apparatus for preserving food.....	440,528	Nov. 11	1418	366	53	890
Bacheller, Lois H., Lynn, Mass. Fire-escape.....	440,244	Nov. 11	943	243	53	804
Bachert, Edward C., Canton, Ohio. Match-box holder.....	427,211	May 6	2287	74	51	868
Bachman, Rose, <i>et al.</i> (See Smith and Bachman, assignors.)						
Bachman, William H. (See Smith and Bachman.)						
Bachmann, Gustave A., Del Norte, Colo. Jaw-trap.....	426,579	Apr. 29	3267	857	51	672
Bachrach, David, <i>et al.</i> (See Merrill, William E. T., assignor.)						
Back, Frank, assignor of seven-eighths to G. L. Parker, Philadelphia, Pa. Rail-fastening, joint, &c.....	443,309	Dec. 23	2767	709	53	1825
Backus, Charles H. (See Sholes, David W., assignor.)						
Backus, Clarence G., assignor to C. P. Hoskins and A. J. Ingraham, Philadelphia, Pa. Ink-stand.....	429,555	June 3	685	167	51	1604
Backus, Edward, Rochester, N. Y. Bicycle-lock.....	436,453	Sept. 16	1682	443	52	1711
Backus, Stephen, assignor of two-thirds to C. Keller and E. Dyer, Chatham, Ontario, Canada. Tobacco-pipe, &c.....	429,712	June 10	923	226	51	1660
Bacon, Ebenezer S., and A. F. Seliers, Detroit, Mich. Car-coupling.....	437,212	May 6	288	74	51	868
Bacon, John A., Phoenix, Ariz. Ter. Gate.....	437,766	Oct. 7	146	45	53	30
Bacon, Steuben T., assignor of one-fourth to J. C. Crosman, Boston, Mass. Counting machine or register.....	419,190	Jan. 7	674	177	50	142
Bacon, William S., and S. L. Holsinger, Tiffin, Ohio. Nozzle-sprayer.....	441,048	Nov. 18	2265	587	53	1060
Baddley, Charles H., <i>et al.</i> (See Lasher, Morgan E., assignor.)						
Bader, James W., Red Key, Ind. Washing-machine.....	418,668	Jan. 7	5	2	50	4
Badger, Jonathan, Waterbury, Conn. Burton-hole cutter.....	419,489	Jan. 14	1258	335	50	265
Badger, Jonathan, Waterbury, Conn. Pocket-scissors.....	425,560	Apr. 15	1714	458	51	351
Badger, Jonathan, Waterbury, Conn. Wick-trimmer.....	426,425	Apr. 29	3047	798	51	629
Badger, Jonathan, Waterbury, Conn. Scissors.....	429,000	May 27	2985	765	51	1430
Badger, Walter S., St. Joseph, Mo. Boot or shoe blacking and brushing machine.....	432,088	July 15	1523	387	52	313
Badger, William E., Quincy, Mass. Brake mechanism for street-cars.....	432,693	Mar. 4	489	125	50	1230
Badger, William E., West Quincy, Mass. Self-lubricating pulley.....	435,673	Sept. 2	461	122	52	1463
Badgley, E. F., <i>et al.</i> (See Bridewell, Richard F., assignor.)						
Badgley, John M., Belleville, Ill. Combined smoke-house and meat safe.....	426,226	Apr. 22	2741	718	51	558
Badische Anilin und Soda Fabrik. (See Bohn, René, assignor.)						
Badische Anilin und Soda Fabrik. (See Koerner, Georg, assignor.)						
Badische Anilin und Soda Fabrik. (See Müller, Carl L., assignor.)						
Badische Anilin und Soda Fabrik. (See Nencki, Marcel V., assignor.)						
Badische Anilin und Soda Fabrik. (See Reissig, Theodor, assignor.)						
Badische Anilin und Soda Fabrik. (See Schrambe, Conrad, assignor.)						
Badische Anilin und Soda Fabrik. (See Witt, Otto N., assignor.)						
Badollet, John M., New York, assignor, by mesne assignments, to E. B. Smith, Garden City, N. Y. Safety locking device for type-writing machines.....	428,444	May 29	2153	541	51	1251
Badt, Francis B. (See Wrigley, Thomas, assignor.)						
Baeder, Charles. (See Michaels and Baeder.)						
Baer, Abraham L., assignor of one-half to P. Asch, Milwaukee, Wis. Ruler.....	420,401	Jan. 28	2654	703	50	549
Baer, Edward, New York, N. Y. Bolt-holder.....	429,766	June 10	1025	251	51	1679
Baethig, Henry, <i>et al.</i> (See Hager, Charles, assignor.)						
Bagby, John T., Bowling Green, Mo. Pole-tip for vehicles.....	425,848	Apr. 15	2159	575	51	436
Bagby, William H., Waco, Tex. Railway-tie.....	419,101	Jan. 7	677	178	50	142
Bagby, William J., Atlanta, Ga. Electric meter.....	424,401	Mar. 25	3097	822	50	1750
Bagg, James D., Springfield, Mass. Coupling for railway-cars.....	443,811	Dec. 30	3560	913	53	1988
Baggerly, Charles W. (See Silvers, Walter B., assignor.)						
Bagley, Olin H., Knappa, Oreg. Gold-saving apparatus.....	419,908	Jan. 21	1891	497	50	397
Bagley, William H., and A. C. Neall, deceased, (C. E. Neall, administratrix,) Philadelphia, Pa. Spring-motor.....	421,650	Feb. 18	1805	471	50	923
Bagshaw, Walter H., Lowell, Mass. Tooth for shoddy-pickers.....	420,182	Jan. 28	2328	615	50	488
Bagunley, Joseph J., Toronto, Canada. Music-chart.....	442,303	Dec. 9	1048	275	53	1474
Bagunley, William, New York, N. Y. Pipe-stopper.....	428,364	May 20	2034	511	51	1228
Bagunley, William, New York, N. Y. Pipe-stopper.....	443,952	Dec. 30	3768	962	53	2027
Bagwell, Charles A., <i>et al.</i> (See Scribner, George W., assignor.)						
Bahlsen, Carl, Garrucha, Spain, assignor to J. Pohlig, Cologne-on-the-Rhine, Germany. Knot or projection in hauling-ropes.....	440,582	Nov. 11	1500	387	53	906
Baier, John. (See Palmer and Baier.)						
Bailey, Alfred H., Palestine, Tex. Folding frame or support for mosquito-canopies.....	424,256	Mar. 25	2828	756	50	1697
Bailey, Annie R. (See Bailey, Clifton J., assignor.)						
Bailey, Ben. T., <i>et al.</i> (See Young, Otis W., assignor.)						
Bailey, Benjamin L., Danielsonville, Conn. Drawing mechanism for spinning-machines.....	439,339	Oct. 28	2607	695	53	514
Bailey, Charles, Winnipeg, Canada. Lawn-cleaner.....	434,233	Aug. 12	1198	311	52	1060
Bailey, Charles J., <i>et al.</i> (See Macdonald and Flower, assignors.)						
Bailey, Charles J., Newton, Mass. Overshoe.....	432,967	July 29	3029	776	52	611
Bailey, Clem, Kingston, N. C. Tether.....	429,111	June 3	6	2	51	1474

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Bailey, Clifton J., assignor to A. R. Bailey, Orange, N. J. Safety-alarm corkscrew	427,656	May 13	943	237	51	1007
Bailey, Edgar G., assignor to S. Howes, Silver Creek, N. Y. Mechanism for shaking screens.	420,711	Feb. 4	392	104	50	641
Bailey, Ellene A. (See Birdsall, Anna E., assignor.)						
Bailey, Elmer E., Everett, and G. J. Galbraith, assignors of one-third to T. W. Lane, Boston, Mass. Electric cut-out	437,324	Sept. 30	3120	816	52	1998
Bailey, Escal. (See Johnson and Bailey.)						
Bailey, Evander A., et al. (See Bullock, Henry P., assignor.)						
Bailey, Ezra B., Windsor Locks, Conn. Chuck-jaw	424,698	Apr. 1	404	106	51	80
Bailey, F. C. (See Brott, George F., assignor.)						
Bailey, Farrell & Co. (See Franklin, Edward A., assignor.)						
Bailey, George, Middleborough, Mass. Separable spindle for spinning wool	434,752	Aug. 19	2022	528	52	1170
Bailey, George H. (See Davis, John, assignor.)						
Bailey, George W., Brooklyn, N. Y. Water conveyer	431,542	July 8	791	197	52	165
Bailey, John A., Washington, D. C. Oar-lock	421,806	Feb. 18	2006	529 530	50	961
Bailey, John M., Goodson, Va. Railway cross-tie	423,586	Mar. 18	1839	484 485	50	1500
Bailey, John M., Goodson, Va. Street-railway chair	427,213	May 6	289	74	51	868
Bailey, John M., Goodson, Va. Street-railway rail	427,214	May 6	290	75	51	868
Bailey, John M., Goodson, Va. Brick-kiln	430,724	June 24	2541	621	51	1990
Bailey, John S., Buckingham, assignor of one-half to A. D. Markley, Hatborough, Pa. Combined tack hammer and distributor	426,095	Apr. 22	2541	669	51	516
Bailey, Josiah, Wilmington, Ohio. Die for forming auger-bits	419,622	Jan. 21	1451	389	50	310
Bailey, Leon O. (See Guptill, Roderick G., assignor.)						
Bailey, Leonard, Hartford, Conn. Curry-comb	443,215	Dec. 23	2608	671	53	1797
Bailey, Martin N., New York, N. Y. Necktie-fastener	438,048	Oct. 7	582	158	53	110
Bailey, Martin N., New York, N. Y. Paper box	439,993	Nov. 4	558	147	53	717
Bailey, Mumford D. (See Bailey, Phillip N., assignor.)						
Bailey, Phillip N., assignor of one-half to M. D. Bailey, Winston, N. C. Box screw and clamp.	436,202	Sept. 9	1283	334	52	1624
Bailey, Samuel B. (See Clarkson, Joseph T., assignor.)						
Bailey, Samuel R., Amesbury, Mass. Vehicle-pole	419,984	Jan. 21	2003	527	50	419
Bailey, Stephen D. (See Ford and Jacobs, assignors.)						
Bailey, William E. (See Leighton and Bailey.)						
Bailey, William F., Galesburg, Ill. Store-service apparatus	437,275	Sept. 30	3046	798	52	1985
Bailey, William P., Stowe, Vt. Knife	437,081	Sept. 23	2715	709	52	1916
Bailey, William H. (See Crosland and Bailey.)						
Bailey, William W., Altus, Ark. Cotton-cultivator	423,655	Mar. 18	1962	516 517	50	1524
Bailairgé, Charles P. F., Quebec, Quebec, Canada. Fountain	428,365	May 20	2034	512	51	1228
Baillache, Eugène J. J. de, Paris, France. Electric train-signaling apparatus for railways	427,953	May 13	1416	358 599	51	1097
Bain, Forée, Chicago, Ill. Leather-measuring machine	425,925	Apr. 15	2262	600 601	51	455
Bain, Forée, Chicago, Ill. Mining-machine	433,610	Aug. 5	251	67	52	805
Bain, Forée, Chicago, Ill. Trolley for electric-motor cars	433,611	Aug. 5	253	68	52	806
Bain, Forée, Chicago, Ill. Mining-machine	433,612	Aug. 5	254	68	52	806
Bain, Forée, Chicago, Ill. Electric insulator	443,187	Dec. 23	2557	657	53	1786
Bain, Forée, assignor of one-half to C. B. Askew, Chicago, Ill. Regulator or rheostat	427,032	May 6	2	1	51	811
Bain, John W., Gonzales, Cal. Gate	420,489	Feb. 4	91	21	50	581
Baines, John, Piqua, Ohio. Roll-paper holder and cutter	431,225	Feb. 11	1186	305	50	797
Baird, George W., U. S. Navy. Steam generator or evaporator	434,722	Aug. 26	2369	633	52	1249
Baird, James, Chignecto Mines, Canada. Railway-frog	438,979	Oct. 21	2020	539 540	53	398
Baird, James S. (See Mitchell, Joseph T., assignor.)						
Baird, John, New York, N. Y. Upright tubular boiler	425,970	Apr. 22	2361	626	51	483
Baird, John, New York, N. Y. Steam-engine driving-gear	425,971	Apr. 22	2363	626 627	51	484
Baird, John, New York, N. Y. Steam-engine	434,497	Aug. 19	1612	421 422	52	1091
Baird, John, New York, N. Y. Steam-boiler	434,973	Aug. 26	2391	633	52	1249
Baird, John, New York, N. Y. Steam-boiler	435,386	Sept. 2	6	23	52	1376
Baird, John, New York, N. Y. Steam-boiler	437,745	Oct. 7	102	32	53	22
Baird, John, New York, N. Y. Locomotive-engine	438,220	Oct. 14	836	227	53	167
Baird, John, New York, N. Y. Valve-gearing	441,786	Dec. 2	247	65	53	1312
Baird, John, New York, N. Y. Balanced slide-valve	442,699	Dec. 16	1678	430 431	53	1607
Baird, John, New York, N. Y. Chain-gearing	443,591	Dec. 30	3207	825	53	1921
Baird, Robert. (See Ford and Baird.)						
Baird, Urias, Ellsworth, Ohio. Bee-hive	424,844	Apr. 1	637	167	51	123
Bakenhus, Dietrich, and A. Mueseler, Chicago, Ill. Truck	418,838	Jan. 7	280	68	50	59
Bakenhus, Dietrich, and A. Mueseler, Chicago, Ill. Whiffletree attachment	426,227	Apr. 22	2742	718	51	558
Baker, A. J., et al. (See Fike and Huffman, assignors.)						
Baker, Aaron J., et al. (See Ruttkar, Charles R., assignor.)						
Baker, Abner D., Swanton, Ohio. Rotary engine	440,125	Nov. 11	751	198	53	764
Baker, Albert R. (See Brown, John F., assignor.)						
Baker, Albert R. (See Clark, Charles B., assignor.)						
Baker, Alberto. (See Goodman, Henry M., assignor.)						
Baker, Allen S., Evansville, Wis. Windmill	441,631	Dec. 2	2	1	53	1263
Baker, Amos M. (See Illingworth and Baker.)						
Baker, Ansel G. (See Gifford, Fred S., assignor.)						
Baker, Ansel G., assignor of one-half to F. S. Gifford, New Bedford, Mass. Charactering-machine	425,725	Apr. 15	1979	527 528	51	402
Baker, Charles A. (See Dorton, Robert E., assignor.)						
Baker, Charles F. (See Horton, James A., assignor.)						
Baker, Charles F. (See Thompson, James F., assignor.)						
Baker, Charles F., Minneapolis, Minn. Filtering oil	420,428	Feb. 4	1	1	50	565
Baker, Charles F., Minneapolis, Minn. Attachment for steam-engines	432,111	July 15	1684	433	52	344
Baker, Clarence, et al. (See Porter, William H., assignor.)						
Baker, Clayton L., Moline, Ill. Two-wheeled vehicle	426,753	Apr. 29	3542	924	51	725
Baker, Clayton L., and M. Thorkelson, Moline, Ill. Paint	423,656	Mar. 18	1963		50	1525
Baker, Daniel B., Rising Sun, Ohio. Hano-fastening	418,669	Jan. 7	6	2	50	4
Baker, Edward E., Philadelphia, Pa. Case for transferring type	423,715	Mar. 18	2044	539	50	1539
Baker, Erastus M., Little Utica, N. Y. Potato-digger	431,311	July 1	422	104	52	87

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Baker, F. A., <i>et al.</i> (See Goodman, Henry M., assignor.)						
Baker, Francis M., assignor of one-half to J. T. Sands, St. Louis, Mo. Sash-balance.....	427,389	May 6	538	136	51	918
Baker, George G., Chillicothe, Ill. Door-securer.....	432,009	July 15	1525	383	52	313
Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Feed- ing mechanism for sewing-machines.....	423,111	Mar. 11	1145	297	50	1360
Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Slide for sewing-machines.....	423,112	Mar. 11	1146	297	50	1361
Baker, George W., assignor to White Sewing Machine Company, Cleveland, Ohio. Clamp for sewing-machine needles.....	423,113	Mar. 11	1146	297	50	1361
Baker, George W., Jonesborough, N. C., assignor to P. F. Parker, Farmington, N. H. Match- safe.....	427,824	May 13	1211	305	51	1058
Baker, Hamilton T., Croton, Ohio. Running-gear for vehicles.....	432,650	July 22	2823	723	52	569
Baker, Harrison J., Chicago, Ill., assignor to Electro-Carbon Motor Company, of Illinois. Gas-engine.....	421,473	Feb. 18	1532	396 397	50	870
Baker, Haydn M., Brooklyn, N. Y. Disinfectant.....	430,725	June 24	2542		51	1990
Baker Heater Company. (See Baker, William C., assignor.)						
Baker, Henry F. (See Brewer, Reuben T., assignor.)						
Baker, Henry H., Jr., assignor of one-half to H. D. Blakeslee, Buffalo, N. Y. Cuff-holder.....	432,591	July 22	2403	619	52	489
Baker, Henry H., Jr., assignor of one-half to H. D. Blakeslee, Buffalo, N. Y. Necktie- fastener.....	439,371	Oct. 28	2655	707	53	522
Baker, Henry H., Jr., assignor of one-half to H. D. Blakeslee, Buffalo, N. Y. Pantaloon- fastener.....	439,372	Oct. 28	2656	707	53	523
Baker, Horace G., assignor to J. K. P. Baker, Irwin, Iowa. Corn-husker.....	426,901	Apr. 29	3748	978	51	766
Baker, Isaac F., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Con- necticut. Trolley.....	437,961	Oct. 7	436	122	53	83
Baker, Isaac F., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Con- necticut. Electric railway-car motor.....	440,686	Nov. 18	1670	431	53	948
Baker, Jacob S., Glen Rock, Pa. Endless straw-conveyer.....	430,372	June 17	1978	488	51	1874
Baker, Jacob W., Dover, N. J. Brake-beam.....	438,462	Oct. 14	1203	326	53	236
Baker, James H., and G. F. Shevlin, Saratoga Springs, N. Y. Wrench.....	421,154	Feb. 11	1088	279	50	780
Baker, James K. P. (See Baker, Horace G., assignor.)						
Baker, John G., and T. H. Asbury, assignors to Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Lawn-sprinkler.....	436,592	Sept. 16	1900	499	52	1750
Baker, John H., Chicago, Ill. Paint.....	443,422	Dec. 23	2931		53	1858
Baker, John L., Greensborough, N. C. Curtain-fixture.....	422,103	Feb. 25	2451	647	50	1052
Baker, John M. B., Pimlico, county of Middlesex, England. Apparatus for deepening channels of rivers, &c.....	423,716	Mar. 18	2045	539	50	1539
Baker, John N., Jagger, Ohio. Potato-digger.....	424,531	Apr. 1	144	41	51	31
Baker, John T., <i>et al.</i> (See Hart, Edward, assignor.)						
Baker, Joseph W., Chatham, Pa. Gaining-machine.....	428,034	May 13	1530	387	51	1120
Baker, Mary D., Washington, D. C. Fire-escape.....	436,071	Sept. 9	1075	278	52	1587
Baker, Moses N., administrator. (See Stevens, Asher B.)						
Baker, Robert, Hamilton, Canada. Double-sealed water-trap.....	436,114	Sept. 9	1147	299	52	1599
Baker, S. H., <i>et al.</i> (See Riddell, Horace B., assignor.)						
Baker, Sterling W., Olallo, Wash. Stump-puller.....	432,851	July 22	2824	723	52	569
Baker, Theodore J., and A. J. Stanchfield, Salt Lake City, Utah Ter. Trap for flies or other insects.....	427,290	May 6	406	105	51	891
Baker, Thomas J., New Cumberland, Ohio. Tire-setter.....	422,280	Feb. 25	2720	716	50	1102
Baker, Walter, Ilen, N. Y. Type-writing machine.....	432,154	July 15	1759	451	52	357
Baker, Willard D., Rogers, Ark. Anchor for buildings.....	436,767	Sept. 23	2185	575	52	1813
Baker, William C., New York, N. Y. Railway-car heater.....	441,273	Nov. 25	2679	696	53	1145
Baker, William C., assignor to Baker Heater Company, New York, N. Y. Railway-car heater.....	439,287	Oct. 28	2517	675	53	497
Baker, William R. (See Pridmore and Baker.)						
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Sheaf-carrier.....	419,623	Jan. 21	1452	389 390	50	311
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Sheaf-carrier for harvesters.....	420,429	Feb. 4	2	1	50	565
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Mower.....	425,016	Apr. 8	906	239 240	51	183
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Sheaf-carrier.....	431,312	July 1	423	105	52	87
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Bundle-carrier.....	440,687	Nov. 18	1672	431	53	948
Baker, William R., and H. E. Pridmore, assignors to McCormick Harvesting Machine Com- pany, Chicago, Ill. Harvester-frame.....	442,504	Dec. 9	1368	350 351	53	1537
Baker, William S. (See Hann, Edmund P., assignor.)						
Baker, William S. G., Baltimore, Md. Car-truck.....	426,096	Apr. 22	2545	669 670	51	518
Baker, Zephaniah, Dudley, Mass. Heater or stove.....	442,348	Dec. 9	1123	293	53	1487
Balbian, Henry, Philadelphia, Pa. Pipe-coupling.....	436,115	Sept. 9	1147	300	52	1600
Balch, Frank C., Kalamazoo, Mich. Surface cattle-guard.....	432,175	July 15	1787	459	52	363
Balch, Frank C., Kalamazoo, Mich. Surface cattle-guard.....	432,194	July 15	1815	467	52	368
Balch, Samuel W. (See Bruckner and Balch.)						
Balch, Samuel W., assignor to E. Rau Manufacturing Company, Yonkers, N. Y. Envelope- machine.....	430,057	June 10	1452	360 361	51	1761
Balderson, Frank, Oketo, Kans. Belt-replacer.....	429,372	June 3	413	98	51	1549
Baldner, Frederick P., Xenia, Ohio. Condensing-trumpet for spinning-machines.....	420,506	Feb. 4	112	28	50	585
Baldrey, Henry, <i>et al.</i> (See Stubbs, Joel, assignor.)						
Baldry, Henry O., Westminster, county of Middlesex, and J. T. Pullon, Leeds, county of York, England. Excavator.....	419,401	Jan. 14	1136	301 302 303 304	50	238
Baldwin, Addison R. (See Lytle, Felton M., assignor.)						
Baldwin, Alfred, Kenyon, R. I. Loom-shuttle.....	418,670	Jan. 7	8	3	50	4
Baldwin, Alfred, Kenyon, R. I. Tension device for loom-shuttles.....	438,599	Oct. 21	1398	379	53	282
Baldwin, Andrew W., Fremont, Nebr. Thill-coupling.....	428,061	May 20	1572	399	51	1137
Baldwin, Arvide O., Belleville, Kans. Device for use in teaching music.....	435,131	Aug. 26	2624	694	52	1292
Baldwin, Benjamin J., Jr., Paris, Tex. Machine for bending and embossing sheet metal..	422,109	Feb. 25	2453	648	50	1052
Baldwin, Charles W., <i>et al.</i> (See Baldwin, George E. D., assignor.)						
Baldwin & Cheney. (See Baldwin, Judson A., assignor.)						
Baldwin & Co., D. H. (See Smith, Fred S., assignor.)						
Baldwin, Cyrus W., Yonkers, N. Y. Gas-engine.....	434,171	Aug. 12	1100	284	52	981
Baldwin, Cyrus W., Yonkers, N. Y. Tram-car.....	434,172	Aug. 12	1102	285 286	52	982

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Baldwin, Cyrus W., Yonkers, N. Y. Ignitor for gas-engines	439,232	Oct. 28	2423	650	53	479
Baldwin, Eli, New York, N. Y. Registering and recording apparatus	427,215	May 6	291	75	51	869
Baldwin, George E., Philadelphia, Pa., assignor, by mesne assignments, to Johnson Steel Street Rail Company, of Kentucky. Railway	427,291	May 6	408	106	51	891
Baldwin, George E. D., Baltimore, Md., assignor of two-thirds to A. B. Cropley, A. Herr, Washington, D. C., and C. W. Baldwin, Laurel, Md. Wheat-separator	419,238	Jan. 14	890	234	50	190
Baldwin, George E. D., assignor of part to J. Q. McAfee and H. Kroeger, Baltimore, Md., and J. Hughes, Washington, D. C. Machine for washing bottles	420,899	Feb. 4	705	182	50	697
Baldwin, George R., Montreal, Canada. Reversing-gear	436,072	Sept. 9	1076	279	52	1588
Baldwin, George W., assignor to E. Miller & Company, Meriden, Conn. Lamp-shade support	441,632	Dec. 2	5	2	53	1263
Baldwin, Hiram, Toledo, Iowa. Cork-holder	421,226	Feb. 11	1187	305	50	798
Baldwin, James S. (See Wayland and Baldwin.)						
Baldwin, James S., Newark, N. J. Utilizing waste heat of clay-burning kilns	441,816	Dec. 2	299	81	53	1322
Baldwin, James S., assignor to S. H. Baldwin, Newark, N. J. Traction-motor	429,804	June 10	1051	258	51	1684
Baldwin, Josiah M., Manistee, Mich. Hand-brace	419,102	Jan. 7	678	178	50	143
Baldwin, Judson A., assignor to Baldwin & Cheney, Winooski, Vt. Sash-holder	419,134	Jan. 7	721	189	50	151
Baldwin, Judson A., assignor to Baldwin & Cheney, Winooski, Vt. Venetian blind	420,000	Jan. 21	2032	536	50	424
Baldwin, Judson A., Burlington, assignor to Baldwin & Cheney, Winooski, Vt. Sash-holder	421,849	Feb. 18	2079	547	50	973
Baldwin, Judson A., Winooski, assignor to Queen Anne Screen Company, Burlington, Vt. Extension-screen	430,559	June 17	2247	552	51	1924
Baldwin, Judson A., Winooski, assignor to Queen Anne Screen Company, Burlington, Vt. Adjustable window-screen	430,560	June 17	2248	552	51	1924
Baldwin, Lewis H. (See Cole, Joseph S., assignor.)						
Baldwin, Myron W. (See Bach, Matthew W., assignor.)						
Baldwin, Matthias H., Memphis, Tenn. Aerostat	423,980	Mar. 25	2449	650	50	1624
Baldwin, Nathan A. (See Greenleaf, Joseph H., assignor.)				651		
Baldwin, Oscar H. (See Wurts and Baldwin.)						
Baldwin, Ransom G., Oskaloosa, assignor of two-thirds to T. H. Simmons and C. D. Ives, Cedar Rapids, Iowa. Seal-lock	442,736	Dec. 16	1769	458	53	1623
Baldwin, Samuel H. (See Baldwin, James S., assignor.)						
Baldwin, Samuel P., Newton, Mass. Puzzle toy	423,407	Mar. 18	1584	416	50	1453
Baldy, Milo D. (See Hughes, Smith E., assignor.)						
Bales, Thomas M., Dublin, Ind. Alarm-bell	442,937	Dec. 16	2112	543	53	1691
Bales, Walter S., Des Moines, Iowa. Car-coupling	418,671	Jan. 7	9	3	50	4
Balfour, Archie B., et al. (See Wynn, Arthur E., assignor.)						
Ball, Albert, Claremont, N. H. Machine for breaking shelled corn	442,086	Dec. 2	718	193	53	1403
Ball, Albert, assignor to Sullivan Machine Company, Claremont, N. H. Steam-actuated valve	421,890	Feb. 25	2141	561	50	995
Ball, Albert, assignor to Sullivan Machine Company, Claremont, N. H. Engine	424,450	Apr. 1	7	4	51	4
Ball, Albert, assignor to Sullivan Machine Company, Claremont, N. H. Steam-engine	426,612	Apr. 29	3318	870	51	663
Ball, Albert, assignor to Sullivan Machine Company, Claremont, N. H. Tool for raising drill-rods	426,613	Apr. 29	3320	871	51	683
Ball, Albert, assignor to Sullivan Machine Company, Claremont, N. H. Direct-acting engine	433,641	Aug. 5	296	78	52	814
Ball, Clinton M., Troy, N. Y., and S. Norton, Hokendauqua, Pa., assignors to Magnetic Separator Company, Watervliet, N. Y. Separating ores magnetically	430,058	June 10	1454	361	51	1761
Ball, Edward W., Brooklyn, assignor of one-half to Lalance & Grosjean Manufacturing Company, New York, N. Y. Tile	427,657	May 13	944	237	51	1007
Ball, George M., Brooklyn, assignor to J. B. Atherton, L. D. Beck, and A. Dey, New York, N. Y. Wire-twisting machine	443,491	Dec. 30	3055	785	53	1891
Ball, George N., assignor of one-half to S. Smith, Argentine, Mich. Windmill	426,162	Apr. 22	2645	695	51	538
Ball, Henry F., Philadelphia, Pa. Device for making photographic camera-beds rigid	434,622	Aug. 19	1807	473	52	1131
Ball, Hosea, New York, N. Y. Horse-bit	443,158	Dec. 23	2496	638	53	1772
Ball, James, Holyoke, Mass. Envelope-machine	442,091	Dec. 9	727	197	53	1413
Ball, James, Holyoke, Mass. Envelope-machine	442,092	Dec. 9	732	198	53	1414
Ball, James A. (See Bowers and Hamilton, assignors.)						
Ballagh, Andrew H., Macon City, Mo. Furnace-door opener	419,748	Jan. 21	1635	435	50	344
Ballantine, Alexander T., Cleveland, Ohio. Toy fortune-telling device	432,813	July 22	2777	711	52	560
Ballard, Charles, Pueblo, Colo. Pneumatic ore-concentrator	431,313	July 1	425	105	52	87
Ballard, George W., Detroit, Mich. Washing-machine	425,397	Apr. 15	1472	395	51	303
Ballard, Harlan H., Pittsfield, Mass. Binding-clip for papers, &c	430,331	June 17	1923	471	51	1862
Ballard, Harlan H., Pittsfield, Mass. Opening-instrument for binding-clips	439,994	Nov. 4	560	148	53	717
Ballard, Henry C., Milwaukee, Wis. Automatic dental plugger	423,205	Mar. 11	1280	333	50	1388
Ballard, James W., and H. L. Fisher, Toledo, Iowa. Railway-scales	434,056	Aug. 12	898	236	52	941
Ballard, John, Dunkirk, Ohio. Spade	432,472	July 15	2927	576	52	447
Ballard, Joseph B., Ballardsville, Miss. Combined dust-guard and ventilator for car-windows	424,163	Mar. 25	2709	721	50	1674
Ballay, Thomas. (See Freckmann, Ballay, and Appel.)						
Ballentine, Edgar S., New Decatur, Ala. Plow-cleaner	419,624	Jan. 21	1455	390	50	311
Ballew, John C., Evansville, Ind. Brazing-machine	426,358	Apr. 22	2918	768	51	596
Ballinger, Levi T. (See Fries and Richardson, assignors.)						
Ballintine, Charles L. (See Livengood, Winfield S., assignor.)						
Ballou, Asa W., Bailey, Mich. Ventilated barrel	433,510	Aug. 5	102	28	52	776
Ballou, James P., et al. (See Randall, Robert, assignor.)						
Balsley, Joseph, Seymour, Ind. Clamping mechanism for wood-working machines	418,880	Jan. 7	354	85,86	50	74
Balsley, Joseph, Seymour, Ind. Clamping device for saw-tables	418,936	Jan. 7	452	110	50	94
Balston, Clyde C. (See Rose and Balston.)				111		
Baltzell, Charles. (See Cheesman, James I., assignor.)						
Baltzley, Edwin, assignor to Keystone Manufacturing Company, Philadelphia, Pa. Culinary grater and chopper	419,103	Jan. 7	679	178	50	143
Baltzley, Edwin, assignor to Keystone Manufacturing Company, Philadelphia, Pa. Combined culinary press and grater	419,104	Jan. 7	682	179	50	143
Baltzley, Henry H., Assumption, Ill. Flood-gate	420,001	Jan. 21	2034	536	50	424
Bamberger, Henry. (See Arthur and Bamberger.)						
Bamford, Henry J. (See Storey and Bamford.)						
Bamford, Walter. (See Hilton, Edwin D., assignor.)						
Bancroft, Melvin, assignor to Quigley Furniture Company, Whitesborough, N. Y. Type-writer cabinet	427,216	May 6	292	75	51	869

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Bancroft, Melvin, assignor to Quigley Furniture Company, Whitesborough, N. Y. Type-writer cabinet	427,217	May 6	293	75	51	869
Bancroft, Melvin, assignor to Quigley Furniture Company, Whitesborough, N. Y. Type-writer case	427,954	May 13	1418	358	51	1097
Bancroft, Melvin, assignor to Quigley Furniture Company, Whitesborough, N. Y. Type-writer cabinet	442,658	Dec. 16	1600	414	53	1592
Bancroft, William F. (See Kent and Bancroft.)						
Bandy, Oliver L., and G. B. Cole, La Salle, Ill. Toy	437,082	Sept. 23	2716	709	52	1916
Bang, Ivar A. F., and M. C. A. Ruffin, Paris, France. Making acetic acid	432,926	July 22	2936	752	52	591
Bangs, Edwin D., Milwaukee, Wis. Propeller-wheel	436,769	Sept. 23	2189	577	52	1814
Bangs, Edwin D., Milwaukee, Wis. Harvester	443,740	Dec. 30	3146	884	53	1966
Bangs, Frederick B. (See Hogeland, Israel, assignor.)						
Banker, George W., Brooklyn, N. Y. Box-fastener	418,672	Jan. 7	10	3	50	4
Banker, George W., Brooklyn, N. Y. Packing-case	423,547	Mar. 18	1787	469	50	1491
Banker, George W., Brooklyn, N. Y. Box-closure	430,106	June 17	1543	383	51	1789
Banker, George W., Brooklyn, N. Y. Drop-spout for cans	430,820	June 24	2706	663	51	2022
Banker, John. (See Wiard, Myron W., assignor.)						
Banks, George, Oakfield, Mich. Seat for agricultural machines	420,430	Feb. 4	4	1	50	565
Banks, George L., and P. P. Belt, said Banks assignor to H. Loether, Fredonia, Kans. Fence-making machine	440,457	Nov. 11	1299	336	53	867
Banks, George W., Philadelphia, Pa. Gripper for job-presses	439,462	Oct. 28	2793	744	53	518
Bankson, John W., New York, N. Y. Roller-sled	424,164	Mar. 25	2711	721	50	1674
Bannatyne, Archibald, assignor to Waterbury Clock Company, Waterbury, Conn. Clock-winding mechanism	427,292	May 6	409	106	51	891
Bannatyne, Archibald, assignor to Waterbury Clock Company, Waterbury, Conn. Motion-clock	439,854	Nov. 4	337	87	53	673
Bannatyne, Archibald, assignor to Waterbury Clock Company, Waterbury, Conn. Motion-clock	439,855	Nov. 4	338	87	53	673
Bannatyne, Archibald, assignor to Waterbury Clock Company, Waterbury, Conn. Clock-case	440,386	Nov. 11	1166	301	53	843
Bannatyne, Archibald, assignor to Waterbury Clock Company, Waterbury, Conn. Balance-escapement for watches	443,248	Dec. 23	2658	682	53	1806
Bannard, Hubbard F., Nashville, Tenn. Paper bottle	423,114	Mar. 11	1147	297	50	1361
Bannister, Burr, Kalamazoo, Mich. Truss	429,556	June 3	686	168	51	1604
Bannon, Patrick, <i>et al.</i> (See Whiteford, Robert, assignor.)						
Banowetz, Mathias B., Brown, assignor of one-half to Monohan Brothers, Charlotte, Iowa. Stalk-cutter	443,349	Dec. 23	2825	726	53	1837
Bansemer, John C., and E. L. Davies, Great Falls, Mont., assignors of one-third to C. E. Beers, Salt Lake City, Utah Ter. Slag-escape for tuyeres	426,702	Apr. 29	3456	906	51	708
Banta, Charles W. (See Banta, Henry L., assignor.)						
Banta, Henry L., assignor of one-half to C. W. Banta, Cañon City, Colo. Hay-rake	421,891	Feb. 25	2143	562 563	50	996
Banta, William E., Springfield, Ohio. Hair-spring collet for watches	438,672	Oct. 21	1512	408	53	303
Banta, William E., Springfield, Ohio. Electric-wire coupling	441,919	Dec. 2	447	119	53	1352
Bantz, Edward, Baltimore, Md. Means for creating artificial currents	429,833	June 10	1099	271	51	1694
Banzett, William E., Brooklyn, assignor of one-half to W. Evans, New York, N. Y. Oil-distributor	436,282	Sept. 9	1395	362	52	1648
Baoyertlin, Emile K., Louisville, Ky. Artificial fuel	426,519	Apr. 29	3176		51	654
Baraco, Rosalie V., Fresno, Cal. Closet attachment	425,972	Apr. 22	2365	627	51	484
Barager, Mary M., Candor, N. Y. Curtain-ring	442,565	Dec. 9	1465	376	53	1556
Barbee Wire and Iron Works. (See Rix, George K., assignor.)						
Barber, Arthur J., and H. A. Tripp, Sodus, N. Y. Pipe-wrench	421,892	Feb. 25	2145	563	50	996
Barber, Francis M., Washington, D. C. Fruit-stand	421,540	Feb. 18	1642	424	50	891
Barber, Francis M., Washington, D. C. Floating stranded vessels	435,788	Sept. 2	632	167	52	1496
Barber, George A. (See Davidson and Barber.)						
Barber, Harvey P., assignor to J. W. Voorhees, Chicago, Ill. Merchandise-package	438,367	Oct. 14	1063	289	53	209
Barber, John C., St. Paul, Minn. Car-truck	433,063	July 29	3174	816 817	52	642
Barber, John C., St. Paul, Minn. Stake for railway-cars	441,736	Dec. 2	167	44	53	1294
Barber, John D., Cleveland, Ohio. Door-check	424,257	Mar. 25	2829	756	50	1698
Barber, John F., assignor of one-half to S. W. Cantril, Denver, Colo. Billiard-cue and chalk-holder	437,746	Oct. 7	107	33	53	23
Barber, John F., assignor of one-half to S. W. Cantril, Denver, Colo. Machine for grinding flat surfaces	437,747	Oct. 7	108	34	53	24
Barber, Joseph G., Broadhead, Wis. Gate	432,354	July 15	2048	527	52	411
Barber, Oliver P., Saginaw, Mich. Surgical-ligature receptacle	443,812	Dec. 30	3563	913	53	1989
Barber, William A., Savanna, Ill. Device for attaching hay-loaders to vehicles	426,703	Apr. 29	3457	906	51	702
Barberie, Ernest T., and J. Des Brisay, New York, N. Y. Electric switch	440,614	Nov. 18	1566	403	53	927
Barbet, Emile A., Paris, France. Apparatus for and process of continuous rectification of spirits, alcohol, &c	436,684	Sept. 16	2048	535	52	1779
Barbet, Emile A., Paris, France. Process of and apparatus for rectifying and distilling alcohol, &c	436,764	Sept. 16	2176	572	52	1803
Barbezat-Bailloit, Charles, Locle, Switzerland. Repeating-watch	433,225	July 29	3417	882 883	52	690
Barbier, Alphens W., and P. P. Coady, Detroit, Mich.; said Coady assignor to said Barbier. Attachment for tailor's goose	423,368	Mar. 11	1524	400	50	1434
Barbour, George H., <i>et al.</i> (See Soper, Robert W., assignor.)						
Barckdall, Daniel, Indianapolis, Ind. Washing-machine	443,609	Dec. 30	3236	831	53	1926
Barclay, Andrew, Kilmarnock, county of Ayr, and J. Walker, Glasgow, county of Lanark, Scotland. Pneumatic grain-conveyer	424,638	Apr. 1	310	79 80 81	51	61
Barclay, Harry H., Buffalo, N. Y. Blower	430,796	June 24	2661	653	51	2014
Barclay, Peter, Winthrop, Mass. Safety water-gage	423,206	Mar. 11	1282	333	50	1388
Barclay, William V., North Wayne, Me. Knife	437,325	Sept. 30	3122	816	52	1998
Barcroft, Henry, Newry, county of Armagh, Ireland. Apparatus for propelling and steering boats	431,428	July 1	605	151 152	52	122
Barcroft, Henry, Newry, Ireland. Apparatus for propelling and steering boats	441,049	Nov. 18	2266	587	53	1060
Barcroft, Henry, Newry, Ireland. Apparatus for propelling and steering vessels	441,050	Nov. 18	2267	587 588	53	1060
Bard, David J., assignor to himself and F. F. Haigh, Chicago, Ill. Crate	420,855	Feb. 4	627	161 162	50	682
Barden, George F., assignor to L. L. Brown Paper Company, Adams, Mass. Manufacturing writing-paper	427,453	May 6	648	162	51	940
Bardez, Frank, San Francisco, Cal. Faucet-filter	427,029	Apr. 29	3931	1025	51	801

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Bardo, Peter N., and T. Ford, Newport, Ky., assignors to Bonrbon Copper and Brass Works, Cincinnati, Ohio. Hydrant.....	430,262	June 17	1775	441	51	1834
Bardsley, Joseph, Brooklyn, N. Y. Door-check.....	441,274	Nov. 25	2680	{ 696 697 697 268 }	53	1145
Bardsley, William, Kearney, and W. K. Crofford, New York, N. Y. Hatchway-door mechanism.....	442,279	Dec. 9	1013	268	53	1467
Bardsley, William, Kearney, and W. K. Crofford, New York, N. Y. Hatchway for elevators.....	442,280	Dec. 9	1016	268	53	1467
Bardwell, Arthur F. (See Brooks, Herbert H., assignor.)						
Bardwell, Arthur F., Boston, assignor of one-half to H. H. Brooks, Cambridge, Mass. Guide for trolley-arms.....	439,092	Oct. 28	2199	590	53	439
Barenther, Augustus, <i>et al.</i> (See Sanborn, Edmond B., assignor.)						
Barfoot, John A., assignor of one-half to H. J. Griswold, Leicester, England. Covering-point for knitting-frames.....	431,135	July 1	147	39	52	31
Barger, Mynderf, Chicago, Ill. Cuspidor-cleaner.....	439,740	Nov. 4	165	43	53	640
Barian, George W., Fowlerville, Mich. Machine for grinding horseshoe-calks.....	428,878	May 27	2-09	714	51	1396
Barian, George W., Fowlerville, Mich. Fireman's safety-helmet.....	439,093	Oct. 28	2200	590	53	439
Barkeley, Charles H., <i>et al.</i> (See Harmon, Orville S., assignor.)						
Barkeley, Julius A., assignor of one-half to S. M. Ramsey, Canton, Mo. Chicken-coop.....	441,120	Nov. 25	2407	623	53	1097
Barker, Albert A. (See Houghton and Barker.)						
Barker, Arthur D., Grinnell, Iowa. Bicycle.....	434,234	Aug. 12	1199	312	52	1000
Barker Automatic Scale Company. (See Barker, Wells T., assignor.)						
Barker, Erastus B., Newark, N. J. Photographic shutter.....	440,583	Nov. 11	1501	387	53	906
Barker, Francis C., and R. F. Sproule, Dublin, Ireland. Printing-machine.....	432,257	July 15	1902	488	52	324
Barker, Henry C., assignor to H. P. Scott, Kansas City, Mo. Drink-registering attachment for bottles.....	421,091	Feb. 11	999	256	50	762
Barker, Henry C., assignor to F. W. Sihler, W. P. Huckle, and H. P. Scott, Kansas City, Mo. Syringe.....	438,980	Oct. 21	2022	540	53	398
Barker, Irving, Springfield, Ill. Car-axle lubricator.....	439,094	Oct. 28	2201	590	53	440
Barker, Jacob. (See Frierson and Barker.)						
Barker, Jacob, Columbia, assignor of one-half to L. L. Frierson, Mount Pleasant, Tenn. Packing and refrigerating case.....	431,930	July 8	1397	355	52	282
Barker, Jacob, Columbia, and L. L. Frierson, Mount Pleasant, Tenn. Packing-refrigerator.....	431,865	July 8	1318	330	52	266
Barker, Jacob, Columbia, and L. L. Frierson, Mount Pleasant, Tenn. Packing and refrigerating vessel.....	431,931	July 8	1398	355	52	282
Barker, John F., Springfield, Mass. Device for operating elevated light-globes.....	423,295	Mar. 25	2309	609	50	1597
Barker, John F., Springfield, Mass. Laboratory burner, specially useful with gasoline-gas.....	423,296	Mar. 25	2309	609	50	1598
Barker, John F., Springfield, Mass. Air-pump.....	433,064	July 29	3175	817	52	642
Barker, John F., Springfield, Mass. Gas-burner.....	434,013	Aug. 12	842	222	52	929
Barker, Peleg, Kearney, Nebr. Grain-meter.....	418,780	Jan. 7	1-5	45	50	41
Barker, Wells T., Nashville, Mich. Automatic grain-weighing machine.....	421,850	Feb. 18	2080	547	50	974
Barker, Wells T., assignor to Barker Automatic Scale Company, Nashville, Mich. Register.....	431,178	July 1	218	55	52	45
Barker, William, Newport, Ky., assignor to Lodge & Davis Machine Tool Company, Cincinnati, Ohio. Lathe-carriage.....	430,612	June 24	2348	575	51	1953
Barker, William S., Troy, Ohio. Feed-trough.....	426,426	Apr. 29	3048	708	51	629
Barkman, Albert B., Brooklyn, N. Y. Luggage-carrier for bicycles.....	442,938	Dec. 16	2113	544	53	1691
Barlass, John. (See Barlass, Robert and J.)						
Barlass, John, <i>et al.</i> (See Sailer, John M., assignor.)						
Barlass, Robert, <i>et al.</i> (See Sailer, John M., assignor.)						
Barlass, Robert, Harmony, and J. Barlass, Johnstown, Wis. Lantern-holder.....	439,620	Nov. 4	4	1	53	607
Barley, Wesley, assignor of one-half to M. J. Friedman, Chicago, Ill. Feed-bag support.....	426,654	Apr. 29	3381	888	51	694
Barlow, Charles, Cookshire, Quebec, assignor to G. A. Le Baron, Sherbrooke, Canada. Clothes-line.....	418,937	Jan. 7	453	111	50	95
Barlow Corn Planter Company. (See Barlow, Joseph C., assignor.)						
Barlow, Henry C., Xenia, Ind. Rein-guard.....	431,314	July 1	426	106	52	88
Barlow, John H., New Haven, Conn. Bullet-molding dipper.....	431,315	July 1	427	106	52	88
Barlow, Joseph C., assignor to Barlow Corn Planter Company, Quincy, Ill. Check-row attachment.....	443,471	Dec. 23	3010	773	53	1874
Barlow, William H., Charlottesville, Va. Four-wheeled dog-cart.....	443,423	Dec. 23	2932	754	53	1858
Barnebly, Nathaniel, Lewisham, England. Mounting for guns in ships.....	436,685	Sept. 16	2050	535	52	1779
Barnard, Benjamin F. (See Williams, John H., assignor.)						
Barnard, Charles, Stamford, Conn. Theatrical appliance.....	422,362	Mar. 4	2	1	50	1137
Barnard & Company, George D. (See Babbitt, Edmond H., assignor.)						
Barnard & Company, George D. (See Babbitt and Stockstrom, assignors.)						
Barnard & Company, George D. (See Knapp, Edward, assignor.)						
Barnard, George A. (See White, Henry C., assignor.)						
Barnard, George A., Hartford, Conn. Steam-heating apparatus.....	429,182	June 3	113	26, 27	51	1493
Barnard, George A., East Orange, N. J. Car-heater.....	429,183	June 3	114	27	51	1493
Barnard, Heman A., assignor to Barnard & Leas Manufacturing Company, Moline, Ill. Grain-separator.....	435,167	Aug. 26	2674	{ 706 707 }	52	1302
Barnard, Henry E., <i>et al.</i> (See Rock, Frank, assignor.)						
Barnard, James J., deceased, Passaic N. J.; J. Adams, administrator. Record-sheet.....	423,657	Mar. 18	1964	517	50	1525
Barnard, John H., Asheville, N. C. Electric meter.....	429,751	June 10	974	239	51	1670
Barnard & Leas Manufacturing Company. (See Barnard, Heman A., assignor.)						
Barnard & Leas Manufacturing Company. (See Cornwall, John B., assignor.)						
Barnard, Lucius V., Pittsfield, Mass. Musical instrument.....	419,625	Jan. 21	1456	391	50	311
Barnard, William C., Worcester, Mass. Moth-trap.....	420,490	Feb. 4	92	22	50	581
Barnes, Amos, assignor to H. C. Ward, Pontiac, Mich. Signaling apparatus for railway-crossings.....	431,027	July 1	2	1	52	3
Barnes, Amos, assignor of three-fourths to H. C. Ward and R. Le Baron, Pontiac, Mich. Switch-signaling apparatus.....	419,135	Jan. 7	722	190	50	151
Barnes, Burton H., Muncie, Ind. Pen-holder.....	432,355	July 15	2050	528	52	411
Barnes, Charles, West Liberty, Iowa. Windmill.....	438,282	Oct. 14	940	254	53	185
Barnes, Charles O. and L., Sr., Syracuse, N. Y. Car-coupling.....	437,962	Oct. 7	437	{ 122 123 }	53	84
Barnes Company, W. F. & John. (See Barnes, William F., assignor.)						
Barnes Company, W. F. & John. (See Farmer, Thomas, Jr., assignor.)						
Barnes, Cortez E., assignor of one-half to D. C. Williams and C. T. Kerry, Reed City, Mich. Sack-filler.....	435,638	Sept. 2	408	110	52	1452
Barnes, David L., Chicago, Ill. Car-brake.....	435,673	Oct. 21	1513	408	53	303
Barnes, David L., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Draw-bar for railway-cars.....	421,651	Feb. 18	1807	471	50	923

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Barnes, David L., Chicago, Ill., assignor to R. R. Hazard, New York, N. Y. Railway passenger-car truck	431,543	July 8	792	{ 197 198 }	52	165
Barnes, David L., Chicago, Ill., assignor to R. R. Hazard, New York, N. Y. Railway-car truck	431,544	July 8	793	198	52	165
Barnes, David L., Chicago, Ill., assignor to R. R. Hazard, New York, N. Y. Railway-car truck	431,736	July 8	1116	{ 277 278 }	52	227
Barnes, David L., Chicago, Ill., assignor to Consolidated Car Heating Company, of West Virginia. Steam-trap	434,373	Aug. 12	1406	369	52	1042
Barnes, David L., assignor to W. R. Stirling, Chicago, Ill., and A. J. Leith, New York, N. Y. Metallic door	421,652	Feb. 18	1807	472	50	923
Barnes, David L., assignor to W. R. Stirling, Chicago, Ill., and A. J. Leith, New York, N. Y. Metallic door	421,653	Feb. 18	1808	{ 472 473 }	50	923
Barnes, Elbridge F., New Haven, Conn. Steering apparatus	426,754	Apr. 29	3543	924	51	725
Barnes, Elbridge F., New Haven, Conn. Steering apparatus	428,366	May 20	2036	512	51	1329
Barnes, Elbridge F., New Haven, Conn. Tenoning-machine	439,373	Oct. 28	2657	707	53	523
Barnes, George A., New Haven, Conn. Brush	431,866	July 8	1320	{ 330 331 123 124 125 126 }	52	266
Barnes, George A., New Haven, Conn. Machine for making paper boxes	437,963	Oct. 7	439	{ 125 126 }	53	84
Barnes, George B., assignor of one-half to Lantern Globe Company, Bellaire, Ohio. Press for forming lenses on articles of glassware	418,881	Jan. 7	357	86	50	75
Barnes, George N., et al. (See Johnson, Charles L., assignor.)						
Barnes, Henry, Brooklyn, assignor of one-half to J. Renton, Astoria, N. Y. Toy pistol	427,535	May 13	774	192	51	974
Barnes, James H., Harmony Village, Va. Sand-band for vehicles	429,713	June 10	924	226	51	1660
Barnes, John T. (See Moore, Frederick W., assignor.) (Reissue.)						
Barnes, John W., Chester, Pa., assignor to H. W. Morrow, Wilmington, Del. Treating parchmentized-fiber waste	411,462	Nov. 25	2984		53	1203
Barnes, Joshua B., Springfield, Ill. Water-purifier for locomotive-boilers	435,168	Aug. 26	2677	707	52	1303
Barnes, Joshua B., Springfield, Ill. Water-purifier for locomotive-boilers	436,094	Sept. 9	1107	287	52	1593
Barnes, Joshua B., Springfield, Ill. Mud-valve for steam-boilers	436,491	Sept. 16	1736	458	52	1722
Barnes, Lewis, Belvidere, N. J., assignor of one-half to W. A. Nichols, Philadelphia, Pa. Knob for cattle-horns	422,490	Mar. 4	184	50	50	1171
Barnes, Lewis, assignor of one-half to W. A. Nichols, Philadelphia, Pa. Lady's hat-pin	436,328	Sept. 16	1470	383	52	1671
Barnes, Lewis, assignor of three-fourths to W. C. Albertson, G. M. Shipman, and K. F. Albertson, Belvidere, N. J. Railway-tie	423,852	Mar. 18	2256	592	50	1577
Barnes, Lucien, Sr. (See Barnes, Charles O. and L., Sr.)						
Barnes, Nebraska H., Wahoo, Nebr. Oil-can	433,613	Aug. 5	256	68	52	806
Barnes, Thomas N., assignor of one-fifth to J. Koblegard, Weston, W. Va. Baking apparatus	435,723	Sept. 2	534	142	52	1478
Barnes, Thomas, assignor of one-half to F. Chatterton, Rawlins, Wyo. Car-coupling	442,412	Dec. 9	1222	315	53	1507
Barnes, William F., assignor to W. F. & J. Barnes Company, Rockford, Ill. Tool-carriage for lathes	427,494	May 6	701	176	51	950
Barnes, William F., assignor to W. F. & J. Barnes Company, Rockford, Ill. Lathe	427,495	May 6	702	177	51	951
Barnet, James B., Tarrytown, N. Y. Information tablet or indicator	420,712	Feb. 4	393	{ 104 105 }	50	641
Barnett, Barnard B., Woodruff, S. C. Cultivator	422,694	Mar. 4	491	125	50	1230
Barnett, Flora, New York, N. Y. Decorative painting	438,833	Oct. 21	1799	479	53	355
Barnett, Henry E., Easthampton, Mass. Binding attachment for sewing-machines	425,285	Apr. 8	1313	351	51	264
Barnett, Horatio, Malvern, Ark. Tool	420,671	Feb. 4	343	90	50	631
Barnett, Ira S., Louisville, Ky. Manufacturing candy	419,001	Jan. 7	533		50	112
Barnett, Ira S., Louisville, Ky. Manufacturing candy. (Reissue.)	11,107	Aug. 26	3026		52	1367
Barnett, John, New York, N. Y. Photo-plate holder	419,105	Jan. 7	683	180	50	144
Barnett, William H. (See Dean and Barnett.)						
Barney, Everett H., Springfield, Mass. Skate	434,235	Aug. 12	1201	312	52	1000
Barney, Henry, assignor to Roller Bearing Axle Company, Hillsborough, Wis. Vehicle-axle bearing	423,717	Mar. 18	2046	539	50	1539
Barney, Henry, and H. Rahn, assignors to Roller-Bearing Axle Company, Hillsborough, Wis. Fifth-wheel for vehicles	439,621	Nov. 4	5	2	53	607
Barney, Richard W. (See Woodard and Barney.)						
Barnhart, Frank, Warren, Pa. Tapping-machine for stay-bolt holes	441,737	Dec. 2	168	44	53	1295
Barnhart, Harvey P. and S. L., Potsdam, N. Y. Liquid-measuring vessel	421,155	Feb. 11	1069	{ 279 280 }	50	780
Barnhart, Samuel L. (See Barnhart, Harvey P. and S. L.)						
Barnhill, Hugh. (See Patridge, James O., assignor.)						
Barnum, Joseph P., assignor to himself, C. Godshaw, and J. S. Cain, Louisville, Ky. Ammonia-soda apparatus. (Reissue.)	11,135	Dec. 23	3045	783	53	1881
Barnum, Levi, et al. (See O'Dell, Oren W., assignor.)						
Barnum, T. P., et al. (See O'Dell, Oren W., assignor.)						
Barnum, William E., assignor to A. G. Warner, Chicago, Ill. Machine for punching checks	438,136	Oct. 14	712	{ 195 196 }	53	144
Barnum, William T., New Haven, Conn. Electrotype	441,920	Dec. 2	448	119	53	1353
Baron, Alfred L., Tiffin, Ohio. Tubular lantern	433,760	July 29	3478	898	52	703
Baron, Bernhard, Baltimore, Md. Case for exhibiting packages of cigars	419,028	Jan. 7	575	145	50	122
Barotte, Henri, assignor to Société Barotte, Meyer & Compagnie, Paris, France. Dry extract of coffee and preparing the same	439,318	Oct. 28	2576	688	53	508
Barotte, Henri, assignor to Barotte, Meyer & Compagnie, Paris, France. Apparatus for preparing extract of coffee	440,752	Nov. 18	1787	{ 461 462 }	53	970
Barotte, Meyer & Compagnie. (See Barotte, Henri, assignor.)						
Barr, Ephraim B., et al. (See Myers, Phares S., assignor.)						
Barr, Frederic, Tacoma, Wash. Soldering-iron	435,274	Aug. 26	2833	749	52	1332
Barr, Henry G., Westborough, Mass. Bicycle-head	433,760	Aug. 5	477	123	52	848
Barr, Jacob N., Milwaukee, Wis. Machine for producing circular bodies	421,374	Feb. 18	1399	361	50	845
Barr, Jacob N., Milwaukee, Wis. Railway-car	421,375	Feb. 18	1401	361	50	845
Barr, Jacob N., Milwaukee, Wis. Railway-car	421,376	Feb. 18	1402	{ 362 363 }	50	845
Barr, Jacob N., Milwaukee, Wis. Machine for truing car-wheels	421,377	Feb. 18	1405	{ 363 364 }	50	846
Barr, Jacob N., Milwaukee, Wis. Railway-car	429,834	June 10	1100	272	51	1694
Barr, John C., St. Paul, Minn. Indicator-lock	426,097	Apr. 22	2547	670	51	518
Barr, John C., St. Paul, Minn. Indicator-lock	428,711	May 27	2567	650	51	1346
Barr, John C., Bismarck, N. D. Indicator-lock	428,710	May 27	2564	{ 649 650 }	51	1346

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Barr, Samuel W., Mansfield, Ohio. Store-service apparatus	432,852	July 22	2825	724	52	570
Barracrough, Thomas C. (See de Landtsheer and Barracrough.)						
Barrath, Edward. (See Zimmerman and Barrath.)						
Barratt, Edward W. (See Barratt, Frank and E. W.)						
Barratt, Frank and E. W., London, England. Apparatus for public amusement	419,490	Jan. 14	1259	{ 335 336 }	50	265
Barred End Button Hole Attachment Company. (See Mills, Daniel, assignor.)						
Barrett, Albert. (See Hale and Barrett.)						
Barrett Battery Company, John A. (See Willms and Liebig, assignors.)						
Barrett, Charles L. (See Hawley and Barrett.)						
Barrett, Charles L., Allegan, Mich. Road-cart	427,454	May 6	649	162	51	940
Barrett, Charles L., Kent City, Mich. Fire-tightener	427,455	May 6	650	163	51	940
Barrett, George L., Springfield, Ohio. Time-indicator	422,563	Mar. 4	286	73	50	1191
Barrett, George W., Cleveland, Ohio. Hydraulic engine	438,600	Oct. 21	1399	379	53	282
Barrett, Isaac M. (See Hough and Barrett.)						
Barrett, James, Boston, Mass. Overflow-pipe and soap-holder for wash-bowls	435,674	Sept. 2	462	122	52	1463
Barrett, James, Boston, Mass. Stand or overflow pipe for bath-tubs	443,310	Dec. 23	2767	709	53	1825
Barrett, James O., assignor of one-half to F. T. Fish, Meadville, Pa. Light-holder	420,292	Jan. 28	2503	664	50	520
Barrett, John A., Brooklyn, N. Y. Electrical conductor	424,751	Apr. 1	485	132	51	95
Barrett, Lucius O., assignor to J. A. Titus & Co., Brattleborough, Vt. Carpenter's gage	436,166	Sept. 9	1225	319	52	1613
Barrett, Mora M., and J. F. Daly, San Francisco, Cal. Gasoline-engine	430,504	June 17	2171	534	51	1911
Barrett, Mora M., and J. F. Daly, San Francisco, Cal. Gas-engine	430,505	June 17	2173	534	51	1911
Barrett, Mora M., and J. F. Daly, San Francisco, Cal. Gas-engine	430,506	June 17	2174	535	51	1911
Barrett, Mora M., and J. F. Daly, San Francisco, Cal. Gas or vapor engine attachment	434,695	Aug. 19	1950	507	52	1155
Barrett, Mora M., and J. F. Daly, San Francisco, Cal. Governor for gas-engines	443,064	Dec. 16	2296	588	53	1729
Barrett, Robert W., Bristol, Tenn. Device for casting sash-weights	438,137	Oct. 14	715	196	53	145
Barrett, Samuel D. (See Stafford and Barrett.)						
Barrett, Walter W., Portland, Me. Time-piece dial	428,588	May 27	2369	602	51	1311
Barrieklow, Jos. P. (See Poultier, John H., assignor.)						
Barrière, Leopold P. de la, Paris, France. Light protection for men of war or merchant-men	425,363	Apr. 8	1415	377	51	284
Barriett, Samuel L., Brooklyn, N. Y. Automatic lubricating device for electric motors	432,927	July 22	2937	752	52	591
Barriett, Samuel L., assignor to Southern Electrical Manufacturing and Supply Company, (limited), New Orleans, La. Switch for electric apparatus	423,891	Mar. 18	2299	607	50	1589
Barringer, Jacob P., and T. H. Johnston, Harrisburg, Pa. Construction of lamps	420,139	Jan. 28	2254	597	50	476
Barrington, William A. (See Shobe, Edward, assignor.)						
Barron, O. E. D., et al. (See Stone, Thomas W., assignor.)						
Barron, Walter J., Brooklyn, assignor of one-half to A. Densmore, New York, N. Y. Type-writing machine	432,220	July 15	1852	475	52	375
Baron, Walter J., New York, N. Y., assignor to A. Densmore, Meadville, Pa. Type-writing machine	436,820	Sept. 23	2289	603	52	1834
Baron, Walter J., New York, N. Y., assignor to A. Densmore, Meadville, Pa., and C. G. Patterson, New York, N. Y. Type-writing machine	430,416	June 17	2038	{ 502 503 }	51	1886
Barron, William H., Port Huron, Mich. Wash-boiler	439,856	Nov. 4	340	88	53	674
Barrow, Jacob, Windfall, Ind. Pressure-regulator	431,961	July 8	1447	366	52	292
Barrow, Lonis, and C. H. Guest, Birmingham, county of Warwick, England. Velocipede	425,017	Apr. 8	909	{ 240 241 }	51	184
Barrow, Thomas E. (See Schreidt and Barrow.)						
Barrow, Thomas E., Mansfield, Ohio. Grave-marker and bouquet and flag holder	443,741	Dec. 30	3447	884	53	1966
Barrows, Albert. (See McElroy, Charles E., assignor.)						
Barrows, Edward F., Chicago, Ill. Hinged seat	434,753	Aug. 19	2023	528	52	1170
Barrows, Edward F., assignor to Barrows Manufacturing Company, Lockport, Ill. Lock	442,087	Dec. 2	719	193	53	1404
Barrows, Frederick B., assignor to himself and W. M. Spalding, Duluth, Minn. Apparatus for operating dredge or excavator buckets	430,561	June 17	2249	552	51	1925
Barrows, John F. (See Lewis, Henry C., assignor.)						
Barrows Manufacturing Company. (See Barrows, Edward F., assignor.)						
Barrows, William H. (See Lee and Barrows.)						
Barrows, William H., Brooklyn, N. Y., assignor to Brooklyn Railway Supply Company. Street-sweeper	423,718	Mar. 18	2047	540	50	1540
Barry, Charles, assignor of fifty-one one-hundredths to A. Lathrop and G. J. Magee, Corning, N. Y. Railway time-signal	420,140	Jan. 28	2256	597	50	476
Barry, Henry W. (See Dillon, William H., assignor.)						
Barry, Homer J., Fargo, Mich. Mouse-trap	429,254	June 3	214	53	51	1513
Barry, John, New York, N. Y. Clinical thermometer	424,165	Mar. 25	2712	722	50	1674
Barry, John F. (See Lawler and Barry.)						
Barry, John F. (See McGighe, Thomas J., assignor.)						
Barry, Simon, Stroudsburg, Pa. Fire-escape	437,552	Sept. 30	3495	912	52	2074
Barry, William, assignor to F. A. Austin, W. H. Brown, and S. Laycock, Syracuse, N. Y. Door-hanger	434,651	Aug. 19	1873	490	52	1142
Barry, William H. (See Condron, Henry, assignor.)						
Barstow, Gideon, et al. (See Verrill, Charles F., assignor.)						
Bartel, Gustav, New York, N. Y. Preparing pulp from pumpkins	436,686	Sept. 16	2030	.....	52	1780
Bartelle, Nicholas, Toledo, Ohio. Convertible chair	439,857	Nov. 4	341	88	53	674
Barter, John, assignor to F. Fear and C. E. Foulds, New York, N. Y. Thumb and finger guide for pen-holders	423,587	Mar. 18	1840	485	50	1500
Barth, Christian, Hørsholm, Denmark. Riding-saddle	423,302	Mar. 11	1433	373	50	1415
Barthel, Friedrich G., Neiderpoyritz, near Dresden, Germany. Lamp for burning hydrocarbons	442,281	Dec. 9	1018	268	53	1468
Barthel, Julius, Milwaukee, Wis. Wrist-pin	434,236	Aug. 12	1202	312	52	1001
Bartholf, Abraham, New York, N. Y. Utilizing rhubarb chips	443,249	Dec. 23	2659	.....	53	1806
Bartholomew, Ermon O., assignor to Eyelet Button Hole Scissor Company, St. Louis, Mo. Button-hole cutter	442,005	Dec. 2	589	159	53	1378
Bartholomew, Frank A., Boston, Mass. Car-truck for center rails	440,126	Nov. 11	753	198	53	765
Bartholomew, George E., Cincinnati, Ohio. Vehicle running-gear	427,033	May 6	3	1	51	811
Bartholomew, John B., Des Moines, Iowa. Peanut roaster and warmer	428,879	May 27	2810	715	51	1396
Bartholomew, Thomas W., Danville, Pa. Bench-plane attachment	435,789	Sept. 2	633	167	52	1496
Bartholomew, Thomas W., Danville, Pa. Name tag or clip	436,593	Sept. 16	1901	499	52	1750
Bartholomew, William A., Marengo, Iowa. Saw	431,316	July 1	428	106	52	88
Bartlett, Charles O. (See Buchholz, Wilhelm, assignor.)						
Bartlett, Charles O. (See Kremer, Franklin W., assignor.)						
Bartlett, Dudley, Elizabeth, N. J., assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic-printing frame	437,843	Oct. 7	261	79	53	51
Bartlett, Edwin E. (See Harlow and Bartlett.)						
Bartlett, Frank L., Portland, Me. Metallurgical furnace	420,029	Jan. 28	2078	549	50	441

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Bartlett, Frank L., Portland, Me. Treating silver and zinc ores.....	420,030	Jan. 28	2080	550	50	441
Bartlett, George H., Hoosick Falls, N. Y. Wheel.....	418,673	Jan. 7	11	3	50	5
Bartlett, George H., Hoosick Falls, N. Y. Pitman-holder for mowing and reaping machines.....	427,536	May 13	775	192 193	51	974
Bartlett, George H., Hoosick Falls, N. Y. Mowing-machine frame.....	427,537	May 13	776	193	51	974
Bartlett, George H., Hoosick Falls, N. Y. Tilting device for mowing-machines.....	441,463	Nov. 25	2985	768	53	1203
Bartlett, Hayward & Co. (See Kummel, Franz C., assignor.)						
Bartlett, John B., Jersey City, N. J. Pencil-sharpener.....	430,417	June 17	2041	503	51	1886
Bartlett, John E. T., New York, N. Y. Steam-generator.....	426,614	Apr. 29	3821	871	51	683
Bartlett, John E. T., New York, N. Y. Crank-connection.....	428,297	May 20	1933	486	51	1207
Bartlett, John W., Moline, Ill. Type-writing machine.....	437,473	Sept. 30	3371	882 883	52	2049
Bartlett, Leroy S., assignor of one-half to C. W. Holtcamp, St. Louis, Mo. Hat-tray.....	431,503	July 1	728	181 182	52	145
Bartlett, Marcus B., Newburg, Ohio. Automatic weighing-scales.....	418,882	Jan. 7	359	86	50	75
Bartlett, Marcus J., Providence, R. I. Attachment for screw-drivers.....	420,431	Feb. 4	5	2	50	565
Bartlett, Marcus J., Providence, R. I. Screw-driver.....	428,662	May 27	2476	629	51	1330
Bartlett, Marcus J., Providence, R. I. Wrench for screw-drivers.....	432,928	July 22	2938	753	52	592
Bartlett, Samuel, Toledo, Ohio. Washing-machine.....	426,755	Apr. 29	3544	925	51	725
Bartlett, Samuel H., and H. E. Waite, assignors to Waite & Bartlett Manufacturing Company, New York, N. Y. Grinding electrodes for microphones.....	422,174	Feb. 25	2546	673	50	1070
Bartlett, Sanford A., Worcester, Mass. End-gate.....	437,415	Sept. 30	3281	856	52	2030
Bartlett, Wallace A., Washington, D. C., assignor, by mesne assignments, to Pneumatic Dynamite Gun Company, New York, N. Y. Pneumatic cannon and operating the same.....	429,593	June 10	747	179 180	51	1625
Bartlett, Wallace A., Washington, D. C., assignor, by mesne assignments, to Pneumatic Dynamite Gun Company, New York, N. Y. Pneumatic cannon and operating the same.....	429,594	June 10	749	180	51	1626
Bartlett, Wallace A., Washington, D. C., assignor, by mesne assignments, to Pneumatic Dynamite Gun Company, New York, N. Y. Pneumatic cannon.....	429,595	June 10	750	180	51	1626
Bartlett, William E., Edinburgh, Scotland. Wheel.....	434,974	Aug. 26	2392	633	52	1249
Bartlett, William G., and J. W. McCoy, Camp Charlotte, Tex. Pipe-wrench.....	421,023	Feb. 11	697	232	50	743
Bartlett, William H. (See Marshall, Charles A., assignor.)						
Bartley, Augustus H., Bartley, N. J. Clasp.....	439,288	Oct. 28	2518	675	53	497
Bartley, Isaac, Carlisle, Ark. Cotton-planter.....	441,349	Nov. 25	2791	722	53	1166
Bartley, Louis K., Winona, Minn. Fire-escape device for live stock.....	435,028	Aug. 26	2470	654 655	52	1263
Bartley, Samuel, Bartley, N. J. Gage-roller for saw-mills.....	440,387	Nov. 11	1167	301	53	843
Bartliff, Charles A., Memphis, Tenn. Feed-bag.....	440,785	Nov. 18	1847	475 476	53	980
Bartliff, Charles A., Memphis, Tenn. Filter for rain-water.....	441,121	Nov. 25	2408	623	53	1097
Bartlo, A. Neno. (See Harris, Carleton C., assignor.)						
Bartmann, Bernard, Cologne, Germany. Chenille cloth.....	419,402	Jan. 14	1143	304	50	241
Barton, Alfred, Boston, Mass. Railway-switch.....	435,724	Sept. 2	535	142	52	1478
Barton Company, R. T. (See Barton, Richard T., assignor.)						
Barton, Elijah C., East Hampton, Conn. Gong-bell.....	429,299	June 3	296	70	51	1526
Barton, Enos M., assignor to Western Electric Company, Chicago, Ill. Transfer-connecting apparatus for multiple switch-boards.....	431,962	July 8	1449	367	52	202
Barton, John H., et al. (See Brooke, William M., assignor.)						
Barton, Richard T., assignor to R. T. Barton Company, New Haven, Conn. Lamp.....	428,367	May 20	2036	513	51	1229
Barton, Samuel, New York, assignor of one-half to C. S. Higgins, Sr., Brooklyn, N. Y. Self-destructive torpedo-vessel.....	423,405	Mar. 11	1578	413	50	1444
Bartsch, Edwin, San Francisco, Cal. Syringe.....	443,043	Dec. 16	2340	597	53	1736
Bartzen, Peter, Huron, Ohio. Trace-book.....	424,950	Apr. 8	798	214	51	163
Barwell, John W., Chicago, Ill. Coffee-pot.....	436,395	Sept. 16	1590	420	52	1694
Basch, Henrietta. (See Moore, Charles, assignor.)						
Basden, William R. (See Hartsfield, Dosier L., assignor.)						
Basler, Hugo, Brooklyn, N. Y. Syringe.....	432,293	July 15	1970	503	52	396
Bass, Alonzo T., Gonzales, Tex. Car-coupling.....	133,927	Aug. 12	727	189	52	909
Bass, Bettie, Windsor, Mo. Corset.....	425,561	Apr. 15	1715	459	51	351
Bass, James, assignor to M. and E. W. Merrill, Brooklyn, N. Y. Die for making turn-buckles.....	422,175	Feb. 25	2547	673	50	1071
Bass, Lewis C., assignor to Greene & Wood Manufacturing Company, New Bedford, Mass. Spool.....	428,035	May 13	1531	389	51	1121
Bass, Robert G., Evinston, Fla. Plant-protector.....	436,329	Sept. 16	1471	383	52	1671
Bass, Thomas, London, England. Ratchet-drill.....	429,714	June 10	925	226 227	51	1660
Basse, Gerhard D., Milwaukee, Wis. Vegetable and fruit preserving case.....	420,983	Feb. 11	838	217	50	731
Bassett, Fred R., Paw Paw, Mich. Means for operating churns.....	419,985	Jan. 21	2005	528	50	419
Bassett, Holly S., et al. (See Pilliod, Charles J., assignor.)						
Bassett, Norman C. (See Hale and Bassett.)						
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Contact-trolley for electric railways.....	441,122	Nov. 25	2410	623 624	53	1097
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Trolley for electric-railway cars.....	441,123	Nov. 25	2412	624	53	1098
Bassinger, Steve. (See Field, Peggs, and Bassinger.)						
Bastian, William V. S., Cherry Valley, assignor to H. L. Browning, New York, N. Y. Pocket-protector.....	438,674	Oct. 21	1514	408	53	303
Bastin, Tom A., assignor of one-half to E. T. Bousfield, Bedford, England. Spool-box.....	439,622	Nov. 4	6	2	53	607
Batavia Wheel Company. (See Sweet, John M., assignor.)						
Batchelder, George L., Bloomington, Ill. Holder for electric lamps and hoods.....	442,472	Dec. 9	1308	338 636 637	53	1524
Batchelder, William W., New York, N. Y. Oil stove or lamp.....	420,221	Jan. 28	2391	673 674	50	500
Batcheller, Alexander F., and J. B. Kerr, Cedar Falls, Iowa. Check-row attachment for corn-planters.....	422,176	Feb. 25	2548	674 675	50	1071
Batcheller, Henry F., Rock Falls, Ill. Churn-closure.....	438,263	Oct. 14	905	246	53	179
Batcheller, Nelson A., Black River Falls, Wis. Lawn-mower.....	437,808	Oct. 7	210	64	53	42
Batcheller, Nelson A., Black River Falls, Wis. Lawn-mower.....	437,809	Oct. 7	211	65	53	42
Batchelor, Charles, New York, N. Y. Cut-out.....	425,726	Apr. 15	1981	528	51	403
Batchelor, Edwin S., Wilkensburg, Pa. Automatic railway-switch lock and keeper.....	442,282	Dec. 9	1019	260	53	1468
Batchelor, James P., Bearden, Ark. Saw-mill dog.....	425,158	Apr. 8	1121	297	51	225
Batchelor, Telford C. (See Butterfield and Batchelor.)						
Batdorf, Charles S., assignor to H. G. Batdorf, Brooklyn, N. Y. Coin-operated vending apparatus.....	424,591	Apr. 1	237	63	51	48
Batdorf, Charles S., assignor to H. G. Batdorf, Brooklyn, N. Y. Coin-operated vending-machine.....	424,592	Apr. 1	239	64	51	49

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Batdorf, Charles S., assignor to H. G. Batdorf, Brooklyn, N. Y. Coin-operated apparatus.	424,593	Apr. 1	241	64	51	49
Batdorf, Helen G. (See Batdorf, Charles S., assignor.)						
Batdorf, Watson, Canton, Ohio. Sheet-metal roofing	432,176	July 15	1788	460	52	363
Bate, James R., and F. W. Owen, Detroit, Mich. Preserving compound	428,161	May 20	1714	-----	51	1165
Bate, William T., Conshohocken, Pa. Apparatus for the manufacture of gas	431,932	July 8	1400	356	52	282
Bateman, Charles, assignor of one-half to F. P. Smith, Grand Rapids, Mich. Mop	429,835	June 10	1102	272	51	1694
Bateman, George C., assignor of one-half to C. W. McKee, Halifax, Canada. Skate	440,529	Nov. 11	1420	366	53	890
Bateman, Walter C., Kenoma, Mo. Planter	438,771	Oct. 21	1687	453	53	334
Bates, Albert J., Joliet, Ill. Engine	436,768	Sept. 23	2186	{ 575 576 }	52	1813
Bates, Alfred C., assignor to Fahys Watch Case Company, Sag Harbor, N. Y. Automatic rose-engine	433,846	Aug. 5	606	{ 157 158 }	52	874
Bates, Andrew J., administrator. (See Hoffman, Edward T.)						
Bates, Charles H., Williamsport, Pa. Candy-packing tray	438,906	Oct. 21	1910	507	53	375
Bates, Charles S. (See Sherman, William F., assignor.)						
Bates, Edward T., Washington, D. C. Cash indicator, register, recorder, and calculator	431,640	July 8	941	{ 236 237 }	52	195
Bates, Emory H. (See Miller, Lemuel D. and P. W., assignors.)						
Bates, Francis G., Philadelphia, Pa. Compound for converting iron into steel by cementation	428,445	May 20	2155	-----	51	1251
Bates, Francis G., assignor to Bates Steel Company, Philadelphia, Pa. Manufacturing steel	428,446	May 20	2155	-----	51	1251
Bates, Francis G., Philadelphia, and W. L. Holman, assignors to F. G. Bates, Renovo, Pa. Marine-boiler furnace	438,907	Oct. 21	1911	508	53	375
Bates, Fred J., assignor of one-half to J. F. Diehl, Buffalo, N. Y. Metallic bushing and bung	420,002	Jan. 21	2035	536	50	424
Bates, George A., Rockland, Mass. Welt-guide for sewing-machines	419,239	Jan. 14	892	234	50	191
Bates, Hervey, Jr., Indianapolis, Ind. Corn product for brewers' use and making the same	437,964	Oct. 7	445	-----	51	85
Bates, John W., Hoboken, N. J. Gas-burner for bake-ovens	439,572	Oct. 28	2949	783	53	579
Bates Steel Company. (See Bates, Francis G., assignor.)						
Bates, Willard A., Princeton, Me. Harness-pad	420,222	Jan. 22	2393	637	50	500
Bates, Willard A., Princeton, Me. Harness-pad	424,532	Apr. 1	145	41	51	31
Bates, William N., Atlantic, Iowa. Gate	442,093	Dec. 9	736	199	53	1414
Bates, William S. (See Swain, Fred F., assignor.)						
Bates, William S., et al., trustees. (See Krueger, August F., assignor.)						
Bates, William S., Chicago, Ill. Railway-car	440,615	Nov. 18	1566	403	53	927
Bateson, Charles C. (See Monrath and Gibbons, assignors.)						
Bateson, Mary, et al. (See Bateson, William, assignor.)						
Bateson, Samuel R., Detroit, Mich. Capsule-mold and stripping device	420,031	Jan. 28	2082	550	50	441
Bateson, Samuel R., Detroit, Mich. Capsule-machine	422,363	Mar. 4	3	1, 2	50	1137
Bateson, Samuel R., Detroit, Mich. Capsule-receiving frame	422,364	Mar. 4	5	2	50	1137
Bateson, Samuel R., Detroit, Mich. Capsule-joining machine	422,365	Mar. 4	7	3	50	1138
Bateson, William, assignor to M. Bateson and R. Carey, Toronto, Ontario, Canada. Door-supporting vise	423,719	Mar. 18	2049	540	50	1540
Bath Iron Works. (See Andrews and Kelley, assignors.)						
Bathurst, Frederick, London, England. Cross-over block	440,753	Nov. 18	1789	462	53	970
Battle, Emilio, Barcelona, Spain. Machine for making vehicle-wheels	426,615	Apr. 29	3322	872	51	684
Batsford, George E., McLean, N. Y. Handle for coffee or tea pots	421,807	Feb. 18	2007	530	50	961
Bat-te, Rinaldo A., Norfolk, Nebr. Window-shade and curtain-pole	440,990	Nov. 18	2177	563	53	1044
Batter, Frank, assignor of one-half to L. Clemmensen, Marshfield, Oreg. Device for drawing beer	433,614	Aug. 5	257	68	52	806
Battershall, Joseph W., Attleborough, Mass. Electric switch	435,132	Aug. 26	2625	691	52	1293
Battershall, Joseph W., Attleborough, Mass. Electric hand-switch	437,352	Sept. 30	3163	828	52	2007
Batterson, James G. (See Hollingshead, William B., assignor.)						
Battin, Lambert B., Elizabeth, N. J. Boiler	422,281	Feb. 25	2721	716	50	1102
Battin, Lambert B., Elizabeth, N. J. Burglar-alarm	429,001	May 27	2986	766	51	1431
Battle Creek Machinery Company. (See Metcalf, Foster M., assignor.)						
Battles, Joseph. (See Allen, Nathaniel, assignor.)						
Battles, Rush S., Girard, Pa. Logging-car truck	421,893	Feb. 25	2146	563	50	996
Battles, Rush S., Girard, Pa. Tramway-locomotive	421,894	Feb. 25	2146	563	50	996
Battles, Rush S., Girard, Pa. Tramway-locomotive	423,720	Mar. 18	2050	{ 540 541 }	50	1540
Batty, George. (See Smiley and Batty.)						
Bauchmüller, Peter J. and W. Philadelphia, Pa. Insect-trap for furniture	427,143	May 6	187	49	51	848
Bauchmüller, William. (See Bauchmüller, Peter J. and W.)						
Bauder, Silas E., et al. (See Montgomery, Edward F., assignor.)						
Bauer, Alexander H., assignor to Pullman's Palace Car Company, Chicago, Ill. Portable electric lamp	423,207	Mar. 11	1283	334	50	1388
Bauer, Alexander H., assignor to Pullman's Palace Car Company, Chicago, Ill. Electric-lighting system	435,084	Aug. 26	2556	674	52	1279
Bauer, Charles A., assignor to Warder, Bushnell & Glessner Company, Springfield, Ohio. Pitman-connection	437,276	Sept. 30	3049	799	52	1986
Bauer, Edward H. (See Fultz, Austin, assignor.)						
Bauer, John, Ottumwa, Iowa. Wire and track cleaner	429,990	June 10	1339	332	51	1740
Bauer, John C., Chicago, Ill. Boiler-fue cleaner	427,456	May 6	651	163	51	910
Bauer, Henry J., Brooklyn, N. Y. Printer's chase	440,256	Nov. 11	959	246	53	807
Bauer, Matthew, et al. (See Gregg, Luther B., assignor.)						
Baugh, Benjamin, Birmingham, England. Stencil-plate	438,221	Oct. 14	838	228	53	167
Baugh, Reuben P., Midland, Tex. Washing-machine	439,266	Oct. 28	2479	665	53	490
Baugh, Samuel A. (See Hargreaves and Baugh.)						
Baughman, Irvin, Edinburg, Ill. End-gate	437,474	Sept. 30	3373	883	52	2050
Baughman, Jacob S. and M. E., Burlington, Iowa. Adjustable pattern-plate for garments	422,282	Feb. 25	2722	717	50	1103
Baughman, Jacob S. and M. E., Burlington, Iowa. Chart for drafting garments	430,059	June 10	1457	{ 361 362 }	51	1762
Baughman, Josiah. (See Booth and Baughman.)						
Baughman, Melvina E. (See Baughman, Jacob S. and M. E.)						
Baugh, John J., F. C. Steele, W. J. Lees, and J. F. Evans, St. Louis, Mo. Leather-blackening	432,853	July 22	2827	-----	52	570
Baum, Samuel, and V. B. Ulman, Williamsport, Pa. Suspender-buckle	432,258	July 15	1904	489	52	385
Bauman, Samuel, Santa Cruz, Cal. Ticket-holder for marking goods	423,981	Mar. 25	2451	651	50	1624
Bauman, Stacy T., Jeffries, Pa. Plow	430,166	June 17	1619	404	51	1804
Baumann, Eugen A., Friedberg, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Sulpho compound	442,094	Dec. 9	737	-----	53	1414
Baumann, Hermann, assignor of one-half to R. N. Richmond, Adams, Mass. Loom-shuttle attachment for preventing misweaving	434,419	Aug. 19	1497	391	52	1067

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Baumann Lock and Alarm Company. (See Baumann, Robert, assignor.)						
Baumann, Robert, assignor to Baumann Lock and Alarm Company, St. Louis, Mo. Combination-lock and alarm	438,049	Oct. 7	583	159	53	111
Baumer, Francis. (See Grieser, George, assignor.)						
Baumgard, Charles, assignor of two-thirds to C. Stuebner and B. Dreifoos, Reading, Pa. Safety-rail for replacing cars	423,466	Mar. 18	1668	441	50	1470
Baumgardner, John W., Colchester, Ill. Register for harvesting-machines	442,709	Dec. 16	1698	436	53	1611
Baumgarten, Albert, <i>et al.</i> (See Hoefer, Frederick W., assignor.)						
Baumgarten, Albert, <i>et al.</i> (See Redlinger, Michael, assignor.)						
Baumgarth, Alwin, Sudenburg-Magdeburg, Prussia, Germany. Apparatus for refining sugar	420,141	Jan. 28	2258	{ 597 598 }	50	477
Baumgartner, Joseph. (See Ney and Baumgartner.)						
Baumgartner, Joseph, assignor of one-half to F. B. Thurber, New York, N. Y. Mold for forming conical butts on candles	436,731	Sept. 16	2111	556	52	1792
Baumgartner, Rudolf A., Rosenheim, Bavaria, Germany. Machine for cleaning barley	433,160	July 29	3325	860	52	672
Baumwart, Arthur C., assignor of two-thirds to G. W. and G. E. Baumwart, Lawler, Iowa. Gate	430,507	June 17	2176	535	51	1912
Baumwart, Gideon W., <i>et al.</i> (See Baumwart, Arthur C., assignor.)						
Baumwart, Grant E., <i>et al.</i> (See Baumwart, Arthur C., assignor.)						
Bausch, George, Syracuse, N. Y. Portable dark-room	428,036	May 13	1532	388	51	1121
Bausch, George, Syracuse, N. Y. Camera	438,834	Oct. 21	1800	480	53	355
Bausch & Lomb Optical Company. (See Schoeller, George W., assignor.)						
Bausch, William, Rochester, N. Y. Device for operating the doors of elevator-wells	420,856	Feb. 4	629	162	50	682
Bausman, Adam C., Minneapolis, Minn. Book-binding	441,275	Nov. 25	2683	697	53	1146
Baxter, Felix J., Braxton C. H., W. Va. Gate	433,434	Aug. 5	2	1	52	757
Baxter, Francis J., Boston, Mass. Hanging rudder	439,373	Oct. 28	2950	784	53	580
Baxter, German L. (See Baxter, James H. and G. L.)						
Baxter, Henry J., Emerald, Wis. Horse-hitcher	439,463	Oct. 28	2794	745	53	549
Baxter, James H. and G. L., Lexington, Ky. Garden implement	430,821	June 24	2708	663	51	2022
Baxter, John A., Minneapolis, Minn. Heating and ventilating apparatus	430,726	June 24	2543	622	51	1990
Baxter, John W. (See Monsey, John H., assignor.)						
Baxter, Robert S., and G. D. Macdougald, Dundee, county of Forfar, Scotland. Preparing cattle food	425,727	Apr. 15	1982	.....	51	403
Baxter, Robert S., and G. D. Macdougald, Dundee, Scotland. Delinting cotton-seed	439,464	Oct. 28	2794	745	53	549
Baxter, William, Jr., Baltimore, Md. Constant-current motor	423,897	Mar. 25	2310	{ 609 610 }	50	1598
Baxter, William D., Brooklyn, N. Y. Pump water-closet	438,981	Oct. 21	2023	{ 540 541 }	53	398
Baxter, William H., East Orange, and W. Cross, Jersey City, N. J.; said Cross assignor to said Baxter. Feathering-propeller	442,791	Dec. 16	1845	{ 477 478 }	53	1640
Bay, Axel V., Naskov, Denmark. Damper-valve regulator	432,294	July 15	1971	{ 503 504 }	52	396
Bayand, George D. (See O'Kelly, James M., assignor.)						
Bayard, Theodore W. (See Irving and Hill, assignors.)						
Bayer, Hector v., Washington, D. C., assignor to Century Ice Machine Company, of West Virginia. Cooling and freezing	431,244	July 1	322	79	52	65
Bayles, James C., New York, N. Y. Pipe or tubing	422,064	Feb. 25	2379	629	50	1039
Bayles, James C., New York, N. Y. Pipe-section	427,658	May 13	945	238	51	1007
Bayles, James C., New York, N. Y. Pipe or tubing	427,659	May 13	946	238	51	1007
Bayles, James C., East Orange, N. J. Coupling for flanged pipes	422,065	Feb. 25	2380	629	50	1040
Bayles, James C., East Orange, N. J. Pipe or tubing	422,066	Feb. 25	2381	629	50	1040
Bayles, James C., East Orange, N. J. Pipe-coupling with lead joint	422,177	Feb. 25	2549	674	50	1071
Bayles, James C., East Orange, N. J. Pipe-coupling	424,951	Apr. 8	799	215	51	163
Bayles, James C., East Orange, N. J. Pipe or tubing	431,028	July 1	3	1	52	3
Bayles, James C., East Orange, N. J. Uniting metal plates or sheets	441,276	Nov. 25	2684	697	53	1146
Bayles, James C., East Orange, N. J. Apparatus for welding	441,277	Nov. 25	2687	698	53	1146
Bayles, James C., and G. R. Green, East Orange, N. J. Sheet-metal-bending machine	427,663	Feb. 25	2376	628	50	1039
Bayles, William H., Mount Clair, N. J. Tooth-powder bottle	435,912	Sept. 9	837	221	52	1543
Bayley, Arthur J., Milwaukee, Wis. Cover for catch-basins	425,198	Apr. 8	1183	314	51	239
Bayley, Arthur J., Milwaukee, Wis. Furnace grate-bar	425,199	Apr. 8	1184	314	51	239
Bayley, Charles H., Boston, Mass. Coin-operated holder for books or other articles	426,098	Apr. 22	2550	670	51	519
Bayley, Charles H., Boston, Mass. Sign	432,968	July 29	3020	776	52	612
Bayley, Richard W., Pittsburg, Pa. Forging-machine	426,099	Apr. 22	2552	{ 671 672 }	51	519
Bayley, Richard W., Pittsburg, Pa. Machine for severing stay-bolts	438,793	Oct. 21	1718	461	53	340
Bayley, Richard W., Pittsburg, Pa., assignor to National Hollow Brake Beam Company, Chicago, Ill. Forging-machine	429,080	May 27	3120	{ 803 804 }	51	1455
Bayley, Richard W., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Air-brake apparatus for cars	429,332	June 3	350	83	51	1538
Bayley, Richard W., Pittsburg, Pa., assignor to National Hollow Brake Beam Company, Chicago, Ill. Machine for forming metallic brake-beams	431,545	July 8	794	{ 198 199 }	52	166
Bayley, Richard W., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Brake-beam hanger	436,297	Sept. 9	1418	370	52	1653
Bayley, William, Springfield, Ohio, assignor of one-half to T. B. Edelin, Brooklyn, N. Y. Pawl-and-ratchet mechanism	422,696	Mar. 4	493	126	50	1231
Bayne, George G., Fremont, Nehr. Lightning-arrester	420,984	Feb. 11	839	217	50	732
Baynes, John, Westchester, N. Y. Photo-engraving frame	436,627	Sept. 16	2051	536	52	1780
Baynes, John, Westchester, assignor of one-fourth to L. De Forest, Oyster Bay, N. Y. Manufacturing transparent patterns	418,674	Jan. 7	12	4	50	5
Baynes, John, Westchester, assignor of one-fourth to L. De Forest, Oyster Bay, N. Y. Direct-printed adhesive negative	418,675	Jan. 7	13	4	50	5
Baynes, John, Westchester, assignor of one-fourth to L. De Forest, Oyster Bay, N. Y. Producing ornamental articles	434,907	Aug. 26	2300	606	52	1231
Baynes, William. (See Morgan, Charles H., assignor.)						
Bazus, Ciser, San Francisco, Cal. Mat for fermenting-vats	434,014	Aug. 12	843	222	52	929
Beach, Charles A., and R. Dansinger, Albany, N. Y.; said Dansinger assignor to said Beach. Street-railway track	434,420	Aug. 19	1498	391	52	1067
Beach, Clifton B., Cleveland, Ohio. Car-link-forming machine	438,091	Oct. 7	648	177	53	125
Beach, Clifton B., Cleveland, Ohio. Machine for making turn-buckle blanks	438,092	Oct. 7	650	177	53	125
Beach, Eliza J. (See Cochran, Edward A., assignor.)						
Beach, Franklin G., Chicago, Ill., and F. B. Cook, Toledo, Ohio. Telephone-exchange apparatus	420,183	Jan. 28	2329	{ 615 616 }	50	489
Beach, Franklin G., Chicago, Ill., assignor to American Bell Telephone Company, Boston, Mass. Telephone-exchange apparatus	438,982	Oct. 21	2025	541	53	399

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Beach, Fred H., Rochester, N. Y. Die for box-staying machines.	442,792	Dec. 16	1849	478	53	1641
Beach, George A., Sioux City, Iowa, assignor of one-fourth to C. Dickinson, Chicago, Ill. Machine for paring and polishing phonograph-cylinders.	441,609	Nov. 25	3199	824 825	53	1246
Beach, George M. (See Bergstrom, Herman, assignor.)						
Beach, Henry L., Montrose, Pa. Sawing-machine.	429,836	June 10	1103	272 273	51	1695
Beach, Henry L., Montrose, Pa. Sawing-machine.	429,837	June 10	1107	273	51	1695
Beach, Henry L., Montrose, Pa. Saw-hanging.	429,838	June 10	1109	274	51	1695
Beach, James E., Routier, Cal. Thrashing-machine.	427,660	May 13	947	238	51	1008
Beach, M. W. (See Mosher, Oscar M., assignor.)						
Beach, Melville, Ashton, Ill. Hub-wrench.	431,641	July 8	947	237	52	196
Beach, Ralph H., St. Paul, Minn., assignor to Acme Electric Company, of Minnesota. Arc lamp.	437,767	Oct. 7	147	46	53	31
Beach, Ralph H., assignor to C. F. and S. B. Diether and P. Ruenitz, St. Paul, Minn. Arc lamp.	424,752	Apr. 1	487	133	51	96
Beach, William H., Bridgenorth, county of Salop, England. Thermo-cauter.	420,672	Feb. 4	344	90	50	631
Beach, William H., Minneapolis, Minn. Fire-extinguishing apparatus for railway-cars.	443,385	Dec. 23	2879	740 741	53	1818
Beacock, George, assignor of two-thirds to C. H. McCready, Brockville, Ontario, and T. J. Claxton, Montreal, Canada. Artificial leg.	433,226	July 29	3419	883	52	691
Beacock, George, assignor of two-thirds to C. H. McCready, Brockville, Ontario, and T. J. Claxton, Montreal, Canada. Surgical splint.	433,227	July 29	3421	883	52	691
Beagle, William B., Paris, Mo. Post-hole auger.	419,909	Jan. 21	1892	497	50	397
Beahan, Charles C., et al. (See Blair, Barton L., assignor.)						
Beairst, Henry B., assignor of two-thirds to E. L. Houghton and G. C. Cary, Fort Fairfield, Me. Wagon-brake.	419,626	Jan. 21	1457	391	50	312
Beal, Dorothy, Leicester, England. Lady's wrap.	440,217	Nov. 11	897	231	53	794
Beal, Thomas W., assignor to Sandwich Enterprise Company, Sandwich, Ill. Float-valve.	433,435	Aug. 5	4	2	52	757
Beal, Welcome B., Newton, Mass. Car-seat.	433,311	Dec. 23	2769	710	53	1826
Beale, Alfred G., Tunbridge Wells, county of Kent, England. Bottle-envelope.	422,366	Mar. 4	8	3	50	1138
Beall, Frank, Decatur, Ill. Roller-mill.	420,507	Feb. 4	114	28	50	555
Beall, John N., Greenfield, Ill. Flour bin and sifter.	425,286	Apr. 8	1314	351	51	264
Bealmear, James A. (See Hutchinson and Mitchell, assignors.)						
Bealor, John T. (See Abrahams, John W., assignor.)						
Beals, Augustus, North Weymouth, Mass. Hammock-holder.	429,409	June 3	468	111	51	1561
Beals, John F., assignor to E. B. De La Matyr, Los Angeles, Cal. Oil-burner.	422,329	Feb. 25	2799	736	50	1118
Beals, Leonard S. (See Thomas and Beals.)						
Beals, Leonard S., Long Island City, assignor to Magerhans & Brokaw, New York, N. Y. Bracelet.	428,447	May 20	2156	541	51	1251
Beals, Leonard S., and P. Thomas, Long Island City, N. Y. Ornamental chain.	442,505	Dec. 9	1371	351	53	1537
Beals, Thomas E., Noblesville, Ind. Wire fence.	440,530	Nov. 11	1421	367	53	891
Beam, Charles E., Fostoria, Ohio. Glass-mold.	442,599	Dec. 16	1525	393	53	1577
Beaman, Charles F., assignor to Chicago Can Company, Chicago, Ill. Machine for making the seams of sheet-metal cans.	434,908	Aug. 26	2301	607 608 609	52	1232
Beamisderfer, Joseph A., Belle Grove, Pa. Device for dressing or cutting millstones.	432,592	July 22	2404	619	52	489
Beamish, Percy, San Francisco, Cal. Carpet-fastener.	429,410	June 3	468	111	51	1561
Bean, Charles, and G. W. Watson, Pawtucket, R. I. Strainer for tea or coffee pots.	435,007	Aug. 26	2442	646	52	1258
Bean, James E., Ironwood, Mich. Floor-jack.	430,613	June 24	2350	575	51	1953
Bean, Roscoe, Springfield, Ohio. Valve-seat.	429,412	June 3	471	112	51	1561
Bean, Roscoe, assignor to Mast, Foos & Company, Springfield, Ohio. Pump.	429,411	June 3	469	111 112	51	1561
Beard, Andrew, Woodlawn, Ala. Rotary engine.	433,847	Aug. 5	607	158	52	875
Beard, Charles W., and G. F. Crummett, Academy, W. Va. Riding-saddle.	436,471	Sept. 16	1712	452	52	1717
Beard, Edwin, Milwaukee, Wis. Saw-mill.	440,388	Nov. 11	1168	301 302	53	843
Beard, John W., and A. H. Spears, McCool, Miss. Plow.	425,287	Apr. 8	1315	352	51	264
Beard, Jonathan A., Hildreth, Nebr. Anti-frost attachment for pumps.	440,458	Nov. 11	1300	336 337	53	868
Beard, Joseph C., Monroe, La. Ice-cream freezer.	442,659	Dec. 16	1602	414	53	1593
Beard, Lewis W. (See Westaway and Beard.)						
Beardslee, Frederick W., Berkeley, Cal. Farm-gate.	422,491	Mar. 4	184	50, 51	50	1171
Beardslee, Marcus D., Detroit, and J. H. Hand, Ann Arbor, assignors of one-third to G. T. Smith, Middlings Purifier Company, Jackson, Mich. Steam-generating fire-box.	425,300	Apr. 8	1184	314	51	240
Beardslee, Nathan S., Warsaw, N. Y. Salt-grainer.	430,332	June 17	1925	471	51	1862
Beardslee, William F., New York, N. Y., assignor to Manufacturer's Special Machine Company, Danbury, Conn. Welt-gage for sewing-machines.	431,137	July 1	151	39	52	32
Beardslee, William F., New York, N. Y., assignor to Manufacturer's Special Machine Company, Danbury, Conn. Sewing-machine.	438,794	Oct. 21	1720	461 462	53	340
Beardslee, William F., New York, N. Y., assignor to Manufacturer's Special Machine Company, Danbury, Conn. Sewing parallel seams.	438,795	Oct. 21	1723	462	53	341
Beardslee, William F., New York, N. Y., assignor to Manufacturer's Special Machine Company, Danbury, Conn. Trimming mechanism for sewing-machines.	438,796	Oct. 21	1725	462	53	341
Beardslee, William F., and J. Chauvet, New York, N. Y., assignors to Manufacturers' Special Machine Company, Danbury, Conn. Needle clamping and looping device for sewing-machines.	419,403	Jan. 14	1144	304 305	50	241
Beardslee, William F., C. Kaiser, and C. Russell, New York, N. Y., assignors to Manufacturer's Special Machine Company, Danbury, Conn. Trimming attachment for sewing-machines.	431,136	July 1	149	39	52	32
Beardsley, Burton C. (See Beardsley, Edward C. and B. C.)						
Beardsley, Edward C. and B. C. Gobleville, Mich. Straw-stacker.	434,754	Aug. 19	2024	529	52	1170
Beardsley, Henry C., Michigan City, Ind. Latch.	438,675	Oct. 21	1515	409	53	303
Beasley, Maria E. (See Parker, John, assignor.)						
Beasley, William F., Oxford, N. C. Seal-lock.	439,623	Nov. 4	7	2	53	608
Beasley, William F., Oxford, N. C. Lock.	439,624	Nov. 4	8	2	53	608
Beattie, Hans S. (See Radcliffe, Robert D., assignor.)						
Beattie, John, Jr., Fall River, Mass. Galvanic battery.	429,596	June 10	751	181	51	1627
Beatty, Henry O., Sacramento, Cal. Steam-motor for pumps.	424,045	Mar. 25	2544	679	50	1642
Beatty, Samuel C. (See Snyder and Beatty.)						
Beatty & Sons, A. J. (See Caldwell, Mathew R., assignor.)						
Beauchamp, Francis. (See Dallmeyer and Beauchamp.)						
Beauchamp, Francis, London, England. Corset-fastening.	432,687	July 22	2576	660	52	521
Beaudry, Alexander, Boston, Mass. Machine for punching and shearing metal.	421,895	Feb. 25	2147	564	50	997

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Beaubarnais, Eugene de, New Bedford, Mass. Manufacturing illuminating-gas	440,754	Nov. 18	1790	{ 462 463	53	970
Beaumont, Jefferson A., Woodville, Miss. Safety-car	436,330	Sept. 16	1472	383	52	1671
Beaupre, Bruno, St. Paul, Minn. Anti-friction journal	422,903	Mar. 11	824	214	50	1301
Beaupre, Bruno, St. Paul, Minn. Anti-friction bearing	427,533	May 13	777	193	51	975
Beaupre, Bruno, St. Paul, Minn. Anti-friction-bearing-roller journal	427,539	May 13	778	194	51	975
Beaupré, Ulric, Montreal, Canada. Hot-water boiler	442,566	Dec. 9	1467	376	53	1557
Beauregard, John H., assignor of one-half to L. D. Beauregard, Lansingburg, N. Y. Sash-fastener	434,909	Aug. 26	2304	609	52	1232
Beauregard, Louis D. (See Beauregard, John H., assignor.)						
Beauvais, William, <i>et al.</i> (See Webster, George L., assignor.)						
Becher, James A., Mishawaka, Ind. Revolving-turret bolt-threading machine	419,174	Jan. 14	794	209	50	171
Becher, James A., Mishawaka, Ind. Screw-cutting die-head	426,228	Apr. 22	2743	718	51	558
Bechman, Henry F., assignor to Shiedewend & Lee Company, Chicago, Ill. Throw-off mechanism for printing-presses	427,034	May 6	5	1, 2	51	812
Bechtel, Charles E., Udall, Kans. Air-ship	429,373	June 3	414	98	51	1550
Bechtel, Robert M., and J. Moehus, assignors of one-third to E. Manners, Jersey City, N. J. Railway time-signal	422,367	Mar. 4	9	3	50	1138
Bechtel, William H., Chicago, Ill. Permutation lock	426,427	Apr. 29	3049	798	51	620
Bechtold, William S., and W. T. Bessonette, Lampasas, Tex.; said Bessonette assignor to said Bechtol. Animal-shears	421,024	Feb. 11	897	232	50	743
Bechtold, William. (See Perraud and Bechtold.)						
Bechtold, William, New York, N. Y. Sink strainer and trap	423,658	Mar. 18	1965	517	50	1525
Bechtolsheim, Clemens v., assignor to Aktiebolaget Separator, Stockholm, Sweden. Centrifugal separator	432,719	July 22	2619	{ 670 671	52	530
Beck, Albert J., Minneapolis, Minn. Harness-blind with connected loop	433,436	Aug. 5	6	2	52	758
Beck, August, Chicago, Ill. Quilting-machine	429,002	May 27	2986	{ 766 767	51	1431
Beck, August, Chicago, Ill. Quilting-machine	438,138	Oct. 14	717	{ 196 197	53	145
Beck, Bruno, Chicago, Ill. Rotary engine	425,562	Apr. 15	1716	459	51	351
Beck, Charles, Philadelphia, Pa. Box-stapling machine	441,051	Nov. 18	2269	{ 588 590	53	1061
Beck, George, St. Louis, Mo. Table	432,356	July 15	2050	528	52	411
Beck, George, St. Louis, Mo. Coal-oil gas-burner	436,865	Sept. 23	2403	627	52	1854
Beck, John P. (See Davids, William, assignor.)						
Beck, Louis, Clifton, Ill. Motor	424,451	Apr. 1	8	4	51	4
Beck, Louis D., <i>et al.</i> (See Ball, George M., assignor.)						
Beck, Niels L., Brayton, Iowa. Harrow	426,704	Apr. 29	3460	906	51	708
Beck, Robert M., Chambersburg, Pa. Compound steam-engine	422,110	Feb. 25	2454	{ 648 649	50	1053
Beck, Robert M., Chambersburg, Pa. Compound steam-engine	422,111	Feb. 25	2456	{ 649 650	50	1053
Beck, Robert M., Chambersburg, Pa. Marine engine	440,531	Nov. 11	1422	367	53	891
Beck, Robert M., Chambersburg, Pa. Engine-governor	441,738	Dec. 2	169	45	53	1295
Beck & Son, E. F. (See Ulbricht, George E., assignor.)						
Beck, William A., San Francisco, Cal. Fruit-drier	422,897	Mar. 4	805	{ 205 206	50	1289
Becker, Andreas. (See Schill, Emil W., assignor.)						
Becker, Ellsworth D., Leesport, Pa. Gun-lock	440,939	Nov. 18	2105	546	53	1029
Becker, Emil A., <i>et al.</i> (See Hickey, John, assignor.)						
Becker, Frederick G., assignor to D. S. Morgan & Company, Brockport, N. Y. Grain-binder	423,115	Mar. 11	1148	298	50	1361
Becker, George. (See English, Analdo M., assignor.)						
Becker, Henry C. (See Scott, Daniel, assignor.)						
Becker, Henry J., Akron, Ohio. Water-filter	426,756	Apr. 29	3545	925	51	725
Becker, Hugo A., Blaenarvon, England. Velocipede	439,095	Oct. 28	2202	{ 590 591	53	440
Becker, Jacob. (See Bryant, Zimmerman, and Becker.)						
Becker, John J., Scranton, Pa. Cigar-machine	425,120	Apr. 8	1048	279	51	212
Becker, John S., Easton, N. Y. Fire-kindler	431,317	July 1	429	106	52	88
Becker, John V., Fort Atkinson, Wis. Work-stand	434,237	Aug. 12	1203	312	52	1601
Beckfeld, John C. (See Schmid and Beckfeld.)						
Beckfeld, John C., Allegheny, Pa. Gas-engine	432,720	July 22	2622	671	52	531
Beckfeld, John C., and A. Schmid, Allegheny, Pa. Gas-engine	421,474	Feb. 18	1535	397	50	871
Beckfeld, John C., and A. Schmid, Allegheny, Pa. Gas-engine	421,475	Feb. 18	1538	397	50	871
Beckfeld, John C., and A. Schmid, Allegheny, Pa. Gas-engine	421,477	Feb. 18	1541	398	50	872
Beckfeld, John C., and R. Siegfried; said Siegfried assignor to A. Schmid, Allegheny, Pa. Driving mechanism for motor-cars	421,476	Feb. 18	1539	398	50	872
Beckford, Frank M., and E. C. Covell, Laconia, N. H. Fire-extinguisher	430,822	June 24	2708	663	51	2022
Beckley, Edgar H., Elkhart, Ind. Railway-car	434,755	Aug. 19	2025	{ 529 530	52	1171
Beckmann, Henry C., St. Louis, Mo. Broom-holder	434,819	Aug. 19	2117	555	52	1190
Beckmann, William R., St. Louis, Mo. Wire-rope machine	440,859	Nov. 18	1911	508	53	1003
Beckwith, George C. (See Cowen and Beckwith.)						
Beckwith, John H. (See Galloway and Beckwith.)						
Beckwith, Nelson, Cambridge, Mass. Elevator	433,268	July 29	3478	898	52	703
Beckwith, Walter C., Fostoria, Ohio. Car-seal	419,491	Jan. 14	1260	336	50	265
Beckwith, Warren, Lake Geneva, Wis. End-gate for wagons	432,688	July 22	2577	660	52	521
Beckwith, William H., <i>et al.</i> (See Riddell, Horace B., assignor.)						
Beddall, Richard, Boston, Mass. Lining journal-boxes	422,873	Mar. 4	757	193	50	1281
Beddoe, Henry, Rolla, Mo. Automatic cut-off for engines	436,646	Sept. 16	1986	520	52	1766
Bedford, Charles. (See Hodgson, Bedford, and Dracup.)						
Bedford, Joseph T., assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic camera	436,012	Sept. 9	974	{ 255 256	52	1569
Bee, Joseph. (See Kollberg, Fredrick L., assignor.)						
Bee, Joseph, Chicago, Ill. Tilt or drop hammer	428,766	May 27	2645	670	51	1262
Beebe, Charles S. (See Thorkelson, Mathias, assignor.)						
Beebe, Charles S., Racine, Wis. Two-wheeled vehicle	422,697	Mar. 4	495	126	50	1231
Beebe, George H. (See Fisher and Beebe.)						
Beebe, Oscar, assignor of one-half to E. F. Willets, Hornellsville, N. Y. Sash-fastener	421,092	Feb. 11	1001	256	50	762
Beebe, Thomas T., Albany, N. Y. Blind-stop	441,464	Nov. 25	2986	769	53	1203
Beebe, William W., Malvern, Ark. Extension car-step	438,463	Oct. 14	1204	326	53	237

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Beecher, Ebenezer B., <i>et al.</i> (See Garland, Frank M., assignor.)						
Beecher, Thomas, assignor of one-half to H. L. Brown, New Haven, Conn. Sash-fastener.	436,116	Sept. 9	1148	300	52	1600
Beehler, Charles W., St. Louis, Mo. Box-fastener	423,303	Mar. 11	1435	374	50	1416
Beekman, Gerard, New York, N. Y. Cotton-harvester	427,218	May 6	295	76	51	869
Beekman, Gerard, New York, N. Y. Transmitter for fibrous materials	427,219	May 6	298	77	51	870
Beekman, Girard, New York, N. Y. Cotton-harvester	436,770	Sept. 23	2191	{ 577 578 }	52	1814
Beekman, John V., Brooklyn, assignor to Lidgerwood Manufacturing Company, New York, N. Y. Friction-surface	429,991	June 10	1340	332	51	1740
Beeler, John, Rockport, Ind. Hame-fastener	434,553	Aug. 19	1697	444	52	1108
Beeman, William S., Ashland, Wis. Intermittent grip for saw-mill set-works, &c	425,398	Apr. 15	1473	395	51	303
Beer, Carl, and R. Bond, Chicago, Ill. Tricycle	429,715	June 10	926	227	51	1661
Beermaker, John, Santa Barbara, Cal. Burglar-proof car	422,047	Feb. 25	2355	{ 621 622 }	50	1035
Beermaker, John, Santa Barbara, Cal. Sea and wave power	412,939	Dec. 16	2113	544	53	1692
Beers, Bradford E., Edgerton, assignor of one-half to G. H. H. Cogswell, Jackson, Minn. Holdback for vehicles	431,546	July 8	796	199	52	166
Beers, Charles B., and W. B. Tuttle, Bridgeport, Conn. Electric lock	430,764	June 24	2614	641	51	2004
Beers, Charles B., and W. B. Tuttle, Bridgeport, Conn. Electric bell	442,473	Dec. 9	1311	339	53	1525
Beers, Charles E. (See Bansenmer and Davies, assignors.)						
Beers, Charles L., Scranton, Pa. Stove-grate	423,721	Mar. 18	2051	541	50	1540
Beers, Charles L., Scranton, Pa. Stove-grate	437,553	Sept. 30	3496	913	52	2074
Beers, Louis G. (See Drendul, Paul, assignor.)						
Beers, Louis G. (See Gilbert, Edwin, assignor.)						
Beers, Louis G. (See Gilbert and Drendul, assignors.)						
Beers, Louis G., and P. Drendul, Chicago, Ill.; said Drendul assignor to said Beers. Ornament for fences	425,926	Apr. 15	2268	601	51	456
Beeson, Jacob, Milton, Ind. Rail-brace	442,506	Dec. 9	1372	351	53	1538
Beeson, Newell, <i>et al.</i> (See Slaughter, Nicholas H. C., assignor.)						
Beggs, William D., <i>et al.</i> (See Harker, Henry K., assignor.)						
Begole, Gordon W., Ypsilanti, assignor to Milan Agricultural Company, Milan, Mich. Fence-machine	419,175	Jan. 14	796	210	50	172
Beharrel, Hattie I. (See Hemenway, Edson H., assignor.)						
Behlen, Charles A., Cincinnati, Ohio. Running-gear for vehicles	440,871	Nov. 18	1987	512	53	1006
Behm, Joseph, San José, Cal. Centrifugal pulverizer	422,698	Mar. 4	496	{ 126 127 }	50	1231
Behn, Carl, and H. T. Koerner, assignors of one-third to R. H. Heussler, Buffalo, N. Y. Toy	433,065	July 29	3177	{ 817 818 }	52	642
Behn, Henry A., Union Hill, N. J. Game apparatus	425,849	Apr. 15	2160	575	51	436
Behn, Henry A., Union Hill, N. J. Game apparatus	425,850	Apr. 15	2161	{ 575 576 }	51	436
Behncke, Gustav, and L. J. Frank, Oshkosh, Wis. Scaffold	435,620	Sept. 2	381	103	52	1447
Behr, Hans C., San Francisco, Cal. Crushing-roll	442,006	Dec. 2	591	160	53	1378
Behr, Herman. (See Lorenz, William A., assignor.)						
Behr, Joseph A., <i>et al.</i> (See Smith, Presley B., assignor.)						
Behrens, Carl, Alfeld, Prussia, Germany. Last	429,992	June 10	1341	332	51	1740
Behrens, Friedrich D., Cincinnati, Ohio. Buckle-shield	442,413	Dec. 9	1223	316	53	1507
Behrman, August F., Buena Vista, Colo. Wagon end-gate	431,318	July 1	430	107	52	88
Beichling, Henry, Roslyn, Wash. Necktie-fastener	422,283	Feb. 25	2725	717	50	1103
Beidler, Herbert A. (See Hultgren, William H., assignor.)						
Beidler, Herbert A., Chicago, Ill. Device for controlling elevators	420,760	Feb. 4	458	122	50	654
Beiersmith, Peter J., assignor of one-half to H. L. Phelps, Toledo, Ohio. Rubber-tired wheel	424,452	Apr. 1	9	4	51	4
Beil, Charles. (See Scheffbauer, Rupert, assignor.)						
Beimling, Henry F., assignor of one-half to J. K. Smith, Philadelphia, Pa. Centrifugal liquid-separator	427,390	May 6	539	137	51	918
Beinhauer, Frederick, New York, N. Y. Refrigerator-box	421,156	Feb. 11	1091	280	50	781
Beisel, Benjamin, Philadelphia, Pa. Gas-valve for hot-blast stoves	439,926	Nov. 4	451	{ 117 118 }	53	696
Beisheim, Henry. (See Price, William C., assignor.)						
Beisheim, Henry, Rochester, N. Y. Mat	443,472	Dec. 23	3014	774	53	1875
Beissbarth, Johann M., Nuremberg, Bavaria, Germany. Brush	429,839	June 10	1110	274	51	1695
Bejsovec, Gottlieb, New York, N. Y. Range-boiler	430,223	June 24	2709	663	51	2022
Belding, Thomas C., assignor to Canton Steel Roofing Company, Canton, Ohio. Machine for beading eaves-troughs	428,549	May 20	2294	583	51	1277
Belding, Thomas C., assignor to Canton Steel Roofing Company, Canton, Ohio. Eaves-trough	428,822	May 27	2731	693	51	1379
Belding, Thomas C., assignor to Canton Steel Roofing Company, Canton, Ohio. Rod for beading-machines	433,437	Aug. 5	7	2	52	758
Belding, Thomas C., assignor to Canton Steel Roofing Company, Canton, Ohio. Water-conductor pipe	433,882	Aug. 5	662	171	52	886
Belding, Thomas C., assignor to Canton Steel Roofing Company, Canton, Ohio. Eaves-trough hanger	435,169	Aug. 26	2678	707	52	1303
Belding, Warren S., Englewood, Ill. Brush-holder for electrical machines	433,390	July 29	3640	939	52	735
Belding, Warren S., Englewood, Ill. Armature for dynamos, &c	433,391	July 29	3641	{ 939 940 }	52	736
Belding, Warren S., Englewood, Ill. Blank for armature coil-guards	433,392	July 29	3644	{ 940 941 }	52	736
Belding, Warren S., Chicago, Ill. Commutator for dynamos	433,393	July 29	3645	{ 941 942 }	52	737
Belding, Warren S., Chicago, Ill. Power-transmitting mechanism	433,394	July 29	3648	942	52	737
Belding, Warren S., Chicago, Ill. Power-transmitting mechanism	440,688	Nov. 18	1675	432	53	949
Belding, Warren S., Chicago, Ill. Electric-railway car	440,689	Nov. 18	1677	{ 432 433 }	53	949
Belfield, Joseph, Lincoln, R. I. Twister-rod	422,699	Mar. 4	497	127	50	1231
Belisle, Victor, Oswego, assignor to Consolidated Car Heating Company, Albany, N. Y. Hose-coupling	423,853	Mar. 18	2256	592	50	1577
Belknap, Gardner A., Beaver Centre, Pa. Bridle-bit	424,258	Mar. 25	2830	757	50	1698
Belknap, Jackson O., and O. F. Cawthon, Mobile, Ala. Car-signal	421,227	Feb. 11	1188	305	50	798
Belknap, Jackson O., and O. F. Cawthon, Mobile, Ala. Car-signal	440,127	Nov. 11	754	198	53	765
Belknap Motor Company. (See Brown, George W., assignor.)						
Belknap Water Motor Company. (See Brown, George W., assignor.)						
Bell, Charles A., Glen Wilton, Va. Drilling-machine	431,319	July 1	431	107	52	88
Bell, Charles E., Amsterdam, N. Y. Lamp or oil burner	441,465	Nov. 25	2987	769	53	1203
Bell, Charles W., Dayton, Ohio. Bottle-wrapper	429,184	June 3	115	27	51	1494

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Bell, Edwin, St. Paul, Minn. Protecting road-beds of railways.....	432,969	July 29	3021	776	52	612
Bell, Edwin I. (See Painter, George B., assignor.)						
Bell, Elizabeth B., Washington, D. C. Telephone mouth-piece and holder.....	430,913	June 24	2843	698	51	2048
Bell, George W., El Moro, Colo. Cuff-holder.....	423,722	Mar. 18	2052	541	50	1541
Bell, George W., St. Joseph, Mo. Truss.....	425,159	Apr. 8	1122	297 298 400 401	51	226
Bell, Harrison M., and W. Armstrong, Martinsburg, W. Va. Railway-car heater.....	423,369	Mar. 11	1525	688 689	50	1434
Bell, Horace, Chicago, Ill. Velocipede-fork.....	443,266	Dec. 23	2686	688 689	53	1811
Bell, J. S., <i>et al.</i> (See Goodman, Henry M., assignor.)						
Bell, John A., Naperville, Ill. Commode.....	423,588	Mar. 18	1841	485	50	1500
Bell, Joseph S., Allegheny, Pa. Spark-arrester.....	427,955	May 13	1419	358	51	1097
Bell, Louis, Lafayette, Ind. Lightning-arrester.....	427,540	May 13	779	194	51	975
Bell, Louis, Lafayette, Ind. System of electrical distribution.....	427,541	May 13	781	194	51	976
Bell, Louis, and F. H. Root, Chicago, Ill. Electric valve-controller.....	427,673	Oct. 7	1	1	53	3
Bell, Louis, and F. H. Root, Chicago, Ill. Electro-thermostatic valve.....	441,817	Dec. 2	301	81	53	1322
Bell-Rock Electrical Conductor Company <i>et al.</i> (See Goodwin, Charles Q., assignor.)						
Bell, William B., Denver, Colo. Sash-cord fastener.....	436,688	Sept. 16	2052	536	52	1780
Bell, William E., Donnellson, J. J. Lee, Mount Hammel, and J. T. Drummond, Mount Pleasant, Iowa. Wire reel and stretcher.....	429,673	June 10	862	209	51	1648
Bell, William G. (See Eaton and Seaman, assignors.)						
Bell, William R., New York, N. Y. Mechanical movement.....	427,496	May 6	704	177	51	951
Bellah, John D. (See Bellah, William N., assignor.)						
Bellah, William N., assignor of one-half to J. D. Bellah, St. Jo, Tex. Wire-tightener.....	432,221	July 15	1854	476	52	375
Bellaire Stamping Company, <i>et al.</i> (See Paull, Archibald W., assignor.)						
Bellamy, Charles H., South Hadley Falls, Mass. Machine for marbleizing paper.....	438,739	Oct. 21	1634	439 440 441	53	324
Bellamy, Charles L., Arlington, N. J. Carriage-jack.....	425,728	Apr. 15	1983	528	51	403
Bellamy, Charles L., Arlington, N. J. Poison-distributor.....	433,438	Aug. 5	7	2	52	758
Bellamy, Charles L., Arlington, N. J. Bandage-winder.....	437,354	Sept. 30	3498	913	52	2074
Bellamy, Charles L., Arlington, N. J. Oil-can.....	438,396	Oct. 14	1103	300	53	217
Belles, Reuben O., Allegheny, Pa. Spiral stairway.....	424,533	Apr. 1	146	42	51	31
Belles, Reuben O., Allegheny, Pa. Apparatus for operating fare-registers.....	438,908	Oct. 21	1913	508 509	53	375
Bellis, David C., Philadelphia, Pa. Trimming for the edges of fabrics.....	431,160	July 1	187	48	52	39
Bellis, David C., Philadelphia, Pa. Machine for making trimmings for the edges of fabrics.....	431,161	July 1	189	48	52	39
Bellis, Nelson, assignor of one-half to W. V. Stevens, Blood's Depot, N. Y. Plow.....	430,983	June 24	2946	723	51	2066
Bellows, Hartwell H., Brooklyn, N. Y. Wash-board.....	443,844	Dec. 30	3608	928	53	1998
Bellows, Stephen H., Athol, Mass. Beam-calipers.....	427,956	May 13	1421	358	51	1098
Bellussich, Josef, Capo d'Istria, Austria-Hungary. Automatic recording apparatus for vehicles.....	442,499	Dec. 16	1949	501 502	53	1660
Belote, Jefferson M., Greenfield Mills, Ind. Wire-and-picket-fence machine.....	419,136	Jan. 7	723	190	50	151
Belscher, Julia A., Whitesborough, Tex. Extension for bedsteads.....	432,505	July 22	2273	589	52	463
Belt, Perley P. (See Banks and Belt.)						
Belt, Perley P., Fredonia, Kans. Regulator for dynamo-electric machines.....	433,269	July 29	3480	898 899	52	704
Belyea, James C., assignor of one-half to Irvin & Kepner, Sabetha, Kans. Velocipede.....	443,890	Dec. 30	3665	944	53	2009
Beman, Henry C., Meadville, Pa. Lamp-filler.....	424,259	Mar. 25	2830	757	50	1698
Bement, Arthur O., Lansing, Mich. Stove-door latch.....	424,594	Apr. 1	243	65	51	49
Bement, Clarence S., <i>et al.</i> (See Miles, Frederick B., assignor.)						
Bement, Frank, <i>et al.</i> (See Miles, Frederick B., assignor.)						
Bement & Sons, E. (See Molitor, Aron F., assignor.)						
Bement, William P., <i>et al.</i> (See Miles, Frederick B., assignor.)						
Bemis, Albert T., Louisville, Ky. Car-ventilator.....	426,359	Apr. 22	2919	768	51	596
Bemis, Frank A., Dane, Wis. Transplanter.....	423,723	Mar. 18	2053	541 542	50	1542
Bemis, Frank A., Dane, Wis. Transplanter.....	423,724	Mar. 18	2055	542	50	1541
Bemis, Sumner A. (See Hoadley and Bemis.)						
Bemis, Sumner A. (See Pfingst and Bemis.)						
Bemis, Sumner A., Springfield, Mass. Journal-bearing.....	425,973	Apr. 22	2366	627	51	484
Bemis, Sumner A., Springfield, Mass. Brake-shoe support.....	425,974	Apr. 22	2367	627	51	484
Bemis, Sumner A., Springfield, Mass. Brake-shoe and beam attachment.....	429,674	June 10	864	209	51	1648
Bemis, Sumner A., Springfield, Mass. Journal-bearing.....	431,642	July 8	949	237	52	197
Benade, Patrick H., Punxsutawney, Pa. Tube-expander.....	434,314	Aug. 12	1319	344	52	1024
Benbon, Charles. (See Moseley and Benbon.)						
Benbow, Paris T., Wichita, Kans. Washing-machine.....	435,913	Sept. 9	838	221	52	1543
Bender, Charles W. (See Hill and Bender.)						
Bender, Frederick W., Narberth Park, and F. L. Scheidemann, Philadelphia, Pa. Tobacco-pipe.....	443,813	Dec. 30	3565	913	53	1989
Bender, Henry R., Lock Haven, Pa. Game apparatus.....	424,260	Mar. 25	2831	757	50	1698
Bender, Horace G., assignor of one-half to J. Grether, Akron, Ohio. Printing-machine.....	419,240	Jan. 14	893	235	50	191
Bender, John, Marion, Kans. Car-coupling.....	418,676	Jan. 7	14	4	50	5
Bender, John O. (See Leonard and Bender.)						
Bender, Ledru R., Elizabethtown, Pa. Farm-gate.....	419,002	Jan. 7	535	133	50	113
Benedict, Alfred B., Buffalo, N. Y. Means for operating grinding-machines.....	442,349	Dec. 9	1125	293	53	1487
Benedict, Curtis T., Milwaukee, Wis. Device for discharging ashes and cinders from coal-stoves.....	422,904	Mar. 11	825	214	50	1302
Benedict, Edwin H. (See Bunce and Benedict.)						
Benedict, Gilbert H., Washington, D. C., assignor to Century Press Company, of West Virginia. Mechanism for casting stereotypes.....	437,374	Sept. 30	3214	838	52	2016
Benedict, Herman A., assignor to C. V. Kellogg, Syracuse, N. Y. Door.....	440,245	Nov. 11	943	243	53	804
Benedict, Henry W. (See Benedict, Theodore H., assignor.)						
Benedict, Jacob, Grand Rapids, Mich. Furniture-clamp.....	427,035	May 6	6	2	51	812
Benedict, Theodore H., assignor of one-third to H. W. Benedict, Danbury, Conn. Over-shoe.....	422,492	Mar. 4	186	51	50	1171
Benedict, William F., New York, N. Y. Wire foot-mat.....	420,985	Feb. 11	841	218	50	732
Benedict, Willis O., <i>et al.</i> (See Herby, John, assignor.)						
Benesh, Charles, Wabpeton, N. D. Seat for agricultural machines, &c.....	418,677	Jan. 7	15	5	50	5
Benfield, Thomas, Newark, N. J. Producing raised designs in colors.....	438,397	Oct. 14	1104	300	53	217
Benford, William H., Dublin, assignor of one-half to W. C. Lovius, Jasper, Mo. Corn-planter.....	441,091	Nov. 18	2346	607	53	1076
Bengler, Edwin F., Buffalo, N. Y. Tool-holder.....	439,096	Oct. 28	2203	591	53	440

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Bengough, George. (See Swartout, Melvin, assignor.)						
Benham, William L. (See Walter, Will P., assignor.)						
Benicia Agricultural Works. (See McMillan, Alfred F., assignor.)						
Benicia Agricultural Works. (See Owens, Owen T., assignor.)						
Benich, Gregori. (See Montgomery, James W., assignor.)						
Benjamin, Alfred, assignor of one-half to E. Benjamin, Newark, N. J. Corset-waist	435,725	Sept. 2	536	142	52	1478
Benjamin, Dana H., assignor to E. Hurlburt, Utica, N. Y. Centrifugal machine	423,408	Mar. 18	1585	{ 416 417 }	{ 50	1453
Benjamin, Edward. (See Benjamin, Alfred, assignor.)						
Benjamin, Edwin, South Evanston, Ill. Appliance for circular saws	437,277	Sept. 30	3051	799	52	1986
Benjamin, Edwin, South Evanston, Ill., assignor to Benjamin Machine Company, of Illi- nois. Matcher	431,796	July 8	1209	301	52	245
Benjamin, Edwin, South Evanston, Ill., assignor to Benjamin Machine Company, of Illi- nois. Matcher	436,331	Sept. 16	1473	384	52	1671
Benjamin, Edwin, South Evanston, Ill., assignor to Benjamin Machine Company, of Illi- nois. Feeding attachment for wood-working machines	440,735	Nov. 18	1754	452	53	965
Benjamin, Frank P., New York, N. Y. Lantern	420,713	Feb. 4	397	105	50	642
Benjamin, Henry, assignor of one-half to F. B. Wells, Montreal, Canada. Composition for roadways, &c.	443,953	Dec. 30	3769	.....	53	2028
Benjamin Machine Company. (See Benjamin, Edwin, assignor.)						
Benjamin, Marshall J., Greenfield, Mass. Egg-carrier	433,228	July 29	3422	883	52	691
Benner, Elwin, and W. B. Ayres, Phillipsburg, Mont. Automatic oiling device	422,284	Feb. 25	2726	{ 717 718 }	{ 50	1103
Benner, Willis, New York, N. Y. Lamp	439,995	Nov. 4	561	{ 148 149 }	{ 53	717
Benners, Edwin H., Elizabeth, N. J. Grease-cup	425,484	Apr. 15	1606	429	51	330
Benners, Edwin H., Elizabeth, N. J. Grease-cup	431,864	July 8	1321	331	52	266
Bennett, Alexander M., Bellaire, Mich. Ironing-board and support	427,542	May 13	783	195	51	976
Bennett, Alexander W., Portland, Oreg., assignor of one-half to W. J. Harvey, Racine, Wis. Harness-loop	436,556	Sept. 16	1844	485	52	1740
Bennett, Arthur A., Jackson, Mich. Machinery for preparing clay	425,729	Apr. 15	1984	529	51	403
Bennett, Arthur A., St. Charles, Ill., and C. S. Boynton, assignors to National Milk Sugar Company, Burlington, Vt. Making lactose or milk-sugar	439,717	Nov. 4	134	.....	53	634
Bennett, Benjamin H., Buffalo, N. Y. Burial-casket	427,248	May 6	349	89	51	878
Bennett, Charles M., Logansport, assignor to himself, J. J. Turner, Pittsburg, Pa., and L. F. Loree, Cass County, Ind. Torpedo	432,259	July 15	1905	489	52	385
Bennett, Darius, and M. Farlander, assignors to Rude Brothers Manufacturing Company, Liberty, Ind. Corn-drill	422,368	Mar. 4	10	4	50	1138
Bennett, Elizabeth, Kansas City, Kans. Toy puzzle	426,902	Apr. 29	3748	979	51	766
Bennett, Frederick M., assignor of one-half to W. Carroll, New York, N. Y. Lock and support for cables, &c.	426,655	Apr. 29	3382	888	51	694
Bennett, Fredrick, New York, N. Y. Automatic leg for folding beds	427,293	May 6	410	106	51	891
Bennett, Fredrick, New York, N. Y. Folding bed	428,368	May 20	2039	513	51	1229
Bennett, George H., Cincinnati, Ohio. Lathe	436,013	Sept. 9	976	256	52	1569
Bennett, George S. (See Miller and Bennett.)						
Bennett, Henry A., New Haven, Conn. Transom-lifter	434,910	Aug. 26	2306	609	52	1232
Bennett, Henry A., New Haven, Conn. Transom-lifter	436,065	Sept. 9	1062	275	52	1585
Bennett, Herbert D., <i>et al.</i> (See Egan and Gray, assignors.)						
Bennett, J. Morgan, <i>et al.</i> (See Stubbs, Joel, assignor.)						
Bennett, John B., Jersey City, N. J. Device for replacing cars on railway-tracks	435,914	Sept. 9	840	221	52	1543
Bennett, John H., Worcester, Mass. Tool for dressing emery-wheels	425,485	Apr. 15	1608	429	51	330
Bennett, Joseph B., assignor to Watertown Machine Company, Watertown, Wis. Adjust- ing device	425,486	Apr. 15	1610	429	51	330
Bennett, Joseph B., Watertown, assignor, by mesne assignments, to Berlin Machine Works, Beloit, Wis. Polishing-machine	441,636	Dec. 2	12	4, 5	53	1264
Bennett, Joseph B., and A. P. Boardman, Watertown, assignors, by mesne assignments, to Berlin Machine Works, Beloit, Wis. Vibrator attachment for polishing-machines	441,633	Dec. 2	6	2	53	1264
Bennett, Joseph B., and A. P. Boardman, Watertown, assignors, by mesne assignments, to Berlin Machine Works, Beloit, Wis. Polishing-machine	441,634	Dec. 2	8	2, 3	53	1264
Bennett, Joseph B., and A. P. Boardman, Watertown, assignors, by mesne assignments, to Berlin Machine Works, Beloit, Wis. Polisher	441,635	Dec. 2	11	3	53	1264
Bennett, Josiah C., <i>et al.</i> (See Kimpton, Charles A., assignor.)						
Bennett, Orson W., Philadelphia, Pa. Picture-holding attachment for badges, &c.	425,201	Apr. 8	1187	315	51	240
Bennett, Samuel G., Handsworth, county of Stafford, England. Safety device for eleva- tors	426,100	Apr. 22	2556	672	51	520
Bennett, Walter E., assignor to Morley Button Sewing Machine Company, Boston, Mass. Machine for sewing on buttons	428,548	May 20	2290	{ 582 583 }	{ 51	1277
Bennett, Walter E., assignor to Morley Button Sewing Machine Company, Boston, Mass. Looping device for sewing-machines	437,083	Sept. 23	2717	710	52	1917
Bennett, Will F., Logansport, Ind. Gate	438,050	Oct. 7	587	160	53	111
Bennett, William A., Blair, Neb. Horse-collar	437,278	Sept. 30	3052	799	52	1987
Bennett, William A., Blair, Neb. Collar-fastener	442,215	Dec. 9	920	244	53	1449
Bennett, William H., Kokomo, Ind. Saw-mill dog	426,520	Apr. 29	3177	834	51	654
Bennett, William H., Chicago, Ill. Sash-holder	428,547	May 20	2288	581	51	1277
Bennett, William H., Kokomo, assignor of one-half to J. W. Littler, Indianapolis, Ind. Saw-gummer	429,165	June 3	92	22	51	1489
Bennett, William W. (See Platen and Bennett.)						
Bennetts, William V., J. M. Lewis, and S. A. Hatch, Bloomington, Wis. Bottle-stopper and applicator	442,743	Dec. 16	1777	459	53	1625
Benninghaus, Chauncey M., <i>et al.</i> (See Ramsay, Henry A., assignor.)						
Bennor, Joseph, assignor to Powell & Brother, Philadelphia, Pa. Straight-knitting ma- chine	440,389	Nov. 11	1174	{ 302 303 304 305 }	{ 53	845
Benoit, Fredrick, assignor to himself and C. A. Hodge, Chicago, Ill. Egg-carrier	433,161	July 29	3326	860	52	672
Bensinger, Moses. (See Carney, Thomas, assignor.)						
Bensinger, Moses. (See Carney and Snyder, assignors.)						
Bensinger, Moses. (See Jones, Harry T., assignor.)						
Benson, Benjamin S., Baltimore, Md. Apparatus for purifying air	438,464	Oct. 14	1205	327	53	237
Benson, Edwin A., assignor of one-half to T. A. Bissell, Buffalo, N. Y. Railway-car	435,675	Sept. 2	463	122	52	1464
Benson, Eloi, assignor of one-half to O. E. Carlson, Wahoo, Neb. Combined oil tank and measure	420,402	Jan. 28	2655	704	50	549
Benson, Marcus E., West Plains, Mo. Saw-mill dog	436,203	Sept. 9	1284	{ 334 335 }	{ 52	1625

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Benson, Samuel, Butte City, Mont., assignor to W. Sellers & Company, Incorporated, Philadelphia, Pa. Tool-holder for slotting-machines	421,345	Feb. 11	1354	{ 350 351	50	829
Benson, Samuel, assignor of one-half to J. M. Montgomery, Butte City, Mont. Crushing and grinding mill	443,929	Dec. 30	3729	{ 953 954	53	2021
Benson, Thomas J., Augusta, Ga. Shuttle-guard for looms	432,357	July 15	2051	528	52	411
Bent, Myron W. (See Ryan and Bent.)						
Bentel, Frederick, Hamilton, Ohio. Autographic register	438,835	Oct. 21	1891	480	53	355
Bentley, Abram and L. L., New Brighton, Pa. Braking and scutching machine	428,663	May 27	2477	630	51	1330
Bentley, Edward M., New York, N. Y. Electric-car motor	424,699	Apr. 1	405	106	51	80
Bentley, Edward M., New York, N. Y. Electric railway	424,845	Apr. 1	638	163	51	123
Bentley, Edward M., New York, N. Y. Electric railway	426,580	Apr. 29	3268	857	51	672
Bentley, Edward M., New York, N. Y. Automatic electric cut-out	427,724	May 13	1052	203	51	1028
Bentley, Edward M., New York, N. Y. Electric railway	427,725	May 13	1053	263	51	1028
Bentley, Edward M., New York, N. Y. Contact device for electric railways	427,726	May 13	1054	264	51	1028
Bentley, Edward M., New York, N. Y. Artificial resistance	437,011	Sept. 23	2616	683	52	1896
Bentley, Edward M., New York, N. Y. Electric railway	434,084	Dec. 23	2345	599	53	1745
Bentley, Edward M., Washington, D. C. Signal for electric railways	430,263	June 17	1777	441	51	1834
Bentley, Edward M., Boston, Mass. Railway-car	431,715	July 8	1081	270	52	220
Bentley, Edward M., Boston, Mass. Telephone-exchange system	437,010	Sept. 23	2615	683	52	1895
Bentley, Edward M., Boston, Mass. Telephone-exchange system	437,012	Sept. 23	2617	684	52	1896
Bentley, Edward M., Boston, Mass. Railway-car	437,343	Sept. 30	3148	824	52	2004
Bentley, Edward M., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. System of electrical distribution	430,060	June 10	1459	302	51	1762
Bentley, Edwin S., Philadelphia, Pa. Merry-go-round	443,492	Dec. 30	3056	786	53	1891
Bentley, George E. (See Boyer and Bentley.)						
Bentley, Herbert J., Union City, Pa. Car-coupling	425,851	Apr. 15	2163	576	51	437
Bentley, Linn, Rempel, Ohio. Trace-fastening	427,957	May 13	1423	359	51	1098
Bentley, Louis L. (See Bentley, Abram and L. L.)						
Bentley, Thomas, assignor to W. Nield, Oldham, county of Lancaster, England. Device for preventing singles in machines for preparing, &c., fibrous material	426,903	Apr. 29	3749	979	51	766
Benton, C. H., et al. (See Abbott, Benjamin J., assignor.)						
Benton, Carrie L. (See Hunter, Robert B., assignor.)						
Benton, Charles H., assignor of one-third to B. J. Abbott, Chicago, Ill. Sectional-faced wheel for dressing metal	442,283	Dec. 9	1020	269	53	1468
Benton, Francis E., Stoughton, Mass. Whip-socket	419,815	Jan. 21	1739	460	50	365
Benton, Francis E., Stoughton, Mass. Band-fastener for whip-sockets	427,036	May 6	8	2	51	812
Benton, Francis E., Stoughton, Mass. Top-prop for vehicles	439,927	Nov. 4	452	118	53	696
Benton, George E., Monroe, N. Y. Ironing-table	442,507	Dec. 9	1372	351	53	1538
Benton, Linn B., assignor to Benton, Waldo & Co., Milwaukee, Wis. Tool-grinder	422,874	Mar. 4	758	193	50	1281
Benton, Thomas K., Bloomfield, N. J., assignor to Courvoisier Wilcox Manufacturing Company, of New York. Watch-case spring	430,824	June 24	2710	664	51	2022
Benton, Waldo & Co. (See Benton, Linn B., assignor.)						
Benton, Webster A., Madelia, Minn. Measuring-funnel	422,700	Mar. 4	498	127	50	1231
Bentz, George C. (See Farwell, Fay O., assignor.)						
Benussi, Louis, and C. Dondero, San Francisco, Cal. Preservative	440,257	Nov. 11	960		53	807
Benvenisti, Leon, Philadelphia, Pa. Handle for cooking utensils	430,984	June 24	2947	723	51	2006
Benwell, Thomas B., Newark, N. J., assignor to W. H. Smidt and E. L. Pupke, New York, N. Y. Die for covering shoe-lacing hooks with pyroxyline material	427,958	May 13	1424	359	51	1098
Benzing, Frederick, New York, N. Y., and H. E. Grabau, Hoboken, N. J. Triangular rule	418,967	Jan. 7	491	122	50	103
Benzing, Frederick, New York, N. Y., and H. E. Grabau, Hoboken, N. J. Triangular rule	418,968	Jan. 7	492	123	50	104
Benzing, Frederick, New York, N. Y., and H. E. Grabau, Hoboken, N. J. T-square	418,969	Jan. 7	493	123	50	104
Benzing, Frederick, New York, N. Y., and H. E. Grabau, Hoboken, N. J. Draftsman's rule	422,701	Mar. 4	499	127	50	1232
Beöthy, Ala, Buda-Pesth, Austria-Hungary. Locomotive-boiler	429,003	May 27	2988	767	51	1431
Berbecker, Julius, New York, N. Y. Curtain-ring	437,279	Sept. 30	3054	799	52	1987
Berbecker, Julius, New York, N. Y. Manufacture of screw-knobs	439,830	Nov. 4	300	75	53	667
Berg, Hart O. (See Marshall, Robert, assignor.)						
Berg, Herman, Columbus, Ohio. Horse-detacher	441,125	Nov. 25	2414	625	53	1098
Berg, Ole, Chicago, Ill. Easel	428,796	May 27	2687	682	51	1371
Berg, Per T., Braddock, Pa. Apparatus for charging furnaces	432,593	July 22	2406	620	52	489
Berg, Philip, et al. (See Duryee, Schuyler, assignor.)						
Berg, Walter S., Philadelphia, Pa. Extensible lamp-shade	427,661	May 13	948	{ 238 239	51	1008
Bergé, Albert H. J., Brussels, Belgium. Acid saccharification of amylaceous substances	432,358	July 15	2052		52	412
Bergen, Edgar, Flatbush, N. Y. Stove, range, &c	425,487	Apr. 15	1611	430	51	330
Bergen, Georg F. N., and I. Doerfler, Milwaukee, Wis. Smoke-consuming furnace	425,730	Apr. 15	1985	529	51	403
Bergendahl, Lewis J., assignor of two-thirds to T. C. Taylor, Pendleton, Oreg., and J. Gagen, Port Townsend, Wash. Snow-plow	436,204	Sept. 9	1286	335	52	1625
Bergengren, Fredrik W. A. (See Fahney, William J., assignor.)						
Bergengren, Fredrik W. A., et al. (See Vincent, Charles H., assignor.)						
Berger, Frank W., St. Paul, Minn. Stocking	422,702	Mar. 4	500	128	50	1232
Berger, Jacob S., Brooklyn, N. Y. Stopper-fastener for bottles	442,940	Dec. 16	2115	544	53	1692
Berger, William H., Philadelphia, Pa. Fastener for water-conductors	425,852	Apr. 15	2164	576	51	437
Berger, Wilson C., Canton, Ohio. Sheet-metal roof	435,960	Sept. 9	903	232	52	1555
Bergesen, John, Brooklyn, N. Y. Umbrella	433,270	July 29	3482	899	52	704
Bergesen, John, Brooklyn, N. Y. Umbrella	438,983	Oct. 21	2028	541	53	399
Borggren, Oscar, Aurora, Nebr. Transposing key-board for pianos	433,315	July 29	3546	915	52	717
Bergh, Waldemar, assignor to D. Hummel, Jr., London, England. Drum for centrifugal fluid-separating machines	422,369	Mar. 4	13	5	50	1139
Bergman, Claes. (See Bissell and Bergman.)						
Bergman, Claes. (See Reiley, James, assignor.)						
Bergman, Frank A. (See Mason and Bergman.)						
Bergman, Oscar W., Oskar Fredericksborg, near Waxholm, Sweden. Fire-arm	430,614	June 24	2351	575	51	1953
Bergmann, Anton, Boerne, Tex. Ointment for skin diseases	422,703	Mar. 4	500		50	1232
Bergmann & Company. (See Dempster, John T., assignor.)						
Bergmann & Company. (See Herrick, Albert B., assignor.)						
Bergmann & Company. (See Johnson, Edward H., assignor.)						
Bergmann & Company. (See Lemaire, Paul C. J., assignor.)						
Bergmann Electric and Gas Fixture Company. (See Bergmann, Sigmund, assignor.)						
Bergmann Electric and Gas Fixture Company. (See Klein, Philip H., Jr., assignor.)						
Bergmann, Friedrich W., Barmen, Germany. Oven	434,577	Aug. 19	1727	{ 452 453	52	1115

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Bergmann, Ignaz, West Madison, Iowa. Pen.....	431,245	July 1	323	80	52	65
Bergmann, Sigmund. (See Wiedenmayer and Bergmann.)						
Bergmann, Sigmund, New York, N. Y. Electric-lamp fixture.....	431,320	July 1	432	107	52	80
Bergmann, Sigmund, New York, N. Y. Switch.....	433,883	Aug. 5	663	172	52	886
Bergmann, Sigmund, New York, N. Y. Telephone.....	440,096	Nov. 4	700	186 187	53	745
Bergmann, Sigmund, New York, N. Y. Incandescent-lamp socket.....	443,562	Dec. 30	3161	812	53	1911
Bergmann, Sigmund, New York, N. Y. Shade-holder for incandescent lamps.....	443,563	Dec. 30	3162	812	53	1912
Bergmann, Sigmund, assignor to Bergmann Electric and Gas Fixture Company, New York, N. Y. Extension-fixture for gas or lamps.....	426,163	Apr. 22	2646	695	51	539
Bergmann, Sigmund, assignor to E. H. Johnson, New York, N. Y. Telephone.....	443,493	Dec. 30	3057	786 787	53	1882
Bergmann, Sigmund, assignor to E. H. Johnson, New York, N. Y. Telephone.....	443,494	Dec. 30	3059	787	53	1892
Bergmann, Sigmund, New York, N. Y., and G. B. Scott, Lakewood, N. J. Regulation of electric motors.....	424,595	Apr. 1	244	65	51	50
Bergner, Serena M. (See Sajous, Charles E., assignor.)						
Bergner, William, Baltimore, Md. Album.....	436,117	Sept. 9	1150	300	52	1600
Bergstein, Henry, Reno, Nev. Night-directory.....	441,863	Dec. 2	372	98	53	1337
Bergstrom, Andrew G., <i>et al.</i> (See Abrams, Gustav, assignor.)						
Bergstrom Brothers & Co. (See Bergstrom and Hansen, assignors.)						
Bergstrom, Carl J. R. (See Johnson and Bergstrom.)						
Bergstrom, George O., and H. N. Hansen, assignors to Bergstrom Brothers & Co., Neenah, Wis. Cooking stove or range.....	434,173	Aug. 12	1104	286	52	982
Bergstrom, Herman, assignor of one-half to G. M. Beach, Big Wausaukee, Wis. Machine for holding and sharpening insertible saw-teeth.....	421,896	Feb. 25	2150	564	50	997
Berkefeld, Wilhelm, Celle, Prussia, Germany. Simple means for scouring filters, &c.....	422,112	Feb. 25	2459	650	50	1054
Berkel, William. (See Murphy and Berkel.)						
Berkey, Julius, Grand Rapids, Mich. Bolt.....	442,941	Dec. 16	2116	545	53	1692
Berlin, Charles F., assignor to A. C. Smith, New York, N. Y. Watch-demagnetizer.....	436,205	Sept. 9	1288	335	52	1626
Berlin, John A., Quincy, Ill. Sad-iron.....	424,753	Apr. 1	490	133	51	96
Berlin Machine Works. (See Bennett, Joseph B., assignor.)						
Berlin Machine Works. (See Bennett and Boardman, assignors.)						
Berlin Machine Works. (See Forbes, Louis D., assignor.)						
Berlin Mills Company. (See Bonett, Edwin J., assignor.)						
Berliner, Emile. (See Suess, Werner, assignor.)						
Bernich, Paul. (See Hanicke and Bernich.)						
Bernard, Walker & Rice. (See Bernard, William A., assignor.)						
Bernard, William A., assignor to Bernard, Walker & Rice, New York, N. Y. Pliers.....	427,220	May 6	299	77	51	870
Bernard, William A., assignor to Bernard, Walker & Rice, New York, N. Y. Punch.....	427,497	May 6	705	177	51	952
Bernard, William A., assignor to Bernard, Walker & Rice, New York, N. Y. Garment-fastener.....	432,177	July 15	1789	460	52	364
Bernardiu, Alfred L., Evansville, Ind. Bottle-disk.....	443,891	Dec. 30	3667	944	53	2009
Bernardin, Francois, Antwerp, Ohio. Express-car.....	437,475	Sept. 30	3374	883	52	2050
Berne, Arthur W., assignor to S. B. McConico, New Orleans, La. Umbrella.....	429,557	June 3	687	168	51	1604
Berne, Arthur W., assignor to B. W. Taylor, New Orleans, La. Fare-collector.....	431,430	July 1	609	152	52	123
Berne, Arthur W., assignor to B. W. Taylor, New Orleans, La. Fare-collector.....	431,431	July 1	610	152	52	123
Berne, Arthur W., assignor, by mesne assignments, to Electrical Safety Railway Switch Company, Limited, New Orleans, La. Electrical attachment for railway-switches.....	443,814	Dec. 30	3566	914	53	1989
Berne, Arthur W., assignor to B. W. Taylor and S. B. McConico, New Orleans, La. Electric circuit for telephone purposes.....	425,853	Apr. 15	2166	576	51	437
Berners, Hubert J., Port Washington, Wis. Door or analogous device.....	432,350	Dec. 23	2827	726	53	1838
Bernhard, Louis, Bloomsburg, Pa. Attachment for fountain-pens.....	427,959	May 13	1425	359	51	1098
Bernhardt, Ernst, Newport, Ky. Pencil-sharpener.....	418,883	Jan. 7	360	86	50	76
Bernhardt, Hermann V. (See Bowden and Bernhardt.)						
Bernhardt, Siegmund. (See Perls, Hermann, assignor.)						
Bernheim, Matthew, New York, N. Y. Tailor's conforming measure.....	422,067	Feb. 25	2382	629	50	1044
Bernheimer, Jacob S. (See Mc Nicol, Archie, assignor.)						
Bernstein, Adolph, New York, N. Y. Clasp for suspenders.....	438,051	Oct. 7	588	160	53	112
Bernstein, Alexander, London, county of Middlesex, England, assignor, by mesne assignments, to Bernstein Electric Company, Boston, Mass. Thermal cut-out.....	433,229	July 29	3423	884	52	691
Bernstein, Benny, New York, N. Y. Fastening for gloves, shoes, &c.....	424,754	Apr. 1	491	133 134	51	96
Bernstein Electric Company. (See Bernstein, Alexander, assignor.)						
Bernstein Electric Company. (See Frei, Gustav A., assignor.)						
Bernstein Electric Company. (See Lean, George R., assignor.)						
Bernstein Electric Light Manufacturing Company. (See Frei, Gustav A., assignor.)						
Bernstein, Samuel, assignor to Instantaneous Water Heating Company, Chicago, Ill. Water-heater.....	429,300	June 3	298	71	51	1527
Bernstein, William F., Philadelphia, Pa. Bedstead.....	422,704	Mar. 4	501	128	50	1232
Berrenberg, Adolph, Somerville, and J. Umbehead, Cambridge, Mass. Switch.....	422,705	Mar. 4	502	128	50	1232
Berrenberg, Adolph, Somerville, assignor to J. Heilborn, trustee, Boston, and A. M. Berrenberg, Somerville, Mass. Vacuum-pump.....	421,346	Feb. 11	1356	351	50	829
Berrenberg, Anna M., <i>et al.</i> (See Berreuberg, Adolph, assignor.)						
Berrey, Samuel H., Providence, R. I. Door-knob attachment.....	422,493	Mar. 4	186	51	50	1172
Berrien, Benjamin G., Jr., Yonkers, N. Y. Wrench.....	419,816	Jan. 21	1740	461	50	365
Berrien, Leonard B., assignor to Avery Planter Company, Peoria, Ill. Planter.....	425,364	Apr. 8	1416	377 378	51	284
Berriman, Richard, assignor to Johnson Company, Johnstown, Pa. Double-brace chair for railway-rails.....	442,165	Dec. 9	846	227	53	1435
Berry, Austiu, Warden, Quebec, Canada. Sleigh.....	432,721	July 22	2624	671	52	531
Berry, Benjamin B., St. George, S. C. Car-coupling.....	434,858	Aug. 19	2105	568	52	1199
Berry, Charles E., Cambridge, Mass. Hame.....	421,025	Feb. 11	900	232	50	743
Berry & Co., L., <i>et al.</i> (See Mays, James F., assignor.)						
Berry, David L., Houstonia, and J. Wheeler, Sweet Springs, assignors of one-third to H. M. Locket, Houstonia, Mo. Barrel-rack.....	430,562	June 17	2252	553	51	1925
Berry, Ellen A., Boston, assignor of one-half to S. W. McDaniel, Cambridge, Mass. Apparatus for marking patterns for dress-waists.....	433,711	Aug. 5	397	102	52	833
Berry, George C., New York, and T. M. Fell, Tenafly, N. J.; said Berry assignor to said Fell. Oil-lamp.....	441,052	Nov. 18	2977	590	53	1063
Berry, John, assignor to National Needle Company, Springfield, Mass. Metal-swaging machine.....	435,351	Aug. 26	2968	787 788	52	1356
Berry, John B. N., Baltimore, Md. Making soap.....	433,066	July 29	3178		52	642
Berry, John B. N., Baltimore, Md. Making pine-needle fiber.....	437,555	Sept. 30	3499		52	2074
Berry, Joseph N., Boston, Mass. Thill-coupling.....	423,208	Mar. 11	1284	334	50	1389

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Berry, Marcellus F., Brooklyn, N. Y. File-binder.....	421,041	Feb. 11	926	239	50	748
Berry, Robert C., assignor of one-half to H. W. Comstock, Lafayette, Ind. Angle-piston engine.....	432,359	July 15	2054	{ 528 529	{ 52	412
Bersch, Anton, assignor to C. Yesinger, Auburn, N. Y. Bridle-bit.....	422,004	Feb. 25	2295	606	50	1020
Bertels, Joseph, Worcester, Mass. Mixing and kneading machine.....	423,020	Mar. 11	998	{ 262 263	{ 50	1333
Berthe, Albert, New York, N. Y. Stove, range, or furnace.....	421,228	Feb. 11	1188	305	50	798
Berthean, Ferdinand, and A. G. Hoegren, Aurora, Nebr. Corn-husking glove.....	436,206	Sept. 9	1289	336	52	1626
Berthon, Louis M., Castle of Assieux, near Roussillon, Isère, France. Photographic camera.....	419,910	Jan. 21	1894	{ 497 498	{ 50	397
Bertine, Edward D., New York, N. Y. Feed-tank for water-pipes.....	428,823	May 27	2732	{ 693 694	{ 51	1379
Bertling, Hermann. (See Helbig and Bertling.)						
Bertram & Co. (See Rodwell, George J. B., assignor.)						
Bertram & Son, James. (See Goodall and Webster, assignors.)						
Bertrand, Ernst, Kladno, Bohemia, Austria-Hungary, assignor to Pottstown Iron Company, Pottstown, Pa. Manufacturing basic linings for converters.....	419,404	Jan. 14	1145	-----	50	241
Bertrand, Joseph E., Boston, Mass. Shoe-fastening.....	431,737	July 8	1118	278	52	227
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Sole-sewing machine.....	421,541	Feb. 18	1642	{ 424 425 426	{ 50	891
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Shuttle-operating mechanism for sewing-machines.....	421,808	Feb. 18	2008	{ 530 531	{ 50	962
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Shuttle for sewing-machines.....	432,010	July 15	1536	388	52	314
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Sole-sewing machine.....	432,011	July 15	1527	{ 388 389	{ 52	314
Bertrand, Joseph E., Boston, assignor of one-half to M. Bray, Newton, Mass. Thread-tension device for sewing-machines.....	432,012	July 15	1534	390	52	315
Bertsch, Charles A., Cambridge City, Ind. Shearing-machine.....	430,986	Feb. 11	842	218	50	732
Bertsch, Charles A., Cambridge City, Ind. Punching and shearing machine.....	430,264	June 17	1777	442	51	1835
Bertsch, Charles A., Cambridge City, Ind. Shearing-machine.....	438,222	Oct. 14	839	228	53	167
Berwig, John M., Everett, Mass. Chimney-cleaner.....	440,940	Nov. 18	2106	546	53	1029
Besch, Conrad G. (See Stewart, Harry B., assignor.)						
Besimer, Anson D., <i>et al.</i> (See Stoddard, Oscar, assignor.)						
Besly, Charles H. (See Gardner, Frederick N., assignor.)						
Besly, Charles H., Chicago, Ill. Paper-holding device for files.....	423,589	Mar. 18	1843	486	50	1501
Bess, John W., Brilliant, Ohio. Wrench-tightener.....	433,928	Aug. 12	728	189	52	909
Besse, Edgar F., assignor of one-half to W. E. Damon, Hanson, Mass. Nut-lock.....	438,748	Oct. 21	1658	445	53	328
Besse, Irvin, <i>et al.</i> (See Rand, Joseph A., assignor.)						
Bessel, Rudolf, Paulan, near Brieg, Germany. Insecticide fuel.....	421,809	Feb. 18	2009	-----	50	962
Bessel, Rudolf, Paulan, near Brieg, Germany. Tree-protector.....	442,095	Dec. 9	737	199	53	1415
Bessemer Steel Company. (See Reese, Jacob, assignor.)						
Bessesen, Charles J. (See Letchworth and Bessesen.)						
Bessette, Addie, <i>et al.</i> (See Bessette, Frank B., assignor.)						
Bessette, Frank B., assignor to J. P. Wilson and A. Bessette, St. Cloud, Minn. Convertible toy.....	419,405	Jan. 14	1146	305	50	241
Bessey, Merritt B., Worcester, Mass. Steam-generator.....	432,854	July 22	2827	{ 724 725	{ 52	570
Bessler, George J., <i>et al.</i> (See McFarlane, John, assignor.)						
Bessonette, William T. (See Bechtol and Bessonette.)						
Bessonoff, Sergius, St. Petersburg, Russia. Water-level regulator.....	440,218	Nov. 11	897	231	53	795
Best, Daniel, San Leandro, Cal. Steering-wheel carriage.....	421,884	Feb. 18	2128	558	50	983
Best, Daniel, San Leandro, Cal. Variable eccentric.....	432,594	July 22	2408	620	52	490
Best, Daniel, San Leandro, Cal. Wheel.....	433,193	July 29	3374	873	52	681
Best, Daniel, San Leandro, Cal. Traction-engine.....	436,951	Sept. 23	2512	658	52	1875
Best, Daniel, San Leandro, Cal. Injector.....	436,932	Sept. 23	2514	658	52	1875
Best, Daniel, San Leandro, Cal. Boiler.....	436,933	Sept. 23	2515	{ 658 659	{ 52	1876
Best, Edward, Carleton Place, Canada. Car-axle box.....	437,375	Sept. 30	3216	839	52	2016
Best, Edward, Carleton Place, Ontario, assignor of two-thirds to W. Prenter and J. P. Kelley, Ottawa, Canada. Car-axle box.....	426,904	Apr. 29	3750	980	51	766
Best, John A. (See Mellon and Best.)						
Best, Louis P., Milwaukee, Wis. Harness-saddle.....	425,731	Apr. 15	1986	529	51	403
Best, William T., Chicago, Ill. Flying target.....	425,732	Apr. 15	1986	529	51	404
Best, William T., Chicago, Ill. Target-throwing trap.....	440,532	Nov. 11	1423	367	53	891
Betham, Alfred F., and H. B. Woolnough, Balmain, near Sydney, New South Wales. Apparatus for disengaging ships' boats from their supporting-tackle.....	425,018	Apr. 8	910	{ 241 242	{ 51	184
Bettendorf, Joseph W. (See Bettendorf, William P. and J. W.)						
Bettendorf, William P., Davenport, Iowa. Wheel-supporting frame.....	420,761	Feb. 4	461	123	50	654
Bettendorf, William P., Davenport, Iowa. Machine for upsetting metal.....	432,360	July 15	2055	529	52	412
Bettendorf, William P., Davenport, Iowa. Tire-rolling machine.....	436,207	Sept. 9	1289	336	52	1626
Bettendorf, William P. and J. W., Davenport, Iowa. Metallic wheel.....	440,533	Nov. 11	1426	368	53	892
Bettendorf, William P. and J. W., Davenport, Iowa. Method of and apparatus for making metallic wheels by electricity.....	440,534	Nov. 11	1427	368	53	892
Betterton, C. L., <i>et al.</i> (See Welke, William R., assignor.)						
Betterton, W. J., <i>et al.</i> (See Welke, William R., assignor.)						
Betts, Charles L., assignor to R. E. Dietz Company, New York, and Steam Gauge and Lantern Company, Syracuse, N. Y. Metallic tube.....	425,975	Apr. 22	2368	628	51	484
Betts, John P. (See Smith and Betts.)						
Betts, Lewis F., assignor of two-thirds to R. E. Dietz Company, New York, and Steam Gauge and Lantern Company, Syracuse, N. Y. Tubular lantern. (Reissue).....	11,127	Nov. 25	3239	835	53	1253
Betts Machine Company. (See Easby, Francis H., assignor.)						
Betz, William, assignor of two-thirds to A. Hammerly, Canton, and J. Wise, Nemisila, Ohio. Fodder-cutter.....	426,632	Apr. 29	3350	878	51	688
Bentry, Joseph L., Echo, W. Va. Coal-mining machine.....	432,361	July 15	2056	529	52	412
Bevin, John F., assignor of one-fourth to E. Bretney, Indianapolis, Ind. Apparatus for blowing sand from railway-track rails.....	440,690	Nov. 18	1680	433	53	950
Bevington, James H., Fostoria, Ohio, assignor, by mesne assignments, to C. W. Robison, Peoria, Ill. Hair-singer.....	433,439	Aug. 5	9	3	52	758
Bevington, James H., Fostoria, Ohio, assignor, by mesne assignments, to C. W. Robison, Peoria, Ill. Curling-iron.....	433,440	Aug. 5	10	3	52	759
Bevis, J. J. (See Bevis, William Z., assignor.)						
Bevis, William Z., assignor to J. J. Bevis, Cherokee Mills, Ga. Combination millstone-pick.....	420,003	Jan. 21	2036	537	50	424

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Bevitt, Edwin D., Cincinnati, Ohio. Roofing.....	422,178	Feb. 25	2551	674	50	1071
Bew, Charles, Angola, Ind. Ice-pick	419,911	Jan. 21	1896	498 } 499 }	50	398
Beyer, Charles, East Palestine, Ohio. Grinding attachment for mowing-machines	432,660	July 22	2526	648	52	511
Beyer, William F., Lancaster, Pa. Cash-carrier	435,621	Sept. 2	382	103	52	1447
Bianchi, Francesco. (See Alpenburg, Victor and L., assignors.)						
Bibikov, Nicholas A., Albuquerque, N. Mex. Ter., assignor of part to C. L. Hubbs, B. S. Rodey, W. C. Burke, C. R. Shupe, J. H. Loveland, and A. W. Harris, N. Mex. Ter., and I. Stein and A. C. Halloran, Albuquerque, N. Mex. Ter. Composition for paint.....	421,229	Feb. 11	1189	-----	50	798
Bibikov, Nicholas A., Albuquerque, N. Mex. Ter., assignor of twenty-nine thirty-sixths to C. L. Hubbs, B. S. Rodey, W. C. Burke, C. R. Shupe, J. H. Loveland, A. W. Harris, New Mexico Territory, I. Stein and A. C. Halloran, Albuquerque, N. Mex. Ter. Composition for paint. (Reissue).....	11,082	June 10	1533	-----	51	1778
Bickel, Hiram, Guffey, Pa. Sucker-rod elevator	442,942	Dec. 16	2117	545	53	1692
Bickford, Erskine F., Malden, Mass., assignor to Boston Rubber Shoe Company, of Massachusetts. Rubber overshoe	437,639	Sept. 30	3608	944	52	2096
Bickford & Huffman. (See Martin and Heath, assignors.)						
Bickham, Yeatman. (See Davis, John H., assignor.)						
Bickley, John H., Dover, N. J. Rolling-mill	431,179	July 1	219	55	52	45
Bicknell, William, Castleton, N. Y. Metallic edging for lawns	436,821	Sept. 23	2290	604	52	1834
Bicycle Step-Ladder Company. (See Murray, Edward M., assignor.)						
Biddell, George A., Ipswich, England, assignor to G. Bower, Fayette, Mo. Fittings of furniture-drawers	437,556	Sept. 30	3500	913	52	2074
Biddison, Clarence E., Goodland, assignor of two-fifths to S. G. Stapp, Phillipsburg, Kans. Train-order	437,557	Sept. 30	3500	913	52	2075
Biddle, Henry L., Dayton, Ohio. Hinge	443,495	Dec. 30	3059	787	53	1892
Bidwell, George R. (See Hoyt, Montraville, assignor.)						
Bidwell, Porter, McGregor, Iowa. Cow-stable	425,649	Apr. 15	1859	496	51	379
Bidwell, William F., assignor of one-half to A. L. Crawford, Troy, N. Y. Horse-tail holder	424,453	Apr. 1	10	4	51	4
Biebuyck, Gustave, Brussels, Belgium. Safety saddle-bar or suspender for stirrup-leathers	440,459	Nov. 11	1302	337	53	868
Biederman, Edwin E., Brooklyn, N. Y. Means for securing twine in balls	423,116	Mar. 11	1149	299	50	1361
Biederman, Edwin E., Brooklyn, N. Y. Balling-machine	425,092	Apr. 8	1011	271	51	204
Biedermann, Emil, and E. W. Harvey, assignors to F. and A. Siemens, Westminster, England. Apparatus for utilizing waste gaseous products	442,600	Dec. 16	1526	393	53	1577
Biel, Christ. (See Koch and Biel.)						
Biel, Frederick J., and J. S. Urban, Terre Haute, Ind.; said Urban assignor to said Biel. Wrench	443,216	Dec. 23	2609	671	53	1797
Bielenberg, Johann, Chemnitz, Germany. Furnace.....	436,283	Sept. 9	1396	363 } 364 }	52	1648
Bier, Danthus P., Woodinville, Wash., assignor of one-half to H. M. Burchard, Marshall, Minn. Snow-excavator	425,365	Apr. 8	1421	378	51	285
Bierbach, Albert G., Milwaukee, Wis. Cable-railway system	429,004	May 27	2989	767	51	1431
Bierley, Henry A., Lexington, Ky. Sign	443,930	Dec. 30	3732	954	53	2021
Bierline, Michael. (See Burris and Bierline.)						
Biery, James S., Allentown, Pa. Spring for beds, &c.	421,230	Feb. 11	1190	306	50	798
Biery, James S., Allentown, Pa. Sash-fastener	424,454	Apr. 1	11	5	51	5
Biesen, Anthony, Hull, Iowa. Buckle	436,167	Sept. 9	1225	319	52	1613
Bigelow, Alfred J., and G. E. Prosser, New London, Ohio. Tool for weaving wire-and-picket fences	443,892	Dec. 30	3668	945	53	2010
Bigelow, Allen J., deceased, (C. A. Bigelow, administratrix,) and H. D. Northrup, Ogdensburg, N. Y. Barrel-hoop	419,492	Jan. 14	1261	336	50	265
Bigelow Carpet Company. (See Ayers, Samuel C., assignor.)						
Bigelow Carpet Company. (See Patterson, Robert F., assignor.)						
Bigelow, Charles C., and F. T. Davis, Mount Vernon, N. Y. Harness	429,496	June 3	602	143	51	1587
Bigelow, Clara A., administratrix. (See Bigelow and Northrup.)						
Bigelow, Clayton. (See Sutton, Le Roy, assignor.)						
Bigelow, David E. (See Armstrong, Bigelow, and Oshorn.)						
Bigelow, Jerome B., Cuba, N. Y. Table	424,639	Apr. 1	315	81	51	62
Bigelow, Lucius S., assignor to N. O. Hickok Manufacturing Company, Harrisburg, Pa. Paper-ruling machine	443,065	Dec. 16	2297	588	53	1729
Bigelow, Lyman G., Chattanooga, Tenn. Stop or diaphragm for photographic cameras	443,386	Dec. 23	2281	741	53	1849
Bigham, John, Ripon, Wis. Pencil-sharpener	419,307	Jan. 14	993	263	50	210
Bigler, James, <i>et al.</i> (See Noppel, Emil, assignor.)						
Biglow, Charles W. (See McCaffrey and Biglow.)						
Bignall, Burnett B., St. Charles, Ill. Stop-cock box for water or gas service pipes	421,897	Feb. 25	2152	565	50	997
Bilbie, John. (See Ross and Bilbie.)						
Bildt, Carl W., Worcester, Mass. Feed device for gas-producers	442,676	Dec. 16	1632	421	53	1599
Bilek, Adolph, Chicago, Ill. Bird bath-tub	422,179	Feb. 25	2552	675	50	1072
Bilharz, Oscar, Freiberg, Saxony, Germany. Hydraulic jiggling-sieve	427,249	May 6	349	89, 90	51	879
Bilharz, Oscar, Freiberg, Saxony, Germany. Percussion-frame with revolving belt for the treatment of ores	427,250	May 6	351	90	51	879
Bilharz, Oscar, Freiberg, Saxony, Germany. Jigger for treating ores.....	427,251	May 6	352	90	51	879
Bilhorn, Peter, Chicago, Ill. Portable organ	439,625	Nov. 4	10	3	53	603
Bill, George W. (See Burbank, Bill, and Ramseyer.)						
Bill, John E., assignor of one-half to Helfrich Saw and Planing Mill Company, Evansville, Ind. Saw-guide	434,756	Aug. 19	2028	530	52	1171
Billaut, Eugène A., Paris, France. Manufacture of jewelry	440,258	Nov. 11	960	-----	53	807
Bilheimer, John C., <i>et al.</i> (See Horrall, William A., assignor.)						
Billings, Andrew W., Brooklyn, N. Y., assignor to Billings Process Company, Jersey City, N. J. Mash-machine	431,246	July 1	324	80	52	66
Billings, Clara B., <i>et al.</i> (See Peterson, Knute F., assignor.)						
Billings, George A., Windsor, Vt. Thill-support	432,689	July 22	2578	660	52	521
Billings, George W., and B. P. Kenyon, Cleveland, Ohio. Removable tank for vapor-stoves	423,117	Mar. 11	1149	299	50	1362
Billings, John D., New York, N. Y. Machine for forming blank bars for horseshoes	422,564	Mar. 4	2-7	73, 74	50	1191
Billings, John D., New York, N. Y. Machine for forming clips on horseshoes	443,893	Dec. 30	3669	945	53	2010
Billings Process Company. (See Billings, Andrew W., assignor.)						
Billingslea, Alvah M. F., assignor of two-thirds to V. H. Ketcham and S. T. Fisk, Toledo, Ohio. Folding bedstead	425,399	Apr. 15	1476	396	51	304
Billsen, George A. (See Patton and Billsen.)						
Billups, George C., Norfolk, Va. Revolving harrow	440,836	Nov. 18	1935	497	53	996
Bindeman, Herman A., Chicago, Ill. Cloth-piling machine	431,321	July 1	433	107	52	89
Binder, Charles F., deceased, Edgewood, Ga.; C. F. Binder, administratrix. Extracting oil	434,696	Aug. 19	1951	508	52	1156

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Binder, Charlott F., administratrix. (See Binder, Charles F.)						
Bines, Robert. (See Stevius, Joel W., assignor.)						
Binford, Julian, <i>et al.</i> (See Simpson, James H., assignor.)						
Bing, Benjamin J., Paris, France. Dental tool	425,650	Apr. 15	1861	496	51	379
Bing, William, Sandusky, Ohio. Single or double tree	430,765	June 24	2615	641	51	2004
Bingham, Charles D., Watertown, N. Y. Equalizing mechanism for paper-winding apparatus	429,497	June 3	604	148	51	1587
Bingham, Cullen B., Volcano, Cal. Ore-feeder	425,733	Apr. 15	1987	530	51	404
Bingham, Cullen B., Volcano, Cal. Crushing-mill	430,602	June 17	2318	569 } 570 }	51	1938
Bingham, George W., Orange, Mass. Shutter-worker	424,261	Mar. 25	2832	758	50	1698
Bingham, Leander K., New York, N. Y. Apparatus for making printers' rollers	419,912	Jan. 21	1897	498 } 499 }	50	398
Bingham, Leander K., New York, N. Y. Apparatus for making printers' rollers	419,913	Jan. 21	1898	499	50	398
Bingham, Leander K., New York, N. Y. Apparatus for making printers' rollers	419,914	Jan. 21	1900	499	50	398
Bingham, Leander K., New York, N. Y. Apparatus for casting printers' rollers	419,915	Jan. 21	1901	500	50	399
Bingham, Wells A. (See Bredenberg, Alfred, assignor.)						
Binney, Charles R. (See Stuart, Herbert A., assignor.)						
Binnix, Benjamin F., Seabrook, Md. Steam-boiler	443,217	Dec. 23	2610	671 } 672 }	53	1797
Biorseth, Carl M. (See Lotstrom and Biorseth.)						
Bippart & Co. (See Kienle, Andreas, assignor.)						
Birch, George A., East Greenbush, N. Y. Cutter for corrugating ice for storing	436,492	Sept. 16	1736	458	52	1722
Birch, John T. (See Henderson, William B., assignor.)						
Birch, William H., assignor of one-half to C. J. Kaighin, San Francisco, Cal. Sheave	425,734	Apr. 15	1988	530	51	404
Birchard, Arthur R., Norwich, Conn. Stenographer's tablet	424,534	Apr. 1	148	42	51	31
Birchard, Ford G., Williamsport, Pa. Machine for making stick-candy	426,521	Apr. 29	3178	834 } 835 }	51	655
Bird, Andrew J., <i>et al.</i> (See Nichols, Henry, assignor.)						
Bird, Edward E., 28 Honeywell Road, Wandsworth Common, county of Surrey, England, Wire rope, band, or cable	429,005	May 27	2990	767	51	1432
Bird, George M., Boston, Mass. Releasing, lowering, and detaching ships' boats	437,881	Oct. 7	316	93, 94	53	62
Bird, Henry J., Brooklyn, N. Y. Waterproofing composition for paper	426,633	Apr. 29	3351	.....	51	688
Bird, Horace G. (See Twyman and Bird.)						
Bird, Horace G., Chicago, Ill. Railway-car	436,031	Sept. 9	1001	262	52	1574
Bird, Horace G., Chicago, Ill. Car-brake	443,665	Dec. 30	3323	856	53	1943
Bird, Turnbull & Co. (See Spalding, Palmer, assignor.)						
Birdsall, Anna E., Brooklyn, assignor of one-half to E. A. Bailey, New York, N. Y. Bed-clothes-fastener	443,742	Dec. 30	3448	885	53	1966
Birdsell, J. Benjamin, <i>et al.</i> (See Briggs, Harrison T., assignor.)						
Birge, Alvin C., Cleveland, Ohio. Foot-cleaner	441,921	Dec. 2	449	120	53	1353
Birgé, Isidore, assignor of one-half to T. B. Wanamaker, Philadelphia, Pa. Scale-measure	434,911	Aug. 26	2308	610	52	1232
Birkery, Cornelius. (See Shea and Birkery.)						
Birkery, Cornelius, Hartford, Conn. Valve	423,118	Mar. 11	1151	299	50	1362
Birkery, Cornelius, Hartford, Conn. Valve	428,199	May 20	1764	446	51	1175
Birkery, Cornelius, assignor of one-half to G. R. Case, Hartford, Conn. Air-pump	435,008	Aug. 26	2443	646	52	1258
Birkery, Cornelius, and G. R. Case; said Birkery assignor to F. M. Peck, Hartford, Conn. Vacuum apparatus	442,474	Dec. 9	1312	339	53	1525
Birkholz, Hans, assignor to E. P. Allis & Co., Milwaukee, Wis. Conveyer	426,488	Apr. 29	3137	824	51	647
Birks, William, and H. S. Cropper, Nottingham, England. Embroidering-machine	424,846	Apr. 1	639	168 } 169 }	51	124
Birmingham Rotary Motor Company. (See Knebel and Henning, assignors.)						
Birney, Oliver, and A. Lease, Means, Ohio. Post-driver	443,424	Dec. 23	2934	754	53	1859
Bischof, Gustav, London, England. Manufacture of white lead	442,943	Dec. 16	2118	.....	53	1693
Bischoff, Carl, Allegheny, Pa. Binding-plate for brick walls	425,854	Apr. 15	2167	577	51	437
Bischoff, Carl, Allegheny, Pa. Meat-tender	434,236	Aug. 12	1204	313	52	1001
Biser, Mahlon K., Los Angeles, Cal. Washing-machine	428,223	Oct. 14	843	228	53	168
Bishop, Charles, Cleveland, and O. D. Miller, Brooklyn, Ohio. Thill-coupling	430,032	Jan. 28	2083	550	50	442
Bishop, Charles C., Nashville, Tenn. Apparatus for displaying stereoscopic views	427,727	May 13	1055	264 } 265 }	51	1029
Bishop, Clement B. (See Emons and Bishop.)						
Bishop, Demott, Leavenworth, Kans. Vehicle-seat	427,960	May 13	1426	360	51	1099
Bishop, Edward S., Manchester, England. Surgical cradle-splint	429,716	June 10	927	227 } 228 }	51	1661
Bishop, Francis A., San Francisco, Cal. Rotary water-meter	432,929	July 22	2939	753	52	592
Bishop, George H., Northport, N. Y. Incubator	435,387	Sept. 2	9	3	52	1376
Bishop, George H., Northport, N. Y. Brooder	442,007	Dec. 2	591	160	53	1378
Bishop, James, <i>et al.</i> (See Colin, Theodore F., assignor.)						
Bishop, James D., Chicago, Ill. Electric meter	420,762	Feb. 4	462	123	50	654
Bishop, James D., assignor to Western Electric Company, Chicago, Ill. Lightning-arrester	425,061	Apr. 8	968	260	51	195
Bishop, James D., assignor to J. B. Atherton, New York, N. Y. Machine for covering cables	429,255	June 3	215	54	51	1514
Bishop, James D., assignor to Western Electric Company, Chicago, Ill. Electric annunciator	429,599	June 10	753	181	51	1627
Bishop, Joseph, assignor of one-half to W. B. Cashen, Meriden, Conn. Automatic fire-extinguisher	441,923	Dec. 2	451	120	53	1353
Bishop, Joseph A., Nashville, Tenn. Cot or lounge	441,922	Dec. 2	450	120	53	1353
Bishop, Joseph H. (See Jenkins and Bishop.)						
Bishop, Thomas F. (See Holland, Daniel A., assignor.)						
Bishop, William E., Aylesford, Canada. Cuff-holder	437,326	Sept. 30	3122	816	52	1998
Bisler, Gustav A., Philadelphia, Pa. Machine for affixing flies to paper boxes	421,157	Feb. 11	1093	281	50	781
Bispham, George R. (See Piggott, Henry E., assignor.)						
Bissell, Anna, executrix. (See Bissell, Melville R.)						
Bissell Carpet Sweeper Company. (See Bissell, Melville R., assignor.)						
Bissell Carpet Sweeper Company. (See Drew, Walter J., assignor.)						
Bissell & Co. (See Bissell, Henry M., assignor.)						
Bissell, Frank H., Orwell, Ohio. Stretcher for wire fences	422,494	Mar. 4	188	51	50	1172
Bissell, George F., Cincinnati, Ohio. Shoe-fastening	439,996	Nov. 4	565	149	53	718
Bissell, Henry M., assignor to Bissell & Co., Pittsburg, Pa. Gas-stove	426,101	Apr. 22	2557	673	51	520
Bissell, James H., <i>et al.</i> (See Danks, Frank, assignor.)						
Bissell, Melville R., deceased; A. Bissell executrix and assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Brush-making machine	435,268	Aug. 26	2826	748	52	1331
Bissell, Thomas A. (See Beuson, Edwin A., assignor.)						
Bissell, Thomas A., Buffalo, N. Y. Railway-car	435,676	Sept. 2	464	123	52	1464

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Bissell, Thomas A., and C. Bergman, Buffalo, N. Y. Car-coupling	440,299	Nov. 11	1038	{ 266 267 }	{ 53 53 }	819
Bissell, Titus L., and W. P. Prescott, Charleston, S. C. Automatic water cut-off	433,441	Aug. 5	11	3	52	759
Bitley, Frank W., San Francisco, Cal. Flexible shaft-coupling	419,241	Jan. 14	896	235	50	191
Bitschowsky, Julius C., Cleveland, Ohio. Postal weighing-scales	421,026	Feb. 11	900	232	50	743
Biven, Felix C., <i>et al.</i> (See Booth, Walter W., assignor.)						
Bixby, Arthur. (See Kemp and Bixby.)						
Bixby & Co., S. M. (See Phelps, William C., assignor.)						
Bixler, Gideon, Wooster, Ohio. Game-board	424,667	Apr. 1	357	94	51	69
Black, Albert W., St. Louis, Mo. Refrigerator-door fastener	424,847	Apr. 1	641	169	51	124
Black, Albert W., St. Louis, Mo. Cold-storage house	433,316	July 29	3547	916	52	717
Black, Asher F., Malden, Mass. Sieve-belt for sewage	443,743	Dec. 30	3448	885	53	1967
Black, Bernard J., assignor to himself, W. F. Jenkins, E. Hoffmann, T. Heinson, and D. Stephenson, Richmond, Va. Conduit for electric railways	419,308	Jan. 14	994	263	50	210
Black, Bernard J., and W. F. Jenkins, Richmond, Va. Electric street-railway	419,309	Jan. 14	997	{ 263 264 }	{ 50 50 }	211
Black, Charlie C., Blakely, Ga. Car-coupling	434,757	Aug. 19	2030	530	52	1172
Black & Clawson Company. (See Jones and Mack, assignors.)						
Black, David, Lorain, Ohio. Velocipede	432,814	July 22	2779	711	52	560
Black, David W., assignor to B. Massoth, Butler, Pa. Packer for deep wells	439,233	Oct. 28	2424	650	53	480
Black, Edward G., and J. F. Werle, New York, N. Y.; said Werle assignor to said Black; Paging and numbering machine	432,209	Mar. 11	1284	{ 334 335 }	{ 50 50 }	1389
Black, Eldridge N. (See Brands, Lafayette M., assignor.)						
Black, John J., Cleveland, Ohio. Thill-coupling	437,882	Oct. 7	318	94	53	63
Black, John J., Cleveland, Ohio, assignor to Black Spring and Gear Company, of Ohio. Vehicle fifth-wheel	423,590	Mar. 18	1844	486	50	1501
Black, John J., Cleveland, Ohio, assignor to Black Spring and Gear Company, of Ohio. Vehicle running-gear. (Reissue)	11,120	Nov. 11	1563	401	53	917
Black, John J., assignor to Black Spring and Gear Company, Cleveland, Ohio. Fifth-wheel for vehicles	426,757	Apr. 29	3546	925	51	726
Black, John J., assignor to Black Spring and Gear Company, Cleveland, Ohio. Road-wagon	439,097	Oct. 28	2204	591	53	440
Black, John T., Philadelphia, Pa. Hydrocarbon-oil burner	437,013	Sept. 23	2618	684	52	1896
Black, Joseph, Blacksburg, S. C. Cooking-stove	434,126	Aug. 12	1033	267	52	968
Black, Joseph F., <i>et al.</i> (See Putman, John, assignor.)						
Black, Joseph F., assignor to Hagood Plow Company, Alton, Ill. Stalk-cutter machine	435,535	Sept. 2	235	65	52	1420
Black, Robert. (See Harey and Black.)						
Black, Robert D., assignor of one-half to G. M. Williams, Constantia, N. Y. Faucet-extractor	441,864	Dec. 2	373	98	53	1338
Black Spring and Gear Company. (See Black, John J., assignor.)						
Black Spring and Gear Company. (See Black, John J., assignor.) (Reissue.)						
Black, William F., Cleveland, Ohio. Axle attachment	431,504	July 1	729	182	52	145
Black, William S., Baltimore, Md. Water-tube boiler	430,914	June 24	2845	698	51	2048
Black, William T., Crittenden, Ill. Automatic grain-weighing machine	441,225	Nov. 25	2576	667	53	1129
Blackburn, Charles A., <i>et al.</i> (See Coppuck, Malcom M., assignor.)						
Blackburn, Charles W., assignor of one-half to J. J. Patton and W. D. Monmonier, Tombstone, Ariz. Whiffletree-hook	437,558	Sept. 30	3502	914	52	2075
Blackburn, George A., and D. J. Brimm, Columbia, S. C. Temporary binder	443,954	Dec. 30	3769	{ 962 963 }	{ 53 53 }	2028
Blackburn, George W., Sarasota, Fla. Fruit-gatherer	432,362	July 15	2058	530	52	412
Blackburn, Jacob E., Fredericktown, Ohio. Baking or roasting pan	419,493	Jan. 14	1262	337	50	266
Blackburn, William, assignor of two-thirds to E. A. Gurley, Marion, and W. Shull, Galion, Ohio. Compound for preventing incrustation in boilers	439,756	Nov. 4	186	.....	53	644
Blacke, David E., Sydney, New South Wales. Ax or wedge for splitting wood	427,961	May 13	1427	360	51	1099
Blackford, Ethelbert O., assignor of one-half to H. R. Stoughton, Shelby, Ala. Roller-tree saddle	438,052	Oct. 7	588	160	53	112
Blackford, William H., assignor to Detroit Casket Company, Detroit, Mich. Coffin-handle	439,049	Oct. 21	2119	569	53	417
Blackhall, Edward W., Toronto, Ontario, Canada, and J. H. Smith, Buffalo, N. Y. Cash-indicator	425,121	Apr. 8	1052	280	51	213
Blackledge, Rollin H., assignor of one-half to H. T. Hearsey, Indianapolis, Ind. Bicycle	435,477	Sept. 2	140	39, 40	52	1402
Blackman, Albert L., Nashville, Tenn. Apparatus for compressing cotton or other fibrous materials	430,985	June 24	2948	724	51	2066
Blackman, Albert L., London, England. Apparatus for compressing fibrous material	430,986	June 24	2952	725	51	2068
Blackman, Albert L., London, England. Hydraulic compress	431,738	July 8	1119	{ 278 279 514 }	{ 52 51 51 }	228
Blackman, Ebenezer, Brooklyn, N. Y. Shade or reflector	428,369	May 20	2040	513	51	1230
Blackman, Elmer E., Raymond, Nebr. Cultivator	439,340	Oct. 28	2608	695	53	514
Blackman, Henry, New York, N. Y. Furnace for recovering soda	424,755	Apr. 1	493	134	51	97
Blackman, Henry, New York, N. Y. Recovering soda	424,756	Apr. 1	497	135	51	97
Blackmer, Orlando C., Oak Park, Ill. Support for frames	421,542	Feb. 18	1648	426	50	892
Blackmer, Orlando C., Oak Park, Ill. Copy-holder	424,086	Mar. 25	2602	693	50	1653
Blackmer, Orlando C., Oak Park, Ill. Toy pistol	438,139	Oct. 14	719	197	53	145
Blackmer, Orlando C., Oak Park, Ill. Calendar	443,894	Dec. 30	3671	945	53	2010
Blackmer, Robert M., assignor of one-half to J. C. Davies, East Saginaw, Mich. Mechanism for operating switches	440,390	Nov. 11	1187	306	53	847
Blackmon, Albert, Sweet Home, Tex. Well-lining	427,728	May 13	1057	265	51	1029
Blackmon, Albert M., assignor of two-thirds to R. M. Blackmon, J. A. and J. S. Youngkin, Sweet Home, Tex. Artificial-stone composition	420,326	Jan. 28	2543	.....	50	528
Blackmon, R. M., <i>et al.</i> (See Blackmon, Albert M., assignor.)						
Blackmore, James E., Grand Rapids, Mich. Photographic camera	435,342	Aug. 26	2952	783	52	1353
Blackmore, Lawrence R., Newark, N. J. Heating-radiator	421,042	Feb. 11	927	240	50	748
Blackstock, Ira B., <i>et al.</i> (See Elliott, George C., assignor.)						
Blackstock, Robert, <i>et al.</i> (See Elliott, George C., assignor.)						
Blackstock, William M., <i>et al.</i> (See Elliott, George C., assignor.)						
Blackstone, Edward C. (See Branson, Bryan, assignor.)						
Blackwell, Francis O., Boston, Mass. Automatic lubricator	435,085	Aug. 26	2557	674	52	1280
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway	424,848	Apr. 1	642	{ 169 170 }	{ 51 51 }	124
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Contact device for electric railways	425,488	Apr. 15	1613	430	51	331
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-railway contact	425,489	Apr. 15	1614	430	51	331
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-railway contact	426,102	Apr. 22	2558	673	51	521

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Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company. Slot-switch for conduit systems of railways.....	442,475	Dec. 9	1313	339	53	1525
Blackwell, Lewis W. (See Wolford and Blackwell.)						
Blackwood, Joseph H. (See Pond, Samuel N., assignor.)						
Blackwood, Lorenzo D., Lathrop, and A. R. Bradley, Cameron, Mo. Plumb-level.....	438,518	Oct. 14	1274	345	53	251
Blades, Harry H., Detroit, Mich. Means for supporting storage-batteries on railway-cars.....	435,640	Sept. 2	410	111	52	1452
Blades, Harry H., Detroit, Mich. Electric-railway car.....	435,641	Sept. 2	412	111	52	1452
Blades, Harry H., assignor to Detroit Motor Company, Detroit, Mich. Electric switch for motors.....	418,678	Jan. 7	16	5	50	6
Blades, Harry H., assignor to Detroit Motor Company, Detroit, Mich. Electric motor.....	435,639	Sept. 2	409	110	52	1452
Blades, Harry H., assignor to Detroit Motor Company, Detroit, Mich. Commutator.....	437,844	Oct. 7	262	79	53	51
Blagrove, Henry D., and H. J. Marsh, Monument, Colo. Car-coupling.....	440,535	Nov. 11	1429	368	53	892
Blakie, Edwin K., Somerville, Mass. Harness.....	434,421	Aug. 19	1499	391	52	1067
Blair, Barton L., assignor to L. H. Wagoner and C. C. Beaban, Rochester, N. Y. Base-ball mask.....	432,970	July 29	3022	776	52	612
Blair Camera Company. (See Blair, Thomas H., assignor.)						
Blair, George, New York, N. Y. Fruit-crate.....	421,655	Feb. 18	1810	474	50	924
Blair, George, New York, N. Y. Folding election-booth.....	438,797	Oct. 21	1726	463	53	341
Blair, George F. (See Sullivan, Daniel F., assignor.)						
Blair, Robert H., Kansas City, Mo. Box-clamp.....	432,855	July 22	2829	725	52	571
Blair, Thomas H., Boston, Mass., assignor to Blair Camera Company, of Massachusetts. Camera.....	428,448	May 20	2157	542	51	1251
Blair, Thomas H., Boston, Mass., assignor to Blair Camera Company, of Massachusetts. Roll-holder for cameras.....	428,797	May 27	2688	682	51	1371
Blair, William H., Janesville, Wis. Pile-driver.....	433,929	Aug. 12	730	189 190	52	900
Blaisdell & Company, P. (See Capen, Ebenezer S., assignor.)						
Blaisdell & Company, P. (See Hildreth, Samuel E., assignor.)						
Blaisdell, Frederick E., assignor to Sil-Crusta Manufacturing Company, Camden, N. J. Insulating composition.....	440,391	Nov. 11	1188		53	847
Blake, Charles M., et al. (See Howe, Patrick, assignor.)						
Blake, Charles S., Chicago, Ill. Adjustable support for photographic cameras.....	439,098	Oct. 28	2205	591	53	440
Blake, Charles W., assignor of one-half to S. Weiskopf, Charleston, S. C. Cut-off.....	441,739	Dec. 2	171	45	53	1295
Blake, Edgar W., et al. (See Stevens, Howard B., assignor.)						
Blake, Elbridge G., Farmington, Me. Exhibiting device for show-windows, &c.....	440,991	Nov. 18	2178	563	53	1044
Blake, Harry, Perrysburg, N. Y. Sap-spout.....	436,557	Sept. 16	1845	486	52	1740
Blake, Henry, et al. (See Stevens, Howard B., assignor.)						
Blake, Henry, Pepperell, Mass., assignor to Facile Bottle Stopple Company, New York, N. Y. Stopper-carrier for bottles.....	427,729	May 13	1058	265	51	1029
Blake, Jesse H., assignor of one-half to J. Nelson, Omaha, Nebr. Mortising-machine.....	424,849	Apr. 1	643	170	51	125
Blake & Johnson. (See Manville, Frank B., assignor.)						
Blake, Theodore A., New Haven, Conn. Chili mill.....	422,706	Mar. 4	503	128	50	1232
Blake, Theodore A., New Haven, Conn. Ore-crusher.....	439,374	Oct. 28	2660	708	53	524
Blake, Thomas J., assignor of one-half to C. H. Brace, Pittsburg, Pa. Starching-machine. (Reissue).....	11,109	Sept. 2	833	220	52	1536
Blake, Samuel A., Osceola, Iowa. Hay-stacking machine.....	433,067	July 29	3179	818	52	643
Blake, Samuel A., Osceola, Iowa. Horse-rake.....	433,068	July 29	3180	818	52	643
Blake, William H., Warren, Mass. Automatic valve-motion for steam-engines.....	428,449	May 20	2159	542 543	51	1252
Blakeley, John, assignor of one-half to T. J. Bounds, Newton, Miss. Cultivator.....	427,543	May 13	784	195	51	977
Blakeley, John D., assignor to D. H. Commager, Toledo, Ohio. Hydrocarbon vaporizer and burner.....	424,700	Apr. 1	407	107	51	80
Blakely, Abram R. (See Ansell, John H., assignor.)						
Blakeman, John D., Smith's Grove, Ky. Trace-detacher for singletrees.....	428,370	May 20	2041	514	51	1230
Blakemore, Herbert D., Moline, Ill. Lawn-mower.....	433,317	July 29	3549	916	52	718
Blakemore, James W., Philadelphia, Pa. Hydraulic motor.....	429,600	June 10	755	182	51	1627
Blaker, Paul, Newtown, Pa. Horse-rake.....	432,112	July 15	1685	433	52	344
Blakeslee, Edward E., Brooklyn, assignor to Eagle Pencil Company, New York, N. Y. Pencil-sharpener.....	421,810	Feb. 18	2010	531	50	962
Blakeslee, Harvey D. (See Baker, Henry H., Jr., assignor.)						
Blakeslee, Ira L., Kirkwood, N. Y. Vehicle-spring.....	434,239	Aug. 12	1206	313	52	1002
Blakeslee, Ira L., Kirkwood, N. Y. Nut-lock.....	437,327	Sept. 30	3123	817	52	1999
Blakeslee, Jared, Story City, Iowa. Device for holding tools for grinding.....	418,761	Jan. 7	187	45	50	41
Blakeslee, Jared, Story City, Iowa. Carpet stretcher and tacker.....	427,544	May 13	785	195	51	977
Blakeslee, Wilmot, Lexington, Nebr. Milk-pail.....	438,264	Oct. 14	907	246	53	179
Blakesley, Gilbert H., assignor to Blakesley Novelty Company, Bristol, Conn. Elastic circlet.....	439,375	Oct. 28	2661	708	53	524
Blakesley Novelty Company. (See Blakesley, Gilbert H., assignor.)						
Blakey, Mildred, Pittsburg, Pa. Welding seams of pipes.....	433,591	Aug. 5	226	60	52	800
Blakey, William, assignor of one-half to R. B. Brown & Sons, Leeds, England. Shuttle for sewing-machines.....	443,744	Dec. 30	3449	885	53	1967
Blakley, Albert, Kokomo, Ind. Corn-planter.....	434,758	Aug. 19	2032	531	52	1172
Blampied, Charles, Boston, Mass. Toy pistol.....	439,626	Nov. 4	11	3	53	608
Blanc, Jerome E., New York, N. Y. Self-operating lady's stool.....	443,202	Dec. 23	2588	665	53	1793
Blanchard, Allen L., Chicago, Ill., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator.....	442,660	Dec. 16	1602	414 415	53	1593
Blanchard, Allen L., Chicago, Ill., assignor of two-thirds to E. L. Lomax, Omaha, Nebr., and B. B. Anderson, Chicago, Ill. Paper-cutter.....	442,414	Dec. 9	1224	316	53	1508
Blanchard, Charles M., et al. (See Reckenzaun, Anthony, assignor.)						
Blanchard, Dudley, Brooklyn, N. Y. Tornado-proof building.....	439,376	Oct. 28	2663	708	53	524
Blanchard, Helen A. (See Tefel, Henry H., assignor.)						
Blanchard, Jesse A., Duluth, Minn. Tool for pointing masonry.....	443,387	Dec. 23	2881	741	53	1849
Blanchard, Silas W., Sheridanville, Pa., assignor to Otis Brothers & Company, New York, N. Y. Hydraulic elevator.....	425,202	Apr. 8	1187	315	51	240
Bland, William, Leicester, assignor of one-half to J. Stott, county of Lancaster, England. Machine for taking copies of written or printed matter.....	425,651	Apr. 15	1861	497	51	379
Blandin, Frederick F., Racine, Wis. Door-check.....	437,559	Sept. 30	3503	914	52	2075
Blandon, Charles F., C. F. Ross, and J. J. Lumm, Michigan City, Ind. Combined caster-socket and corner-brace.....	427,662	May 13	950	239	51	1008
Blank, Alois, St. Louis, Mo. Water-proof and fire-proof material for roofing. (Reissue).....	11,106	Aug. 26	3025	800	52	1367
Blanken, Clans H., Charleston, S. C. Removable siding for beds.....	421,656	Feb. 18	1812	474	50	924
Blankensop, Thomas. (See Morton, Blankensop, and Hipkins.)						
Blankman, John S., Washington, D. C. Adjustable tubular gun-sight.....	420,261	Jan. 28	2456	652	50	511
Blankman, John S., Washington, D. C. Distance-measuring machine.....	435,201	Aug. 26	2725	719 720	52	1312

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Blanton, Joseph W., <i>et al.</i> (See Farnsworth, Henry T., assignor.)						
Blasius, Levin W., Philadelphia, Pa. Piano	423,510	Mar. 18	1734	457	50	1482
Blassing, William, Central City, Iowa. Ornament for jewelry	420,508	Feb. 4	115	28	50	566
Bláthy, Otto T. (See Zipernowsky, Déri, and Bláthy.)						
Bláthy, Otto T., Buda-Pesth, Austria-Hungary. Electric meter for alternating currents	423,210	Mar. 11	1287	{ 335 336 }	50	1389
Blattmach'r, Leopold, Brooklyn, N. Y. Surgical brace	431,797	July 8	1210	302	52	245
Blauss, Ferdinand, assignor of one-half to G. J. Schnatz, New York, N. Y. Car-coupling	420,673	Feb. 4	345	91	50	631
Blauvelt, Albert, New York, N. Y. Automatic fire-sprinkler	423,591	Mar. 18	1844	486	50	1501
Blauvelt, Warren S., assignor to Sea-Shore Electric Railway Company, Asbury Park, N. J.						
Trolley for electric railways	429,413	June 3	473	112	51	1561
Bleakley, William M., Verplanck, N. Y. Circuit-closing hinge for electric burglar-alarm	426,705	Apr. 29	3461	907	51	709
Blee, William C., Manilla, Iowa. End-gate	429,006	May 27	2991	768	51	1432
Bléha, William V. (See Fife and Bléha.)						
Bléha, William V., assignor of one-half to J. F. Donhoff, St. Louis, Mo. Sash-holder	426,905	Apr. 29	3751	980	51	766
Bleichert, Adolf, Leipsic, Germany. Coupling apparatus for elevated wire-rope tramways	433,974	Aug. 12	801	209	52	921
Blentlinger, William H. (See Zimmerman, George F. S., assignor.)						
Breo, John H., Brooklyn, assignor to Mutual District Telegraph Company, New York, N. Y. Burglar-alarm	426,706	Apr. 29	3462	907	51	709
Bresch, August F., Columbus, Ohio. Tank for water-closets	425,288	Apr. 8	1316	352	51	264
Bresch, August F., and J. Herrmann, Columbus, Ohio. Seat-back for water-closets	443,564	Dec. 30	3162	813	53	1912
Blessing, Charles A., Philadelphia, Pa. Flushing mechanism for water-closets	420,327	Jan. 28	2543	674	50	528
Blessing, Charles A., Philadelphia, Pa. Standing overflow and waste	420,328	Jan. 28	2547	675	50	529
Blessing, Charles A., Philadelphia, Pa. Overflow and waste for set basins	432,222	July 15	1855	476	52	375
Blessing, Charles A., Philadelphia, Pa. Overflow and waste for bath-tubs	438,465	Oct. 14	1207	327	53	237
Blessing, Charles A., Philadelphia, Pa. Flushing mechanism for water-closets	443,845	Dec. 30	3609	928	53	1998
Blessing, James H., Albany, N. Y. Apparatus for filtering water	442,601	Dec. 16	1527	394	53	1577
Blessing, James H., Albany, N. Y. Water-filtering apparatus	442,602	Dec. 16	1530	{ 394 395 }	53	1578
Blethen, Andrew R., and L. H. Alexander, Lynn, Mass. Railway-crossing gate	441,226	Nov. 25	2577	667	53	1129
Blethen, Harry W., Dover, Me. Seat-lock	435,726	Sept. 2	537	142	52	1479
Blickensderfer, George C., Stamford, Conn. Roller or platen for type-writing machines	442,603	Dec. 16	1531	395	53	1578
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-writing machine	432,295	July 15	1973	504	52	397
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-wheel for type-writing machines	432,296	July 15	1975	505	52	397
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Paper-carriage for type-writing machines	432,297	July 15	1977	505	52	397
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-writing machine	432,298	July 15	1979	505	52	398
Blickensderfer Manufacturing Company. (See Blickensderfer, George C., assignor.)						
Bligh, Samuel L., Custards, Pa. Cheese-cutter	441,053	Nov. 18	2278	590	53	1063
Blinn, Joseph S., New Haven, Conn. Potato-masher	442,850	Dec. 16	1952	502	53	1660
Blinn, William C. (See Miller, Horace G. and G. C., assignors.)						
Bliss Company, E. W. (See Leavitt, Frank M., assignor.)						
Bliss, Edward D., Brooklyn, N. Y. Suspender-back	424,087	Mar. 25	2603	693	50	1654
Bliss, Eleanor A., Washington, D. C. Game or educational device or appliance	438,757	Oct. 21	1669	448	53	330
Bliss, Francis D., assignor of one-fourth to S. T. Rogers, Bridgeport, Conn. Axle-nut	427,825	May 13	1212	305	51	1059
Bliss, George B. W., Calais, Vt. Musical-scale register	426,229	Apr. 22	2744	719	51	559
Bloch & Co., Abe. (See Bloch, Jacob, assignor.)						
Bloch, Jacob, Cincinnati, Ohio, assignor to A. Bloch & Co. Pantaloon	441,637	Dec. 2	14	5	53	1265
Bloch, Israel. (See Goldstein and Bloch.)						
Block Spring and Gear Company. (See Black, John J., assignor.)						
Blocker, Octavius H. (See Shooter, Edward E., assignor.)						
Blodget, Chester A. (See Blodgett, Stillman and C. A.)						
Blodgett, Stillman and C. A., Hicksville, Ohio. Coffin	427,391	May 6	540	137	51	918
Blodgett, Frank M., New York, N. Y. Ear-trumpet	439,099	Oct. 28	2206	592	53	440
Blodgett, Frank P., assignor to L. Sullivan, Chicago, Ill. Water-heater	425,062	Apr. 8	969	{ 260 261 }	51	195
Blodgett, John W., Chicago, Ill. Friction-clutch	432,473	July 15	2228	576	52	448
Blodgett, William H., <i>et al.</i> (See Goodson, George A., assignor.)						
Blomén, Jonas E., Brooklyn, assignor to C. B. Harris, New York, N. Y. Refractory compound for incandescent gas-burners	430,508	June 17	2177	.....	51	1912
Blomgren, William A., Chicago, Ill. Photo-engraving apparatus	432,783	July 22	2729	698	52	551
Blondeau, Jules P., St. Joseph, Mo. Combined grass receiver and dumper for lawn-mowers	428,371	May 20	2042	514	51	1230
Blondel, Richard A. L., Baltimore, Md. Sanitary service-tank for water-closets	428,372	May 20	2043	{ 514 515 }	51	1230
Blondel, Richard A. L., Baltimore, Md. Sanitary service-tank for water-closets	428,373	May 20	2047	{ 516 517 }	51	1232
Blondel, Richard A. L., Baltimore, Md. Tank	429,879	June 10	1173	{ 291 292 }	51	1707
Blondin, Adrien, St. Hyacinthe, Canada. Boiler for hot-water heating	440,300	Nov. 11	1040	267	53	819
Blood, Edwin J., <i>et al.</i> (See Hardy, Franklin D., assignor.)						
Blood, Joel S., assignor of one-half to E. Manasse, Napa City, Cal. Knife-sharpener	435,553	Sept. 2	267	74	52	1427
Blood, Oliver H., New York, N. Y. Needle	428,263	May 20	1875	471	51	1196
Bloom, Charles J., assignor to S. S. Warren & Co., Elmo, Mo. Fruit-gatherer	424,455	Apr. 1	13	5	51	5
Bloom, Charles J., and W. M. Atherton, Elmo, Mo. Churn	433,194	July 29	3375	873	52	681
Bloom, Samuel S. (See Page and Bloom.)						
Bloomer, Charles G., Pawtuxet, R. I. Car-starter	431,029	July 1	4	1	52	3
Blount, Eugene I., Cambridge, Mass., assignor to Blount Manufacturing Company, Portland, Me. Piston-cylinder	419,916	Jan. 21	1903	500	50	399
Blount, Eugene I., Boston, Mass., assignor to Blount Manufacturing Company, of Maine. Door-check	435,677	Sept. 2	467	123	52	1465
Blount, Eugene I., Cambridge, Mass., assignor to Blount Manufacturing Company, of Maine. Door-check	435,678	Sept. 2	469	124	52	1465
Blount Manufacturing Company. (See Blount, Eugene I., assignor.)						
Blue, Edwin N., Philadelphia, Pa. Preparing printed sheets for drying	441,924	Dec. 2	452	{ 120 121 }	53	1353
Blue Flame Manufacturing Company. (See Fennessy, Frank R., assignor.)						
Blue, John W. (See Miller, Blue, and Miller.)						
Blum, Adolph. (See Livingston, Blum, Wollenweber, Westheimer, and Cohn.)						
Blum, August, Pablo Beach, Fla. Chair	424,952	Apr. 8	800	215	51	163
Blum, Frank J., Dansville, N. Y. Manufacture of shoes	434,975	Aug. 26	2393	634	52	1250

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Blum, Isaac. (See Ewig, John, assignor.)						
Blum, Joseph C., Towanda, Pa. Inner sole	439,377	Oct. 28	2664	709	53	524
Blumann, Moritz. (See Sims, Francis M., assignor.)						
Blume & Co., John H. (See Blume and Loving, assignors.)						
Blume, Herman, New York, N. Y. Wagon-jack	427,144	May 6	188	49	51	848
Blume, Herman, New York, N. Y. Candlestick	436,118	Sept. 9	1151	301	52	1600
Blume, John H., and C. Loving, assignors to J. H. Blume & Co., Walhalla, Tex. Topical remedy	436,014	Sept. 9	977		52	1569
Blumer, Jacob, Brooklyn, N. Y. Drying apparatus	434,652	Aug. 19	1875	490	52	1142
Blun, Ferdinand S. M. (See Osborne, William, assignor.)						
Blundstone, Benjamin. (See Moseley and Blundstone.)						
Bly, Charles L., et al. (See Sargent, Milton O., assignor.)						
Blydenburgh, Charles M., Riverhead, N. Y. Shifting seat for vehicles	428,062	May 20	1573	399	51	1137
Blythe, James E. (See Kletzker, Albert J., assignor.)						
Blythe, James E., et al. (See Bradley, Jay L., assignor.)						
Boal, Stanhope, Piqua, Ohio. Deflecting-plate for open stoves or grates	425,289	Apr. 8	1317	352	51	265
Boand, Julius A., Omaha, Nebr. Manufacture of white lead	432,784	July 22	2731	699	52	551
Boardman, Anson P. (See Bennett and Boardman.)						
Boardman, Charles A. (See Trench, Ira J., assignor.)						
Boardman, Joseph E., Camden, Me. Reversing mechanism for washing-machines	419,627	Jan. 21	1459	391	50	312
Boardwell, Edward A. (See Sant and Boardwell.)						
Bohbs, Andrew J., Cincinnati, Ohio. Shoulder-brace corset	432,363	July 15	2060	530	52	413
Bohmerith, Lewis E., assignor of nine-tenths to E. E. Swisler, L. M. Hahn, J. F. Miller, T. P. McKinney, A. B. Howe, J. L. Ernst, and E. C. Hahn, Petersburg, Ohio. Umbrella-support	419,137	Jan. 7	724	190	50	151
Bochkoltz, Constant, Weilerbach, Germany, assignor of one-half to J. B. Nau, New York, N. Y. Cinder-car	439,465	Oct. 28	2796	745	53	549
Bock, Henry F., Lansing, Ill. Shaft-ting	418,679	Jan. 7	18	5	50	6
Bock, Leo, Jr., et al. (See Darling, William H., assignor.)						
Bock, Leo, Jr., assignor of one-half to C. L. Wright, New York, N. Y. Electrical indicator	421,851	Feb. 18	2083	548	50	974
Bock, Leo, Jr., assignor to himself and C. L. Wright, New York, N. Y. Electric motor	424,535	Apr. 1	149	43	51	32
Bock, Leo, Jr., assignor to himself and C. L. Wright, New York, N. Y. Electric motor	440,821	Nov. 18	1909	490	53	991
Bock, Martin, Hazelton, Pa. Key for time-pieces	437,965	Oct. 7	446	126	53	85
Bock, William A., Chicago, Ill. Switch-stand	437,966	Oct. 7	448	126	53	85
Böckel, August, Erfurt, Prussia, and E. Lechmann, Leipsic, Saxony, Germany. Slat for rolling shutters	422,707	Mar. 4	505	129	50	1233
Bockus, Charles G. (See Ewing and Bockus.)						
Bocks, Charles G., Pottstown, Pa. Cutting attachment for lawn-mowers	431,836	July 8	1269	319	52	257
Boda, William J., Dayton, Ohio. Fastening device	428,063	May 20	1575	400	51	1138
Boddie, Henry B., Weoka, Ala. Plow	427,545	May 13	787	196	51	977
Bode, Albert, Cincinnati, Ohio. Pick	438,877	Oct. 21	1668	496	53	367
Bode, Henry, New York, N. Y. Camera apparatus, slide, and extension-bed	443,610	Dec. 30	3237	532	53	1927
Bode, Henry F., Chicago, Ill. Spectacle-frame	435,961	Sept. 9	904	238	52	1555
Bode, Peter J., Belleville, Ill. Pipe-tongs	443,312	Dec. 23	2770	710	53	1826
Bodefeld, Meinolph, St. Louis, Mo. Car-brake	421,231	Feb. 11	1192	366	50	798
Bodell, John R., assignor of one-half to G. Haver, New Salem, Ohio. Sliding door	442,944	Dec. 16	2119	545	53	1693
Bodenstein, Henry, Staatsburg, N. Y. Whiffletree-hook	424,166	Mar. 25	2713	732	50	1674
Bodenstein, Henry, Staatsburg, N. Y. Cooking utensil	429,256	June 3	216	54	51	1514
Beeck, Charles H., Jackson, Mich. Burner for oil-stoves	442,567	Dec. 9	1468	377	53	1557
Beeck, Charles H., assignor of one-half to H. H. D. S., and H. L. Smith, Jackson, Mich. Oil-burner	442,304	Dec. 9	1050	276	53	1474
Boecker, Martin, Friedenshütte, Prussia, Germany. Regenerative hot-blast stove	422,905	Mar. 11	827	{ 214 215 722 723 }	50	1302
Boecker, Wilhelm, Schalke, Prussia, Germany. Machine for finishing railway-spikes	424,167	Mar. 25	2713	{ 214 215 722 723 }	50	1675
Boedeker, Hermann, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Violet dye	438,053	Oct. 7	590		53	112
Boedicker, Hermann C., Philadelphia, Pa. Machine for making nut-blanks	426,656	Apr. 29	3383	888	51	694
Boehm, David J., New York, N. Y., assignor to North American Cigar Machinery Company, of New York. Filler-tobacco and preparing the same	437,328	Sept. 30	3124	817	52	1999
Boelsterli, Johann, Füssen, Bavaria, Germany. Flier and drag device therefor for spinning and twisting machines	432,856	July 22	2630	725	52	571
Boemermann, Herman, Brooklyn, N. Y. Mixer	420,262	Jan. 28	2458	652	50	512
Boer, Uhbo H. S. de, Berlin, Germany. Spring device for hanging lamps, &c.	439,100	Oct. 28	2206	592	53	441
Beesen, James P., Hoboken, N. J. Lamp-shade	425,735	Apr. 15	1990	530	51	404
Beettcher, Adolph, South Stillwater, Minn. Fire-escape	426,256	Apr. 22	2745	719	51	559
Bogard, William J., Menden, Mo. Stanchion	427,145	May 6	189	49	51	848
Bogart, George L. (See Bogart, Gilbert E. and G. L.)						
Bogart, Gilbert E. and G. L., New York, Conn. Blacking-cabinet	439,831	Nov. 4	301	76	53	667
Bogert, John L., Flushing, N. Y. Steady-rest for lathes	429,880	June 10	1176	292	51	1708
Bogness, J. S., agent. (See Webb and Haag, assignors.)						
Boggs, Joseph O., assignor of one-half to J. W. Roop, Harrisburg, Pa. Sweeper	436,689	Sept. 16	2052	536	52	1780
Bogle, Jerome, and J. S. C. Sower, Brazil, Ind. Freight-car	434,057	Aug. 12	900	237	52	941
Begle, Walter S., Chicago, Ill. Coal-handling apparatus	419,628	Jan. 21	1461	{ 392 393 }	50	312
Bogle, Walter S., Chicago, Ill. Transfer-carriage for elevated ways	419,629	Jan. 21	1462	393	50	313
Bogle, Walter S., Chicago, Ill. Coal-handling apparatus	419,630	Jan. 21	1464	393	50	313
Bogusch, Gustav, Vallecillo, Mexico, and R. J. Bogusch, deceased; A. Zincke, Llano, Tex., administrator. Extensible trestle	418,938	Jan. 7	454	111	50	95
Bogusch, Gustav, Vallecillo, Mexico, and R. J. Bogusch, deceased; A. Zincke, Llano, Tex., administrator. Flue-cutter	419,310	Jan. 14	999	264	50	211
Bogusch, Robert J. (See Bogusch, Gustav and R. J.)						
Bogy, Henry S., St. Louis, Mo. Folding extension display-frame for dress goods	424,262	Mar. 25	2834	758	50	1699
Bohac, Johann E., Vienna, Austria-Hungary. Inking-pad and holder	428,242	May 20	1640	461	51	1191
Bohannon, Jenetta V., Washington, D. C. Cigarette-machine	431,432	July 1	612	{ 153 154 155 }	52	123
Bohlig, Martin, St. Paul, Minn. Hobby-horse	439,627	Nov. 4	12	3	53	609
Bohmann, Joseph, Chicago, Ill. Head for musical instruments	427,962	May 13	1427	360	51	1099
Bohn, Emil, assignor of two-thirds to T. Vinke, Galveston, and O. Engelke, Brenham, Tex. Treating cotton-seed hulls	437,084	Sept. 23	2719	710	52	1917
Bohn, Emil, Galveston, assignor of two-thirds to H. O. Engelke, Brenham, and T. Vinke, Galveston, Tex. Apparatus for treating cotton-seed hulls	438,984	Oct. 21	2029	{ 541 542 }	53	400

Alphabetical list of patentees—Continued.

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Bohn, René, assignor to Badische Anilin und Soda Fabrik, Ludwigshafen, Germany. Blue dye	440,536	Nov. 11	1430	-----	53	893
Bohner, Joseph E., Chicago, Ill. Lamp	418,782	Jan. 7	187	45	50	41
Bohner, Joseph E., Chicago, Ill. Central-draft lamp	439,718	Nov. 4	136	36	53	634
Bohner, Joseph E., Chicago, Ill. Adjustable shade-holder	439,769	Nov. 4	208	54	53	649
Bohren, Ulrich, Hoboken, N. J. Pen and pencil holder	420,033	Jan. 28	2084	550	50	442
Boice, Samuel, assignor of one-half to J. H. Hill, Edina, Mo. Carpet-stretcher	425,160	Apr. 8	1124	298	51	226
Böing, William C., Hermann, Mo. Machine for applying stay-wires to wire fences	433,195	July 29	3377	873	52	682
Boisseau, Louis. (See St. Marie, Horace A., assignor.)						
Boiteau, Octave, Eagle Point, Wis. Grab-hook	443,473	Dec. 23	3016	774	53	1875
Bokop, Henry D. (See Sites, Frank B., assignor.)						
Boland, William J., Chicago, Ill. Pulverizer and pug-mill	421,811	Feb. 18	3011	531	50	962
Bolander, Charles, assignor of one-half to C. E. Hallstrom, Chicago, Ill. Bag holder and spreader	426,906	Apr. 29	3753	980	51	767
Bold, William M. (See Brown and Bold.)						
Bolding, Arch, assignor to H. A. Murphy and J. Hardy, Sumner, Ill. Poke-yoke	419,138	Jan. 7	725	190	50	152
Bole, George M., and A. D. Hamilton, Pittsburg, Pa. Stop-governor	428,064	May 20	1576	400	51	1138
Bole, Robert J., Beaver Falls, Pa. Insertible saw-tooth	420,857	Feb. 4	632	163	50	683
Bole, Robert J., assignor to Champion Saw Company, (Limited,) Beaver Falls, Pa. Circular saw	424,263	Mar. 25	2836	758	50	1699
Boles, Edgar E., Arkansas City, Kans. Tea-kettle	425,400	Apr. 15	1477	396	51	304
Boles, Warren H., Syracuse, N. Y. Burnisher	436,866	Sept. 23	2404	627	52	1854
Boles, Warren H., Syracuse, N. Y. Burnisher	438,601	Oct. 21	1401	340	53	282
Boley, Daniel C., Chicago, Ill. Thread-protecting attachment for spools	421,478	Feb. 18	1543	399	50	872
Boley, John, et al. (See Delano, David, assignor.)						
Bolick, Jerome, Conover, N. C. Wheel	443,232	Dec. 23	2634	676	53	1801
Boll, George W., Mount Hope, Kans. Parcher	423,211	Mar. 11	1290	336	50	1389
Bollentin, Adam, New York, N. Y. Tufted fabric	423,659	Mar. 18	1965	518	50	1525
Bolles, William P. (See Hague and Bolles.)						
Bollinckx, Arthur, Brussels, and B. J. Springuel, Huy, Belgium. Steam-trap	424,032	Mar. 25	2525	672	50	1638
Bollinger, Alexander M., New Florence, Pa. Shoe	423,212	Mar. 11	1290	337	50	1389
Bollinger, Jacob, Tripp, S. D. Paint composition	419,106	Jan. 7	684	-----	50	144
Bollinger, Simon, South Whitley, Ind. Rotary grain-meter	419,176	Jan. 14	797	210	50	172
Bolls, Thomas H., Washington, D. C. Toy puzzle	435,790	Sept. 2	634	167	52	1496
Bolte, Frank H., assignor of one-half to P. H. Sercombe, Milwaukee, Wis. Bicycle	443,815	Dec. 30	3567	914	53	1990
Bolton, Channing M., Washington, D. C. Bulletin or indicator for trains	426,428	Apr. 29	3050	798 } 799 }	51	630
Bolton, Charles W., Philadelphia, Pa. Ice and snow shoe for horses	431,868	July 8	1322	331	52	266
Bolton, Edward, Cincinnati, Ohio. Combined distilling-column and condenser	440,087	Nov. 4	690	183	53	743
Bolton, George W., assignor of two-thirds to H. L. M. Krekel and F. Reisner, Milwaukee, Wis. Device for exhibiting pictures and like articles	435,388	Sept. 2	11	3	52	1377
Bolton, James, Chicago, Ill. Take-up for sewing-machines	420,034	Jan. 28	2046	551	50	442
Bolton, James M., Carson, Iowa. Washing machine	429,993	June 10	1342	333	51	1741
Boluss, Alfred R., Norwood, Ohio. Straight air automatic brake	435,791	Sept. 2	635	167 } 168 }	52	1497
Boluss, Alfred R., Norwood, Ohio. Valve for air-brakes	436,298	Sept. 9	1419	370	52	1653
Boluss, Alfred R., Norwood, Ohio. Valve for air-brakes	436,299	Sept. 9	1420	370	52	1654
Boluss, Alfred R., Norwood, Ohio, assignor of one-half to W. T. Bothwell, Jersey City, N. J. Steam-engine valve	443,223	Dec. 23	2636	677	53	1801
Boman, Claes W., New York, N. Y. Cigar-rolling machine	442,945	Dec. 16	2120	546	53	1693
Boman, Claes W., assignor to Eagle Pencil Company, New York, N. Y. Fountain-pen	426,758	Apr. 29	3547	925	51	736
Bomar, Thomas B. and W. A., Kyle, Tex. Horse-collar fastener	424,850	Apr. 1	645	170	51	125
Bomar, William A. (See Bomar, Thomas B. and W. A.)						
Bommer, Lorenz, Brooklyn, N. Y. Boot-jack	434,653	Aug. 19	1877	490	52	1142
Bon, John T., Syracuse, N. Y. Folding table	430,615	June 24	2353	576	51	1953
Bon, John T., Syracuse, N. Y. Folding table	434,240	Aug. 12	1207	313 } 314 }	52	1002
Bon, Leopold, Guantanamo, Cuba. Apparatus for drying sugar-cane trash	435,792	Sept. 2	638	168 } 169 }	52	1497
Bonbrake, Lewis S., Waynesburg, assignor of one-half to A. C. Kanneberg, Canton, Ohio. Eaves-trough	438,519	Oct. 14	1276	345	53	251
Bond, Edward G., Waltham, E. C. Goldsmith, Springfield, and A. Goldsmith, Salem, Mass. Supporting device for advertising and other cards or sheets	433,230	July 29	3424	884	52	691
Bond, Edward S., Birmingham, county of Warwick, England. Wire-netting machine	432,223	July 15	1856	476 } 477 }	52	376
Bond, Elijah R. (See Legault, Joseph D., assignor.)						
Bond, George T., Huntington, W. Va. Float for fish-lines	427,730	May 13	1059	265	51	1029
Bond, George W., assignor to himself, C. C. Van Doren and L. H. Roath, Adrian, Mich. Fence-post	432,930	July 22	2941	753	52	592
Bond, Henry A., Los Angeles, Cal. Tourist's head-rest	429,207	June 3	155	37	51	1501
Bond, James, Philadelphia, Pa. Car-coupling	439,319	Oct. 28	2578	688	53	508
Bond, James, Philadelphia, Pa. Drier	440,786	Nov. 18	1848	476 } 477 }	53	980
Bond, John, Waterloo, N. Y. Mechanism for operating the twist-slides of spinning-machines	432,013	July 15	1535	390	52	315
Bond, John R. (See Cochran and Bond.)						
Bond, Nathan O., Fairfax Court-House, Va., assignor to Bond Wave and Tide Force Company, Ocean Grove, N. J. Wave-power	425,927	Apr. 15	2269	601	51	456
Bond, Nathan O., Fairfax Court-House, assignor of three-fourths to M. B. Harlow, C. C. Carlin, and J. M. Hill, Alexandria, Va. Wash-stand	438,368	Oct. 14	1064	290	53	209
Bond, Richard. (See Beer and Bond.)						
Bond, Sherman G., Westerville, Nebr. Rein-holder	437,560	Sept. 30	3504	914	52	2075
Bond, Sobieski L., Charleston, S. C. Spring-bending machine	425,736	Apr. 15	1990	530 } 531 }	51	405
Bond Wave and Tide Force Company. (See Bond, Nathan O., assignor.)						
Bone, David M., Kansas City, Mo. Bed-bottom	442,008	Dec. 2	593	160 } 161 }	53	1379
Bonelli, Eugene S., San Francisco, Cal. Exercising device for musicians	440,837	Nov. 18	1939	498	53	997
Boner, William W., assignor of two-thirds to R. Cass and J. McArthur, Harlan, Iowa. End-gate for wagons	422,875	Mar. 4	761	194	50	1282
Bonett, Edwin J., Berlin, N. H., assignor to himself, and Berlin Mills Company, Portland, Me. Cleaning the faces of grindstones	440,616	Nov. 18	1567	403	53	927
Bonhack, Charles F., and O. Hoppe, New York, N. Y. Hydrocarbon-burner	421,543	Feb. 18	1649	427	50	892
Bonna, Aimé, Paris, France, assignor to Mac Farlane, Strang & Co., Glasgow, Scotland. Piston meter	441,925	Dec. 2	455	121 } 122 }	53	1354

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Bonner, Joseph C., assignor of one-half to J. Ames, Jr., Toledo, Ohio. Brush	421,812	Feb. 18	2012	532	50	962
Bonner, Julius, New York, N. Y. Jewelry	443,425	Dec. 23	2935	755	53	1859
Bonneville, Amable B., Allentown, Pa. Conveyer.	438,054	Oct. 7	591	160	53	112
Bonsack Machine Company. (See Emery, Charles G. and W. H., assignors.)						
Bonslong, William H. (See Phillips, John C., assignor.)						
Bonton, Edward H. (See Ihue, Frederick W., assignor.)						
Bonwell, William H., Brookville, Ind. Wheel-cultivator	436,690	Sept. 16	2055	537	52	1780
Bonwill, William G. A., Philadelphia, Pa. Dental engine	440,128	Nov. 11	756	199	53	765
Bonwill, William G. A., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Rock-drill and instrument using revolving hammers	425,737	Apr. 15	1992	531	51	405
Bonzano, Maximilian F., Philadelphia, Pa. Metallic cross-tie	437,476	Sept. 30	3375	884	52	2050
Bonzano, Maximilian F., Philadelphia, Pa. Metallic cross-tie	441,926	Dec. 2	458	122	53	1354
Booker, Joseph E., and J. O. Phillips, Raleigh, N. C. Gin-saw gummer	430,333	June 17	1926	{ 471 472 }	{ 51 51 }	1863
Boomer, Benjamin T., Buncombe, Ill. Grain-separator	423,304	Mar. 11	1435	374	50	1416
Booue, James N., and S. D. Taylor, Hazleton, Pa. Slate-jig	440,460	Nov. 11	1303	337	53	868
Boone, Joseph C., Cincinnati, Ohio. Vehicle-body	436,493	Sept. 16	1737	459	52	1722
Boone, Robert, assignor of one-half to H. N. Youngman, Philadelphia, Pa. Hinge	436,691	Sept. 16	2056	537	52	1781
Boone, Samuel M., Somerset, Ky. Reel-seat for fishing-rods	441,126	Nov. 25	2415	625	53	1099
Boone, William C. (See Dobson, William J. M., assignor.)						
Boone, William C., Brooklyn, N. Y. Apparatus for transmitting motion	431,030	July 1	5	1	52	3
Booraem, John V. V., Brooklyn, N. Y. Self-closing shutter	424,088	Mar. 25	2604	694	50	1654
Booraem, John V. V., Brooklyn, N. Y., assignor to R. M. Booraem, Jersey City, N. J. Device for opening shutters	433,884	Aug. 5	665	{ 172 173 }	{ 52 52 }	887
Booraem, Robert E., Butte, Mont. Separating the valuable portions of the tailings produced in the treatment of ores	420,432	Feb. 4	6		50	566
Booraem, Robert E., Jersey City, N. J. Moistening device for gums, envelopes, &c.	436,822	Sept. 23	2291	604	52	1834
Booraem, Rudolph M. (See Booraem, John V. V., assignor.)						
Boorman, David, Altoona, Pa. Shaft-coupling	432,364	July 15	2061	530	52	413
Boorman, William G., and E. J. Donohue, Mauston, Wis. Machine for separating flour	440,301	Nov. 11	1041	{ 267 268 }	{ 53 53 }	820
Boos, Imre, Milwaukee, Wis. Transposing key-board for pianos	427,826	May 13	1214	306	51	1059
Booth, Benjamin B. (See Van Wie, Avery, assignor.)						
Booth, Constant W., and T. Brabson, Brooklyn, N. Y. Oil-cup	433,069	July 29	3181	819	52	643
Booth, Edgar H. (See Loftus and Booth.)						
Booth, Edgar H. (See Spiers and Booth.)						
Booth, Irving E. (See Booth, Quentin W. and I. E.)						
Booth, John H., Alton, Ill. Mustache-holder	438,055	Oct. 7	591	161	53	112
Booth, Quentin W. and I. E., Rochester, N. Y. Apparatus for molding abrasive strips	428,298	May 20	1934	486	51	1207
Booth, Ralph W., New Brunswick, N. J., assignor to W. Demuth, New York, N. Y. Cigar-tip cutter	422,708	Mar. 4	505	129	50	1233
Booth, Robert J., and J. Baughman, Garver, Ark. Railway-switch	442,096	Dec. 9	738	199	53	1415
Booth, Samuel, Clinton, Mass. Tensioning device for endless bands of spinning-machines	434,820	Aug. 19	2118	555	52	1190
Booth, Thomas C. (See Foster, George W., assignor)						
Booth, Thomas C., New York, N. Y. Compression-cock	422,906	Mar. 11	827	215	50	1302
Booth, Walter W., Elmsford, assignor to himself, F. C. Biven, Lake Mahopac, and J. Rooney, Brooklyn, N. Y. Artificial paving-stone	428,037	May 13	1533	388	51	1121
Booth, William, Leominster, Mass. Manufacturing articles from wood pulp	420,763	Feb. 4	464	123	50	655
Boothby, Edward K., assignor to himself and G. W. Chase, Portland, Me. Can-opener	425,739	Apr. 15	1995	532	51	405
Booz, Harvey G., Doylestown, Pa. Boot-leg supporter	438,466	Oct. 14	1209	327	53	238
Booz, Harvey G., and J. C. Vandegrift, Doylestown, Pa. Pipe or flue cleaner	427,963	May 13	1428	360	51	1099
Boozer, Henry. (See Gibbs and Boozer.)						
Bopp, Charles, Mount Joy, Pa. Washing-machine	421,898	Feb. 25	2153	565	50	998
Bopp, Henry B. (See Holden and Bopp.)						
Bopp, John, Brooklyn, N. Y. Machine-planer head	437,329	Sept. 30	3126	817	52	1999
Bopp, John, Brooklyn, and J. McCort, Blissville, N. Y.; said McCort assignor to said Bopp. Cutter-head for planers	420,569	Feb. 4	198	51	50	603
Boppel, Jacob, Newark, N. J. Sewing-machine	439,234	Oct. 28	2426	{ 650 651 }	{ 53 53 }	480
Boppel, Jacob, Newark, N. J. Tension device for sewing-machines	439,378	Oct. 28	2664	709	53	524
Boppel, Jacob, Newark, N. J. Sewing-machine	439,379	Oct. 28	2666	{ 709 710 }	{ 53 53 }	524
Borchers, Henry W., Portland, Oreg. Automatic fire-lighter	425,740	Apr. 15	1996	532	51	406
Borchers, William. (See Reber, Daniel L., assignor.)						
Borden, James Y., Philadelphia, Pa. Hair and wig	431,837	July 8	1270	319	52	257
Borg, Charles, New York, N. Y. Sad-iron	430,167	June 17	1620	404	51	1804
Boris, Pierre J., Boston, Mass. Cart-truck	419,139	Jan. 7	726	191	50	152
Boris, Pierre J., assignor of two-thirds to H. M. Oliver and T. H. Pearce, Boston, Mass. Car-brake	422,330	Feb. 25	2801	737	50	1118
Borland, Alexander M., Otisville, N. Y. Mop-wringer	438,467	Oct. 14	1210	328	53	238
Borland, William D., London, England. Dynamite	443,035	Dec. 16	2259		53	1721
Bormann, Hermann, Philadelphia, Pa. Sinuous pleasure-railway	429,601	June 10	757	{ 182 183 }	{ 51 51 }	1628
Bormann, Hermann, Philadelphia, Pa. Sinuous pleasure-railway	434,554	Aug. 19	1698	{ 444 445 }	{ 52 52 }	1108
Bormann, Hermann, assignor, by mesne assignments, to J. W. Douglass, Philadelphia, Pa. Method of and apparatus for making roofing fabrics	427,146	May 6	190	49	51	849
Bormann, Hermann, assignor, by mesne assignments, to J. W. Douglass, Philadelphia, Pa. Apparatus for making roofing fabrics	427,147	May 6	192	50	51	849
Born, Henry, Cleveland, Ohio. Rotative fire-grate	421,378	Feb. 18	1407	364	50	846
Born, Henry, Cleveland, Ohio. Box-bending brake	437,829	Oct. 7	241	74	53	48
Borner, William, Chicago, Ill. Railway freight-car	421,379	Feb. 18	1408	{ 364 365 }	{ 50 50 }	846
Bornholdt, Adolph, Brooklyn, N. Y. Manufacture of incandescent electric lamps	441,127	Nov. 25	2416	625	53	1099
Bornholdt, Adolph, Brooklyn, N. Y. Incandescent electric lamp	441,128	Nov. 25	2417	626	53	1099
Bornstein, Henry, assignor of one-half to C. Green, Boston, Mass. Wrench	434,912	Aug. 26	2309	610	52	1233
Borntrager, Fredrick, St. Clair, Mich. Road-cart	438,258	Nov. 4	349	89	53	674
Borsch, John L., Philadelphia, Pa. Skin-protector for spectacle-templates	427,252	May 6	353	91	51	880
Bortee Manufacturing Company. (See Colley, George H., assignor.)						
Bosart, Timothy L. (See Stunkard, John R., assignor.)						
Bosch, Andreas, Prairie du Chien, Wis. Pruning implement	419,311	Jan. 14	1000	264	50	211
Bosche, Philip, Cortland, N. Y. Game	431,762	July 8	1147	286	52	233
Bosdevex, Edmond F., assignor, by mesne assignments, to J. W. Emerson, New York, N. Y. Truck for railway-cars	424,089	Mar. 25	2606	694	50	1654
Bosmann, Nicolas, Chicago, Ill. Detachable link	434,498	Aug. 19	1615	423	52	1092

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Boss Coulter Company. (See Cuthbertson, Joseph, assignor.)						
Boss, George W., Minneapolis, Minn. Electric railway signal	420,858	Feb. 4	633	163	50	683
Boss, George W., Minneapolis, Minn. Electric railway-signal	420,859	Feb. 4	636	164	50	684
Bossé, Adèle, Paris, France. Cosmetic	439,101	Oct. 28	2208		53	441
Bossert, William F., Ilion, N. Y. Magazine fuse-box for electric circuits	439,859	Nov. 4	343	89	53	674
Bossler, Joseph B., Middletown, and S. D. Stauffer, Marietta, Pa. Steam-generator	433,442	Aug. 5	12	4	52	759
Bostedo, Louis G., Atlantic, Iowa, assignor to Bostedo Package and Cash Carrier Company, Chicago, Ill. Store-service apparatus	426,406	Apr. 22	3015	790	51	614
Bostedo Package and Cash Carrier Company. (See Bostedo, Louis G., assignor.)						
Bostian, Charles P., Milton, assignor of one-half to J. F. Mecklev, Watsontown, Pa. Chisel	420,529	Feb. 4	146	36	50	592
Boston Cash Indicator and Recorder Company. (See Drew, William W., assignor.)						
Boston Cash Indicator and Recorder Company. (See Webster, Jerome J., assignor.)						
Boston Dental Manufacturing Company. (See Stoddard, Arthur H., assignor.)						
Boston & Lockport Block Company. (See Ferrall, Thomas R., assignor.)						
Boston Rubber Shoe Company. (See Bickford, Erskine F., assignor.)						
Boston, William G., David City, Nebr. Washing-machine	439,628	Nov. 4	13	4	53	609
Boston Woven Hose Company. (See Cowen, Robert, assignor.)						
Boston Woven Hose Company. (See Cowen and Beckwith, assignors.)						
Bostwick, Frederick R., Minneapolis, Minn. Hame-fastener	434,499	Aug. 19	1617	423	52	1092
Bostwick, Joseph M., Janesville, Wis. Marker for counters	437,967	Oct. 7	449	126	53	85
Boswell, Fletcher O., Jersey Shore, Pa. Nut-lock	432,014	July 15	1537	391	52	315
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Hose-coupling	418,906	Jan. 7	402	99	50	84
Bosworth, Charles B., Everett, assignor to Crosby Steam-Gage and Valve Company, Boston, Mass. Device for supplying feed-water to boilers	441,740	Dec. 2	173	46	53	1296
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Device for regulating feed-water	441,741	Dec. 2	174	46	53	1296
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Boiler-feeder	442,097	Dec. 9	739	200	53	1415
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Device for automatically regulating boiler feed-water	442,098	Dec. 9	740	200	53	1415
Bosworth, Charles F., Milford, Conn. Knockdown box	426,231	Apr. 22	2746	719	51	559
Bothwell, Charles L. (See Jones and Bothwell.)						
Bothwell, David, Hannibal, N. Y. Funnel	432,021	Mar. 11	1000	263	50	1334
Bothwell, William T. (See Boluss, Alfred K., assignor.)						
Botkowsky, Morris. (See Botkowsky, Sam. and M.)						
Botkowsky, Sam. and M., Chicago, Ill. Watch-balance staff	439,629	Nov. 4	14	4	53	609
Botsford, Frederick G., Erie, Pa., assignor of three-fourths to J. N. Hurst, West Dover, Ohio, and C. M. Bryant, Buffalo, N. Y. Hose	438,836	Oct. 21	1804	481	53	355
Botsford, George, New Haven, Conn. Hydrocarbon-oil vaporizer and burner	431,332	July 1	434	108	52	89
Botsford, William B., assignor of one-half to J. E. Wentz, Binghamton, N. Y. Folding chair	427,964	May 13	1429	361	51	1099
Botter, Jasper J., Mobile, Ala. Irrigator	429,994	June 10	1343	333	51	1741
Bottle Seal Company. (See Painter, William, assignor.)						
Bottlers' Specialty Company. (See La Casse and Wile, assignors.)						
Bottlers' Specialty Company. (See Wile and La Casse, assignors.)						
Bottomer, Turner D., assignor to J. B. Tibbits, Hoosick, N. Y. Insulating composition	439,796	Nov. 4	250		53	657
Bottomer, Turner D., assignor to J. B. Tibbits, Hoosick, N. Y. Desilverizing lead by electrolysis	442,661	Dec. 16	1608		53	1595
Bottomly, J. (See Sanford, George M., assignor.)						
Bottomoff, John L., and C. A. Conyers, Union Star, Mo. Corn-cultivator	442,946	Dec. 16	2123	546	53	1693
Bottsford, Russell. (See Mark, Charles E., assignor.)						
Bottsford, Russell, Cleveland, Ohio. Heating apparatus	419,817	Jan. 21	1741	461	50	366
Bouck, John M., Gouverneur, N. Y. Snow-plow	437,416	Sept. 30	3283	856 857	52	2030
Boudard, Marcel. (See Tuquet, Boudard, and Crawley.)						
Boughner, Joseph C., Paris, Ky. Wheel-plow	425,592	Apr. 15	1762	473	51	360
Boughton, John W. (See Snidow, John M., assignor.)						
Boughton, John W., Philadelphia, Pa. Screen	425,290	Apr. 8	1318	353	51	265
Boughton, John W., Philadelphia, Pa. Screen	426,232	Apr. 22	2747	720	51	559
Boughton, Mortimer E., Wauseon, Ohio. Gate	443,484	Dec. 23	3036	781	53	1879
Boughton, William, Mansfield, Ohio. Carriage-top	440,343	Nov. 11	1104	283	53	830
Bonis, William R., Washington, D. C. Indicator	426,103	Apr. 22	2560	673	51	521
Boule, Zephir E., Springfield, Mass. Attachment for lawn-mowers	438,340	Oct. 14	1023	278	53	201
Boulton, Wilfrid S., Birkenhead, county of Chester, England. Oil-testing machine	424,536	Apr. 1	152	44	51	32
Boulton, James B. D., Jersey City, N. J., assignor to Solid Ingot Company, of New Jersey. Forming steel ingots in sectional molds	440,097	Nov. 4	701	187	53	745
Boulton, James B. D., Jersey City, N. J., assignor to Solid Ingot Company, of New Jersey. Apparatus for casting tubular ingots	442,305	Dec. 9	1052	276	53	1474
Bounds, Thomas J. (See Blakeley, John, assignor.)						
Bourbon Copper and Brass Works. (See Bardo and Ford, assignors.)						
Bourhonnais, Louis A., et al. (See Lochr, Peter H., assignor.)						
Bourne, Edward, Allegheny, Pa. Filter	428,162	May 20	1715	434	51	1165
Bourne, John, Shepherd's Bush, England. Apparatus for obtaining motive power	442,793	Dec. 16	1852	478 479	53	1641
Bourne, John E., Somerville, Ohio. Gate	431,643	July 8	950	238	52	197
Bourne, Stephen N., Manchester, N. H. Picker-house for cotton-mills	433,642	Aug. 5	297	78	52	814
Bourne, Theodore F., et al. (See Chappell, George H., assignor.)						
Bourry, Julius A., Zurich, Switzerland. Sad-iron-heater	418,970	Jan. 7	494	123	50	104
Bousfield, Charlie J., Bay City, Mich. Ship-steering apparatus	441,638	Dec. 2	15	5	53	1265
Bousfield, Edward T. (See Bastin, Tom A., assignor.)						
Boussemaere, Hyppolite, Lake View, Ill. Picture-exhibitor	438,341	Oct. 14	1024	278 279	53	202
Boutell, Alexander A., Detroit, Mich. Tobacco-moistening device	428,065	May 20	1577	400	51	1138
Bouton, Nathaniel S., Chicago, Ill. Chill	421,899	Feb. 25	2154	565	50	998
Bouton, Nathaniel S., Chicago, Ill. Making sectional chills	421,900	Feb. 25	2156	565	50	998
Bouton, Nathaniel S., Chicago, Ill. Chuck for car-wheels	436,886	Sept. 23	2441	637	52	1862
Bouvier, Louis P., assignor of forty-five one-hundredths to T. J. Clark, Toronto, Ontario, Canada. Envelope-machine	422,286	Feb. 25	2730	719	50	1104
Bouvier, Louis P., Toronto, Ontario, Canada, assignor to S. Raynor & Co., New York, N. Y. Printing attachment for envelope-machines	432,785	July 22	2733	699 700	52	551
Bonvier, Louis P., and A. J. Phillips, Toronto, Ontario, Canada. Machine for covering card-board boxes with paper	422,285	Feb. 25	2727	718 719	50	1104
Bovee, David W., Tama, Iowa. Harvester	420,329	Jan. 28	2549	675	50	529
Bovee, David W., Tama, Iowa. Agricultural boiler	420,330	Jan. 28	2551	675	50	530

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Bovee, David W., Tama, Iowa. Harvester	420,376	Jan. 28	2616	694	50	541
Bow, Lafayette T., assignor of one-half to M. T. Pedigo and E. T. Murphy, Glasgow, Ky. Thill-supporter	441,350	Nov. 25	2792	722 337 338	53	1166
Bowden, James H., Wilkes-Barré, Pa. Bearing for car-wheels	419,494	Jan. 14	1263		50	266
Bowden, Joseph B., and H. V. Bernhardt, Brooklyn, N. Y.; said Bernhardt assignor to said Bowden. Rolling-machine for shaping and sizing rings	426,707	Apr. 29	3463	907	51	709
Bowden, Joseph B., and H. V. Bernhardt, Brooklyn, N. Y.; said Bernhardt assignor to said Bowden. Forming rings	432,365	July 15	2062	531	52	413
Bowden, Junius A., et al. (See Parrish, Myron W., assignor.)						
Bowden, Junius A., Detroit, Mich. Filter	429,112	June 3	7	2, 3	51	1474
Bowdish, Edward R. (See Bowdish, Nelson S. and E. R.)						
Bowdish, Nelson S. and E. R., Skaneateles, N. Y. Lawn-mower	433,318	July 29	3551	916	52	718
Bowdish, Nelson S. and E. R., Skaneateles, N. Y. Tubular boiler	440,872	Nov. 18	1989	512 513	53	1006
Bowe, Clarence E., Huron, S. D. Expansion-drill	434,241	Aug. 12	1208	314	52	1002
Bowe, George W., Detroit, Mich. Culinary device	435,962	Sept. 9	905	238	52	1555
Bowe, William H., Cincinnati, Ohio. Point-band for hubs	437,748	Oct. 7	110	34	53	24
Bowen, Alexander S., et al. (See Link, Harvey L., assignor.)						
Bowen, Evan H., assignor of two-thirds to L. A. Smith and J. H. Kruse, Akron, Ohio. Commutator-brush	428,038	May 13	1535	388	51	1121
Bowen, George M., Talbott, Tenn. Book-cover	425,291	Apr. 8	1318	353	51	265
Bowen, J. J., et al. (See Wheeler, Henry W., assignor.)						
Bowen, James H., Philadelphia, Pa. Mechanical movement	425,401	Apr. 15	1479	397	51	305
Bowen, James H., Philadelphia, Pa. Mechanical movement	425,738	Apr. 15	1994	531	51	405
Bowen, James H., Philadelphia, Pa. Toy	428,450	May 20	2162	543	51	1252
Bowen, James H., Philadelphia, Pa. Cigar-cutter	439,320	Oct. 28	2579	628	53	509
Bowen, John W., Jacksonville, Ill. Adjustable folding ironing-table	433,712	Aug. 5	400	103	52	833
Bowen, John W., Jacksonville, Ill. Lock for saw-bucks	437,850	Oct. 7	270	81	53	53
Bowen, John W., Jacksonville, Ill. Folding seat or commode	439,797	Nov. 4	250	64	53	657
Bowen, John W., Jacksonville, Ill. Machine for making eyebolts and hooks	439,809	Nov. 4	263	66, 67	53	659
Bowen, John W., Jacksonville, Ill. Folding chair	441,466	Nov. 25	2929	769	53	1203
Bowen, Joseph H., et al. (See Dean, Henry W., assignor.)						
Bowen, Joseph H., et al. (See Dean and Mundell, assignors.)						
Bowen, Lester W., Savanna, Ill. Sash-cord fastener	440,129	Nov. 11	760	199	53	766
Bowen, Thomas W., Philadelphia, Pa. Swing	437,014	Sept. 23	2619	624	52	1897
Bower, Albert C. and J. K., Waukegon, Ill. Weed-cutter for steam-launches	425,019	Apr. 8	912	242	51	125
Bower, Byron B., Bainbridge, Ga. Fluid-motor	422,495	Mar. 4	189	52	50	1172
Bower, Byron B., Bainbridge, Ga. Rotary engine	436,867	Sept. 23	2408	628	52	1855
Bower, George. (See Biddell, George A., assignor.)						
Bower, Giles W. (See Nutting, Parsons and Bower.)						
Bower, John F., assignor to O. D. Orvis, Chicago, Ill. Coin-controlled weighing and strength-testing machine	422,876	Mar. 4	762	194 195	50	1282
Bower, John F., assignor to Bower's Automatic Machine Company, Chicago, Ill. Coin-controlled testing and display apparatus	438,520	Oct. 14	1277	345 346	53	251
Bower, John K. (See Bower, Albert C. and J. K.)						
Bowerman, Albert C., Bloomfield, Ontario, Canada. Sewer-trap	427,546	May 13	788	196	51	977
Bowers, Alfred, and G. Pettit, Jr., Brooklyn, N. Y. Surface decoration	420,263	Jan. 28	2459	653	50	512
Bowers, Alfred, and G. Pettit, Jr., Brooklyn, N. Y. Interior decoration	420,293	Jan. 28	2504	664	50	520
Bower's Automatic Machine Company. (See Bower, John F., assignor.)						
Bowers, Byron, West Bowersville, Ga. Cotton-planter	440,787	Nov. 18	1851	477	53	981
Bowers, George W., Somerville, assignor of one-half to L. Ernst, Boston, Mass. Line-fastener	438,398	Oct. 14	1105	300	53	217
Bowers, Noah. (See Renner and Bowers.)						
Bowers, Sarah E. (See Bowers, William, assignor.)						
Bowers, Thomas M., Denton, Tex. Plev-slide	437,768	Oct. 7	149	46	53	31
Bowers, William, assignor to S. E. Bowers, New York, N. Y. Pipe-coupling	442,947	Dec. 16	2124	546 547	53	1694
Bowers, William F., San Francisco, Cal. Rotary joint	421,657	Feb. 18	1813	474	50	925
Bowers, William M., and W. Hamilton; said Hamilton assignor to J. A. Ball, Thornton, Ind. Well-drilling machine	420,004	Jan. 21	2038	537	50	424
Bowhall, Sam, Edmore, Mich. Kitchen-cabinet	429,602	June 10	761	183	51	1620
Bowing, John, London, county of Middlesex, England. Artificial fuel	422,907	Mar. 11	828		50	1302
Bowker, Albert R., and J. D. Millen, Winona, Minn. Fumigator	428,580	May 27	2911	715	51	1396
Bowker, William, Geneva, N. Y. Eyeglasses	440,392	Nov. 11	1189	306	53	847
Bowler, Giles, assignor of one-half to T. H. Shipway, Toronto, Canada. Wash-boiler	440,941	Nov. 18	2107	547	53	1030
Bowles, David, assignor of one-half to W. P. Hastings, Maryville, Tenn. Car-coupling	432,971	July 29	3023	777	52	612
Bowles, Frank I. (See Haight, James R., assignor.)						
Bowles, Samuel P., et al. (See Walter, David C., assignor.)						
Bowles, Robert C. M., Boston, Mass. Mechanical telephone	419,986	Jan. 21	2005	528	50	419
Bowley, Arthur S., London, England, assignor to Overman Wheel Company, Chicopee Falls, Mass. Tire for velocipedes	442,948	Dec. 16	2125	547	53	1694
Bowley, Joseph H., et al. (See Schermerhorn, Clarence M., assignor.)						
Bowling, Erasmus G., et al. (See Shaw, William C., assignor.)						
Bowman, Alexander H. (See Widdfield and Bowman.)						
Bowman, Charles M. (See Weaver, Isaac D., assignor.)						
Bowman, Daniel W., Toledo, Ohio. Washing-machine	425,563	Apr. 15	1717	460	51	352
Bowman, Ezra, Remington, Ind. Car-pusher or pinch-bar	425,855	Apr. 15	2167	577	51	438
Bowman, Ezra F. (See Wundes, John H., assignor.)						
Bowman, George W., Red Cliff, Colo. Fire-escape	443,388	Dec. 23	2883	741	53	1849
Bowman, Gideon M., Springdale, Ark. Cultivator	435,202	Aug. 26	2729	720	52	1312
Bowman, Henry, St. Joseph, Mo. Roller grinding-mill	421,658	Feb. 18	1813	475	50	925
Bowman, Henry, Louisville, Ky. Crow-bar	424,757	Apr. 1	500	135	51	97
Bowman, John D., Altoona, Pa. Valve	429,881	June 10	1177	292	51	1708
Bowman, Louis T., assignor to Capitol Manufacturing Company, Chicago, Ill. Bolt-threading machine	432,972	July 29	3025	777 778	52	613
Bowman, Louis T., assignor to Capitol Manufacturing Company, Chicago, Ill. Machine for molding bung-bushes	437,968	Oct. 7	450	127	53	86
Bowman, William, Battle Creek, Mich. Carpet-cleaning machine	427,827	May 13	1214	306	51	1059
Bowman, William, Atchison, Kans. Projectile	442,476	Dec. 9	1314	339	53	1526
Bowman, William H., South Solon, assignor of two-thirds to R. W. Jones and J. F. Smith, London, Ohio. Saw-set	438,093	Oct. 7	652	178	53	126
Bowmann, Louis. (See Schlesinger and Bowmann.)						
Bowne, Charles W., Miller, S. D. Bill-file	438,909	Oct. 21	1913	509	53	376

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Bowne, Newton S., Hastings Centre, and M. Chune, East Syracuse, N. Y. Railway-chair	422,180	Feb. 25	2553	675	50	1072
Bowne, Robert T., Benson, Md. Railway-signal	420,185	June 3	116	27	51	1494
Bowne, Robert T., Benson, Md. Railway-switch signal	441,351	Nov. 25	2793	722	53	1166
Bowron, Azalia, Chicago, Ill. Car-coupling	425,976	Apr. 22	2369	628	51	485
Bowser, Augustus. (See Bowser, Sylvanus P. and A.)						
Bowser, Sylvanus P. and A., Fort Wayne, Ind. Portable siphon	443,496	Dec. 30	3060	787	53	1893
Bowsher, Nelson P., South Bend, Ind. Table for balancing pulleys	433,643	Aug. 5	298	78	52	815
Boxer, Frederic N., Montreal, Quebec, Canada. Composition of matter	430,766	June 24	2616	-----	51	2005
Boxley, George, Troy, assignor of one-half to United Patent Company, New York, N. Y. Combined crimping-wheel and turn-down folding attachment for sewing-machines	433,930	Aug. 12	732	190	52	910
Boyce, Charles F., Sterling Bush, N. Y. Folding box	437,769	Oct. 7	150	46	53	31
Boyce, Elias H., Canandaigua, N. Y. Gate	437,085	Sept. 23	2720	710	52	1917
Boyd, Charles N. (See Ratchford and Evans, assignors.)						
Boyd, James, St. Paul, Minn. Hoisting-machine	437,810	Oct. 7	212	65	53	43
Boyd, James, St. Paul, Minn. Ear-trumpet	438,369	Oct. 14	1065	290	53	210
Boyd, James, St. Paul, Minn. Hoisting apparatus	441,742	Dec. 2	176	47	53	1297
Boyd, James, St. Paul, Minn. Hoisting-machine	443,719	Dec. 30	3412	876	53	1958
Boyd, James A. (See White and Boyd.)						
Boyd, James A., and B. C. White, assignors to Chisholm, Boyd & White, Chicago, Ill. Clay-pulverizing machine	440,537	Nov. 11	1431	369	53	893
Boyd, John, Elmhurst, Ill. Making butter	429,186	June 3	119	28	51	1494
Boyd, John, Elmhurst, Ill. Making butter	429,187	June 3	120	28	51	1494
Boyd, John B., et al. (See Schilling, Joseph, assignor.)						
Boyd, Maria W., Londonderry, N. H. Bread, cake, and pie protector	419,177	Jan. 14	799	211	50	172
Boyd, Nathaniel W., Carlisle, Pa. Spring railway-frog	435,727	Sept. 2	538	143	52	1479
Boyd, Nathaniel W., Carlisle, Pa. Automatic switch-stand	435,728	Sept. 2	540	143	52	1479
Boyden Brake Company of Baltimore City. (See Boyden, George A., assignor.)						
Boyden, George A., assignor to Boyden Brake Company of Baltimore City, Baltimore, Md. Locomotive-driver brake	437,171	Sept. 23	2883	750	52	1946
Boyden, George A., assignor to Boyden Brake Company of Baltimore City, Baltimore, Md. Pump-governor	442,568	Dec. 9	1470	377	53	1557
Boyden, James W., et al. (See Young, Charles, assignor.)						
Boydston, Benjamin S., Clunette, Ind. Stethoscope	438,521	Oct. 14	1281	346	53	252
Boyer, Charles H. (See Sweeney, Peter, assignor.)						
Boyer, Charles T., Franklin, Ind. Churn	421,065	Feb. 11	961	247	50	755
Boyer, Cyrus C., Waterloo, Ind. Swinging gate	427,148	May 6	195	50	51	850
Boyer, Edward C., Dayton, Ohio. Disk harrow	420,403	Jan. 28	2656	704	50	549
Boyer, Edward C., Dayton, Ohio. Disk harrow	441,054	Nov. 18	2279	591	53	1063
Boyer, Israel D., Dayton, Ohio. Cash register and indicator	442,851	Dec. 16	1954	503 504	53	1661
Boyer, Israel D., and F. Ham, assignors to National Cash Register Company, Dayton, Ohio. Cash register and indicator	436,573	Sept. 16	1867	491 492	52	1744
Boyer, Israel D., Dayton, Ohio, and J. D. Riggs, Guelph, Ontario, Canada, assignors to National Cash Register Company, Dayton, Ohio. Cash register and indicator	422,287	Feb. 25	2731	719 720	50	1104
Boyer, Jerome L., Reading, Pa. Apparatus for loading pig-iron	423,548	Mar. 18	1788	470	50	1491
Boyer, John A., and G. E. Bentley, Burr Oak, Kans. Listing-harrow	427,731	May 13	1060	266	51	1030
Boyer, John J., assignor to American Writing Machine Company, Hartford, Conn. Type-writing machine	428,264	May 20	1876	471	51	1197
Boyer, Joseph, St. Louis, Mo. Apparatus for making glass bottles	428,712	May 27	2569	651	51	1347
Boyer, Leon, New Orleans, La. Diffusion apparatus	428,569	May 27	2370	602	51	1312
Boyes, Francis B., Vienna, Austria-Hungary. Piano-key lever	442,166	Dec. 9	846	227	53	1435
Boylan, John J., New Haven, Conn. Corset	427,828	May 13	1215	306	51	1059
Boylan, Patrick, Mossville, Ill. Potato-digging machine	419,495	Jan. 14	1268	338	50	267
Boyle, Homer L. (See Moulton and Boyle.)						
Boyle, James E., Brooklyn, N. Y. Water-closet bowl and trap	423,092	Mar. 11	1000	263	50	1334
Boyle, James E., Brooklyn, N. Y. Flushing-tank	439,630	Nov. 4	15	4, 5	53	609
Boynton, Charles S. (See Bennett and Boynton.)						
Boynton, Eben M., West Newbury, Mass. Railway	424,168	Mar. 25	2715	723 724	50	1675
Boynton, Eben M., West Newbury, Mass. Electric-conductor support and protector	427,221	May 6	300	77	51	871
Boynton, Eben M., West Newbury, Mass. Letter-box	439,631	Nov. 4	19	5	53	610
Boynton, Eben M., West Newbury, Mass. Bicycle passenger-car	439,770	Nov. 4	210	54, 55	53	650
Boynton, Eben M., West Newbury, Mass. Railway-car	442,508	Dec. 9	1373	352	53	1538
Boynton, Ervin G., and A. G. Brown, La Crosse, Wis. Draft-equalizer	431,547	July 8	798	199	52	167
Boynton Furnace Company. (See Wodell, Joseph, assignor.)						
Boynton, George O., Boston, assignor of one-half to G. K. Littlefield, Newton, Mass. Spool or hobbin	433,885	Aug. 5	666	173	52	887
Boynton, Newell M., assignor to E. P. Carpenter Company, Brattleborough, Vt. Organ stop-action	443,426	Dec. 23	2936	755	53	1859
Boynton, William J., Danvers, Mass. Combined ruler and ink-pad	436,887	Sept. 23	2442	638	52	1863
Boys, Porter & Company. (See Evans, David, assignor.)						
Boyum, John S., Mayville, N. D., assignor to V. P. Travers, New York, N. Y. Hammock-support	435,793	Sept. 2	639	169	52	1498
Bozzell, George W. (See George, Albert F., assignor.)						
Braack, John. (See Wiese and Braack.)						
Braatz, August. (See Radant, August F., assignor.)						
Brabson, Tom. (See Booth and Brabson.)						
Braze, Clinton H. (See Blake, Thomas J., assignor. (Reissue.)						
Braze, De Witt B., Lincoln, Neb. Dynamo-electric machine	421,479	Feb. 18	1544	399	50	873
Braze, De Witt B., Lincoln, Neb. Dynamo-electric machine	427,294	May 6	411	106	51	892
Braze, Delos R. (See Cash and Braze.)						
Brackett, Edgar T. (See Gailor, William H., assignor.)						
Brackett, Frank A., Whitman, Mass. Guide for sewing-machines	440,302	Nov. 11	1043	268	53	820
Brackett, William H., Somerville, Mass. Whetstone-holder	427,965	May 13	1430	361	51	1099
Brackney, William J., Coyleville, Pa. Washing-machine	431,323	July 1	435	108	52	89
Bradburn, Henry D. (See Taylor and Bradburn.)						
Bradburn, Joseph A. (See Pennock and Bradburn.)						
Bradbury, Benjamin B., Brooklyn, N. Y. Banjo	443,159	Dec. 23	2497	639	53	1772
Bradbury, John M. (See Griswold and Bradbury.)						
Bradbury, Joseph Y., and F. J. Stone, Lowell, Mass. Electrode for secondary batteries	441,818	Dec. 2	302	81	53	1323
Bradfield, Isaac, Pomeroy, Ohio. Car-coupling	427,222	May 6	301	77	51	871
Bradford, Charles K., Lynnfield, Mass. Fishing-line attachment	422,331	Feb. 25	2802	737	50	1118
Bradford, Charles W., assignor of one-half to E. Cornforth, Thordike, Me. Street or station indicator	441,787	Dec. 2	250	66, 67	53	1313

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Bradford, Chester, assignor to L. D. Railsback, Indianapolis, Ind. Machine for making ice, &c.	422,565	Mar. 4	289	74	50	1191
Bradford, Cornelius F., assignor of one-half to N. Morton, Plymouth, Mass. Machine for winding cotton, &c., upon cores.	438,910	Oct. 21	1915	509	53	376
Bradford, Eugene S., Springfield, Ill. Dial-printing machine	424,851	Apr. 1	647	171	51	125
Bradford, Eugene S., Springfield, Ill. Dial-printing machine	441,129	Nov. 25	2418	626	53	1099
Bradford, George E. (See Case, Hiram A., assignor.)						
Bradford, Horace C., Milwaukee, Wis. Adjustable trap	423,409	Mar. 18	1587	417	50	1454
Bradford, Horace C., Milwaukee, Wis. Pipe-die	423,410	Mar. 18	1588	417	50	1454
Bradford, John F., Leetonia, Pa. Steam liquid-heater	418,939	Jan. 7	455	{ 111 112 }	50	95
Bradford, Julien M., Portland, Me. Maintaining a uniform current in electric circuits	429,333	June 3	351	83, 84	51	1538
Bradford, Lewis E., Howard, Kans. Fastening for gates	429,995	June 10	1345	333	51	1742
Bradford Mill Company. (See Muller, Edward A., assignor.)						
Bradley, Alfred. (See Gill and Bradley.)						
Bradley, Allen B., St. Armand, Quebec, Canada. Cooling apparatus for horse-powers.	429,996	June 10	1346	334	51	1742
Bradley, Arthur C. (See Bradley, Stephen R. and A. C.)						
Bradley, Arthur C., Brooklyn, N. Y. Making white lead	434,623	Aug. 19	1809	473	52	1131
Bradley, Arthur R. (See Blackwood and Bradley.)						
Bradley, Charles J., Westfield, Mass. Whip	423,725	Mar. 18	2058	543	50	1542
Bradley, Charles S., Yonkers, N. Y. Thermo-electric generator	420,764	Feb. 4	465	{ 123 124 }	50	655
Bradley, Charles S., Yonkers, N. Y. Alternating-current generator and motor	438,602	Oct. 21	1405	380	53	282
Bradley, Charles S., Yonkers, N. Y. Electric motor	438,603	Oct. 21	1406	381	53	283
Bradley, Charles S., Yonkers, N. Y. Electric motor	439,102	Oct. 28	2208	{ 592 593 }	53	441
Bradley, Christopher C., Syracuse, N. Y. Screw-nut	431,324	July 1	438	108	52	90
Bradley, Christopher C., Syracuse, N. Y. Road-cart	432,595	July 22	2409	621	52	490
Bradley, Clifford R. (See Ireland and Bradley.)						
Bradley, Edward. (See Crane, Thomas S., assignor.)						
Bradley, Edward, and D. Gallagher, Clinton, Iowa. Ice-cutting machine	433,713	Aug. 5	490	103	52	833
Bradley, Frank S., and J. P. Lavigne, New Haven, Conn. Staple-stitching machine.	438,399	Oct. 14	1106	{ 301 302 }	53	218
Bradley, Frank S., and J. P. Lavigne, New Haven, Conn. Clutch mechanism for staple stitching-machines.	442,477	Dec. 9	1315	340	53	1526
Bradley, Frederick A., New Haven, Conn. Carriage-door	424,701	Apr. 1	409	107	51	81
Bradley, Herbert T., Detroit, Mich. Cash-register	434,374	Aug. 12	1407	{ 369 370 }	52	1042
Bradley & Hubbard Manufacturing Company. (See Evarts, Charles A., assignor.)						
Bradley & Hubbard Manufacturing Company. (See Jauch, Joseph, assignor.)						
Bradley & Hubbard Manufacturing Company. (See Patitz, Albert, assignor.)						
Bradley, J. Harley. (See Packer and Gaede, assignors.)						
Bradley, James J., assignor to Edison Lamp Company, Harrison, N. J. Incandescent-lamp socket	425,741	Apr. 15	1998	532	51	406
Bradley, Jay L., St. Louis, Mo., assignor of two-thirds to J. W. Turner, J. E. Blythe, J. A. St. John, C. E. Carroll, J. F. Wangler, J. S. White, and B. Kimball. Closing and sealing device for discharge-openings of fire-extinguishers.	421,347	Feb. 11	1358	352	50	829
Bradley, John. (See Burdett and Bradley.)						
Bradley, John, assignor to Byfield Manufacturing Company, Chelmsford, Mass. Collarette-knitting machine	442,167	Dec. 9	347	227	53	1436
Bradley Manufacturing Company, David. (See Packer, John F., assignor.)						
Bradley, Peter T., Kansas City, Mo. Horse-collar fastener	431,548	July 8	799	199	52	167
Bradley, Richard, assignor of one-half to J. Paronito, Ashland, Wis. Force-pump	436,300	Sept. 9	1421	371	52	1654
Bradley, Robert D., Preston, Md. Air-carburetor	423,898	Mar. 25	2316	611	50	1599
Bradley, Stephen R. and A. C., Brooklyn, N. Y. Apparatus for manufacturing oxides of metals.	425,292	Apr. 8	1319	353	51	265
Bradley, William, St. Louis, Mo. Catarrh remedy	440,461	Nov. 11	1305		53	869
Bradley, William H., Allegheny, Pa. Gas burning and heating apparatus	424,852	Apr. 1	648	171	51	126
Bradley, William H., Mingo Junction, Ohio. Cinder-car	435,478	Sept. 2	142	40	52	1402
Bradshaw, Arthur T., Williamette, Conn. Puzzle	427,392	May 6	542	137	51	919
Bradshaw, Charles H., et al. (See Monto, Joseph, assignor.) (Reissue.)						
Bradshaw, Douglas, Rockport, and J. M. Ashley, Boonville, Ind. Apparatus for vaporizing and burning hydrocarbon oils	437,969	Oct. 7	454	127	53	86
Bradshaw, George, Decatur, Ill. Hook	439,997	Nov. 4	566	149	53	718
Bradshaw, Harry. (See Crane and Bradshaw.)						
Bradstreet, George S. (See Thisell and Bradstreet.)						
Bradt, Charles E., et al. (See Pringle, Eugene, assignor.)						
Bradt, Charles E., et al. (See Whitney, Edmund B., assignor.)						
Brady, Bernard B. (See McCanna and Brady.)						
Brady, Charles N., Washington, Pa. Apparatus for making glass vessels	428,713	May 27	2570	651	51	1347
Brady, Frank, et al. (See McGlinchey, Charles E., assignor.)						
Brady, Frank, Denver, Colo. Tire for railway-tricycles	427,663	May 13	950	239	51	1008
Brady, Frank, San Quentin, assignor to W. R. Thomas and R. Arnold, Alameda, Cal. Device for cleaning tubes	430,767	June 24	2617	641	51	2005
Brady, James, Brooklyn, N. Y., assignor to Fitch Type Writer Company, Des Moines, Iowa. Type-writing machine	431,869	July 8	1323	331	52	266
Brady, James, Brooklyn, N. Y., assignor to Fitch Type Writer Company, Des Moines, Iowa. Type-writer	439,998	Nov. 4	567	{ 149 150 }	53	718
Brady, James, Brooklyn, N. Y., assignor to Latimer Cash Register Company, Detroit, Mich. Cash-register	435,052	Aug. 26	2509	663	52	1270
Brady, James, and J. R. Vellacott, Brooklyn, N. Y., assignors to Fitch Type-Writer Company, Des Moines, Iowa. Type-writing machine	426,360	Apr. 22	2920	768	51	596
Brady, John W., et al. (See Marsh, Leonardo M., assignor.)						
Brady, Thomas, South Chicago, Ill. Device for handling ingots	440,219	Nov. 11	900	{ 232 233 }	53	795
Brady, Thomas H., New Britain, Conn. Windlass	421,480	Feb. 18	1545	399	50	873
Brady, Thomas H., New Britain, Conn. Pulley attachment for electric lamps	437,883	Oct. 7	319	94	53	63
Brady, Thomas H., New Britain, Conn. Pulley attachment for electric lamps	442,415	Dec. 9	1225	316	53	1508
Brady, William B., Austin, Tex. Nail-driving tool	432,113	July 15	1687	433	52	344
Brady, William H., Belleville, Canada. Handle for brakemen's lamps	442,852	Dec. 16	1961	504	53	1662
Brady, William W., Geneseo, N. Y. Bean-planter	443,816	Dec. 30	3568	914	53	1990
Braggins, Seth, Rochester, N. Y., assignor to W. S. King, Minneapolis, Minn. Lasting-machine	437,884	Oct. 7	320	94	53	63
Braggins, Seth, Rochester, N. Y., assignor to W. S. King, Minneapolis, Minn. Lasting-machine	443,351	Dec. 23	2828	{ 727 728 }	53	1838

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Brainard, Adelbert M., assignor to J. Cox, Chicago, Ill. Box-closure	439,632	Nov. 4	19	5	53	610
Brainard, Curtis B., Joliet, Ill. Machine for making bale-ties	419,917	Jan. 21	1903	501	50	399
Braithwaite, Charles H., Ardmore, Pa. Lawn-mower	435,389	Sept. 2	12	4	52	1377
Brake, Archibald, Toronto, Ontario, Canada. Water-heater	422,288	Feb. 25	2733	720	50	1105
Brakey, Robert E., Ventura, Cal. Drop-regulating attachment for seed-planters	440,736	Nov. 18	1756	452	53	965
Bramble, Cyrus, Lodi, N. Y. Combined tool	433,319	July 29	3553	917	52	719
Bramble, William H., Decatur, Ill., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Padlock	418,884	Jan. 7	361	87	50	76
Brampton, Charles H., Birmingham, England. Drive-chain	439,466	Oct. 28	2798	745	53	549
Bramwell, William, Toledo, Ohio. Pipe-coupling	436,574	Sept. 16	1872	492	52	1745
Branagan, John E., and A. Martineau, Boston, Mass. Toy hoop	418,885	Jan. 7	362	87	50	76
Branch, Emma L., administratrix. (See Branch, Jesse M.)						
Branch, Jesse M., deceased, Gaylord, Mich.; E. L. Branch, administratrix. Shifting eccentric	425,293	Apr. 8	1321	353	51	266
Branch, L. C. (See Houghton, Stephen C., assignor.)						
Brand, Lewis, Bozrahville, Conn. Shuttle-operating mechanism for looms	419,818	Jan. 21	1741	461	50	366
Brandau, Adam E. (See Mayhew and Brandau.)						
Brandeis, Fanny M., et al. (See Brandeis, Louis, assignor.)						
Brandeis, Louis, assignor to F. M. Brandeis, Spencer, and H. C. Robertson, Elmira, N. Y. Fan-cock stop-cock	433,320	July 29	3554	917	52	719
Brandenburg, Edward A., assignor of one-half to W. F. Carson, Des Moines, Iowa. Type-bar for type-writing machines	420,005	Jan. 21	2040	538	50	425
Brandenburg, Fowler A., Vandalia, Ohio. Toy gun	437,770	Oct. 7	151	47	53	31
Brandon, James, New York, N. Y. Piston packing-ring	426,634	Apr. 29	3352	878	51	688
Brandon, Rufus L., et al. (See Bullock, Henry P., assignor.)						
Brands, Lafayette M., assignor of one-half to E. N. Black, Belmont, N. Y. Wagon-brake	426,759	Apr. 29	3548	926	51	726
Brandt, Andrew G. and G. D., Scranton, Pa. Hod	433,321	July 29	3556	917	52	719
Brandt, Edward J., Watertown, Wis. Adjustable arm-rest	432,786	July 22	2736	701	52	552
Brandt, George D. (See Brandt, Andrew G. and G. D.)						
Brandt, Henry, Brooklyn, N. Y. Combined match-safe, pin-cushion, and trap	439,467	Oct. 28	2799	746	53	549
Brandt, John L., Terre Haute, Ind. Bath-heater	432,596	July 22	2410	621	52	490
Brandt & Wilde. (See Heinrich, Hermann, assignor.)						
Brandt, William. (See Diehl and Brandt.)						
Brandwood, Edward, assignor to J. G. Carson, Philadelphia, Pa. Railway cross-tie	442,416	Dec. 9	1226	317	53	1506
Brann, Alexander T. and A. W., Dayton, Nev. Wrench	433,558	Aug. 5	173	46	52	790
Brann, Alexander T. and A. W., Dayton, Nev. Wagon-jack	436,594	Sept. 16	1902	499	52	1750
Brann, Augustus W. (See Brann, Alexander T. and A. W.)						
Brannen, D. J. (See Thorp, Thomas J., assignor.)						
Brannen, D. J., et al. (See Thorp, Thomas J., assignor.)						
Branner, Bernard, New York, N. Y. Album and support for the same	440,462	Nov. 11	1306	338	53	869
Brannum, William S., et al. (See Jackson, Lewis P., assignor.)						
Branson, Bryan, Grantham, assignor to E. C. Blackstone, Stamford, England. Mowing-machine	436,912	Sept. 23	2484	{ 649 650 }	52	1870
Bransen, James L. (See Dow, Frank L., assignor.)						
Branson, James L. (See Kern, James S., assignor.)						
Brant, Thornt. A. (See Catlett and Brant.)						
Branton, Robert H. (See Holland, Albert L., assignor.)						
Braren, Edward F., Fernwood, Ill. Curtain	443,981	Dec. 30	3822	974	53	2038
Bratton, Paul R. (See Hoke, Quinton J., assignor.)						
Braubach, Louis. (See Regensteiner and Braubach.)						
Brault, Pierre L., St. Johns, Quebec, Canada. Remedy for dyspepsia	432,366	July 15	2063		52	413
Brann, August J., Pittsburg, Pa. Machine for pointing and threading bolts	427,732	May 13	1061	{ 266 267 }	51	1030
Braun, Carl, Königsberg, Prussia, Germany, assignor to F. W. Hoffman, Albany, N. Y. Clock striking mechanism	420,006	Jan. 21	2041	538	50	425
Braun, Henry, et al. (See Ellis, Josiah W., assignor.)						
Braun, John, Philadelphia, Pa. Holder for brace-rings of knife-cylinders	420,714	Feb. 4	398	{ 105 106 }	50	642
Braun, John, Philadelphia, Pa. Holder for knife-cylinder ends	420,715	Feb. 4	399	106	50	643
Braunfeld, Henry E., Allegheny, Pa. Power-transmitting mechanism for velocipedes	428,881	May 27	2813	715	51	1397
Braunsdorf, Henry R., New York, N. Y. Saw-set	425,742	Apr. 15	1998	533	51	406
Bray, James B., Waverly, N. Y. Hair-curler	426,907	Apr. 29	3754	980	51	767
Bray, Mellen. (See Bertrand, Joseph E., assignor.)						
Bray, Mellen. (See Clifford, Patrick, assignor.)						
Bray, Mellen, Newton, Mass. Rivet	421,659	Feb. 18	1815	475	50	925
Bray, Mellen N. (See McClintock, George W., assignor.)						
Bray, Mellen N., Boston, Mass. Rivet-setting machine	420,264	Jan. 28	2461	653	50	512
Bray, Mellen N., Brookline, Mass. Machine for forming rivets	436,332	Sept. 16	1474	384	52	1672
Bray, Mellen N., Brookline, and E. M. Pope, Quincy, Mass.; said Pope assignor to said Bray. Shoe-buckle	421,660	Feb. 18	1816	475	50	925
Bray, Mellen N., Brookline, E. M. Pope, and A. H. Taber, Quincy, Mass.; said Pope and Taber assignors to said Bray. Rivet-setting machine	441,388	Nov. 25	2851	736	53	1178
Bray, Morris P., Ansonia, Conn. Dress-stay	440,246	Nov. 11	945	243	53	804
Bray, Morris P., Ansonia, Conn., assignor to D. H. Fanning, Worcester, Mass. Button-hole strip	421,544	Feb. 18	1650	427	50	892
Bray, Morris P., Ansonia, Conn., assignor to D. H. Fanning, Worcester, Mass. Corset-waist	432,787	July 22	2738	701	52	552
Bray, Morris P., Ansonia, Conn., assignor to Worcester Corset Company, Worcester, Mass. Making button-hole pieces	425,533	Apr. 15	1677	447	51	344
Bray, Morris P., Ansonia, Conn., assignor to A. Fellheimer, New York, N. Y. Button-hole strip	430,987	June 24	2956	726	51	2069
Bray, Robert V., et al. (See Trump, John G., assignor.)						
Bray, Simeon L., assignor of one-half to B. Gugenheim, Evansville, Ind. Combined jug handle and stopper	418,940	Jan. 7	457	112	50	96
Bray, Stephen T. J., Moscow, Russia. Apparatus for burning hydrocarbon oils	441,467	Nov. 25	2990	769	53	1203
Bray, Thomas J., Warren, Ohio. Machine for drawing cold-metal rods or shafts	435,992	Sept. 9	949	249	52	1564
Bray, Thomas J., assignor of one-half to Paige Tube Company, Warren, Ohio. Machine for cold-rolling metallic pipe	440,130	Nov. 11	761	{ 199 200 }	53	767
Bray, Thomas J., assignor of one-half to Paige Tube Company, Warren, Ohio. Machine for cold-drawing metallic pipe	441,927	Dec. 2	459	123	53	1354
Bray, Thomas J., assignor of one-half to Paige Tube Company, Warren, Ohio. Process of and apparatus for making couplings for wrought-iron pipe	442,604	Dec. 16	1533	395	53	1578
Bray, Thomas J., assignor of one-half to Paige Tube Company, Warren, Ohio. Die for forging pipe-coupling blanks	442,605	Dec. 16	1534	396	53	1578

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Bray, Thomas J., assignor of one-half to Paigo Tube Company, Warren, Ohio. Rolls for rolling skelps for making pipe-couplings.	442,606	Dec. 16	1534	396	53	1579
Bray, William C., Newton, Mass. Rivet.	425,294	Apr. 8	1322	354	51	266
Bray, William C., Newton, Mass. Rivet.	428,824	May 27	2733	694	51	1379
Bray, William C., Newton, Mass. Rivet.	428,825	May 27	2734	694	51	1379
Bray, William C., Newton, Mass. Making pronged rivets.	428,826	May 27	2735	694	51	1380
Bray, William C., Newton, Mass. Lacing-hook.	433,162	July 29	3327	861	52	672
Bray, William C., Newton, and G. Van Horne, East Milton, Mass., assignors to Tubular Rivet Company, New Haven, Conn. Rivet-setting machine.	429,334	June 3	356	84	51	1538
Brayer, George E. (See Butler, Maguler, assignor.)						
Brayton, George B., Exeter, N. H. Gas and air engine.	432,114	July 15	1688	434 435	52	345
Brayton, George B., Boston, Mass. Hydrocarbon-engine.	432,260	July 15	1907	489 490	52	385
Brecher, Arnold. (See Frey, Marie, assignor.)						
Bredeen, Louis, and A. Morrison, Oklahoma City, Oklahoma Ter. Refrigerator.	432,722	July 22	2625	671	52	531
Bredel, Frederick, New York, N. Y. Apparatus for charging retorts.	440,617	Nov. 18	1568	403	53	927
Bredenberg, Alfred, Brooklyn, assignor to C. W. Lovell, New York, N. Y. Book-binding machine.	428,741	May 27	2610	662	51	1355
Bredenber, Alfred, Brooklyn, assignor, by mesne assignments, to W. A. Bingham, New York, N. Y. Paper-bag machine.	429,007	May 27	2993	768 769 770 771	51	1432
Breed, David R., Chicago, Ill. Combination-lock.	443,218	Dec. 23	2611	672	53	1797
Breed, George, U. S. Navy. Method of and apparatus for producing musical sounds by electricity.	435,679	Sept. 2	472	124 125	52	1466
Breese, Charles P., New York, N. Y. Arc lamp.	428,066	May 20	1578	400	51	1138
Brega, Charles W. (See O'Brien, Edward J., assignor.)						
Bréher, Frank, Wadena, Minn. Fire-bowl for blacksmiths' forges.	421,901	Feb. 25	2156	566	50	998
Bremer, Max, New Bedford, Mass. Casket-handle.	442,949	Dec. 16	2126	547	53	1694
Bremer, William G., St. Louis, Mo., assignor to United Electric Improvement Company, Gloucester City, N. J. Cut-out for electric lamps.	435,029	Aug. 26	2473	655	52	1264
Bremer, William G., St. Louis, Mo., assignor to United Electric Improvement Company, Gloucester City, N. J. High-resistance-shunt compound.	435,030	Aug. 26	2475		52	1264
Bremer, William G., St. Louis, Mo., assignor to United Electric Improvement Company, Gloucester City, N. J. High-resistance compound.	443,497	Dec. 30	3061		53	1893
Bremer, William G., St. Louis, Mo., assignor to United Electric Improvement Company, Gloucester City, N. J. High-resistance compound.	443,565	Dec. 30	3163		53	1912
Brenand, Spire, assignor to himself and M. and M. Wise, New York, N. Y. Heel-shaping machine.	436,208	Sept. 9	1291	336 337	52	1627
Brendecke, Adolph C., Chicago, Ill. Oil-finish for photographs.	429,558	June 3	688		51	1604
Brendel, Robert A. (See Currier and Brendel.)						
Brener, Louis A., Sandwich, Ill. Mechanical movement for converting motion.	425,534	Apr. 15	1678	448	51	344
Brenizer, Orson W., assignor of one-half to F. E. A. Stauff, Z. D. Goodell, and T. H. Pressnell, Duluth, Minn. Railway-switch.	433,975	Aug. 12	802	209 210	52	921
Brennahan, Royal, Francesville, Ind. Weather-strip.	435,658	Sept. 2	442	118	52	1459
Brennan, Daniel, Jr., Bayonne, N. J. Crushing-rolls.	442,764	Dec. 16	1806	468	53	1631
Brennan, Daniel, Jr., Bayonne, N. J. Apparatus for reducing ores.	442,765	Dec. 16	1809	469	53	1632
Brennan, Daniel, Jr., Bayonne, N. J. Feed-regulator for roller-mills.	442,766	Dec. 16	1811	469	53	1632
Brennan, Dennis, J. Jones, and E. Goldthwait, Elkhart, Ind.; said Brennan assignor to said Jones and Goldthwait. Railway-rail joint.	435,729	Sept. 2	542	143	52	1480
Brennan, James B., assignor of one-half to J. J. Brennan, St. Louis, Mo. Unwelded lock-brace strap for boiler-heads.	438,522	Oct. 14	1282	347	53	252
Brennan, John J. (See Brennan, James B., assignor.)						
Brennan, Nicholas, assignor of one-half to L. P. Lawrence, East Boston, Mass. Corn-husking machine.	434,654	Aug. 19	1877	491	52	1143
Brennan, Patrick H. (See Leighton and Brennan.)						
Brennan, William N., St. Louis, Mo. Seal-lock.	432,723	July 22	2626	672	52	531
Brennen, George J., Lynn, assignor to E. Frost, Lisleton, and A. W. Tufts, Boston, Mass. Connector for electric conductors.	438,400	Oct. 14	1116	302	53	219
Brenner, John G., Fond du Lac, Wis. Vehicle-axle.	424,169	Mar. 25	2716	724	50	1675
Brenowitz, Abraham, assignor to Kesner & Co., New York, N. Y. Frame for pockets.	432,224	July 15	1858	477	52	376
Breon, George B., et al. (See Welteroth, Henry J., assignor.)						
Bresch, Richard, Leipsic, Saxony, Germany. Watch-chain attachment.	427,664	May 13	952	239 240	51	1009
Bresnahan, Cornelius, assignor of one-half to M. A. McGowan, Detroit, Mich. Fire-escape.	441,819	Dec. 2	303	82	53	1323
Bresnahan, Maurice V. (See Heys, John J., assignor.)						
Breth, Robert L., Homer City, Pa. Car-coupling.	434,315	Aug. 12	1322	344	52	1025
Bretherton, Sidney E., and F. C. Mason, Leadville, Colo. Vehicle for conveying slag-pots.	441,788	Dec. 2	251	67	53	1313
Bretland, Alfred L., Fremont, assignor to W. R. Anderson, Tiffin, Ohio. Laterally-adjustable vise for bolt-cutting machines.	430,825	June 24	2711	664	51	2022
Brettney, Eugene. (See Bevin, John F., assignor.)						
Brettney, Eugene, Indianapolis, Ind. Dust-collector.	438,523	Oct. 14	1284	347	53	253
Brett, Henry E. (See Angerer and Brett.)						
Brett, John R., Oakland, Cal. Feed-rod for ore stamp-mills.	424,264	Mar. 25	2836	758	50	1699
Brett, Victor, Bangor, Me. Car-coupling.	442,853	Dec. 16	1962	504	53	1663
Brett, William P., Decatur, Ill. Target-trap.	434,077	Aug. 12	943	248	52	951
Brett, William P., Decatur, Ill. Target-trap.	434,078	Aug. 12	945	248	52	951
Breuer, George F., Humeston, Iowa. Punching-machine.	423,119	Mar. 11	1152	300	50	1362
Breul, Richard A., assignor to Bridgeport Chain Company, Bridgeport, Conn. Chain attachment.	428,798	May 27	2689	682	51	1371
Breul, Richard A., assignor to Bridgeport Chain Company, Bridgeport, Conn. Snap-hook.	428,799	May 27	2690	683	51	1371
Breul, Richard A., assignor to Bridgeport Chain Company, Bridgeport, Conn. Swivel.	439,860	Nov. 4	344	89	53	674
Breuscher, Christoph, Plano, assignor to Plano Manufacturing Company, Chicago, Ill. Grain-binder.	433,644	Aug. 5	299	79	52	815
Brevard, James W. (See Vance and Brevard.)						
Brewer, Charles W., assignor of one-half to M. Shiel, Racine, Wis. Sash-holder.	431,870	July 8	1324	332	52	267
Brewer, George, Jr., et al. (See Gray, Theo., assignor.)						
Brewer, George S., Athol, Mass. Cradle.	430,616	June 24	2355	576	51	1954
Brewer, Gilbert T., Hoboken, N. J., assignor to Combination Stove and Water Heater Company, of Jersey City. Hot-water attachment for stoves.	422,496	Mar. 4	191	52	50	1172
Brewer, Horatio J., New York, N. Y. Galvanic battery.	432,973	July 29	3030	778	52	614
Brewer, Horatio J., New York, N. Y. Electric-battery connection.	441,130	Nov. 25	2419	627	53	1099
Brewer, Horatio J., New York, N. Y. Galvanic battery.	443,219	Dec. 23	2615	673	53	1798

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Brewer, Mariau L., Hartford, Conn. Shutter-fastener	431,325	July 1	438	109	52	90
Brewer, Renben T., assignor of one-half to H. F. Baker, Waterbury, Conn. Curtain-pole fixture	435,053	Aug. 26	2510	663	52	1271
Brewer, Roland L., assignor to E. Miller & Company, Meriden, Conn. Central-draft lamp	428,882	May 27	2814	716	51	1397
Brewer, Russell, assignor of one-third to E. B. Schneider and A. Engard, Philadelphia, Pa. Car-axle box	431,871	July 8	1325	332	52	267
Brewer, Seabury D., et al. (See Hussey, Levi, assignor.)						
Brewer, William H., Masonville, N. Y. Stable-floor	427,547	May 13	789	196	51	978
Brewer, William J., New York, N. Y. Anti-friction bearing	437,561	Sept. 30	3505	914	52	2076
Brewer, William J., New York, N. Y. Cable railway	439,342	Oct. 28	2610	695	53	515
Brewer, William J., New York, N. Y. Electric conduit	440,822	Nov. 18	1911	491	53	991
Brewer, William J., London, England. Bearing for car-axes	439,341	Oct. 28	2609	695	53	515
Brewer, William V., et al. (See Gray, Theo., assignor.)						
Brewerton, Alfred W., et al. (See Abshagen, Ernest, assignor.)						
Brewington, Bainbridge & Co. (See Brewington, Henry S., assignor.)						
Brewington, Henry S., assignor to Brewington, Bainbridge & Co., Baltimore, Md. Tray	420,404	Jan. 28	2657	704	50	549
Brewington, Henry S., assignor to Brewington, Bainbridge & Co., Baltimore, Md. Frying-pan	433,231	July 29	3425	884	52	692
Brewster, Frank H., assignor to Cochrane Roller Mills Company, Escanaba, Mich. Roller-mill	422,908	Mar. 11	829	215	50	1302
Brewster, James B., New York, N. Y. Amalgamator	441,089	Nov. 18	2343	{ 606 607 }	53	1075
Brewster, Robert, London, England. Artificial tooth	440,131	Nov. 11	762	200	53	767
Brice, Alfred L., assignor of one-half to F. F. Reed, Minneapolis, Minn. Alarm for elevators	426,104	Apr. 22	2561	674	51	521
Brice, William A., London, England. Photographic camera	422,709	Mar. 4	506	129	50	1233
Brick, Charles, South Bend, Ind. Potato-digger	431,433	July 1	620	153	52	125
Brickell, Vreeland. (See Trulsen, William F., assignor.)						
Brickenstein, Laurence C. (See Babendreier, Charles A. I., assignor.)						
Bricker, James, Philadelphia, Pa. Fare-box	420,265	Jan. 28	2462	{ 653 654 }	50	513
Brickley, Charles A., Providence, R. I. Towel-rack	433,196	July 29	3378	873	52	682
Bridenbaugh, Philip H., and L. A. Oellig, Martinsburg, Pa. Spring-tooth harrow and cultivator	429,500	June 3	608	149	51	1588
Bridenbecker, Frank W., Frankfort, N. Y. Hen's nest	429,008	May 27	3004	771	51	1434
Bridewell, Mary B., et al. (See Bridewell, Richard F., assignor.)						
Bridewell, Richard F., assignor to D. McKay, E. F. Badgley, and M. B. Bridewell, San Francisco, Cal. Device for operating keys of gas-chandeliers	439,832	Nov. 4	303	76	53	667
Bridge & Beach Manufacturing Company. (See Carter, John V. B., assignor.)						
Bridge, Charles F. (See Hart, Currey, and Bridge.)						
Bridge, James W., Young America, Ind. Plow attachment	427,733	May 13	1066	267	51	1031
Bridge, Lucius L., Springfield, Mass. Music-leaf turner	442,009	Dec. 2	594	161	53	1379
Bridgeport Chain Company. (See Breul, Richard A., assignor.)						
Bridges, Appleton S. (See Hollweide, Charles, assignor.)						
Bridges, John R., Philadelphia, Pa. Circular-knitting machine	440,415	Nov. 11	1229	{ 318 319 320 321 }	53	855
Bridges, John R., Findlay, Ohio, assignor to S. B. Wilkins Company, Rockford, Ill. Device for feeding thread to knitting machines	440,416	Nov. 11	1244	321	53	856
Bridges, John S., Baltimore, Md. Photographic flash-light diffuser	439,999	Nov. 4	568	150	53	718
Bridges, Thomas H., Valley Mills, Tex. Windlass	424,537	Apr. 1	153	44	51	32
Bridges, William C., assignor of three-fourths to H. Sleek and E. J. Penfield, Kansas City, Mo. Cylinder breaking-plow	426,908	Apr. 29	3755	981	51	767
Bridgman, Henry L., Blue Island, Ill. Ore-sampler	433,714	Aug. 5	402	103	52	834
Brie, Emmanuel D. de, et al. (See Enholm, Oscar A., assignor.)						
Bried, Lewis. (See Clayton and Bried.)						
Brigam, William C., assignor of one-half to C. D. Grace, Bonham, Tex. Car-coupling	440,000	Nov. 4	569	150	53	719
Briggs, Thomas H., Barnes, England. Draft attachment for vehicles	439,468	Oct. 28	2801	746	53	550
Brigger, Gottfried, assignor of one-half to G. M. Sieber, Akron, Ohio. Leather belting	443,352	Dec. 23	2833	728	53	1840
Briggs, Arthur E., Bond Hill, assignor to Post & Co., Cincinnati, Ohio. Alarm-gong	434,578	Aug. 19	1729	453	52	1115
Briggs, David K., Roanoke, Va. Fence	428,265	May 20	1878	472	51	1197
Briggs, Eugene M., et al. (See Laguire, William H., assignor.)						
Briggs, Frank, Philadelphia, Pa. Air governor or brake	437,280	Sept. 30	3055	800	52	1987
Briggs, Frank, Philadelphia, Pa. Spring-motor	440,873	Nov. 18	1990	513	53	1007
Briggs, Frank, Philadelphia, Pa. Spring-motor	443,313	Dec. 23	2771	{ 710 711 }	53	1826
Briggs, James E., Rochester, N. Y. Spectacles	443,160	Dec. 23	2498	639	53	1773
Briggs, George S., assignor to L. A. Weyburn Company, Rockford, Ill. Plowshare	421,661	Feb. 18	1817	476	50	925
Briggs, George S., assignor to L. A. Weyburn Company, Rockford, Ill. Mechanism for shaping plowshares	430,988	June 24	2957	726	51	2069
Briggs, Gilbert D. (See Clark and Briggs.)						
Briggs, Harrison T., assignor of one-half to A. Meyers, South Bend, Ind. Pulley	429,009	May 27	3005	771	51	1434
Briggs, Harrison T., assignor of three-fourths to A. Myers, J. B. Birdsell, South Bend, Ind., and W. T. Carskaddon, Los Angeles, Cal. Split pulley	432,857	July 22	2831	726	52	571
Briggs, Horace A. (See Arrington and Briggs.)						
Briggs, Isaac. (See Carpenter and Briggs.)						
Briggs, John N., Coeymans, N. Y. Apparatus for planing cakes of ice for storing. (Reissue.)	11,060	Feb. 18	2131	558	50	984
Briggs, John N., Coeymans, N. Y. Cutter for ice-planers	422,566	Mar. 4	290	74	50	1191
Briggs, John T., Decatur, Ill. Ventilating-hood for dust-collectors	428,067	May 20	1579	401	51	1139
Briggs, Joseph H., et al. (See Sidentopf, Frederick, assignor.)						
Briggs, Joseph M., assignor of one-half to A. F. Schwahn, Eau Claire, Wis. Sausage-meat cutter	423,299	Mar. 25	2318	{ 611 612 613 614 }	50	1600
Briggs, Joseph M., and A. F. Schwahn, Eau Claire, Wis. Sausage-meat cutter	438,056	Oct. 7	592	{ 161 162 }	53	112
Briggs, Joshua, Boston, Mass. Adjustable chair or stool	428,664	May 27	2479	630	51	1330
Briggs, Lucius, Glasgow, Conn. Thread	421,158	Feb. 11	1096	281	50	782
Briggs, Lucius, Glasgow, Conn. Stamp-safe	439,380	Oct. 28	2668	710	53	525
Briggs, Orlando P., assignor to J. A. and R. B. Miller, Chicago, Ill. Pipe-making machine	430,265	June 17	1780	{ 442 443 444 445 }	51	1835
Briggs, Orlando P., assignor to J. A. and R. B. Miller, Chicago, Ill. Machine for making corrugated pipe from sheet metal	430,266	June 17	1806	{ 445 446 }	51	1836

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Briggs, Warren R., Bridgeport, Conn. Knob attachment.....	425,743	Apr. 15	2000	533	51	406
Briggs, Warren R., Edgerton, Ohio. Wook-working machine. (Reissue).....	11,110	Sept. 16	2181	573	52	1805
Briggs, William J., Trinidad, Colo. Combined cigar-tip cutter and match-safe.....	440,874	Nov. 18	1992	513	53	1007
Briggs, Winfield S., Beemer, Nebr. Attachment for windmills.....	442,417	Dec. 9	1227	317	53	1508
Brigham, Charles. (See Emery and Brigham.)						
Brigham, Dan, South Omaha, Nebr. Hog-waterer.....	422,113	Feb. 25	2459	650	50	1054
Brigham, Eli H. (See Fisher, Alvan B., assignor.)						
Brigham, Martin E., Philadelphia, Pa. Box-making machine.....	424,953	Apr. 8	801	{ 215 216 }	51	163
Bright, Edward S. (See Smith and Bright.)						
Bright, Fred E., Cleveland, Ohio, assignor to Rogers Typograph Company, Jersey City, N. J. Typograph.....	437,141	Sept. 23	2823	{ 734 735 736 737 738 }	52	1936
Bright, James H., St. Louis, Mo. Tile ceiling.....	425,652	Apr. 15	1863	498	51	379
Bright, Joseph T., Lexington, Ky. Cob-pipe turning and boring lathe.....	427,037	May 6	9	3	51	812
Bright, Joseph T., Lexington, Ky. Weighing and price scales.....	427,829	May 13	1216	307	51	1060
Bright, Richard A., assignor to W. A. Peck, Providence, R. I. Cigar-wrapping machine..	428,550	May 20	2296	{ 583 584 }	51	1278
Bright, Richard R., Indianapolis, Ind. Dumb-waiter.....	433,931	Aug. 12	733	190	52	910
Brightman, Latham H., Cleveland, Ohio. Expanding lathe-mandrel.....	420,616	Feb. 4	269	71	50	617
Briles, Benjamin R., Crotty, Kans. Washing-machine.....	435,479	Sept. 2	143	40, 41	52	1403
Brill Company, J. G. (See Adams, Walter S., assignor.)						
Brill, George M. (See Brill, John A. and G. M.)						
Brill, George M. and J. A., Philadelphia, Pa. Motor-car.....	427,966	May 13	1431	{ 361 362 }	51	1100
Brill, Henry C., assignor to J. H. Sternbergh & Son, Reading, Pa. Hydrocarbon-burner...	429,414	June 3	474	112	51	1561
Brill, Henry C., assignor to J. H. Sternbergh & Son, Reading, Pa. Screw-cutting machine.	434,913	Aug. 26	2310	610	52	1233
Brill, John, assignor of one-third to F. Heim, Philadelphia, Pa. Obtaining pepsin.....	433,395	July 29	3650	-----	52	738
Brill, John A. (See Brill, George M. and J. A.)						
Brill, John A., Philadelphia, Pa. Actuating device for car-brakes.....	424,170	Mar. 25	2717	724	50	1675
Brill, John A., Philadelphia, Pa. Electric-motor car.....	426,657	Apr. 29	3384	{ 888 889 }	51	695
Brill, John A., Philadelphia, Pa. Electric-motor car.....	426,658	Apr. 29	3386	889	51	695
Brill, John A., Philadelphia, Pa. Electric-railway car.....	426,708	Apr. 29	3466	908	51	710
Brill, John A., Philadelphia, Pa. Railway-car.....	428,068	May 20	1560	401	51	1139
Brill, John A., Philadelphia, Pa. Street-car.....	432,115	July 15	1694	435	52	345
Brill, John A. and G. M., Philadelphia, Pa. Motor-truck for cars.....	425,653	Apr. 15	1864	{ 498 499 503 504 }	51	380
Brill, John A. and G. M., Philadelphia, Pa. Car-truck.....	430,418	June 17	2042	{ 503 504 }	51	1886
Brill, John A. and G. M., Philadelphia, Pa. Railway-car truck.....	433,932	Aug. 12	734	191	52	910
Brimm, Daniel J. (See Blackburn and Brimm.)						
Brin, Arthur, London, county of Surrey, assignor to Continental Oxygen Company, (Limited), Westminster, England. Obtaining oxygen from air.....	432,815	July 22	2781	-----	52	561
Brine, Henry J., assignor of one-half to R. J. Evans, St. Paul, Minn. Butter-package.....	422,005	Feb. 25	2296	606	50	1025
Brine, Henry J., assignor of one-half to R. J. Evans, St. Paul, Minn. Butter-package.....	425,564	Apr. 15	1719	461	51	352
Brings, Wilhelm, Freiburg, Breisgau, Baden, Germany. Lithographic printing.....	420,765	Feb. 4	467	-----	50	655
Brinham, George W., Jr., and A. Hahn, Keystone Junction, Pa. Brick-mold.....	436,692	Sept. 16	2057	538	52	1781
Brining, Thomas, Leeds, England. Boot or shoe nailing machine.....	439,235	Oct. 28	2429	{ 651 652 653 }	53	481
Brink, Henry F. (See Scotland and Brink.)						
Brink, Henry S., Biggs, Cal. Cultivator.....	439,469	Oct. 28	2802	746	53	550
Brinkerhoff, Jacob, Auburn, N. Y. Elastic roll.....	418,886	Jan. 7	363	87	50	56
Brinkerhoff, Jacob, Auburn, N. Y. Ice-tongs.....	438,128	Oct. 7	701	190	53	173
Brinkerhoff, Warren M. (See Markham, Dewitt C., assignor.)						
Brinkerhoff, Warren M., Auburn, N. Y. Hay-rake.....	442,794	Dec. 16	1855	479	53	1641
Brinkerhoff, Warren M., A. W. Stevens, and L. D. Swart, Auburn, N. Y. Seeder and rake.	442,795	Dec. 16	1856	{ 479 480 }	53	1642
Brinkerhoff, Warren M., L. W. Stevens, L. D. Swart, A. W. Stevens, and A. M. Nye, assignors to A. W. Stevens & Son, Auburn, N. Y. Harrow.....	428,329	May 20	1981	{ 498 499 }	51	1216
Brinkerhoff, William W., Albany, N. Y. Trunk.....	419,819	Jan. 21	1742	462	50	366
Brinkman, George J. (See Wright, Benjamin B., assignor.)						
Brinkmann, Albert. (See Nacke and Brinkmann.)						
Brinkop, John H., Quincy, Ill. Cover for buckets, cans, &c.....	432,474	July 15	2229	576	52	448
Brinkop, John H., Quincy, Ill. Broom.....	439,470	Oct. 28	2803	746	53	550
Brinser, Eli H. G., Elizabethtown, assignor of one-half to J. L. Gingrich, near Bainbridge, Pa. Wrench.....	423,592	Mar. 18	1845	487	50	1501
Brinton, Henry, Philadelphia, Pa., and B. M. Denney, Camden, N. J. Circular-knitting machine.....	426,760	Apr. 29	3549	926	51	726
Brinton, Henry, Philadelphia, Pa., and B. M. Denney, Camden, N. J. Yarn-guide for knitting-machines.....	426,761	Apr. 29	3550	926	51	727
Brisbin, George M., et al. (See Stine, Samuel B., assignor.)						
Brisker, Gustav, Königshütte, Germany. Machine for rolling metal plates and bars.....	437,970	Oct. 7	456	128	53	86
Brislin, David A., St. Louis, Mo. Heating-coil stand.....	425,856	Apr. 15	2168	577	51	438
Bristol, Benjamin H., et al. (See Bristol, Franklin B., assignor.)						
Bristol, Benjamin H., et al. (See Bristol, William H., assignor.)						
Bristol, Franklin B., et al. (See Bristol, William H., assignor.)						
Bristol, Franklin B., assignor of two-thirds to B. H. Bristol, Naugatuck, Conn., and W. H. Bristol, Hoboken, N. J. Button.....	423,370	Mar. 11	1527	401	50	1434
Bristol, Franklin B., assignor of two-thirds to B. H. Bristol, Naugatuck, Conn., and W. H. Bristol, Hoboken, N. J. Punch and die.....	443,353	Dec. 23	2833	729	53	1840
Bristol, William H., et al. (See Bristol, Franklin B., assignor.)						
Bristol, William H., Hoboken, N. J. Camera.....	424,402	Mar. 25	3098	823	50	1750
Bristol, William H., Hoboken, N. J. Electric meter.....	439,381	Oct. 28	2669	{ 710 711 }	53	525
Bristol, William H., Hoboken, N. J., assignor of two-thirds to B. H. and F. B. Bristol, Naugatuck, Conn. Pressure indicator and recorder.....	420,570	Feb. 4	200	51	50	603
Bristow, Joseph A., and W. M. Dixon, Stormont, Va. Oyster-tongs.....	426,909	Apr. 29	3756	981	51	767
Bristow, Thomas A., assignor of one-half to J. L. Napier and W. B. Drake, Blenheim, S. C. Securing or fastening device.....	419,029	Jan. 7	575	145	50	122
Britain, William, London, county of Middlesex, England. Means for operating mechanical toys.....	427,734	May 13	1066	267	51	1031

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Britt, Charles E., Cincinnati, Ohio. Support for persons cleaning windows.....	439,798	Nov. 4	252	64	53	657
Brittain, Howard M., Martin's Creek, Pa. Inhaler.....	440,132	Nov. 11	763	200	53	769
Britten, Henry, London, England, assignor to J. Warner, Brooklyn, N. Y. Sign.....	443,955	Dec. 30	3771	963	53	2028
Brittlan, L. C., et al. (See McIntyre, Innes T., assignor.)						
Brittin, Frederick W., Norwich, Conn. Table-knife.....	424,954	Apr. 8	806	216	51	165
Brittiu, John T., Long Branch, N. J. Funnel.....	426,165	Apr. 22	2648	696	51	539
Britton, Charles S. (See Ogden, George H., assignor.)						
Britton, Henry M. (See Cook and Britton.)						
Britton, Horace E., Stoughton, Mass. Floor-jack.....	435,031	Aug. 26	2476	655	52	1264
Britton, John W. (See Mardis and Britton.)						
Britton, Thomas E. (See Britton, William and T. E.)						
Britton, Walter M., Crawfordsville, Ind. Fence.....	420,987	Feb. 11	847	218	50	733
Britton, William and T. E., Wellman, Iowa. Gate.....	440,992	Nov. 18	2150	564	53	1044
Britz, John N., Aurora, Ill. Driving-gear for traction-engines.....	421,902	Feb. 25	2157	566	50	998
Broad, Thomas, et al. (See Anderson, Lee, assignor.)						
Broadstreet, James R., Talladega, Ala. Clock-leveling device.....	423,411	Mar. 18	1589	417	50	1454
Broadwell, Louis O., Bay City, Mich. Slate-ruling machine.....	435,390	Sept. 2	14	4	52	1377
Broadwell, William. (See Grant, Edgar H., assignor.)						
Brobst, Benjamin, Columbus, Ohio. Washing-machine.....	443,566	Dec. 30	3164	813	53	1912
Brochon, Emile. (See Delorme and Brochon.)						
Brochu, Michael, Grand Rapids, Mich. Lathe for turning spirals.....	419,167	Jan. 7	777	{ 205 206 391 392 }	{ 50 52 }	161 1067
Brock, Augusto, Buenos Ayres, Argentine Republic. Air-engine.....	434,422	Aug. 19	1500			
Brock, Matthias, Boston, Mass., assignor to McKay & Copeland Lasting Machine Com- pany, Portland, Me. Tack-strip-setting machine.....	431,549	July 8	799	200	52	167
Brock, Matthias, Boston, Mass., assignor to McKay & Copeland Lasting Machine Com- pany, Portland, Me. Machine for driving headed fastenings.....	442,418	Dec. 9	1228	{ 317 318 312 313 }	{ 53 51 51 51 }	1509 126 813 1789
Brock, William, and F. W. Vetter, Puxico, Mo. Nut-lock.....	424,853	Apr. 1	649	172	51	126
Brock, William E., Plainfield, N. J. Mechanical movement.....	427,038	May 6	10	3	51	813
Brock, William E., Plainfield, N. J. Velocipede.....	430,107	June 17	1545	{ 383 384 }	{ 51 51 }	1789 1362
Brockington, George, Brooklyn, N. Y. Bridle-bit.....	428,767	May 27	2646	670	51	1362
Brockton Last Company. (See Locke, Howard G., assignor.)						
Brockway, Tiffany J., and C. Taylor, Argonia, Kans. Corn or cane cutter or harvester.....	425,402	Apr. 15	1480	397	51	305
Brockway, William S. (See Robinson and Brockway.)						
Brodin, Gustaf A., Stockholm, Sweden. Lathe.....	442,662	Dec. 16	1609	415	53	1595
Brodnax, John T., New Orleans, La. Combined shirt or vest and suspenders.....	428,374	May 20	2052	517	51	1233
Brodnax, John T., New Orleans, La. Under-garment.....	428,375	May 20	2054	{ 517 518 }	{ 51 51 }	1233 1654
Brodrick, John, New York, N. Y. Plate for preparing printing-stencils.....	424,090	Mar. 25	2607	694	50	1654
Brodsky, Lewis, and S. A. Ott, Plover, Iowa. Wagon end-gate.....	424,171	Mar. 25	2719	725	50	1676
Brogan, Robert A., Osage Mission, Kans. Key rail-joint.....	421,545	Feb. 18	1651	427	50	892
Brohard, Joseph M., Clarksburg, W. Va. Door-check.....	433,248	Aug. 5	608	158	52	875
Broichgans, Stephan, Milwaukee, Wis. Burglar-alarm.....	430,373	June 17	1979	488	51	1874
Brokaw, Harvey, assignor of three-fourths to C. Kolter, Sr., H. C. Settlege, and F. H. Ham- man, Wapakoneta, Ohio. Churn-closure.....	427,457	May 6	652	163	51	940
Bromberg, Samuel A., Lexington, Ky., assignor of one-half to I. H. Scates and J. R. Woods, Baltimore, Md. Advertising-card holder.....	435,352	Aug. 26	2972	788	52	1356
Bromell, Thomas A., Nelson, New Zealand. Plow.....	439,719	Nov. 4	137	37	53	634
Bromfield, Edward T. (See Ingersoll, Simon, assignor.)						
Bromich, Joseph, Topeka, Kans. Boiler.....	438,057	Oct. 7	597	162	53	114
Bromiley, William I. (See Dobson and Bromiley.)						
Bromley, John H. (See Houghton, Thomas, assignor.)						
Bromley, Joseph E., Chicago, Ill., and A. Straus, New York, N. Y., said Bromley assignor of one-half to A. Featherstone, Chicago, Ill. Tire for vehicle-wheels.....	441,820	Dec. 2	305	82	53	1323
Brones, Béla, deceased, Vienna, Austria-Hungary; H. Orth, administrator. Explosive com- pound.....	421,662	Feb. 18	1818		50	926
Brones, Béla, deceased; H. Orth, Washington D. C., administrator. Explosive compound.....	421,753	Feb. 18	1936		50	948
Bronk, Charles L., Brooklyn, N. Y. Square.....	435,086	Aug. 26	2558	675	52	1280
Bronner, Edmund D., Detroit, Mich., R. Potts, St. Thomas, Ontario, Canada, and W. A. Pungs, assignors to Metallic Grain Door Company, Detroit, Mich. Grain-door for cars.....	422,909	Mar. 11	831	216	50	1303
Bronner, Paul, Stuttgart, Germany. Making white lead.....	431,505	July 1	730		52	145
Bronson, Benjamin, assignor of two-thirds to T. Purves and E. Lipman, Beloit, Wis. Swinging saw.....	422,332	Feb. 25	2803	737	50	1118
Bronson, Benjamin, assignor of two-thirds to T. Purves and E. Lipman, Beloit, Wis. Ro- sette-machine.....	426,105	Apr. 22	2563	674	51	522
Bronson Company, Homer D. (See Bronson, Homer D., assignor.)						
Bronson, Homer D., assignor to H. D. Bronson Company, Beacon Falls, Conn. Forming hollow ornamental metal-work.....	428,883	May 27	2815	716	51	1397
Bronson, Horatio G. (See Lines and Bronson.)						
Brooder, John D., and A. B. Thomas, Kane, Pa. Inkstand.....	431,247	July 1	326	80	52	66
Brooder, John D., and A. B. Thomas, Kane, Pa. Stopple for inkstands.....	432,015	July 15	1537	391	52	315
Brook, James W., Lynchburg, Va. Trough for the manufacture of ice.....	419,918	Jan. 21	1906	501	50	400
Brook, James W., Lynchburg, Va. Building.....	420,223	Jan. 28	2394	637	50	501
Brook, James W., Lynchburg, Va. Mold for ice-blocks.....	423,305	Mar. 11	1437	374	50	1416
Brook, James W., Lynchburg, Va. Apparatus for the manufacture of ice.....	423,306	Mar. 11	1438	{ 374 375 }	{ 50 50 }	1416 1676
Brook, James W., Lynchburg, Va. Crate.....	424,172	Mar. 25	2720	725	50	1676
Brooke, Robert G. (See Holden and Brooke.)						
Brooke, Samuel, Mackville, Kans. Cultivator.....	440,860	Nov. 18	1973	508	53	1003
Brooke, William M., assignor to J. H. Barton, Brooklyn, and J. J. Ebert, New York, N. Y. Permutation-lock.....	435,915	Sept. 9	841	222	52	1544
Brooke, William M., assignor to himself and J. J. Ebert, New York, N. Y. Permutation- padlock.....	426,233	Apr. 22	2748	720	51	560
Brooker, John W., Dalton, Ga. Car-coupling.....	421,232	Feb. 11	1195	306	50	799
Brookfield, William. (See Pease, Jacob, assignor.)						
Brooklyn Fastener Company. (See Mallett, Francis W., assignor.)						
Brooklyn Railway Supply Company. (See Barrows, William H., assignor.)						
Brooklyn Railway Supply Company. (See Sternoff-Beyer, Otto, assignor.)						
Brookmire, James H. (See Dreyer, Charles M., assignor.)						
Brookmire, James H. (See Roemer, Thomas R.)						
Brookmire, James H., St. Louis, Mo. Hydraulic-cylinder lubricator.....	424,456	Apr. 1	15	5	51	5
Brookmire, James H., St. Louis, Mo. Hydraulic-cylinder lubricator.....	426,762	Apr. 29	3552	926	51	727

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Brookmire, James H., St. Louis, Mo. Coffee-polisher	426,910	Apr. 29	3758	982	51	767
Brooks Bros. <i>et al.</i> (See Courtright, Edgar, assignor.)						
Brooks, Byron A., Brooklyn, N. Y. Type-writing machine	423,900	Mar. 25	2322	{ 612 613 }	50	1600
Brooks, Byron A., Brooklyn, N. Y. Type-writing machine	438,985	Oct. 21	2032	{ 542 543 }	53	400
Brooks, Chapin C., Hallowell, Me. Combined rifle and shotgun	441,389	Nov. 25	2854	{ 736 737 }	53	1178
Brooks & Company, E. J. (See Brooks, Edward J., assignor.)						
Brooks & Company, E. J. (See Wenk, Theodore, assignor.)						
Brooks, David, Jr., Philadelphia, Pa. Introducing compositions into electric conductors	427,039	May 6	11	3	51	813
Brooks, David, Jr., Philadelphia, Pa., assignor to Electric Cable Construction and Maintenance Company of Pennsylvania. Electric cable	437,330	Sept. 30	3127	817	52	1999
Brooks, David, Jr., Philadelphia, Pa., assignor to Electric Cable Construction and Maintenance Company of Pennsylvania. Covering for electric wires	437,913	Oct. 7	362	104	53	70
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Roller seal-press	431,763	July 8	1148	287	52	234
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Seal-press	438,140	Oct. 14	720	{ 197 198 }	53	145
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Inking-pad	438,571	Oct. 14	1356	367	53	268
Brooks, Edward L. (See Oliver and Brooks.)						
Brooks, Franklin A., <i>et al.</i> (See Kerns, Thomas J., assignor.)						
Brooks, Franklin W., New York, N. Y. Coin-operated perfume-ejector	427,967	May 13	1434	362	51	1101
Brooks, George W., Columbus, Tex. Trace-carrier	429,224	June 3	176	43	51	1505
Brooks, Henry G., Battle Creek, Mich. Water-gage	442,010	Dec. 2	596	161	53	1379
Brooks, Herbert H. (See Bardwell, Arthur F., assignor.)						
Brooks, Herbert H., Cambridge, assignor of one-half to A. F. Bardwell, Boston, Mass. Shipper for trolleys	440,584	Nov. 11	1502	387	53	906
Brooks, Hulburt, Kalamazoo, Mich. Vehicle-spring	427,665	May 13	953	240	51	1009
Brooks, James. (See Vogel and Brooks.)						
Brooks, James A. (See Aycock, William C. and J. A., assignors.)						
Brooks, James W., trustee. (See Freeman, James F., assignor.)						
Brooks, James W., trustee. (See Glidden, Charles W., assignor.)						
Brooks, James W., trustee. (See Glidden and Elliott, assignors.)						
Brooks, James W., <i>et al.</i> , trustees. (See Goddu, Louis, assignor.)						
Brooks, John, Plainfield, N. J. Set-off mechanism for printing-presses	423,660	Mar. 18	1967	{ 518 519 }	50	1525
Brooks, John, Plainfield, N. J. Registering-gage for printing-presses	423,661	Mar. 18	1968	519	50	1526
Brooks, John, Plainfield, N. J. Fastening for printing-plates upon cylindric surfaces	433,232	July 29	3426	{ 884 885 }	52	692
Brooks, John, Plainfield, N. J. Rotary paper-cutter-adjusting device for printing-machines	433,715	Aug. 5	403	103	52	834
Brooks, John, Plainfield, N. J. Paper-feeding mechanism for printing-machines	433,716	Aug. 5	406	104	52	834
Brooks, John, Plainfield, N. J. Gearing for continuous-motion impression-cylinders	437,417	Sept. 30	3284	857	52	2030
Brooks, John, Plainfield, N. J. Gearing for continuous-motion impression-cylinders	437,418	Sept. 30	3286	858	52	2031
Brooks, John, Plainfield, N. J. Set-off mechanism for printing-presses	438,342	Oct. 14	1026	{ 279 280 }	53	202
Brooks, John, Plainfield, N. J. Sheet-supplying mechanism for printing-presses	439,861	Nov. 4	345	89, 90	53	675
Brooks, John, Plainfield, N. J. Mechanism for cutting variable lengths of sheets from paper web	439,862	Nov. 4	347	90	53	675
Brooks, John B., Birmingham, county of Warwick, England. Velocipede-saddle	421,233	Feb. 11	1196	307	50	799
Brooks, John D., Denver, Colo. Tricycle	435,730	Sept. 2	543	143	52	1480
Brooks, John S., Brooklyn, N. Y., assignor of one-half to C. Voorhis, Crawford, N. J. Protector for trees	426,106	Apr. 22	2564	674	51	522
Brooks, John S., Brooklyn, N. Y., assignor to Peck, Stow & Wilcox Company, Southington, Conn. Bevel	432,367	July 15	2064	531	52	413
Brooks, Mary E. (See Brooks, William D., assignor.)						
Brooks, S. O. (See Purvis, John B., assignor.)						
Brooks, Stephen P., Somerville, Mass. Piano-forte action	439,633	Nov. 4	20	6	53	610
Brooks, Theodore S., Garrisons, N. Y. Railway-chair	438,524	Oct. 14	1286	347	53	253
Brooks, Thomas J., Troup Factory, Ga. Cotton-planter	431,434	July 1	622	155	52	125
Brooks, William, Oakland, Cal. Broiler or toaster	431,550	July 8	802	200	52	168
Brooks, William D., Baltimore, Md. Can-soldering machine	421,043	Feb. 11	929	240	50	749
Brooks, William D., Baltimore, Md. Can-heading machine	425,295	Apr. 8	1323	354	51	266
Brooks, William D., Baltimore, Md. Can-soldering machine	425,296	Apr. 8	1326	355	51	267
Brooks, William D., Baltimore, Md. Can seaming and crimping machine	425,744	Apr. 15	2001	{ 533 534 }	51	407
Brooks, William D., assignor to M. E. Brooks, Baltimore, Md. Machine for applying solder to can-caps	431,933	July 8	1403	356	52	283
Brooks, William D., assignor to M. E. Brooks, Baltimore, Md. Can-cap	437,086	Sept. 23	2720	711	52	1917
Brooks, William R., Mobile, Ala. File or cabinet for newspapers, &c	423,982	Mar. 25	2452	651	50	1624
Brose, Wilhelm. (See Buch and Brose.)						
Brosius, Aaron, Fort Wayne, Ind. Traction-wheel	437,674	Oct. 7	2	1	53	3
Brosius, Dalton A. (See Davenport and Brosius.)						
Brosius, John M., Atlanta, Ga. Feeding mechanism for sewing-machines	421,234	Feb. 11	1197	{ 307 308 }	50	799
Brosius, John M., Atlanta, Ga. Railway-rail	423,371	Mar. 11	1528	401	50	1434
Brosius, John M., Atlanta, Ga. Frame for sewing-machines	424,854	Apr. 1	651	172	51	126
Brosius Motor Sewing Machine Company. (See Wood, Albert A., assignor.)						
Brosnan, Cornelius J., Springfield, assignor to Peninsular Novelty Company, Boston, Mass. Button-chute	425,928	Apr. 15	2271	601	51	456
Brousseau, Noel, <i>et al.</i> (See Anderson, James J., assignor.)						
Brotherhood, Peter, Lambeth, England. Slide-valve for compound engines	435,794	Sept. 2	644	170	52	1499
Brotherhood, Peter, Lambeth, England. Valve for steam-engines	436,693	Sept. 16	2058	{ 538 539 }	52	1781
Brotherhood, Peter, Lambeth, England. Valve for engines	436,694	Sept. 16	2059	{ 540 541 }	52	1781
Brotherton, W. L. <i>et al.</i> (See Walrons, Henry N., assignor.)						
Brothwell, Charles R., Bridgeport, Conn. Gate for draw-bridges, &c	431,838	July 8	1271	319	52	257
Brott, George F., Washington, D. C. Attachment for cotton-gins	434,759	Aug. 19	2033	531	52	1172
Brott, George F., Washington, D. C. Cotton-gin	434,859	Aug. 19	2167	{ 568 569 }	52	1199
Brott, George F., Washington, D. C., assignor of one-half to F. C. Bailey, Baltimore, Md. Feed-block for animals	422,370	Mar. 4	14	5	50	1139

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Brough, Thomas J., Baltimore, Md. Corset-fastening	427,295	May 6	412	107	51	892
Brought, Jonathan R., Lawrence, Kans. Breaking apparatus for horses	422,497	Mar. 4	193	52, 53	50	1173
Broughton, John, Covington Center, N. Y. Stack-cover	424,955	Apr. 8	807	217	51	165
Broughton, Joseph. (See Olsen, Engelbrecht, assignor.)						
Broughton, Milton, Syracuse, N. Y. Discharge-gate for mixing-machines	431,798	July 8	1212	302	52	245
Broughton, Pulaski B., Austin, Minn. Brick-kiln	434,058	Aug. 12	901	{ 237 238	52	941
Broun, Fredric M., Warren, assignor to himself and J. A. Hoar, Newport, R. I. Steam-pump.	421,159	Feb. 11	1096	282	50	782
Broussard, Joseph A., et al. (See Fuller, Willy S., assignor.)						
Brower, Bloomfield, New York, N. Y. Letter-file	422,181	Feb. 25	2554	{ 675 676	50	1072
Brower, George H., Roann, Ind. Evaporator	442,478	Dec. 9	1316	340	53	1526
Brower, Hiram B., Tyler City, assignor of one-half to B. O. Pratt, Middletown, Conn. Em- broidering attachment for sewing-machines	428,884	May 27	2216	716	51	1397
Brower, Hiram B., New Haven, assignor of one-half to B. O. Pratt, Middletown, Conn. Hemming attachment for sewing-machines	428,885	May 27	2218	{ 716 717	51	1398
Brower, Joseph, Lexington, Ky. Fish-string needle	430,826	June 24	2712	664	51	2023
Brower, Joseph, Lexington, Ky. Fishing-rod	430,827	June 24	2712	664	51	2023
Browett, Thomas. (See Lindley and Browett.)						
Brown, Alexander, Chicago, Ill. Gas-heater	431,326	July 1	439	109	52	90
Brown, Alexander E., Cleveland, Ohio. Tnb or bucket for hoisting and conveying ma- chines	426,763	Apr. 29	3553	927	51	727
Brown, Alexander E., Cleveland, Ohio. Automatic dumping-bucket for hoisting and con- veying machines	427,830	May 13	1218	{ 307 308	51	1060
Brown, Alexander E., Cleveland, Ohio. Clutch mechanism	428,376	May 20	2055	518	51	1233
Brown, Alexander E., Cleveland, Ohio. Means for translating power and motion of drive- shafts	428,886	May 27	2220	717	51	1398
Brown, Alexander E., Cleveland, Ohio. Blast-furnace filling contrivance	432,788	July 22	2739	{ 701 702	52	552
Brown, Alexander F. G., Dalry, county of Ayr, Scotland. Rotary engine	420,331	Jan. 28	2552	676	50	530
Brown, Alexander T., Syracuse, N. Y. Type-cleaner	421,044	Feb. 11	932	241	50	749
Brown, Alexander T., Syracuse, N. Y. Cleaning attachment for type-writing machines	427,393	May 6	542	138	51	919
Brown, Alexander T., Syracuse, N. Y. Type-writing machine	436,333	Sept. 16	1475	{ 355 356	52	1672
Brown, Alexander T., Syracuse, N. Y. Matting-machine	440,909	Nov. 18	2050	{ 530 531	53	1018
Brown, Alfred G. (See Boynton and Brown.)						
Brown, Alfred P., Brooklyn, N. Y. Gage for paper-cutting machines	421,546	Feb. 18	1652	428	50	893
Brown, Almon C. (See Davis, Alexander H. S., assignor.)						
Brown, Alonzo F., San Francisco, Cal. Stationary spittoon	419,919	Jan. 21	1908	502	50	400
Brown, Arthur J. and E. Jr., and D. Shay, Bellefonte, Pa. Radiator	439,471	Oct. 28	2803	747	53	550
Brown, Asa C., Eugene City, Oreg. Combined harrow and cultivator	419,820	Jan. 21	1743	462	50	366
Brown & Bailey. (See Brown, Robert P., assignor.)						
Brown, Benjamin F., Boston, Mass. Trolley-carrier	429,113	June 3	8	3	51	1474
Brown, Benoni S., Boston, Mass., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Truck for dental chairs	425,654	Apr. 15	1868	499	51	380
Brown, Calvin, San Francisco, Cal. Apparatus for submarine exploration	427,149	May 6	196	50, 51	51	850
Brown, Charles, Naples, Italy, assignor to G. J. Melms, Chicago, Ill. Steam-engine	437,353	Sept. 30	3164	828	52	2007
Brown, Charles A. (See Harder, William A., assignor.)						
Brown, Charles E., assignor of one-half to J. Stevens, Rome, N. Y. Means for reversing steam-valves	439,472	Oct. 28	2805	747	53	551
Brown, Charles E. L., Zurich, Switzerland. Winding dynamo-armatures	441,391	Nov. 25	2859	{ 738 739	53	1179
Brown, Charles F., et al. (See Cram and Roberts, assignors.)						
Brown, Charles F., et al. (See Porter, Daniel R., assignor.)						
Brown, Charles F., trustee. (See Woodley, Thomas E., assignor.)						
Brown, Charles H., Boston, Mass. Sash-fastener	425,203	Apr. 8	1190	315	51	241
Brown, Charles H., Boston, Mass. Die for upsetting flanges on rivets	430,374	June 17	1981	489	51	1875
Brown, Charles H., Port Huron, Mich. Device for raising sunken vessels	435,054	Aug. 26	2511	{ 663 664	52	1271
Brown, Charles O., New York, N. Y. Sliding door	421,547	Feb. 18	1653	428	50	893
Brown, Charles T., and F. R. Wolfinger, Chicago, Ill. Desk and writing-machine table	437,477	Sept. 30	3376	{ 884 885	52	2051
Brown, Clark, Freeport, Ill. Nut-lock	424,457	Apr. 1	15	6	51	6
Brown, Corydon P., Winnipeg, Manitoba, Canada. Steam-plow	424,265	Mar. 25	2837	759	50	1699
Brown, Corydon P., Winnipeg, Canada. Compensating and steering gear for road-vehicles	434,624	Aug. 19	1810	473	52	1131
Brown, Cyril P., Spring Lake, Mich. Leaf-turner	431,327	July 1	441	{ 109 110	52	90
Brown, Daniel, Wrentham, Mass. Stopping device for machines for grading and reeling straw braid	425,204	Apr. 8	1192	315	51	241
Brown, Daniel A., C. V. Klippert, and L. J. Vogt; said Brown assignor to E. U. Ely, Roch- ester, N. Y. Device for heating shoe-makers' tools	429,069	May 20	1582	401	51	1139
Brown, Daniel V., Philadelphia, Pa. Combined optical measuring, nose-conforming, and recording instrument	432,401	Oct. 14	1117	302	53	219
Brown, David, assignor of one-third to C. H. Meigs, New Haven, Conn. Cash-carrier	428,039	May 13	1536	389	51	1121
Brown, David R. C. (See Lamont, Charles G., assignor.)						
Brown, David W., Washington, D. C. Graphophony	424,956	Apr. 8	808	217	51	165
Brown, E. Parmly, Flushing, N. Y. Artificial tooth-crown	423,467	Mar. 18	1669	441	50	1470
Brown, Edward, Jr. (See Brown and Shay.)						
Brown, Edward J. (See Tyrrel, Alvin D., assignor.)						
Brown, Edward J., Washington, D. C. Drawer	419,496	Jan. 14	1269	338	50	267
Brown, Edwin W., Vining, Kans. Jack for supporting clapboards	424,173	Mar. 25	2721	725	50	1676
Brown, Elizabeth. (See Brown, George H., assignor.)						
Brown, Emma H., Wethersfield, Conn. Hook and eye	420,766	Feb. 4	469	124	50	655
Brown, Ethan S., Pascoag, R. I. Attachment for stoves and ranges	438,141	Oct. 14	723	198	53	146
Brown, Eugene H., Bennington, Vt. Trimming attachment for machines for sewing looped fabrics	420,926	Feb. 11	754	195	50	715
Brown, Fayett, et al. (See Colony, Charles W., assignor.)						
Brown, Frances L. (See Brown, Wofford, assignor.)						
Brown, Frederick H., Chicago, Ill. Articulated electro-magnet	435,343	Aug. 26	2953	784	52	1354
Brown, Frederick H., Chicago, Ill. Electro-magneto therapeutic chair	435,376	Aug. 26	3006	796	52	1364
Brown, Fredric M., Warren, assignor to himself and J. A. Hoar, Newport, R. I. Horizon- tal marine engine	423,120	Mar. 11	1153	300	50	1362

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Brown, Frederic W. (See Wiles and Brown.)						
Brown, Frederic W., Troy, and T. S. Wiles, Albany, N. Y. Telescopic stand-pipe for extinguishing fires	423,663	Mar. 18	1971	520	50	1526
Brown, George, Ottumwa, Iowa. Device for shifting valve-eccentrics	429,415	June 3	475	113	51	1562
Brown, George H., assignor to E. Brown, Portsmouth, Va. Berry-basket	423,412	Mar. 18	1590	418	50	1454
Brown, George J., Grand Ledge, Mich. Fence	438,402	Oct. 14	1120	303	53	220
Brown, George R. and J. W., Pledger, Tex. Machine for distributing poison on plants	423,121	Mar. 11	1154	300	50	1363
Brown, George W., Deering, assignor to Belknap Water Motor Company, Portland, Me. Water-motor	424,918	Apr. 1	746	199	51	145
Brown, George W., assignor to Belknap Water Motor Company, Portland, Me. Grinding-machine	424,919	Apr. 1	747	199	51	145
Brown, George W., assignor to Belknap Water Motor Company, Portland, Me. Grinding-machine	437,640	Sept. 30	3609	944	52	2097
Brown, Gilman W., West Newbury, Mass. Lubricator	423,662	Mar. 18	1970	520	50	1526
Brown, Gilman W., West Newbury, Mass. Lubricator	426,764	Apr. 29	3555	927	51	727
Brown, Harry H., Wappinger's Falls, N. Y. Cycle-handle	429,416	June 3	476	113	51	1562
Brown, Harold P., Chicago, Ill. System of arc and incandescent electric lighting	422,910	Mar. 11	832	216	50	1303
Brown, Harold P., New York, N. Y. Insulator for electric-railway wires	428,071	May 20	1584	402	51	1140
Brown, Harold P., New York, N. Y. Trolley system for electric railways	428,072	May 20	1586	402	51	1140
Brown, Harold P., New York, N. Y. Electric collecting device or brush	440,691	Nov. 18	1682	433	53	950
Brown, Harvey, assignor of one-half to G. W. Cole, Buffalo, N. Y. Combination-lock	441,610	Nov. 25	3202	825	53	1247
Brown, Henry H., and W. M. Bold, Decatur, Ill.; said Bold assignor to said Brown. Nail for box-corners	423,443	Aug. 5	13	4	52	759
Brown, Henry L. (See Beecher, Thomas, assignor.)						
Brown, Henry W., Cambridgeport, Mass. Pipe or cable supporting device	420,767	Feb. 4	470	124	50	656
Brown, Henry W., Cambridge, Mass. Hydraulic dredging apparatus	441,055	Nov. 18	2281	591	53	1064
Brown, Herbert P., et al. (See Yale, Charles O., assignor.)						
Brown, Horatio M., assignor to Farrel Foundry and Machine Company, Ansonia, Conn. Machine for cutting veneers	433,511	Aug. 5	102	29	52	777
Brown, Howard W., Oakland, Cal. Copying-sheet. (Reissue)	11,113	Sept. 30	3657		52	2106
Brown, Isaac, Swatara, Pa. Railway tie and chair	420,674	Feb. 4	346	91	50	631
Brown, Isabelle. (See Quevedo, Narciso T., assignor.)						
Brown, Israel D. and S. F., Cuyler, N. Y. Wash-bench	428,070	May 20	1583	402	51	1140
Brown, J. Thompson, et al. (See Farnsworth, Henry T., assignor.)						
Brown, James, Brandon Gardens, Cambuslang, Scotland. Match-box	436,209	Sept. 9	1292	337	52	1627
Brown, James E., Brooklyn, N. Y., assignor to Archer & Pancoast Manufacturing Company, of New York. Electric-light fixture	437,851	Oct. 7	271	81	53	53
Brown, James E. and J. F., Brooklyn, N. Y., assignors to Archer & Pancoast Manufacturing Company, of New York. Extension-electrolier	420,552	Feb. 4	173	43	50	597
Brown, James H., North Evanston, Ill. Suspension-link for books	429,301	June 3	293	71	51	1527
Brown, James L. (See Depp, Frank A., assignor.)						
Brown, James L., et al. (See Rich, George, assignor.)						
Brown, James O., assignor to Brown Self Sharpening Mowing Machine Company, Boston, Mass. Guard-finger for cutter-bars of mowers and reapers	420,768	Feb. 4	472	125	50	656
Brown, James O., assignor to Brown Self Sharpening Mowing Machine Company, Boston, Mass. Sharpener for knives of endless-cutter mowing or reaping machines	420,769	Feb. 4	473	125	50	656
Brown, James O., assignor to Brown Self Sharpening Mowing Machine Company, Boston, Mass. Endless cutter for mowers and reapers	431,799	July 8	1214	302	52	246
Brown, James R., Springfield, Mass. Obstetrical forceps	424,702	Apr. 1	411	108	51	81
Brown, Jesse H. (See Lefever and Brown.)						
Brown, John, Redfern, near Sydney, assignor to J. C. Oakman, Sydney, New South Wales. Car-coupling	442,509	Dec. 9	1374	352	53	1538
Brown, John C. (See Hodgson and Brown.)						
Brown, John D., et al. (See Severance, Asahel J., assignor.)						
Brown, John E., assignor of two-thirds to P. and M. J. Hagerty, Washington Court-House, Ohio. Heel-building machine	427,498	May 6	707	177	51	952
Brown, John F. (See Brown, James E. and J. F.)						
Brown, John F., Brooklyn, N. Y. Tool for tapering plugs	433,615	Aug. 5	257	69	52	807
Brown, John F., Chicago, Ill., assignor to A. R. Baker, Indianapolis, Ind. Paper-punch	430,168	June 17	1621	404	51	1805
Brown, John F., Chicago, Ill., assignor to A. R. Baker, Indianapolis, Ind. Order-holder	430,169	June 17	1622	405	51	1805
Brown, John F., Chicago, Ill., assignor to A. R. Baker, Indianapolis, Ind. Order-holder	436,396	Sept. 16	1591	420	52	1694
Brown, John H., New York, N. Y. Magazine fire-arm	430,061	June 10	1460	362	51	1763
Brown, John N., New London, Conn. Vehicle-wheel	438,468	Oct. 14	1211	328	53	238
Brown, John P. (See Ritter, John L., assignor.)						
Brown, John P., Rising Sun, Ind. Metallic land-mark for evidencing surveys of land	427,394	May 6	543	138	51	919
Brown, John S., Galveston, Tex. Flower-pot trellis	425,745	Apr. 15	2004	534	51	407
Brown, John S., Galveston, Tex. Trace-carrier	425,746	Apr. 15	2005	534	51	407
Brown, John W. (See Brown, George R. and J. W.)						
Brown, John W., et al. (See Maret, James, assignor.)						
Brown, John W., Brimfield, Mass. Swage	431,031	July 1	7	2	52	4
Brown, John W., Detroit, Mich. Puzzle	433,444	Aug. 5	13	4	52	759
Brown, John W., assignor to W. W. Sutcliffe, New Orleans, La. Centrifugal governor for steam-engines	423,726	Mar. 18	2060	543	50	1542
Brown, John W., assignor of one-half to W. W. Sutcliffe, New Orleans, La. Combined smoke-stack, feed-water heater, and filter	423,983	Mar. 25	2453	652	50	1624
Brown, John W., Jr., assignor to Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Meat-cutter	424,758	Apr. 1	501	135	51	98
Brown, John W., and A. A. Gebert, assignors to Collins Plow Company, Quincy, Ill. Bal- ing-press	434,760	Aug. 19	2036	532	52	1173
Brown, John W., and A. A. Gebert, assignors to Collins Plow Company, Quincy, Ill. Bal- ing-press	434,761	Aug. 19	2037	532	52	1174
Brown, John W., and A. A. Gebert, assignors to Collins Plow Company, Quincy, Ill. Bal- ing-press	434,762	Aug. 19	2040	533	52	1174
Brown, Joseph N., Farwell, Mich. Clothes-line	430,170	June 17	1623	405	51	1805
Brown, Joseph N., assignor of one-half to F. E. Presley, Farwell, Mich. Hand weighing- truck	432,597	July 22	2411	622	52	490
Brown, L. S., et al. (See Hart, Marshall W., assignor.)						
Brown, Levi S., assignor of one-half to A. C. Rahter and F. T. Shaw, Westminster, Md. Vehicle-axle	433,432	July 29	3704	956	52	749

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Brown, Lewis A. (See Paridy and Brown.)						
Brown, Lewis A., St. Louis, Mo. Basket	421,368	Feb. 11	1386	358	50	834
Brown, Lewis A., St. Louis, Mo. Seal-lock	425,490	Apr. 15	1615	431	51	332
Brown, Loam, Sr., Rochelle, Ga. Lathe	430,245	June 17	1751	436	51	1830
Brown, Louis A., assignor of two-thirds to T. J. Young and S. D. Lane, Macedonia, Iowa.						
Cultivator	421,903	Feb. 25	2160	567	50	999
Brown, Luke E. (See Giles and Brown.)						
Brown, Martin A. (See Welander, Peter, assignor.)						
Brown, Mary L., Erie, Pa. Water-proof garment	439,103	Oct. 28	2210	{ 593 594 }	53	441
Brown, Morris H. (See Hall, William J., assignor.)						
Brown, Orrill W., Hayt's Corners, assignor of one-third to G. W. B. Neal, Ovid Centre, N. Y. Railway-tie	425,747	Apr. 15	2006	534	51	408
Brown Paper Company, L. L. (See Barden, George F., assignor.)						
Brown, Perry, Louisville, Ky. Car-coupling	434,763	Aug. 19	2041	{ 533 534 }	52	1174
Brown, Perry, Louisville, Ky. Clevis	439,771	Nov. 4	212	55	53	650
Brown, Perry, assignor to D. E. Doherty, Louisville, Ky. Freight-car door	422,710	Mar. 4	508	130	50	1233
Brown, Peter, Montreal, Quebec, Canada. Dental-engine motive gear	431,020	June 24	3008	735	51	2079
Brown, Peter M., Cairo, Mo. Machine for resetting rail fences	424,855	Apr. 1	652	172	51	126
Brown, Reuben H. (See Lavigne, Joseph P., assignor.)						
Brown, Richard A., New York, N. Y. Copy-press	440,823	Nov. 18	1913	491	53	992
Brown, Richmond R. (See Davis, Robert C., assignor.)						
Brown, Robert, assignor to Hoover & Gamble, Miamisburg, Ohio. Sheaf-carrier	432,931	July 22	2942	753	52	592
Brown, Robert G., Brooklyn, N. Y. Multiplex synchronous telegraph	423,901	Mar. 25	2324	613	50	1601
Brown, Robert G., Brooklyn, N. Y. Multiplex synchronous telegraph	423,532	Mar. 25	2326	{ 613 614 }	50	1601
Brown, Robert G., Brooklyn, N. Y. Synchronous multiplex telegraph	423,903	Mar. 25	2329	614	50	1602
Brown, Robert P., assignor to Brown & Bailey, Philadelphia, Pa. Paper box	432,475	July 15	2329	577	52	448
Brown, Royal F., Chicago, Ill. Hot-water boiler	424,174	Mar. 25	2723	726	50	1676
Brown, Rufus H., Marion, Va. Extension-step for cars	419,107	Jan. 7	684	180	50	144
Brown, Rufus H., Marion, Va. Extension-step for cars	425,731	Sept. 2	543	144	52	1480
Brown, Samuel E., Cleveland, Ohio. Blank for carriage-steps	435,916	Sept. 9	841	222	52	1544
Brown, Seabury F. (See Brown, Israel and S. F.)						
Brown Self Sharpening Mowing Machine Company. (See Brown, James O., assignor.)						
Brown & Sharpe Manufacturing Company. (See Norton, Charles H., assignor.)						
Brown & Sharpe Manufacturing Company. (See Parks, Edward H., assignor.)						
Brown & Sharpe Manufacturing Company. (See Worsley, Samuel L., assignor.)						
Brown & Sons, Robert B. (See Blakey, William, assignor.)						
Brown, Stephen J., Brooklyn, N. Y. Window-refrigerator	433,322	July 29	3537	918	52	719
Brown, Stephen R., Wichita, Kans. Cultivator	422,711	Mar. 4	510	130	50	1234
Brown, Theodore H., assignor of three-fourths to H. P. Procter, O. R. Skaar, and H. C. Forsyth, Virequa, Wis. Combined sheathing and lath machine	422,333	Feb. 25	2504	738	50	1119
Brown, Thomas H., Milwaukee, Wis. End-board for vehicles	439,104	Oct. 28	2212	594	53	442
Brown, Thomas J., near St. Paul, Nebr., assignor to T. R. Wallace. Header attachment	429,257	June 3	218	54	51	1514
Brown, Thomas W., Belmont, Mass. Egg-beater	419,631	Jan. 21	1465	394	50	313
Brown, Walter E. (See Giles and Brown.)						
Brown, Walter M. (See Scattergood, Henry V., assignor.)						
Brown, Walter M. (See Scattergood, Henry V. and C. F., assignors.)						
Brown, Walter M., Albany, N. Y. Steam-generator	423,664	Mar. 18	1975	521	50	1527
Brown, Walter M., Albany, N. Y. Ink-well for desks	434,015	Aug. 12	845	222	52	929
Brown, Walter M., Albany, N. Y. Saw-gin	438,676	Oct. 21	1515	409	53	303
Brown, Walter M., Albany, N. Y. Ink-well holder	441,639	Dec. 2	17	5	53	1265
Brown, Walter S. (See Sparks and Brown.)						
Brown, Wilfred L., San Francisco, Cal. Machine for cleaning fiber	419,632	Jan. 21	1466	394	50	313
Brown, William, Wilmington, Del. Packing-frame for shipping paper	443,474	Dec. 23	3017	774	53	1875
Brown, William A. (See Parsons and Brown.)						
Brown, William H., et al. (See Barry, William, assignor.)						
Brown, William H., St. Paul, Minn. Apparatus for transmitting fertilizers	419,242	Jan. 14	897	235	50	192
Brown, William J., Moline, Ill. Wheel	435,963	Sept. 9	906	239	52	1555
Brown, William M., Johnstown, Pa., assignor to Johnson Company, of Kentucky. Rail-chair	435,680	Sept. 2	475	125	52	1466
Brown, William W., New York, N. Y. Field game	443,427	Dec. 23	2938	755	53	1859
Brown, Wofford, assignor to F. L. Brown, Parkersburg, W. Va. Puzzle	425,535	Apr. 15	1678	448	51	344
Browne, Arthur W., Prince's Bay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Hand-piece pulley-head for dental engines	434,697	Aug. 19	1953	508	52	1156
Browne, Arthur W., Prince's Bay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Attachment for dental-engine hand-pieces	434,698	Aug. 19	1954	508	52	1156
Browne, Arthur W., Prince's Bay, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dentist's burring-tool. (Reissue.)	11,118	Oct. 28	3039	803	53	598
Browne, Charles L. (See Helcombe, Alfred G., assignor.)						
Browne, Frank L., et al. (See Evelyn, John T., assignor.)						
Browne, George W., Brooklyn, N. Y. Portable blacking-stand	426,234	Apr. 22	2750	720	51	560
Browne, Hugh M., Washington, D. C. Sewer or other trap	426,429	Apr. 29	3051	799	51	630
Browne, Joseph P., Princeton, Ind. Carpet-stretcher	437,971	Oct. 7	458	128	53	87
Browne, Josiah H. (See Phippen and Browne.)						
Browne, Josiah H., Salem, Mass. Cellar	436,765	Sept. 16	2180	573	52	1804
Browne, Warren A., Hempstead, N. Y. Score device for base-ball and similar games	437,562	Sept. 30	3507	915	52	2076
Brownell, Daniel N., Kalamazoo, Mich. Stock-car	432,506	July 22	2275	590	52	463
Brownell, Frank A., assignor, by mesne assignments, to Eastman Company, Rochester, N. Y. Photographic camera	442,216	Dec. 9	921	244	53	1450
Brownell, Jewett A., Binghamton, N. Y. Machine for rolling leather	441,821	Dec. 2	306	82, 83	53	1323
Browning, Clinton, Shoustown, Pa., assignor to Miller, Du Brul & Peters Manufacturing Company, Cincinnati, Ohio. Cigar-bunch roller	428,451	May 20	2163	543	51	1252
Browning, Howard L. (See Bastian, William V. S., assignor.)						
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Magazine fire-arm	421,663	Feb. 18	1819	{ 476 477 }	50	926
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Magazine fire-arm	422,887	May 27	2822	{ 717 718 719 }	51	1398
Browning, John M., and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Breech-loading gun	436,965	Sept. 23	2552	668	52	1383
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Magazine-gun	441,390	Nov. 25	2856	{ 737 738 }	53	1179

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Browning, Joseph, Philadelphia, Pa. Machine for spinning metal into irregular shapes.....	423,904	Mar. 25	2331	614	50	1602
Browning, Joseph, Philadelphia, Pa. Machine for spinning irregular forms.....	426,235	Apr. 22	2752	721	51	560
Browning, Joseph, Philadelphia, Pa. Thimble-embossing machine.....	426,407	Apr. 22	3017	790	51	614
Browning, Joseph, assignor to Simons, Brother & Co., Philadelphia, Pa. Thimble-die.....	441,822	Dec. 2	307	83	53	1334
Browning, Matthew S. (See Browning, John M. and M. S.)						
Brownlow, John H., and J. S. Warner, Ogdenburg, N. Y. Truss.....	434,316	Aug. 12	1322	344	52	1025
Brownson, Edgar E., et al. (See Ward, Frank F., assignor.)						
Brownson, Ralph, assignor of one-half to W. A. Hardenbergh, St. Paul, Minn. Horse-collar-stuffing machine.....	425,063	Apr. 8	973	261	51	196
Bruce, B. Taylor. (See Rankin, William G., assignor.)						
Bruce, James W., Aitch, Ohio. Wagon-brake.....	437,281	Sept. 30	3058	{ 800 801 590 591 }	{ 52 52 }	1988
Bruce, Lucien F., Springfield, Mass. Breech-loading magazine-gun.....	432,507	July 22	2276	76, 77	53	463
Bruce, Lucien F., Springfield, Mass. Magazine for breech-loading fire-arms.....	439,833	Nov. 4	304	76, 77	53	667
Bruce, Lucien F., Springfield, Mass., assignor to Gatling Gun Company, Hartford, Conn. Cartridge-feeding device.....	421,348	Feb. 11	1359	352	50	829
Bruce, Norman H., Waterford, N. Y. Machine for sewing looped fabrics.....	437,142	Sept. 23	2340	738	52	1938
Bruce, Norman H., Waterford, N. Y. Shirt-neck-marking machine.....	441,531	Nov. 25	3079	791	53	1222
Bruce, Norman H., Waterford, N. Y. Machine for cutting knitted fabrics.....	441,532	Nov. 25	3081	792	53	1222
Bruce, Sidney T., Marshall, Mo. Steam-engine.....	439,634	Nov. 4	21	6	53	610
Bruce, William B., Staunton, Va. Stand-boiler.....	429,335	June 3	357	85	51	1538
Bruch, Erwin J., West Bethlehem, Pa. Sealing-press.....	440,417	Nov. 11	1244	322	53	856
Bruckner, Charles C., New York, and S. W. Balch, Yonkers, N. Y. Engraving-machine.....	425,929	Apr. 15	2272	{ 602 603 }	{ 51 51 }	457
Brucks, Isidor, Lincoln, Nebr. Suspenders.....	433,717	Aug. 5	408	104	52	835
Bruen, John H., Elmira, N. Y. Feather-renovator.....	435,170	Aug. 26	2679	707	52	1303
Bruening, William, East Orange, N. J. Bleaching wax.....	421,904	Feb. 25	2161	567	50	999
Bruff, John W., et al. (See Merrill, William E. T., assignor.)						
Brulard, Arthur H., Fort St. Leon, La. Cane-mill.....	422,289	Feb. 25	2734	720	50	1105
Brumbaugh, Upton E., Marion, Ind. Lumber-drier.....	441,278	Nov. 25	2688	698	53	1146
Brumwell, Alfred, and M. E. Doolittle, Kansas City, Mo., assignors of one-third to J. M. Thompson, San Francisco, Cal. Cable-grip.....	435,275	Aug. 26	2834	750	52	1333
Brumwell, Alfred E., Huron, S. D. Potato-planter.....	429,498	June 3	605	148	51	1587
Brunemeyer, Lenerd H., Aurora, Ill. Trace-buckle and hame-tug.....	430,108	June 17	1546	384	51	1790
Brunner, Augustus, Indianapolis, Ind. Underground electric conduit.....	423,023	Mar. 11	1003	264	50	1334
Bruener, Martin, Buckland, Ohio. Combined plow and harrow.....	443,817	Dec. 30	3569	915	53	1990
Brunhaus, Henry, Wheeling, W. Va. Coffee-urn.....	427,735	May 13	1067	267	51	1031
Brunhoff, Edward, Chicago, Ill., and C. Lehmann, Wayne, Nebr. Gate-latch.....	426,765	Apr. 29	3556	927	51	728
Brunn, Albert, Wiesbaden, Prussia, Germany. Obtaining peptone and maltose.....	423,213	Mar. 11	1291	50	1390	
Brunn, Hermann, Munich, Germany. Parallel-ruler.....	433,976	Aug. 12	803	210	52	921
Brunner, Anton, Newark, N. J. Door-fastener.....	432,178	July 15	1790	460	52	364
Brunner, Henry C., and H. Hall, Jr., Highland Mills, N. Y. Let-off device for the spools of braiding or other machines.....	425,857	Apr. 15	2169	578	51	438
Brunning, Charles E., Stockton, Kans. Electric-therapeutic appliance.....	423,549	Mar. 18	1790	470	50	1491
Bruo, Richard M. (See Wiesebrock, Frederick W., assignor.)						
Brunquest, William, Menominee, Mich. Car-brake.....	421,664	Feb. 18	1824	477	50	927
Brunst, Henry, Baltimore, Md. Suspending pottery articles while burning.....	442,854	Dec. 16	1965	504	53	1663
Brunthaver, Charles E., Washington, D. C. Copy-holder.....	431,934	July 8	1405	357	52	283
Brunthaver, Charles E., Washington, D. C. Indicator.....	443,314	Dec. 23	2774	711	53	1827
Brunwasser, Frank. (See Brunwasser, Joseph and F.)						
Brunwasser, Joseph and F., Pittsburg, Pa. Fly-trap.....	419,003	Jan. 7	536	134	50	113
Brush, Charles F., Cleveland, Ohio. Fuse-block.....	427,548	May 13	789	196	51	978
Brush, Charles F., Cleveland, Ohio. Commutator collector or block for dynamo-electric machines.....	428,742	May 27	2612	662	51	1356
Brush, Charles F., Cleveland, Ohio. Commutator collector or block for dynamo-electric machines.....	428,743	May 27	2613	662	51	1356
Brush, Charles M., assignor of one-half to C. J. Waldron, Great Bend, Pa. Telegraph-pole.....	432,858	July 22	2833	726	52	572
Brush Electric Company. (See Pfannkuche, Gustav, assignor.)						
Brush Electric Company. (See Possons, Nathan S., assignor.)						
Brush Electric Company. (See Possons, William J., assignor.)						
Brush, George E., Danbury, Conn. Hat-bow.....	421,380	Feb. 18	1409	365	50	247
Brush, George E., Danbury, Conn. Machine for attaching sweats and bands to hats.....	424,458	Apr. 1	16	6, 7	51	6
Brunton, Jackson W., Guthrie, Mo. Portable fence.....	439,343	Oct. 28	2611	696	53	515
Brunton, Jackson W., Guthrie, Mo. Target-gun.....	440,538	Nov. 11	1432	370	53	893
Brunn, Eusebius, Svendborg, Denmark. Preparing pressed yeast.....	439,834	Nov. 4	307	53	668	
Bryan, Catharine M., New Sharon, Iowa. Dish washing and draining machine.....	422,371	Mar. 4	15	5	50	1139
Bryan, Henry, Modesto, Cal. Shoe for thrashing-machines.....	418,862	Jan. 7	318	77	50	67
Bryan, James A., New Berne, N. C. Nut-lock.....	427,040	May 6	12	4	51	813
Bryan, John C., Fordyce, Ark. Peach-stoner.....	440,463	Nov. 11	1307	338	53	869
Bryan, John H. B. (See Miller and Bryan.)						
Bryan, John M., San Francisco, assignor of one-half to P. A. Doane, Oakland, Cal. Ore-crusher.....	435,622	Sept. 2	385	104	52	1447
Bryan, St. George T. C., Birmingham, Ala. Treating slag.....	429,225	June 3	178	43	51	1505
Bryan, St. George T. C., Birmingham, Ala. Treating slag.....	429,226	June 3	178	43	51	1505
Bryans, Robert G., Jackson, Ga. Surgical bed-pan.....	422,290	Feb. 25	2735	721	50	1105
Bryant, B. H., et al. (See Reeser, John W., assignor.)						
Bryant, Benjamin F., Bushton, Ill. Dumping-wagon.....	437,885	Oct. 7	321	95	53	63
Bryant, Charles A., Wakefield, Mass. Glove-fastener.....	423,665	Mar. 18	1975	521	50	1527
Bryant, Charles A., Wakefield, Mass. Glove-fastener.....	423,666	Mar. 18	1976	521	50	1527
Bryant, Charles A., assignor to Woods, Sherwood & Co., Wakefield, Mass. Bail-lock.....	420,491	Feb. 4	93	22	50	582
Bryant, Charles G., Minneapolis, Minn. Oil-filter.....	421,093	Feb. 11	1002	{ 256 257 }	{ 50 50 }	762
Bryant, Clarence M., et al. (See Botsford, Frederick G., assignor.)						
Bryant, Daniel E., et al. (See Bryant, John L., assignor.)						
Bryant, Edson L., assignor of one-half to Wallace & Sons, Ansonia, Conn. Lamp-standard.....	441,393	Nov. 25	2863	739	53	1180
Bryant, Edson L., assignor of one-half to Wallace & Sons, Ansonia, Conn. Suspension device for lamps.....	441,394	Nov. 25	2864	740	53	1180
Bryant, Emory A., assignor of one-half to E. P. Rose, Aspen, Colo. Artificial tooth.....	434,317	Aug. 12	1324	345	52	1025
Bryant, Fred L. (See Frost and Bryant.)						
Bryant, Fred L., Chicago, Ill. Boring-machine.....	443,666	Dec. 30	3325	857	53	1943
Bryant, Fred L., Chicago, Ill., assignor to Ames & Frost Company, of Illinois. Hospital-bedstead.....	434,174	Aug. 12	1105	286	52	983

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Bryant, James, <i>et al.</i> (See Bryant, Zimmerman, and Becker, assignors.)						
Bryant, James M., C. H. Zimmerman, and J. Becker, assignors to said Zimmerman and Becker, J. Bryant, and B. F. Peabody, Benwood, W. Va. Splice for railway-rails and other bars	432,816	July 22	2782	711	52	561
Bryant, John L., Hillsdale, assignor of one-half to W. G. Bryant, Flint, and D. E. Bryant, Lansing, Mich. Device for unloading cars	434,375	Aug. 12	1410	370	52	1043
Bryant, Orrin, assignor to Pierce Steam Heating Company, Buffalo, N. Y. Machine for boring and tapping radiators	432,877	Mar. 4	767	{ 194 195 196 }	50	1283
Bryant, Orrin, assignor to Pierce Steam Heating Company, Buffalo, N. Y. Machine for boring and milling radiator-sections	434,079	Aug. 12	948	249	52	952
Bryant, Stanley A., <i>et al.</i> , administrators. (See Massey, Gideon B.)						
Bryant, Thomas W., Torrington, Conn. Pipe-wrench	429,258	June 3	219	55	51	1514
Bryant, Waldo C., Bridgeport, Conn. Electric ceiling-block	431,551	July 8	803	200	52	168
Bryant, Waldo C., Bridgeport, Conn. Switch for incandescent-lamp sockets	435,578	Sept. 2	305	84	52	1434
Bryant, William D., Brooklyn, N. Y. Padlock	439,635	Nov. 4	23	7	53	611
Bryant, William G., <i>et al.</i> (See Bryant, John L., assignor.)						
Bryant, William H., North Amherst, Ohio. Channeling-machine. (Reissue)	11,136	Dec. 23	3049	784	53	1882
Bryanton, George, Ghent, Ky. Road-cart	423,367	Mar. 11	1440	375	50	1417
Bryce, John, Moberly, Mo. Steam-water heater and purifier	439,574	Oct. 28	2951	784	53	580
Bryden, George. (See Bryden, William, assignor.)						
Bryden, William, Chelsea, Mass., assignor of one-half to G. Bryden, Hartford, Conn. Horse-shoe	421,349	Feb. 11	1361	353	50	830
Bryden, William L., Coshocton, Ohio. Tricycle	439,382	Oct. 28	2671	711	53	525
Bryon, William J. O., Jr., New York, N. Y. Exercising-machine	432,598	July 22	2412	622	52	490
Bryson, Andrew, Jr. (See Pendleton, Bryson, and Moss.)						
Bryson, Andrew, Jr. (See Pendleton, Bryson, and Tiers.)						
Bryson, Andrew, Jr. (See Pendleton, Tiers, and Bryson.)						
Bryson, Andrew, Jr., New York, N. Y. Pneumatic dispatch apparatus	422,498	Mar. 4	194	53	50	1173
Bryson, Andrew, Jr., and C. Tiers, New York, N. Y. Portable railway	421,813	Feb. 18	2013	532	50	962
Bryson, Andrew, Jr., New York, and J. H. Pendleton, Brooklyn, N. Y., assignors to Rapid Transit Cable Company, of New York. Conduit for cable railways	430,109	June 17	1547	{ 384 385 150 }	51	1790
Bryson, Andrew, Jr., New York, J. H. Pendleton, Brooklyn, and L. Moss, assignors to Rapid Transit Cable Company, New York, N. Y. Cable-shifting device for cable railways	440,001	Nov. 4	571	{ 151 152 }	53	719
Buch, Carl, and W. Brose, Keula, near Muskau, Germany. Spirit heating and cooking apparatus	439,772	Nov. 4	213	55, 56	53	650
Buch, Nelson C., Indianapolis, Ind. Saw-mill dog	441,743	Dec. 2	177	47	53	1297
Buchanan, Alfred E., Stanberry, Mo. Ditching-machine	435,276	Aug. 26	2835	750	52	1333
Buchanan, Charles A. (See Fogarty and Buchanan.)						
Buchanan, Charles G., New York, N. Y. Crushing-rolls	420,571	Feb. 4	202	52	50	604
Buchanan, David R., Peoria, assignor to Elgin National Watch Company, Chicago, Ill. Manufacture of watch-dials	425,020	Apr. 8	913	.....	51	185
Buchanan, Frank. (See Keller, Chauncey F., assignor.)						
Buchanan, George W., <i>et al.</i> (See Rothlisberger, Ernesto, assignor.)						
Buchanan, Gordon, Chicago, Ill. Electric drill	438,837	Oct. 21	1805	481	53	355
Buchanan, Judson. (See Sanders and Buchanan.)						
Buchanan, William, New York, N. Y. Car-heating apparatus	424,459	Apr. 1	25	7	51	7
Buchheit, Joseph, Brooklyn, N. Y. Game	420,915	June 24	2846	698	51	2048
Buchholz, Gustav A., deceased, Frankfort-on-the-Main, Prussia, Germany; O. Knight, Washington, D. C., administrator, assignor of one-third to J. U. Robertson, New York, N. Y. Grain-reduction machine	425,366	Apr. 8	1422	{ 379 380 381 }	51	285
Buchholz, Henry A., New York, N. Y. Reel-holder	427,831	May 13	1220	308	51	1060
Buchholz, Wilhelm, assignor of one-half to C. O. Bartlett, Cleveland, Ohio. Grinding-mill	437,087	Sept. 23	2721	711	52	1917
Buchhop, Ferdinand, and A. J. Allibone, New York, N. Y., assignors to E. B. Meyrowitz, Ridgefield, N. J. Spectacle-temple and making the same	440,220	Nov. 11	910	234	53	798
Buchman, Abraham, Oriole, Md. Picker for berries, fruits, &c.	421,665	Feb. 18	1825	477	50	927
Buchman, Henry D., Allegheny, Pa. Making molds	434,104	Aug. 12	989	258	52	960
Buchmüller, Carl, Pasadena, Cal. Grass-receptacle for lawn-mowers	428,074	May 20	1588	403	51	1141
Buchner, Georg, Munich, assignor to M. May, Mindelheim, Germany. Artificial stone	443,250	Dec. 23	2659	.....	53	1806
Buchwald, William C. v., assignor of one-half to F. A. Byram, Philadelphia, Pa. Making smoking						
Buck, Charles E., Boston, Mass. Adjustable shelf or bracket	422,268	Feb. 25	2699	711	50	1099
Buck, James A., Crescent, N. Y. Potato-digger	439,636	Nov. 4	24	7	53	611
Buck, William, Brantford, Ontario, Canada. Furnace, stove, or range grate	441,928	Dec. 2	461	123	53	1355
Buckingham, Edward L., Lewistown, Ill. Vehicle-shaft support	419,178	Jan. 14	800	211	50	172
Buckingham, John L., Hermosa, S. D. Drilling rock, &c.	430,510	June 17	2179	536	51	1913
Buckingham, John L., Hermosa, S. D. Rock-drill	424,266	Mar. 25	2840	759	50	1700
Buckingham, Nathan A., Jacksonville, Ill. Sash-fastener	436,558	Sept. 16	1846	486	52	1740
Buckingham, Nathan A., Jacksonville, Ill. Sash-fastener	425,021	Apr. 8	914	242	51	185
Buckingham, Nathan A., Jacksonville, Ill. Sash-fastener	426,581	Apr. 29	3270	858	51	673
Buckingham, Roswell H., Chicago, Ill. Bridge-rail joint	433,616	Aug. 5	258	69	52	807
Buckles, Daniel D., Jamestown, Ohio. Horse-collar pad	419,030	Jan. 7	576	145	50	122
Buckley, Edward F., <i>et al.</i> (See Purdy, Zachariah V., assignor.)						
Buckley, Jeremiah and M. G. F., New York, N. Y. Machine for bending bridle-irons	441,929	Dec. 2	462	124	53	1355
Buckley, John, Boston, Mass. Lever	418,907	Jan. 7	404	99	50	84
Buckley, John, assignor to Rochester Machine Tool Works, Limited, Rochester, N. Y. Atomizer	440,002	Nov. 4	576	152	53	721
Buckley, Michael G. F. (See Buckley, Jeremiah and M. G. F.)						
Buckley, Thomas, Kalamazoo, Mich. Adjustable stove-back	437,282	Sept. 30	3059	801	52	1988
Buckley, Thomas F., Lock Haven, Pa. Wood-bundling machine	425,064	Apr. 8	974	261	51	197
Buckley, William A., Gainesville, Va. Fire-escape	419,108	Jan. 7	685	{ 180 181 }	50	144
Buckley, William H., Jr., Philadelphia, Pa. Garbage-receptacle	426,766	Apr. 29	3558	928	51	728
Bucklin, Charles S., Key Port, N. J. Fruit and vegetable pulp machine	426,236	Apr. 22	2753	721	51	561
Bucklin, William C., New York, N. Y. Regenerative gas-lamp	422,567	Mar. 4	291	74, 75	50	1192
Bucklin, William C., New York, N. Y. Gas-stove	427,666	May 13	954	{ 240 241 }	51	1009
Buckman, S. M., <i>et al.</i> (See Reckenzaun, Anthony, assignor.)						
Budd, Edward B., Bloomfield, and W. R. Sands, Newark, N. J. Hitching-strap for double teams	440,910	Nov. 18	2053	531	53	1019
Budd, Thomas R., Carthage, N. Y. Music-holder	432,859	July 22	2834	726	52	572
Budde, Conrad, and D. C. McCalip, Mansfield Valley, Pa. Device for setting cartridges on railway-tracks	437,283	Sept. 30	3060	801	52	1988

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Budde, Joseph, San Francisco, Cal. Supply-valve for water-closets.....	442,419	Dec. 9	1230	318	53	1409
Buddington, Frank E., Chicago, Ill. Adjustable sleeve-drafting apparatus.....	440,692	Nov. 18	1684	434	53	950
Budgett, Henry H. (See Skinner, Charles C., assignor.)						
Budlong, Edward L., Chicago, Ill. Belt-fastener.....	431,103	July 1	109	28	52	24
Budlong, William G., assignor to Union Machine Company, Providence, R. I. Combined metal-working machine.....	437,284	Sept. 30	3061	{ 801 802 }	{ 52 52 }	{ 1988 1988 }
Buehler, Rudolph R., assignor to T. Devlin, Philadelphia, Pa. Transom-lifter.....	431,963	July 8	1451	367	52	292
Buehler, Rudolph R., Philadelphia, Pa., assignor to T. Devlin. Transom-lifter.....	437,391	Sept. 30	3237	{ 843 844 }	{ 52 52 }	{ 2020 2020 }
Buehrig, Charles. (See Buehrig, Frederick and C.)						
Buehrig, Frederick and C., Minier, Ill. Egg-tester.....	430,334	June 17	1928	472	51	1863
Buel, Albert W., Milwaukee, Wis. Bridge-gate.....	432,016	July 15	1538	391	52	316
Buell, Benjamin, Bethel, Mich. Gate.....	423,308	Mar. 11	1441	375	50	1417
Buette, Louis. (See Chevalier and Buette.)						
Buettner, Frank, and F. Orlikowski, Cleveland, Ohio. Paving-brick.....	426,430	Apr. 29	3053	799	51	630
Buffalo Dental Manufacturing Company. (See Seamans, Irving M., assignor.)						
Buffalo Patent Axle and Wheel Company. (See Jones, Willis, assignor.)						
Bufford, George W., assignor of one-half to J. E. Kitson, Brooklyn, N. Y. Pipe-tongs.....	432,195	July 15	1816	467	52	368
Bufford, George W., assignor of one-half to J. E. Kitson, Brooklyn, N. Y. Pipe-tongs.....	442,306	Dec. 9	1054	276	53	1474
Bufford, George W., assignor of one-half to J. E. Kitson, Brooklyn, N. Y. Chain-wrench.....	442,569	Dec. 9	1471	377	53	1557
Buffum, Edward S. (See Griffin, Thayer, and Buffum.)						
Buffum, Frederick C. (See Harrison and Buffum.)						
Burkin, Samuel, Anderson, Ind. Straw-stacker.....	427,736	May 13	1068	268	51	1031
Bugbee, Almon C. (See Lamprey and Bugbee.)						
Bugbee, Almon C., Lake Village, assignor to W. D. Huse, Laconia, N. H. Circular-knitting machine.....	439,050	Oct. 21	2120	569	53	417
Bugbee, Truman G., Sheboygan, Wis. Wood-working machinery.....	424,091	Mar. 25	2608	695	50	1654
Buhlman, William, Chicago, Ill. Hydraulic nozzle for water-wheels.....	431,739	July 8	1122	279	52	228
Buhoup, Harry C., Chicago, Ill. Draw-gear for railway-cars.....	432,727	Mar. 18	2062	543	50	1543
Buhoup, Harry C., Chicago, Ill. Car-coupling.....	431,644	July 8	952	238	52	198
Buhoup, Henry C., Chicago, Ill., assignor to W. McConway, Pittsburg, Pa. Car-coupling.....	427,737	May 13	1072	269	51	1032
Buhoup, Henry C., Chicago, Ill., assignor to W. McConway, Pittsburg, Pa. Car-coupling.....	429,081	May 27	3122	{ 804 805 }	{ 51 51 }	{ 1456 1456 }
Buikema, Hommo, North St. Paul, Minn. Organ-pedal cover.....	439,863	Nov. 4	350	91	53	676
Buland, Knut, Linn Grove, Iowa. Corn-planter.....	428,377	May 20	2057	518	51	1234
Buland, Knut, Linn Grove, Iowa. Corn-planter.....	438,058	Oct. 7	598	163	53	114
Bulckens, Frank V., Oregon, Ill. Temperature-regulator for liquids.....	442,011	Dec. 2	597	162	53	1380
Bulen, George F., Tompkinsville, N. Y. Thermostat.....	421,852	Feb. 18	2086	548	50	975
Bulen, George F., Tompkinsville, N. Y. Automatic fire-alarm system.....	431,853	Feb. 18	2086	{ 548 549 }	{ 50 50 }	{ 975 975 }
Bulen, George F., Tompkinsville, N. Y. Automatic fire-alarm transmitter.....	421,854	Feb. 18	2091	549	50	976
Bulger, Aaron Z., Martinsburg, Pa. Road-cart.....	430,916	June 24	2847	698	51	2048
Bull, E. E., et al. (See Bull, James E., assignor.)						
Bull, James E., Tracy City, Tenn. Hame-fastening.....	427,041	May 6	12	4	51	813
Bull, James E., assignor of three-fourths to E. O. Nuthurst, W. N. Byus, and E. E. Bull, Tracy City, Tenn. Hame.....	420,433	Feb. 4	7	2	50	566
Bull, William B., Quincy, Ill. Means for preventing boiler incrustation.....	430,461	June 17	2105	519	51	1297
Bull, William B., Quincy, Ill. Electric incrustation-preventer.....	430,462	June 17	2106	519	51	1297
Bullard, Charles W., Chicago, Ill. Door-hanger.....	442,950	Dec. 16	2127	547	53	1694
Bullard, Edgar R., Wheeling, W. Va. Camera.....	433,070	July 29	3182	819	52	644
Bullard, Edward P. (See Libby, Charles L., assignor.)						
Bullard, Isaac H., et al. (See Getchell, Charles E., assignor.)						
Bullard, James H., Springfield, Mass. Rotary furnace for heating blanks.....	426,556	Apr. 29	3232	{ 847 848 }	{ 51 51 }	{ 665 665 }
Bullard, James H., Springfield, Mass. Velocipede.....	443,818	Dec. 30	3571	{ 915 916 }	{ 53 53 }	{ 1991 1991 }
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Hydrocarbon metal heating and melting furnace.....	419,406	Jan. 14	1147	305	50	242
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Hydrocarbon metal-heating furnace.....	419,407	Jan. 14	1149	305	50	242
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Valve for regulating the ingress of liquids to tanks.....	419,408	Jan. 14	1151	306	50	242
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Hydrocarbon-burner.....	419,409	Jan. 14	1152	306	50	242
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Apparatus for burning hydrocarbon fuel.....	419,410	Jan. 14	1154	307	50	243
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Apparatus for burning hydrocarbon oils.....	419,411	Jan. 14	1155	307	50	243
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Apparatus for burning hydrocarbons.....	435,269	Aug. 26	2827	748	52	1331
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Hydrocarbon-burning apparatus.....	435,270	Aug. 26	2828	748	52	1331
Bullard, James H., and F. A. Nickerson, Springfield, Mass. Apparatus for burning hydrocarbon oils.....	435,009	Aug. 26	2444	647	52	1258
Bullard, Walter, Chico, Cal. Baling-press.....	424,046	Mar. 25	2546	{ 679 680 }	{ 50 50 }	{ 1642 1642 }
Bullene, Emma F. J., Chicago, Ill. Ventilated cushion.....	442,099	Dec. 9	742	200	53	1416
Bullenger, Joseph. (See Jump and Bullenger.)						
Bullivant, William P., London, England. Attachment for supporting torpedo-nets.....	442,951	Dec. 16	2128	548	53	1694
Bullock, Charles. (See Kenney, Thomas M., assignor.)						
Bullock, Edwin B. (See Grover, Stillman B., assignor.)						
Bullock, Henry P., Jonesborough, Tex., assignor of one-half to E. A. Bailey, A. B. Roberts, and R. L. Brandon. Car-coupling.....	430,171	June 17	1623	405	51	1805
Bullock, James R., Tarborough, N. C. Back-hand buckle.....	423,667	Mar. 18	1977	521	50	1527
Bullock Manufacturing Company, M. C. (See Douglass, Samuel W., assignor.)						
Bullock, Milan C., Chicago, Ill. Drill-tube coupling.....	430,617	June 24	2356	576	51	1954
Bullock, Milan C., Chicago, Ill. Device for removing casing-tubes in rock and earth drilling.....	434,860	Aug. 19	2172	{ 916 917 918 }	{ 52 53 53 }	{ 1200 1991 1991 }
Bullock, Milan C., Chicago, Ill. Rock or earth drill.....	443,819	Dec. 30	3572	{ 916 917 918 }	{ 53 53 53 }	{ 1991 1991 1991 }
Bullock, W. S. (See Johanson, Nils J., assignor.)						
Bulluck, William, Centralia, Pa. Draft-annunciator for mines.....	419,312	Jan. 14	1001	{ 264 265 }	{ 50 50 }	{ 212 212 }

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Bulmer, Robinson, Burlington, Iowa. Swinging and sliding gate hinge.....	430,618	June 24	2358	577	51	1954
Bültzingslöwen, Bruno v., M. Levy, and F. S. Klotz, New York, N. Y. Pocket-knife.....	436,888	Sept. 23	2443	638	52	1863
Bumpus, Charles J., Fayette Station, W. Va. Car-coupling.....	430,917	June 24	2848	699	51	2048
Bumpus, Ebenezer F., Boston, Mass. Pencil-sharpener.....	437,285	Sept. 30	3063	802	52	1989
Bunce, Charles, and E. H. Benedict, Brooklyn, N. Y. Action for upright pianos.....	427,667	May 13	956	241	51	1010
Bunce, Densmore J., Nevada, Iowa. Veterinary surgical instrument.....	421,814	Feb. 18	2015	533	50	963
Bunch, N. (See Mitchell, John A., assignor.)						
Bunch, Walter S., Marshfield, Oreg. Wrench.....	440,303	Nov. 4	577	152	53	721
Bundy, Jesse E., San Rafael, Cal. Miter-box.....	426,767	Apr. 29	3559	928	51	728
Bundy, Willard L., Auburn, N. Y. Electric cash-register.....	443,475	Dec. 23	3018	775 776 777	53	1875
Bunge, Charles, Geneva, N. Y. Gun-sight.....	433,323	July 29	3558	918	52	719
Bunker, John H. (See Dubois, Olivier F., assignor.)						
Bunker, William L., assignor to Rocker Spring Company, Chicago, Ill. Spring attachment for platform rocking-chairs.....	430,601	June 17	2317	569	51	1938
Bunnell, Morton G., assignor to F. C. Austin, Chicago, Ill. Road-scraper.....	427,738	May 13	1073	269 270	51	1032
Bunnell, Morton G., assignor to F. C. Austin, Chicago, Ill. Road-scraper.....	427,739	May 13	1076	270 271	51	1033
Bunnell, Morton G., assignor to F. C. Austin, Chicago, Ill. Machine for making and re-pairing roads.....	427,740	May 13	1079	271 272 273	51	1034
Bunsen, William M., Galesville, Wis. Blow-gun.....	429,499	June 3	607	149	51	1587
Bunting, William, Jr., Brooklyn, assignor to Meyer-Suiffen Company, Limited, New York, N. Y. Basin, sink, bath-tub, &c.....	433,718	Aug. 5	408	104 105	52	835
Buntun, William. (See Cavett, William K., assignor.)						
Buoh, Louis, Jr., Cincinnati, Ohio. Neck-yoke coupling.....	430,267	June 17	1820	446	51	1841
Burbank, Charles E., assignor to M. L. Burbank, Philadelphia, Pa. Hydrocarbon-oil burner.....	440,942	Nov. 18	2107	547	53	1030
Burbank, George W., G. W. Bill, and W. H. Ramseyer, Missouri Valley, Iowa. Automatic governor for air-brake pumps.....	428,299	May 20	1936	487	51	1208
Burbank, Jotham H., deceased, North Brookfield; L. J. Burbank administratrix and assignor to O. A. Miller, Brockton, Mass. Boot-tree.....	440,788	Nov. 18	1852	477	53	981
Burbank, Lovinia J., administratrix. (See Burbank, Jotham H.)						
Burbank, Lyman L., and C. Nippert, Ashland, Wis. Wash-boiler.....	422,114	Feb. 25	2460	651	50	1054
Burbank, Mary L. (See Burbank, Charles E., assignor.)						
Burbeck, Charles L., Fort Bragg, Cal. Oil-cup.....	433,849	Aug. 5	610	159	52	875
Burbridge, James, Tottenham, county of Middlesex, England. Rubber water-bottle.....	421,160	Feb. 11	1098	282	50	782
Burbridge, James, Tottenham, England. Tobacco-pouch.....	438,798	Oct. 21	1727	463	53	341
Burbridge, O. H., et al. (See Dotson, John W., assignor.)						
Burch, Oliver F., Rhodellia, Ky. Car-coupling.....	437,830	Oct. 7	243	75	53	48
Burch, William H., Scranton, Pa. Joint or fastening for balusters, &c.....	422,712	Mar. 4	511	130	50	1234
Burchard, H. M. (See Bier, Danthus P., assignor.)						
Burchfield, Wilner G., Altus, Ark. Seed-planter.....	437,563	Sept. 30	3508	915	52	2076
Burchill, Joseph S. (See Murray, John N., assignor.)						
Burcky, John, et al. (See Goldsmith, Frederick E., assignor.)						
Burd, Julian F., Dupuyer, Mont. Toy game.....	442,012	Dec. 2	598	162	53	1380
Burdell, Charles E., New York, N. Y. Apparatus for manufacturing water-gas.....	425,977	Apr. 22	2371	628	51	485
Burden, Howard H. (See Renshaw and Burden.)						
Burdett, Oliver S., New Orleans, La. Pavement and gutter.....	421,235	Feb. 11	1198	308	50	800
Burdett, Samuel F., and J. Bradley, assignors to Byfield Manufacturing Company, Chelmsford, Mass. Circular-knitting machine.....	442,168	Dec. 9	849	228	53	1436
Burdick, Charles L., Madison, Wis. Paint-distributor.....	434,105	Aug. 12	991	258	52	960
Burdick, John, Fort Elliott, Tex., assignor of one-half to H. W. Wheeler, Fort Reno, Ind. Ter. Wire-stretcher.....	443,640	Dec. 30	3286	847	53	1935
Burdine, George D., Magnolia, Ark. Combined seeder and fertilizer-distributor.....	435,032	Aug. 26	2477	655	52	1265
Burdon, Levi L., assignor to Burdon Seamless Filled Wire Company, Providence, R. I. Making ingots for seamless plated wire.....	419,598	Jan. 14	1412	378	50	296
Burdon, Levi L., assignor to Burdon Seamless Filled Wire Company, Providence, R. I. Compound ingot and wire made therefrom.....	422,713	Mar. 4	512	131	50	1234
Burdon, Levi L., assignor to Burdon Seamless Filled Wire Company, Providence, R. I. Making compound ingots.....	432,690	July 22	2579	661	52	522
Burdon, Levi L., assignor to Burdon Seamless Filled Wire Company, Providence, R. I. Manufacture of compound ingots.....	432,691	July 22	2582	661	52	522
Burdon, Levi L., assignor to Burdon Seamless Filled Wire Company, Providence, R. I. Seamless compound gold wire.....	440,693	Nov. 18	1686	434	53	951
Burdon, Levi L., assignor to Burdon Seamless Filled Wire Company, Providence, R. I. Seamless plated hollow wire.....	440,694	Nov. 18	1687	434	53	951
Burdon Seamless Filled Wire Company. (See Burdon, Levi L., assignor.)						
Burford, Daniel C. (See Harrison and Burford.)						
Burford, William B. (See Freismuth, Franz B., assignor.)						
Burg, Lewis, Farmington, Iowa. Road-cart.....	443,592	Dec. 30	3209	825	53	1921
Burge, Clif. L., Emporia, Kans. Clothes-prop.....	429,227	June 3	179	43	51	1506
Burge, John H. H., assignor to E. I. Horsman, Brooklyn, N. Y. Game.....	440,737	Nov. 18	1757	452	53	965
Burger, Benjamin E., Merrill, Wis. Dental forceps.....	436,210	Sept. 9	1294	337	52	1627
Burger, Charles F. (See Monsanto, Mauricio M., assignor.)						
Burger, Clarence L., Brooklyn, assignor of one-half to West & Melchers, New York, N. Y. Pencil-sharpener.....	432,789	July 22	2743	702	52	553
Burger, S. F., et al. (See Warner, Marcellus K., assignor.)						
Burger, Samuel K., assignor of one-half to T. G. Edie, Stewartstown, Pa. Swing.....	431,552	July 8	805	201	52	168
Burgermeister, Christian L. (See Rees and Burgermeister.)						
Burgert, Lewis, Table Rock, Nebr. Door-spring.....	439,236	Oct. 28	2434	653	53	481
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Sheet-metal latch-keeper.....	421,381	Feb. 18	1411	365	50	847
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Sheet-metal latch-case.....	421,905	Feb. 25	2162	567	50	999
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock-case.....	425,748	Apr. 15	2007	535	51	408
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock or latch bolt.....	435,554	Sept. 2	268	75	52	1427
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Reversible latch.....	435,555	Sept. 2	270	75	52	1427
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock.....	438,677	Oct. 21	1517	409	53	303

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Burgess, Edward A., New Haven, Conn., assignor to C. S. Drake, San Rafael, Cal. Rail-way-switch	419,179	Jan. 14	801	212	50	173
Burgess, Henry, Chicago, Ill. Combined bed and lounge	443,389	Dec. 23	2885	742	53	1850
Burgess, Hugh, Ardmore, Pa. Apparatus for recovering soda	429,417	June 3	477	113	51	1562
Burgess, Hugh, Ardmore, Pa. Apparatus for recovering alkali	438,772	Oct. 21	1690	454	53	334
Burgess, Hugh, Ardmore, assignor of one-half to W. Rennyson, Norristown, Pa. Apparatus for the manufacture of gas	440,004	Nov. 4	578	152 153	53	721
Burgess, James S., Charleston, Ill. Gate	431,553	July 8	806	201	52	168
Burgey, Morris P., Corning, N. Y. Car or locomotive brake	428,744	May 27	2615	663	51	1356
Burgess, Neilson, Highlands, N. J. Stage apparatus	442,796	Dec. 16	1858	480	53	1642
Burgess, Neilson, Highlands, N. J. Stage apparatus	442,797	Dec. 16	1860	481	53	1643
Burgess, Theodore P., Sangerties, N. Y. Lead-lining metallic vessels	421,161	Feb. 11	1099	282	50	782
Burgess, Theodore P., Dedham, Mass. Apparatus for producing bisulphite solutions	432,692	July 22	2584	662	52	522
Burgess, William D., and T. C. Munz, assignors of one-third to E. H. Van Hoesen, Toledo, Ohio. Metal wheel	420,927	Feb. 11	755	195	50	715
Burghardt, William C. L., Greenfield, Ill. Folding box	438,403	Oct. 14	1121	303	53	220
Burgos, Pastor. (See Messina and Burgos.)						
Burhorn, Edwin, Philadelphia, Pa. Filter-valve	423,122	Mar. 11	1156	300	50	1363
Burk, Hiram C., Cleveland, Ohio. Steak-tenderer	423,855	Feb. 18	2092	549	50	976
Bürk, Richard, Schwenningen, Württemberg, Germany. Workman's time-recorder	433,512	Aug. 5	105	29 30 31	52	777
Burkard, William N., Sheboygan, Wis. Banjo attachment	441,930	Dec. 2	466	124	53	1356
Burke, Daniel C., et al. (See Tanner, Jesse J., assignor.)						
Burke, James A., Albany, N. Y. Temporary binder	433,559	Aug. 5	174	46	52	790
Burke, James V., Chicago, Ill. Filtering can and receptacle	426,911	Apr. 29	3760	982	51	768
Burke, Matthew, Bismarck, Nebr. Corn-planter	442,350	Dec. 9	1126	293 294	53	1487
Burke, Robert E., Phillipsburg, N. J. Ventilator	426,237	Apr. 22	2754	721	51	561
Burke, Solon W., Edon, assignor of one-half to F. B. Metzler, Wauseon, Ohio. Combined curry-comb and brush	429,010	May 27	3006	772	51	1434
Burke, Stephen E., assignor of one-half to L. W. Johnson, Edon, Ohio. Road-cart	422,291	Feb. 25	2736	721	50	1105
Burke, Stephen L., assignor of five-sixths to F. M. and W. A. Jenks, J. C. Nial, C. L. McDonald, R. Carrick, I. E. Russell, St. Louis, and J. Schaffer, Kirkwood, Mo. Ore-concentrator	427,551	May 13	793	198 199	51	979
Burke, Thomas, Fordham, N. Y. Boiler-flue scraper	428,714	May 27	2572	652	51	1348
Burke, William C., et al. (See Bibikov, Nicholas A., assignor.)						
Burke, William C., et al. (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Burke, William J., Seattle, Wash. Head-light for locomotives	431,872	July 8	1326	332 333	52	267
Burkhalter, Elijah B., Gibsland, La. Combination press or ironing board	423,668	Mar. 18	1978	522	50	1528
Burkhardt, John, New York, N. Y. Forming ornamental tubing or tubular cups	425,022	Apr. 8	915	243	51	185
Burkhart, John D., Dayton, Wash. Cultivator	430,828	June 24	2713	665	51	2023
Burkholder, Alfred, Toronto, Ontario, Canada. Baby-walker	428,452	May 20	2164	544	51	1253
Burkholder, Christ. (See Burkholder, Jonathan H. and C.)						
Burkholder, Jonathan H. and C., Ridgeville Corners, Ohio. Corn-cutter	441,744	Dec. 2	178	47	53	1297
Burleigh, Wallace, Franklin, N. H. Automatic gate for railway-crossings	427,395	May 6	544	138 139	51	919
Burley, John H., Reading, Pa. Chimney-cowl or ventilator	421,094	Feb. 11	1004	257	50	762
Burlingame, Henry A., Central Falls, R. I., assignor to Sawyer Spindle Company, Boston, Mass. Spinning-spindle and support therefor	425,930	Apr. 15	2278	603	51	457
Burlingham, John E. (See Jones and Burlingham.)						
Burnam, William H., Birmingham, county of Warwick, England, assignor to L. S. Lee, Philadelphia, Pa. Hair-clipper	433,513	Aug. 5	106	31	52	778
Burmeister, Frederick, assignor to F. E. Drury, Cleveland, Ohio, and H. P. Crowell, Chicago, Ill. Hot-air register	435,391	Sept. 2	17	4, 5	52	1378
Burnap, Charles E. (See Wood and Burnap.)						
Burne, John, Portland, Ohio. Wagon-jack	419,031	Jan. 7	577	146	50	122
Burnell, Arthur. (See Burnell, George and A.)						
Burnell, George and A., Hindmarsh, South Australia. Apparatus for cleansing wool	440,418	Nov. 11	1245	322	53	856
Burnes, James E., Waterbury, Conn. Wire-drawing machine	427,150	May 6	198	51	51	850
Burnes, James E., Waterbury, Conn. Wire-drawing machine	440,133	Nov. 11	764	200 201	53	767
Burnet, William H., J. Sears, and O. G. Burnham, assignors to American Stock Food and Fibre Company, Chicago, Ill. Apparatus for delinting cotton-seeds or the hulls	440,259	Nov. 11	963	246	53	808
Burnott, Wesley. (See Marvin, Burnett, and Marvin.)						
Burnett, William J., Huron, S. D. Hot-air and steam heater	429,882	June 10	1179	292	51	1708
Burnett, William S. (See Goodwin and Burnett.)						
Burnham, Arthur. (See Christiansen, John, assignor.)						
Burnham & Dugan Railway Appliance Company. (See Dugan, John A., assignor.)						
Burnham, Frank H., Bridgeton, Me. Guide attachment for sheet-metal-cutting machines	441,931	Dec. 2	467	125	53	1356
Burnham, Frank L. (See Burnham, Shepard C. and F. L.)						
Burnham, Hiram, Burnham, N. Y. Split pulley	422,508	Mar. 4	293	75	50	1192
Burnham, John E., assignor of one-third to J. C. Metcalf, Lynn, Mass. Tag-marking machine	425,749	Apr. 15	2008	535	51	408
Burnham, Joseph H., Ipswich, Mass. Beating-machine	429,114	June 3	9	3, 4	51	1474
Burnham, Nathan F., York, Pa. Turbine water-wheel	427,552	May 13	795	200	51	979
Burnham, Nathan F., York, Pa. Turbine water-wheel	438,878	Oct. 21	1869	496 497	53	367
Burnham, Oliver G. (See Burnet, Sears, and Burnham.)						
Burnham, Oliver G. (See Sears and Burnham.)						
Burnham, Shepard C. and F. L., Homer, N. Y. Positive shuttle-motion for looms	418,863	Jan. 7	319	78	50	67
Burnham, William H., and J. H. Miller, assignors to United States Wind Engine and Pump Company, Batavia, Ill. Compensating pump-rod	428,800	May 27	2691	683	51	1371
Burnley, William, assignor of two-thirds to C. A. Hitchcock, North East, and S. A. Davenport, Erie, Pa. Galvanic battery	419,633	Jan. 21	1468	394	50	314
Burnley, William, assignor of two-thirds to C. A. Hitchcock, North East, and L. F. Watson, Warren, Pa. Telephone	436,334	Sept. 16	1478	386	52	1673
Burnley, William, assignor of two-thirds to C. A. Hitchcock, North East, and L. F. Watson, Warren, Pa. Telephone	436,335	Sept. 16	1479	386	52	1673
Burns, Frank, et al. (See Weiss, Louis T., assignor.)						
Burns, James A., Atlanta, Ga. Ice-cream freezer	431,645	July 8	954	239	52	198
Burns, James A., Homestead, Pa. Ladle-car	439,637	Nov. 4	25	7, 8	53	611

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Burns, James D. (See Deolittle and Burns.)						
Burns, John, Chicago, Ill. Air-feeding device.	429,228	June 3	180	43	51	1506
Burns, John, Rochester, assignor of one-half to J. H. Reynolds, Troy, N. Y. Means for conveying oil from a supply-reservoir to tanks	424,596	Apr. 1	246	65	51	50
Burns, John, Rochester, assignor of one-half to J. H. Reynolds, Troy, N. Y. Means for detecting leaks in underground oil-pipes.	424,597	Apr. 1	247	65	51	50
Burns, John, Rochester, assignor of one-half to J. H. Reynolds, Troy, N. Y. Furnace for burning hydrocarbon fuels	440,098	Nov. 4	705	{ 187 188 }	{ 53 53 }	{ 746 746 }
Burns, John C., Hughes Springs, Tex. Car-coupling	440,134	Nov. 11	765	201	53	768
Burns, Joseph H., Cleveland, Ohio. Base-ball curver	443,036	Dec. 16	2260	580	53	1721
Burns, Michael, Milwaukee, Wis. Water-tower	439,383	Oct. 28	2672	712	53	526
Burns, Nevin E. (See Olsen and Burns.)						
Burns, Robert. (See Westbrook and Burns.)						
Burns, Silver & Co. (See Cook, Charles A., assignor.)						
Burns, W. E., et al. (See Ordner, Joseph F., assignor.)						
Burson, Erick H., Chicago, Ill. Floor-clamp	442,607	Dec. 16	1535	396	53	1579
Burpee, Augustus R., Lake Village, N. H. Combination knit garment	421,236	Feb. 11	1199	{ 308 309 }	{ 50 50 }	{ 800 800 }
Burpee, Charles, Rowena, New Brunswick, assignor to G. F. Burpee, Wilmot, and C. L. Tilley, Wakefield, Canada. Car-coupling	433,514	Aug. 5	107	31	52	778
Burpee, George F., et al. (See Burpee, Charles, assignor.)						
Burpee, George H., New York, N. Y. Heating feed-water	441,392	Nov. 25	2861	739	53	1179
Burr, Ebenezer B. (See Thorne and Burr.)						
Burr, Ellis M., et al. (See Lasher, Morgan E., assignor.)						
Burr, Eunmons. (See Ferriss, Elisha P., assignor.)						
Burr, George S., and J. M. Cummings, Schochoh, Ky. Ground-roller	426,431	Apr. 29	3054	800	51	630
Burr, George W., Round Lake, N. Y. Valve	426,635	Apr. 29	3353	{ 878 879 880 }	{ 51 51 51 }	{ 689 689 689 }
Burr & Houston Company. (See Houston, John, assignor.)						
Burr, Sanford S., Winnetka, Ill. Wash-stand	434,914	Aug. 26	2311	{ 610 611 }	{ 52 52 }	{ 1233 1233 }
Burr, Sanford S., Winnetka, Ill. Wash-stand	434,915	Aug. 26	2313	611	52	1234
Burrell, Archibald, Morris, Ill. Steam brick-machine	419,749	Jan. 21	1636	435	50	345
Burrell & Co., D. H. (See Hart, Frederick, assignor.)						
Burrell & Co., D. H. (See Naylor, James, Jr., assignor.)						
Burrell & Co., D. H. (See Sedgwick, Alonzo, assignor.)						
Burrell & Co., D. H. (See Womersley, William, assignor.)						
Burrell, David H., et al. (See Hatch, George E., assignor.)						
Burrell, David H., Little Falls, N. Y. Cheesec and creamery vat	433,197	July 29	3379	874	52	682
Burrell, Glenn C., and E. H. Roblee, Canisteo, N. Y. Drinking-fountain for poultry	443,428	Dec. 23	2938	756	53	1860
Burrell, Henry, Gravesend, county of Kent, England. Table	427,668	May 13	958	{ 241 242 }	{ 51 51 }	{ 1010 1010 }
Burrell, Henry, Gravesend, county of Kent, England. Table for use at sea	427,669	May 13	961	242	51	1011
Burrell, James B., Wrights, Cal. Machine for cutting boards	439,321	Oct. 28	2580	688	53	509
Burri-Haldi, Louis, Bienne, Switzerland. Stem winding and setting watch	429,805	June 10	1054	259	51	1684
Burrill, Hiram, Sangerville, Me. Water-wheel	420,988	Feb. 11	848	219	50	733
Burris, James S., and M. Bierline, St. Paul, Minn. Fire-escape	438,224	Oct. 14	844	229	53	168
Burroughs, Joseph B., Shortsville, N. Y. Road-cart	428,330	May 20	1983	499	51	1217
Burroughs, William S., assignor to American Arithmometer Company, St. Louis, Mo. Printing-recorder	420,617	Feb. 4	270	71, 72	50	617
Burroughs, William S., assignor to American Arithmometer Company, St. Louis, Mo. Device for recording numbers	420,618	Feb. 4	273	72, 73	50	617
Burroughs, William S., assignor to American Arithmometer Company, St. Louis, Mo. Printing-recorder	420,619	Feb. 4	275	73	50	618
Burrows, Charles E., and F. E. Jones, Montague, Mich. Motor	426,432	Apr. 29	3055	800	51	631
Burrows, Edmund, Fremont, Iowa. Milk-bucket	434,423	Aug. 19	1501	392	52	1067
Burrows, George H., Somerville, Mass. Carbureting apparatus	427,632	May 13	1222	390	51	1061
Burrows, Joseph M., assignor to R. O. Pate, Hawkinsville, Ga. Plow	426,166	Apr. 22	2649	696	51	539
Burrows, Joseph M., assignor to R. O. Pate, Hawkinsville, Ga. Plow attachment	430,511	June 17	2180	536	51	1913
Burrows, Pierre F. M., Auckland, New Zealand. Folding adjustable ladder	419,821	Jan. 21	1744	{ 462 463 }	{ 50 50 }	{ 366 366 }
Burrows, William A., Picadilly, England. Composition for the soles of boots or shoes	431,646	July 8	956		52	198
Burros, John E., and L. D. Hall, Concordia, Kans. Corn-harvester	438,758	Oct. 21	1671	{ 448 449 }	{ 53 53 }	{ 331 331 }
Burry, John, Boston, Mass., assignor of one-half to A. Wirsching, New York, N. Y. Printing-telegraph	429,115	June 3	10	4, 5	51	1475
Burson, William W., Chicago, Ill. Corn-harvester	436,623	Sept. 23	2293	{ 604 605 }	{ 52 52 }	{ 1835 1835 }
Burson, William W., Chicago, Ill. Whiffletree clip and hook	439,289	Oct. 28	2519	675	53	497
Burson, William W., Chicago, Ill. Corn-harvester	442,307	Dec. 9	1055	277	53	1475
Burt, Benjamin F. (See McCollum and Burt.)						
Burt, Charles B., and A. D. Davol, Taunton, Mass. Thread-guide for spinning-machines	421,237	Feb. 11	1200	309	50	800
Burt, Edward M., Paris, Ill. Solution for galvanic batteries	428,888	May 27	2829		51	1399
Burt, Edward M., Paris, Ill. Electric danger and safety signal for railways	436,168	Sept. 9	1227	{ 319 320 }	{ 52 52 }	{ 1614 1614 }
Burt, Elnathan P., assignor of two-thirds to Freeland & Bradley, Wellsville, N. Y. Thill-coupling	443,066	Dec. 16	2300	589	53	1730
Burt, George E., Harvard, Mass. Shaft-coupling	443,895	Dec. 30	3673	946	53	2010
Burt, George H., Philadelphia, Pa. Metallic ceiling	431,328	July 1	445	110	52	91
Burt, Homer A., Detroit, Mich. Vehicle-pole	420,434	Feb. 4	9	2	50	566
Burt, Joseph, Olean, N. Y. Fire-escape	424,460	Apr. 1	26	8	51	8
Burt, Martin C., Chicago, Ill. Apparatus for generating oil-gas	429,675	June 10	865	210	51	1648
Burt, Peter. (See McGhee, George, assignor.)						
Burtis, Arthur B., et al. (See Reddout, William N., assignor.)						
Burtis, Jacob H., El Paso, Ill. Coffee or tea steeper	425,858	Apr. 15	2170	578	51	438
Burtis, William. (See Marshall, Herbert E., assignor.)						
Burton, Augustus G., assignor of one-half to D. S. Covert, Chicago, Ill. Burglar-proof safe	425,403	Apr. 15	1484	{ 397 398 }	{ 51 51 }	{ 306 306 }
Burton, Augustus G., assignor of one-half to D. S. Covert, Chicago, Ill. Burglar-proof safe	425,404	Apr. 15	1485	{ 398 399 }	{ 51 51 }	{ 306 306 }
Burton, Clarence A. (See McCarty and Burton.)						
Burton, Clinton H., St. Louis, Mo. Device for moistening envelopes	422,714	Mar. 4	514	131	50	1224
Burton, Clinton H., St. Louis, Mo. Moistening device for envelopes, &c	442,510	Dec. 9	1377	352	53	1539

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Burton Electric Company. (See Burton, Watkins L., assignor.)						
Burton, Frank A., Charles City, Iowa, assignor of one-half to N. H. Henderson, Chicago, Ill. Thill-coupling	437,564	Sept. 30	3510	915	52	2076
Burton, Garrett G., Trenton, Nebr. Heating-drum and damper	438,297	Oct. 14	965	262	53	189
Burton, George D. (See Burton, John M., assignor.)						
Burton, George D., Boston, Mass. Car-door	422,006	Feb. 25	2298	607	50	1025
Burton, George D., Boston, Mass. Feed-trough	422,007	Feb. 25	2299	608	50	1025
Burton, George D., Boston, Mass. Stock-car	424,598	Apr. 1	248	66	51	51
Burton, George D., Boston, Mass. Stock-car	427,043	May 6	16	5, 6	51	814
Burton, George D., Boston, Mass. Method of and apparatus for making rolled forgings by electricity	427,151	May 6	200	51, 52	51	851
Burton, George D., Boston, Mass. Stock-car	427,968	May 13	1436	363	51	1101
Burton, George D., Boston, Mass. Electric forging-machine	435,110	Aug. 26	2594	685	52	1286
Burton, George D., Boston, Mass. Electric bar heating and feeding apparatus for forging-machines	435,111	Aug. 26	2595	685	52	1287
Burton, George D., Boston, Mass. Feed-trough	436,397	Sept. 16	1592	421	52	1694
Burton, George D., Boston, Mass. Method of and apparatus for working metals by electricity	438,525	Oct. 14	1287	348 349	53	254
Burton, George D., Boston, Mass. Electric blank heating and feeding apparatus for forging-machines	438,723	Oct. 21	1601	429 430	53	318
Burton, George D., New Ipswich, N. H. Electrical train-signal	426,522	Apr. 29	3181	835	51	655
Burton, George D., New Ipswich, N. H. Electrical train-signal	427,042	May 6	13	4, 5	51	813
Burton, John M., Wichita, Kans. Electric prod-pole	427,549	May 13	790	197	51	978
Burton, John M., Wichita, Kans. Stock-car	442,952	Dec. 16	2129	548	53	1695
Burton, John M., Wichita, Kans., assignor of one-half to G. D. Burton, Boston, Mass. Stock-car	426,709	Apr. 29	3468	903	51	711
Burton, John N. (See Huckins, Frank S., assignor.)						
Burton, Oscar F., Brooklyn, N. Y. Valve	420,224	Jan. 28	2396	538	50	501
Burton, Watkins L., assignor to Burton Electric Company, Richmond, Va. Heating by electricity	432,932	July 22	2943	754	52	592
Burwell, John J., Covington, Ky. Steam-generator	443,354	Dec. 23	2834	729	53	1840
Busard, Osee A., Marion, Ohio. Foot-power hammer	437,972	Oct. 7	458	129	53	87
Bushea, Albert G., and D. Hearn, Paxson, Ark. Cotton or corn cultivator	421,548	Feb. 18	1634	428	50	893
Busby, Matilda M. (See Reynolds, Hooton, and Busby.)						
Busch, Charles L., assignor to W. Lee, Philadelphia, Pa. Horse-boot	423,854	Mar. 18	2242	592	50	1578
Busch, Edward F. G. (See Jensen, Heinrich J. E., assignor.)						
Busch, George W., and J. W. Johnston, Walkerville, Canada. Thill-coupling	441,131	Nov. 25	2421	627	53	1100
Busch, John, New York, N. Y. Easy-chair	430,829	June 24	2714	665	51	2023
Busch, John G., Dickeyville, Wis. Corn-planter	431,647	July 8	957	239	52	198
Buschmann, Victor H., Baltimore, Md. Device for oscillating photographers' developing-pans	435,681	Sept. 2	476	126	52	1466
Buschmann, William, and C. C. E. Van Alstine, Paterson, N. J. Liquid-scales	437,899	Oct. 7	343	100	53	67
Busell, James H., Boston, Mass. Heel-burnishing tool	441,823	Dec. 2	309	83	53	1324
Busenbenz, Jacob J., Chicago, Ill. Oil-burner	429,302	June 3	301	71, 72	51	1527
Busenbenz, Jacob J., assignor to United States Automatic Perfuming Company, Chicago, Ill. Vending apparatus	430,463	June 17	2108	520	51	1898
Busenbenz, Jacob J., assignor to United States Automatic Perfuming Company, Chicago, Ill. Vending apparatus	430,464	June 17	2112	520	51	1899
Busenbenz, Jacob J., assignor to United States Automatic Perfuming Company, Chicago, Ill. Vending apparatus	430,465	June 17	2115	520	51	1899
Busenbenz, Jacob J., assignor to United States Automatic Perfuming Company, Chicago, Ill. Vending apparatus	430,466	June 17	2116	521	51	1900
Busenbenz, Jacob J., Greenbush, assignor to United States Store Service Co., Albany, N. Y. Brake for store-service cars	433,886	Aug. 5	667	173	53	887
Buser, William E., Chillicothe, Ohio. Bed-lounge	418,971	Jan. 7	495	123	50	104
Busgett, Stanley S., Brushy Fork, Ill. Churn	427,331	Sept. 30	3127	818	52	1999
Bush, Andrew L., and W. C. Clark, Westfield, Mass. Filter	421,238	Feb. 11	1202	309	50	800
Bush, Arthur R., assignor to Paine & Francis, Boston, Mass. Switch	425,205	Apr. 8	1192	316	51	241
Bush, Arthur R., assignor to Paine & Francis, Boston, Mass. Electric switch	440,303	Nov. 11	1044	268	53	820
Bush, Arthur R., assignor to Paine & Francis, Boston, Mass. Pendent cleat	442,746	Dec. 16	1781	461	53	1626
Bush, Daniel B., Jr., Pittsfield, Ill. Folding type-case stand	436,211	Sept. 9	1294	338	52	1627
Bush, Harry D., New York, N. Y. Building construction	438,678	Oct. 21	1518	410	53	304
Bush, James J., Newark, N. J. Steam-generator	419,634	Jan. 21	1469	394	50	314
Bush, Lewis. (See Seebach, George, and Bush.)						
Bush, Martin L. T., Grand Rapids, Mich. Base for furniture	434,861	Aug. 19	2175	569 570	52	1201
Bush, William L., assignor of one-half to Watertown Spring Wagon Company, Watertown, N. Y. Combined axle and spring clip	424,092	Mar. 25	2610	696	50	1655
Bush, William L., assignor of one-half to Watertown Spring Wagon Company, Watertown, N. Y. Vehicle-spring	436,398	Sept. 16	1593	421	52	1695
Bushnell, Alvah, Philadelphia, Pa. Envelope, stamp, and finger moistener	441,132	Nov. 25	2422	627	53	1100
Bushnell, Cornelius S., et al., executors. (See Ericsson, John.)						
Bushorr, Derrick J., Lincoln, Kans. Button-setting machine	435,993	Sept. 9	950	249	52	1564
Busiel, Charles A., et al. (See Esty, William, assignor.)						
Busiel, Frank E., et al. (See Esty, William, assignor.)						
Busiel, John T., et al. (See Esty, William, assignor.)						
Büsing, Carl W. M. F., Oldenburg, Germany. Wall for ships	431,329	July 1	446	110 918 919 920 921	52	91
Buss, Edward, St. Gall, and A. Saurer, Arbon, Switzerland. Embroidering-machine	443,820	Dec. 30	3578	772	53	1992
Bussard, William, Port Jefferson, Ohio. Steel or metal railway-tie	431,839	July 8	1274	330	52	258
Bussell, Harmon, Ross, Iowa. End-gate for wagons	429,011	May 27	3007	772	51	1434
Bussell, Edward, New York, N. Y., assignor to himself, and S. W. Reese, Westfield, N. J. Tool for turning or planing metal	429,883	June 10	1180	293	51	1709
Butenshon, John B., Portland, Oreg. Broom-brush bridle	418,941	Jan. 7	457	112	50	96
Butler, Argalis P., et al. (See Westgate, Joseph D., assignor.)						
Butler, Benjamin F. (See Oefinger and Butler.)						
Butler, Benjamin F. (See Truss, Esau, assignor.)						
Butler, Benjamin F., Rockford, Ill. Three-wheel plow	419,180	Jan. 14	803	212	50	173
Butler, Edward, assignor to Butler's Patent Petrol-Cycle Syndicate, (limited,) London, England. Hydrocarbon-motor	423,214	Mar. 11	1293	337	50	1390
Butler, Edward, assignor to Butler's Patent Petrol-Cycle Syndicate, Limited, London, England. Motor	437,973	Oct. 7	459	129 130	53	87

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Butler, Fay, Oakland, Cal. Bill-file	443,130	Dec. 23	2437	623	53	1762
Butler & Kelley. (See Kelley, Thomas W., assignor.)						
Butler, Magnier, assignor of one-half to G. E. Brayer, Rochester, N. Y. Bicycle-lock	438,526	Oct. 14	1290	349	53	254
Butler, Nellie L., Frankfort, Kans. Sun-bonnet	440,005	Nov. 4	580	153	53	721
Butler, Simon A., <i>et al.</i> (See Dean, Henry W., assignor.)						
Butler, Simon A., <i>et al.</i> (See Dean and Mundell, assignors.)						
Butler, Theodore, assignor to J. L. Mott Iron Works, New York, N. Y. Automatic siphon for cisterns	425,859	Apr. 15	2171	578	51	438
Butler, Thomas H. (See Hildrap and Butler.)						
Butler, Warren T., Chelsea, assignor to C. Houghton, trustee, Boston, Mass. Apparatus for spreading fertilizing material	437,419	Sept. 30	3287	858	52	2031
Butler, Wesley, assignor to Pitts Agricultural Works, Buffalo, N. Y. Conveyor for thrashing-machines	424,175	Mar. 25	2724	726	50	1676
Butler, Wesley, assignor of one-half to Pitts Agricultural Works, Buffalo, N. Y. Thrashing-machine	429,418	June 3	479	113	51	1562
Butler, William P., Chicago, Ill. Street-lantern	435,795	Sept. 2	645	170	52	1499
Butler's Patent Petrol-Cycle Syndicate. (See Butler, Edward, assignor.)						
Butman, Fred P., Holbrook, Mass. Tip for gas-jets	442,100	Dec. 9	743	201	53	1416
Butman, Thomas R., Chicago, Ill. Flue-cleaner rod	425,593	Apr. 15	1764	473	51	360
Butman, Thomas R., Chicago, Ill. Flue-cleaning rod	426,912	Apr. 29	3761	982	51	768
Butt, Addison W., Springfield, Ohio. Cultivator	440,135	Nov. 1	766	201	53	768
Butt, Elisha C., Portland, Tenn. Vehicle-brake	431,873	July 8	1328	333	52	267
Butt, Revere, Clifton, Iowa. Car-coupling	418,680	Jan. 7	19	6	50	6
Butterbaugh, Cornelius C., Los Angeles, Cal. Car-truck	431,554	July 8	808	201	52	169
Butterfield, Charles. (See Moritt and Butterfield.)						
Butterfield, Henry A., Waterville, Me. Electric steam-generator and water-heater	437,771	Oct. 7	152	47	53	31
Butterfield, Henry R., Waterville, Me. Electro-motor	422,911	Mar. 11	834	217	50	1303
Butterfield, Henry R., assignor to Butterfield & Mitchell Electric Cooking and Heating Company, Waterville, Me. Electric heating and cooking device	424,403	Mar. 25	3100	823	50	1750
Butterfield, Henry R., and W. Mitchell, Waterville, Me. Electric flat-iron	424,404	Mar. 25	3102	823	50	1751
Butterfield, Henry R., and W. Mitchell, assignors to Butterfield & Mitchell Electric Cooking and Heating Company, Waterville, Me. Electric radiator	424,047	Mar. 25	2550	680	50	1643
Butterfield, John C., and T. C. Batchelor, London, England. Cartridge-case	430,918	June 24	2849	699	51	2049
Butterfield, John W., Columbus, Ohio. Two-revolution cylinder printing-press	422,715	Mar. 4	515	131	50	1235
Butterfield & Mitchell Electric Cooking and Heating Company. (See Butterfield, Henry R., assignor.)						
Butterfield & Mitchell Electric Cooking and Heating Company. (See Butterfield and Mitchell, assignors.)						
Butterick, Ebenezer, Brooklyn, N. Y. Fence-post	430,830	June 24	2714	665	51	2023
Butterworth, Benjamin, trustee. (See Heckert, William, assignor.)						
Butterworth, Robert, Somerville, Mass. Elevator	441,824	Dec. 2	310	83	53	1325
Butterworth, Robert, Somerville, assignor of one-half to Reversible Collar Company, Boston, Mass. Calendaring-machine	425,978	Apr. 22	2372	628	51	485
Buttler, William, Fostoria, Ohio, assignor to Jefferson Glass Company, Washington, Pa. Apparatus for the manufacture of glassware	431,874	July 8	1330	334	52	268
Büttner, Carl L. F. A., and C. Meyer, Erdingen-on-the-Rhine, Prussia, Germany. Drier for humid materials	426,361	Apr. 22	2928	769	51	597
Button, Charles P., Milwaukee, Wis. Socket	428,889	May 27	2829	719	51	1400
Button, Conyers, <i>et al.</i> (See Stohr, Jodok, assignor.)						
Button, Judson Q., <i>et al.</i> (See Siedentopf, Frederick, assignor.)						
Button, Theodore E., Waterford, N. Y. Steam-boiler	442,608	Dec. 16	1536	396	53	1579
Buttrick, Charles G., and T. B. Flanders, Holyoke, Mass., assignors, by mesne assignments, to Sawyer Spindle Company, of Massachusetts. Support for spinning-spindles	438,879	Oct. 21	1873	497	53	368
Butts, Charles W., assignor to Fahys Watch Case Company, Sag Harbor, N. Y. Machine for forming ribs on watch-pendants	431,435	July 1	623	155	52	126
Butts, Daniel G., assignor of five-eighths to F. H. Ray, Chicago, Ill. Sleeve-holder	419,635	Jan. 21	1471	395	50	315
Butts, Hiram, and J. J. Edmonds, San Diego, Cal. Brake-block	425,206	Apr. 8	1194	316	51	241
Butts, John H. B., Thomaston, Ga. Evaporator and skimmer	442,013	Dec. 2	600	162	53	1380
Butts, Joseph E., Hawthorn, Fla. Body-ventilator	431,764	July 8	1150	287	52	234
Butts, Peter O. (See Duncan, George T., assignor.)						
Butts, Theophilus, <i>et al.</i> (See Rich, George, assignor.)						
Buttz, Frank C., assignor of one-half to J. R. Johnson, Indianapolis, Ind. Gas-valve	427,152	May 6	203	52	51	851
Butz, Albert M., Chicago, Ill., assignor to Consolidated Temperature Controlling Company, of Minnesota. Apparatus for regulating steam in boilers	441,745	Dec. 2	180	48	53	1298
Butzel, Martin I., Saugerties, N. Y., and J. L. Jacobs, Providence, R. I. Store-service apparatus	433,324	July 29	3559	918	52	719
Buxton, Levi W., Nashua, N. H. Kettle attachment	432,017	July 15	1540	392	52	316
Buzby, Albert G., New York, N. Y. Pencil-sharpener	435,317	Sept. 9	842	232	52	1544
Buzby, Augustus C., Philadelphia, Pa. Lubricator	434,059	Aug. 12	902	238	52	942
Buzby, Joseph F., Royer's Ford, Pa. Insulator	427,296	May 6	413	107	51	892
Buzzacott, Francis H., Fort Supply, Indian Ter. Portable bake-oven	434,242	Aug. 12	1209	314	52	1002
Buzzell, George H., assignor of one-half to O. C. Clark, Boston, Mass. Pipe-wrench	438,343	Oct. 14	1029	280	53	203
Bram, Sewall T. J., assignor to Trenton Watch Company, Trenton, N. J. Manufacture of watch-cases	424,048	Mar. 25	2551	680	50	1643
Bre, Martin, assignor to S. Forehand, Worcester, Mass. Breech-loading gun	441,305	Nov. 25	2865	740	53	1180
Byers, David I., Cincinnati, Ohio. Envelope-closer	420,620	Feb. 4	277	74	50	618
Byers, John F., Minneapolis, Minn. Burning brick	425,536	Apr. 15	1679	448	51	344
Byers, John F., Minneapolis, Minn. Brick-klm.	427,550	May 13	792	197	51	978
Byers, John F., Ravenna, Ohio. Mechanical movement	438,799	Oct. 21	1728	463	53	342
Byers, Moses G., New York, N. Y. Combined street-cleaning bag and shovel	440,618	Nov. 18	1569	404	53	928
Byers, Sylvester. (See Field and Byers.)						
Byers, William J. (See Moore, Andrew R., assignor.)						
Byk, Heinrich. (See Scholz, Karl, assignor.)						
Byfield Manufacturing Company. (See Bradley, John, assignor.)						
Byfield Manufacturing Company. (See Burdett and Bradley, assignors.)						
Bylesby, Henry M. (See Shallenberger and Bylesby.)						
Byram, Frank A. (See Buchwald, William C. v., assignor.)						
Byrd, Orval E. (See Davis and Byrd.)						
Byrne, Amanda J., Tuscarora, Nev. Flower-pot	437,565	Sept. 30	3510	915	52	2077
Byrne, Edward J., Fort Bowie, Ariz. Ter. Joint-fastener for railway-rails	425,207	Apr. 8	1195	316	51	242

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Byrne, James A., Denver, Colo. Spirit-level	423,669	Mar. 18	1980	522	50	1528
Byrne, Michael, Chicago, Ill. Station-indicator	420,989	Feb. 11	849	219	50	733
Byrne, Michael, New York, N. Y. Sparger	434,538	Aug. 19	1671	437	52	1103
Byrne, Michael, New York, N. Y. Apparatus for brewing beer	440,464	Nov. 11	1308	{ 338 339 }	53	869
Byrne, Patrick, Birmingham, Ala. Machine for forging links	427,458	May 6	653	{ 163 164 }	51	941
Byrne, Timothy, Bloomington, Ill. Pipe-cutter	422,115	Feb. 25	2461	651	50	1054
Byrne, William, assignor of one-half to A. S. Hickey, Auburn, N. Y. Ruling-machine	442,101	Dec. 9	744	{ 201 202 }	53	1416
Byrnes, John F., Norwich, Conn. Stage scenery	421,815	Feb. 18	2016	533	50	963
Byrnes, John F., Norwich, Conn. Mechanical horse for stage-scenery	437,015	Sept. 23	2622	685	52	1897
Byrnes, John F., Norwich, Conn. Stage-scenery	437,016	Sept. 23	2622	685	52	1897
Byrnes, Patrick. (See Gillard and Leewer, assignors.)						
Byrnes, Thomas F., Emporia, Kans. Shoe attachment	442,798	Dec. 16	1861	481	53	1643
Byrns, James O., St. Paul, Minn. Shoe-tie holder	435,392	Sept. 2	17	5	52	1378
Byrom, Henry, Bradford, Pa. Garbage-receiver	433,233	July 29	3427	885	52	692
Byus, W. N., <i>et al.</i> (See Bull, James E., assignor.)						
Cabell, Milton S. (See Faunce and Cabell, assignors.)						
Cabell, Samuel G. (See Faunce and Cabell.)						
Cable, Jerome B., <i>et al.</i> (See Young, Otis W., assignor.)						
Cable, John, Cable, Minn. Sand-band for vehicles	440,911	Nov. 18	2054	531	53	1019
Cable, John, Cable, Minn. Excavator	440,912	Nov. 18	2055	{ 531 532 }	53	1019
Cable, Josiah C., <i>et al.</i> (See Crandall, Jesse A., assignor.)						
Cable Motor Traction Company. (See Nehr, Herman F., assignor.)						
Cable, Paul D., St. Louis, Mo. Railway electric signal	421,239	Feb. 11	1202	{ 309 310 311 }	50	801
Cables, Hartley A. (See Hutchinson and Cables.)						
Cables, Hartley A., Rochester, N. Y. Machine for manufacturing tassels, upholsterers' tufts, &c.	427,741	May 13	1083	273	51	1035
Cabus, Joseph, New York, N. Y. Window blind or shutter	422,068	Feb. 25	2383	630	50	1040
Cade, Baylus, Louisburg, N. C. Electric railway-telegraph	419,313	Jan. 14	1003	265	50	212
Cade, Baylus, Louisburg, N. C. Electric railway	419,314	Jan. 14	1004	{ 265 266 }	50	212
Caddy, Thomas E., Nottingham, England. Fire-bar	425,405	Apr. 15	1486	399	51	306
Caddy, Thomas E., New Basford, Nottingham, England. Molding-machine	428,590	May 27	2371	602	51	1312
Cadwell, Jason R., assignor to himself and W. G. Press, Chicago, Ill. Hair-curler	419,243	Jan. 14	898	236	50	192
Caldwell, Homer M., assignor to Harrington & Richardson Arms Company, Worcester, Mass. Cylinder-catch for revolvers	419,412	Jan. 14	1157	307	50	244
Caldwell, John H. (See Stewart and Faw, assignors.)						
Caldwell, John H., <i>et al.</i> (See Stewart, Joseph H., assignor.)						
Cadwell, William H., Lansing, Mich. Shipping-package	435,203	Aug. 26	2730	720	52	1312
Cadwell, William H., Lansing, Mich. Shipping-package for butter	435,204	Aug. 26	2731	721	52	1313
Cadwell, William H., Lansing, Mich. Fruit-basket	440,136	Nov. 11	769	202	53	768
Cadwgan, Thomas C., Springfield, Ohio. Crushing and grinding mill	421,481	Feb. 18	1546	400	50	873
Cady, Edwin H., Gardner, Mass. Toy detonator	423,215	Mar. 11	1295	337	50	1390
Cady, Henry G., Pine Bluff, Ark. Boat-saving apparatus	438,059	Oct. 7	600	{ 163 164 }	53	114
Cady, William E., Cerry, Pa. Electric-arc lamp	434,175	Aug. 12	1106	{ 256 267 }	52	983
Caen, Camille, New York, N. Y. Combined waist and skirt	443,390	Dec. 23	2886	742	53	1850
Caffrey, Charles S., Camden, N. J. Carriage-fender	423,024	Mar. 11	1004	264	50	1335
Cage, Gustavus A. W., Jr., Greeley, Colo. Dust-pan	424,461	Apr. 1	28	8	51	8
Cagle, Byron E., Medina, Kans. Corn-planter	428,827	May 27	2736	695	51	1380
Cahill, John, Tarrytown, N. Y. Die for making rock-drills	426,710	Apr. 29	3469	908	51	711
Cahill, Patrick. (See Hall, Cofran I., assignor.)						
Cahill, William P., Chattanooga, Tenn. Sash-weight-casting apparatus	435,205	Aug. 26	2732	721	52	1313
Cabeon, Wesley. (See McPherson and Cabeon.)						
Caheone-Barnet Manufacturing Company. (See Steele, William H., assignor.)						
Caheone, Edwin R., Newark, N. J. Mucilage-bottle	430,619	June 24	2358	577	51	1954
Caile, Adolph A., <i>et al.</i> (See Church, Frank S., assignor.)						
Caile, Arthur, <i>et al.</i> (See Church, Frank S., assignor.)						
Caille, Arthur A., assignor to Caille Cash Carrier Company, East Saginaw, Mich. Cash-carrier	427,396	May 6	548	140	51	920
Caille Cash Carrier Company. (See Caille, Arthur A., assignor.)						
Cain, Henry W., Deer Lake, Mich. Apparatus for sprinkling vines and plants	440,247	Nov. 11	945	{ 243 244 }	53	805
Cain, James, and G. W. Mann, Minneapolis, Minn. Poultry-crate	431,032	July 1	7	2	52	4
Cain, John S., <i>et al.</i> (See Barnum, Joseph P., assignor.) (Reissue.)						
Cain, John W., Rusk, W. Va. Fruit-gatherer	435,206	Aug. 26	2734	721	52	1313
Cain, Thomas J. (See Thompson and Cain.)						
Cairness, Stewart, Grafton, N. D. Aerial machine	432,860	July 22	2835	{ 726 727 }	52	512
Cairns, Samuel D., assignor of three-fourths to D. J. Whelan, W. J. Roche, and J. T. Quinn, Troy, N. Y. Trolley for electromotor cars	435,011	Aug. 26	2447	648	52	1259
Calahan, Edward A., Brooklyn, N. Y. Bulletin or advertising apparatus	422,716	Mar. 4	517	132	50	1235
Calcutt, Newton W. (See Southworth and Calcutt.)						
Calder, Lewis S., Terre Haute, Ind. Vapor-burner	421,162	Feb. 11	1101	283	50	783
Caldwell, Alex., Essex, Iowa. Cultivator	428,591	May 27	2373	603	51	1312
Caldwell, Alfred, Providence, R. I. Socket-tip for flexible tubing	425,367	Apr. 8	1426	381	51	286
Caldwell, Alfred F., New York, N. Y. Hygienic chair	421,045	Feb. 11	933	241	50	749
Caldwell, Charles W. (See Peterson, Knute F., assignor.)						
Caldwell, Frank G., Wheeling, W. Va. Tray for delivering goods	422,717	Mar. 4	518	132	50	1235
Caldwell, Frank G., Wheeling, W. Va. Metallic ceiling	431,436	July 1	624	156	52	126
Caldwell, Frank G., Wheeling, W. Va. Thumb-tack	440,006	Nov. 4	581	153	53	722
Caldwell, Frank G., Wheeling, W. Va. Sheet-metal ceiling-molding	440,007	Nov. 4	582	154	53	722
Caldwell, Frank G., Wheeling, W. Va. Ceiling-panel	440,008	Nov. 4	583	154	53	722
Caldwell, Frank G., Wheeling, W. Va. Crate for sheet metal	440,009	Nov. 4	584	154	53	722
Caldwell, George S., Auburn, N. Y. Hand-rail for sleighs	422,372	Mar. 4	16	5	50	1139
Caldwell, George S., Auburn, N. Y. Dash-rail for vehicles	428,266	May 20	1879	472	51	1197
Caldwell, George S., Auburn, N. Y. Dash-rail for vehicles	428,267	May 20	1880	472	51	1197
Caldwell, George S., Auburn, N. Y. Handle for vehicles	428,268	May 20	1880	472	51	1198

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Caldwell, Harper, Pineville, Mo. Fruit-gatherer	422,373	Mar. 4	16	6	50	1139
Caldwell, Harper, Pineville, Mo. Fruit-gatherer	435,393	Sept. 2	18	5	52	1378
Caldwell, Henry W., Chicago, Ill. Lubricating device	421,382	Feb. 18	1411	365	50	847
Caldwell, Homer M., assignor to Harrington & Richardson Arms Company, Worcester, Mass. Fire-arm	425,979	Apr. 22	2373	629	51	485
Caldwell, Homer M., assignor to Harrington & Richardson Arms Company, Worcester, Mass. Fire-arm	427,833	May 13	1223	309	51	1061
Caldwell, James. (See Smith and Caldwell.)						
Caldwell, John A., Bay Ridge, N. Y. Steam-boiler	439,105	Oct. 28	2213	594	53	442
Caldwell, Marvin A., Erie, Pa. Washing-machine	426,433	Apr. 29	3056	800	51	631
Caldwell, Mathew R., assignor to A. J. Beatty & Sons, Tiffin, Ohio. Apparatus for reheating and finishing glassware	442,855	Dec. 16	1966	505	53	1664
Caldwell, Robert W., Greenfield, Ohio. Collar-pad fastener	436,695	Sept. 16	2060	540	52	1781
Caldwell, William. (See Crawford, Edward S., assignor.)						
Caleb, August C. G., and J. B. Couture, Cleveland, Ohio. Soil-pipe-cutting machine	430,727	June 24	2544	622	51	1990
Calhoun, James G., Edinburg, and C. B. Garrison, Charlestown, assignors of one-third to S. Calhoun, Edinburg, Ohio. Wire-twisting tool	439,835	Nov. 4	308	77	53	668
Calhoun, Samuel. (See Calhoun and Garrison, assignors.)						
Calkins, Almon B., Bridgeport, Conn. Speed-measure	435,012	Aug. 26	2448	648	52	1259
Calkins, Almon B., Bridgeport, Conn. Speed-measure	435,013	Aug. 26	2450	649	52	1260
Calkins, Almon B., Bridgeport, Conn. Steam-engine indicator	442,102	Dec. 9	747	202 203	53	1416
Calkins, Almon B., assignor to Ashcroft Manufacturing Company, Bridgeport, Conn. Steam-engine indicator	427,044	May 6	18	6	51	814
Calkins, Almon H. (See Noteman, Alonzo, assignor.)						
Calkins, Almon H., Chicago, Ill. Liquid-fuel burner	419,822	Jan. 21	1746	463	50	367
Calkins, Almon H., Chicago, Ill. Liquid-fuel burner	419,823	Jan. 21	1748	463	50	367
Calkins, Almon H., Chicago, Ill. Liquid-fuel burner	419,824	Jan. 21	1751	463	50	368
Calkins, Almon H., Chicago, Ill. Liquid-fuel burner	419,825	Jan. 21	1753	464	50	368
Calkins, Almon H., Chicago, Ill. Oil-burning heating apparatus for water-tanks	419,826	Jan. 21	1755	464	50	368
Calkins, Almon H., Chicago, Ill. Liquid-fuel burner	437,354	Sept. 30	3170	829	52	2008
Calkins, Almon H., Evanson, Ill. Vapor generator and burner	433,515	Aug. 5	108	31	52	778
Calkins, Gary G., et al. (See Vogel, William, assignor.)						
Calkins, James H., Owosso, Mich. Grain-separator	430,335	June 17	1929	472	51	1863
Callahan, Andrew V., Melrose, Fla. Rein-guard for horses	426,913	Apr. 29	3761	982	51	768
Callahan, Daniel. (See Iselin and Callahan.)						
Callahan, Edward, et al. (See Griffin, Patrick, assignor.)						
Callahan, Edward, et al. (See Griffin, Patrick, assignor.) (Reissue.)						
Callahan, Edward P. (See Collins, Frank M., assignor.)						
Callahan, Edward T., Omaha, Neb. Dumping-wagon	427,153	May 6	204	53	51	851
Callahan, Harry A., assignor of one-half to R. A. Dempsey, Bradford, Pa. Torpedo and torpedo-detonator	425,860	Apr. 15	2172	578	51	439
Callahan, James D., Boston, Mass. Automatic valve for air-brakes	431,506	July 1	731	182	52	146
Callahan, Joseph J., Newburg, N. Y. Metallic railway-tie	410,465	Nov. 11	1310	339	53	870
Callaway, Jonathan A., Lampasas, Tex. Broadcast seeder	429,229	June 3	181	44	51	1506
Callender, Romaine, assignor of one-half to J. P. Martyn, St. Thomas, Ontario, Canada. Combination organ stop-action	420,435	Feb. 4	10	2, 3	50	566
Callender, Romaine, Brantford, assignor of one-half to J. P. Martyn, St. Thomas, Ontario, Canada. Pipe-organ	426,711	Apr. 29	3471	909 910 911	51	711
Calov, Georg, Koschentin, Silesia, Germany. Insect-powder	442,245	Dec. 9	959		53	1458
Cameron, Alexander A., Cobbville, Ga. Fire-escape	430,225	June 17	1719	427	51	1823
Cameron, Allan B., Williamsport, Pa. Making ornamental open-work panels	419,636	Jan. 21	1472	305	50	315
Cameron, Allan B., Williamsport, Pa. Wood-channeling machine	422,912	Mar. 11	836	217	50	1304
Cameron, Allan B., Williamsport, Pa. Wood-channeling machine	422,913	Mar. 11	838	217	50	1304
Cameron, Allan B., Williamsport, Pa. Guide for wood-channeling machines	436,966	Sept. 23	2557	668 669	52	1884
Cameron, Arthur, assignor to F. C. Austin, Chicago, Ill. Grinding-mill	443,485	Dec. 23	3037	781	53	1879
Cameron, Arthur, assignor to F. C. Austin, Chicago, Ill. Well-sinking machine	443,486	Dec. 23	3039	781 782	53	1880
Cameron, Arthur, and H. H. Schumaker, assignors to F. C. Austin, Chicago, Ill. Steam-generator	443,067	Dec. 16	2301	589	53	1730
Cameron, Daniel A., Pittsburg, Pa. Crank-connection	443,267	Dec. 23	2687	689	53	1811
Cameron, Donald. (See Heule and Cameron.)						
Cameron, Elmore, assignor of one-half to J. K. Love, Cincinnati, Ohio. Lock-hinge for rules and protractors	422,374	Mar. 4	18	6	50	1140
Cameron, Henry F. D., et al. (See Harris, Thomas, assignor.)						
Cameron, Hugh L., Delvalle, Tex. Agricultural implement	422,718	Mar. 4	519	132	50	1235
Cameron, James W., New York, N. Y. Yeast-cake	427,553	May 13	797	200	51	980
Cameron, Mattie. (See Perry, Edwin R., assignor.)						
Cameron, Neill A., assignor of one-third to W. E. Moore, Blossom, Tex. Fly-wheel	442,570	Dec. 9	1472	378	53	1558
Cameron, Robert, Bernalillo, N. Mex. Ter. End-gate	442,217	Dec. 9	924	245	53	1450
Cammann, August F., St. Louis, Mo. Hat-tray	437,286	Sept. 30	3065	802	52	1989
Canntitz, William J., et al. (See Drake, Lewis B., assignor.)						
Camors, John B. (See Graner, John, assignor.)						
Camp, David C., Gainesville, Ga. Cooler and purifier for liquids	426,914	Apr. 29	3762	983	51	769
Camp, Frederick T., Bloomfield, N. J. Coin-carrier	429,752	June 10	976	249	51	1671
Camp, Secelia R., Reed City, Mich. Kilt-pat gage	439,106	Oct. 28	2215	594	53	442
Company, Milton E., Hamilton, Mich. Knockdown shipping-box	419,109	Jan. 7	687	181	50	145
Company, Milton E., Hamilton, assignor of one-half to H. B. Peck, Kalamazoo, Mich. Extensible car-step	436,454	Sept. 16	1682	443	52	1711
Campbell, Albert P., et al. (See Whipple, John D., assignor.)						
Campbell, Alexander, Pittsburg, Pa. Coupling for rock-drills	441,279	Nov. 25	2690	698	53	1147
Campbell, Alfred G., Sherbrooke, Quebec, Canada. Railway foot-guard	423,511	Mar. 18	1736	457	50	1483
Campbell, Archibald M., et al. (See Marlow, George, assignor.)						
Campbell, Charles, and J. Cox, Winchester, Ind. Crate	428,331	May 20	1985	499	51	1318
Campbell, Charles B., et al. (See Mott, Samuel L., assignor.)						
Campbell, Charles C., et al. (See Mott, Samuel L., assignor.)						
Campbell, Charles H., New York, N. Y. Apparatus for securing the absorption of exhaust ammonia-gas from ammonia-engines	427,397	May 6	549	140	51	920
Campbell, Daniel W., West Troy, N. Y. Street-pavement	429,303	June 3	304	72	51	1528
Campbell, David, Windsor, Ontario, Canada. Reel	426,434	Apr. 29	3057	801	51	631
Campbell, Duncan H., assignor to H. B. Metcalf, Pawtucket, R. I., and W. McCleery, Boston, Mass. Ironing-machine	420,405	Jan. 28	2657	704 705	50	550

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Campbell, Edward P., New York, N. Y. Way-bill	431,765	July 8	1151	287	52	234
Campbell, Elmer, assignor to Advance Thresher Company, Battle Creek, Mich. Gripping device for spring packing-rings	419,413	Jan. 14	1159	308	50	244
Campbell, George G., Milwaukee, Wis. Electrical connection with car-tracks	423,468	Mar. 18	1670	441	50	1470
Campbell, George G., Milwaukee, Wis. Catch-basin cover	430,620	June 24	2359	577	51	1954
Campbell, George R., Bucyrus, Ohio. Railway-crossing	437,974	Oct. 7	462	130	53	88
Campbell, George R., Bucyrus, Ohio. Guard-rail	437,975	Oct. 7	464	130	53	88
Campbell, George R., Bucyrus, Ohio. Railway-crossing	437,976	Oct. 7	465	131	53	88
Campbell, George R., Bucyrus, Ohio. Railway-frog	437,977	Oct. 7	466	131	53	88
Campbell, George W., Lima, Ohio. Corn-planter	431,935	July 8	1406	357	52	283
Campbell, George W., Lowville, N. Y. Sand-band	439,638	Nov. 4	28	8	53	612
Campbell, George W., Lowville, N. Y. Vehicle pole-tip	441,352	Nov. 25	2796	722	53	1167
Campbell, George W., El Paso, assignor of one-fourth to J. H. Babb, Pntnam, Tex. Water-elevator	424,920	Apr. 1	747	200	51	145
Campbell, Hamilton. (See Whiteside, Sidney B., assignor.)						
Campbell, Henry, London, England. Machine for securing the corners of boxes	427,670	May 13	963	242	51	1011
Campbell, Henry, Milwaukee, Wis. Feed-water regulator	437,914	Oct. 7	362	105	53	70
Campbell, Henry J., Philadelphia, Pa. Yarn scouring and dyeing machine	439,473	Oct. 28	2806	747	53	551
Campbell, Howard, Brooklyn, assignor to Physician's Supply Manufacturing Company, New York, N. Y. Flash-lamp	435,884	Sept. 2	787	209	52	1527
Campbell, Hugh, Halifax, county of York, England. Gas-motor engine	428,801	May 27	2691	683	51	1372
Campbell, James. (See Rhodes and Campbell.)						
Campbell, James, <i>et al.</i> (See Murray, James W. and J. E., assignors.)						
Campbell, James A., St. Louis, Mo. Sectional kitchen-safe	419,920	Jan. 21	1909	502	50	400
Campbell, James A., New Orleans, La. Barrel-head	422,008	Feb. 25	2300	608	50	1025
Campbell, James A., assignor of two-thirds to G. P. Harrison and P. Michel, New Orleans, La. Barrel-head wedge	439,928	Nov. 4	453	118	53	696
Campbell, James D., <i>et al.</i> (See Gebby, Johnson R. and R. N., assignors.)						
Campbell, James E. (See Chapline, Dutton, and Campbell.)						
Campbell, James E., <i>et al.</i> (See Howard, Mendel, assignor.)						
Campbell, James L., West Elizabeth, Pa. Water-indicator for boilers	429,997	June 10	1348	334	51	1742
Campbell, James W., Germantown, assignor to Ferguson Brothers, New York, N. Y. Hat and coat hook	419,414	Jan. 14	1160	308	50	245
Campbell, James W., Germantown, assignor to Ferguson Brothers, New York, N. Y. Towel-rack	420,184	Jan. 28	2333	616	50	489
Campbell, James W., Germantown, assignor to Ferguson Brothers, New York, N. Y. Towel-rack	435,133	Aug. 26	2626	695	52	1293
Campbell, John A., Dorchester, Mass. Gage	427,253	May 6	354	91	51	880
Campbell, John B., Majenica, Ind. Corn-planter	431,555	July 8	809	202	52	169
Campbell, John M., New York, N. Y., assignor to J. S. Lowrey & Co. Shirt-pocket	425,750	Apr. 15	2010	535	51	408
Campbell, Joseph, assignor to himself, C. W. and J. F. Raymond, Middletown, Pa. Support for shelving	443,355	Dec. 23	2835	729	53	1840
Campbell, Joseph H., New York, N. Y. Vapor and ammonia engine	427,398	May 6	551	140	51	920
Campbell, Joseph H., New York, N. Y. Operating vapor or ammonia engines	427,399	May 6	554	140	51	921
Campbell, Joseph H., New York, N. Y. Apparatus for operating vapor or ammonia engines	427,400	May 6	558	141	51	922
Campbell, Joseph H., New York, N. Y. Aqua-ammonia engine	427,401	May 6	561	141	51	922
Campbell, Louis M., assignor to G. H. P. Flag, Boston, Mass. Garment-stay	433,719	Aug. 5	410	105	52	835
Campbell Machine Company. (See Amborn, George, Jr., assignor.)						
Campbell, Marie A., Chicago, Ill. Adjustable pillow or body-support	420,860	Feb. 4	637	164	50	684
Campbell, Neil, Jersey City, N. J. Skylight	424,176	Mar. 25	2725	726	50	1677
Campbell, Neil, New York, N. Y. Railway-rail sweeper	427,834	May 13	1226	309	51	1061
Campbell, Neil F., McDade, Tex. Car-coupling	426,915	Apr. 29	3763	983	51	769
Campbell, Oron, Lawrence, Kans. Apparatus for concentrating and amalgamating ores	433,850	Aug. 5	611	159	52	875
Campbell, Patterson T., and W. H. Pickett, Warren, Pa. Oil-pump	430,919	June 24	2850	699	51	2049
Campbell, Philip F., <i>et al.</i> (See Gebby, Johnson R. and R. N., assignors.)						
Campbell Printing Press and Manufacturing Company. (See Robischung, Henry, assignor.)						
Campbell, Robert, Mancelona, Mich. Churn	434,318	Aug. 12	1325	345	52	1025
Campbell, Robert B., Marion, Iowa, and F. E. House, Chillicothe, Mo. Combination freight-car	437,332	Sept. 30	3128	818	52	1999
Campbell, Robert C. (See Taylor, Francis C., assignor.)						
Campbell, Thomas H. (See Wolfe and Campbell.)						
Campbell, William P., Rome, Ala. Hoisting device	437,088	Sept. 23	2723	712	52	1918
Campbell, William W., Sedalia, Mo. Combined baggage check and seal	426,582	Apr. 29	3271	858	51	673
Campbell, Wilnot H., <i>et al.</i> (See Jackson, Lewis P., assignor.)						
Campbell, Woodley W., Busti, N. Y. Inkstand	435,277	Aug. 26	2836	750	52	1333
Campbell, Woodley W., Busti, N. Y. Inkstand	435,278	Aug. 26	2838	751	52	1334
Campbell & Zell Company. (See Zell, Robert R., assignor.)						
Campiche, Louis, assignor to Mermod Frères, Ste. Croix, Switzerland. Musical instrument	418,681	Jan. 7	21	6	50	6
Campiche, Louis, assignor to Mermod Frères, Ste. Croix, Switzerland. Regulator for motors for music-boxes, &c.	442,609	Dec. 16	1537	397	53	1579
Campman, Henri J. W. (See Lisle, Myron C., assignor.)						
Canales, Frederick A., Everett, Mass. Car-coupling	430,110	June 17	1549	385	51	1790
Canastota Casket Company. (See Hams, Charles E., assignor.)						
Cancienne, Cleophas, Bértie, La. Feed-water heater	434,319	Aug. 12	1326	345	52	1025
Canda, Ferdinand E., New York, N. Y. Water-trough for cattle-cars	423,123	Mar. 11	1157	301	50	1363
Canda, Ferdinand E., New York, N. Y. Trussing for railway-cars	426,238	Apr. 22	2755	722	51	561
Canda, Ferdinand E., New York, N. Y. Catch for car-door brackets	427,297	May 6	414	107	51	892
Canda, Ferdinand E., New York, N. Y. Feeding-rack for cattle-cars	440,010	Nov. 4	585	154	53	792
Candee, Charles E., New York, N. Y. Cuff-fastener	431,330	July 1	146	110	52	92
Candee, Willard L., Brooklyn, assignor to Okonite Company, New York, N. Y. Electric cable	428,745	May 27	2616	663	51	1356
Candee, William N., Buffalo, N. Y., assignor to New York Twine Holder Company, of New York. Automatic twine-holder	436,301	Sept. 9	1423	371	52	1654
Candee, William N., Buffalo, assignor of one-half to E. P. Putnam, Holland Patent, N. Y. Extension-step for cars	442,571	Dec. 9	1473	378	53	1558

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Candy, Frank, Bexley, assignor to International Water and Sewage Purification Company, Limited, Westminster, England. Preparing iron ore for filters.	440,539	Nov. 11	1434	53	893
Canedy, William E., assignor of one-half to W. H. Edwards, Downer's Grove, Ill. Drilling-machine.	422,569	Mar. 4	295	75	50	1192
Canedy, William E., assignor of one-half to W. H. Edwards, Downer's Grove, Ill. Screw-cutting die and stock.	425,655	Apr. 15	1870	499	51	380
Canedy, William E., assignor of one-half to W. H. Edwards, Downer's Grove, Ill. Combined anvil and vise.	426,362	Apr. 22	2929	770	51	598
Canedy, William E., assignor of one-half to W. H. Edwards, Downer's Grove, Ill. Intermittent grip device.	435,279	Aug. 26	2839	751	52	1334
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Co., (limited.), Manchester, England. Apparatus for pointing or laying guns.	419,581	Jan. 14	1379	³⁶⁹ 370	50	290
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Co., (limited.), Manchester, England. Turret and turreted barrette for guns.	419,921	Jan. 21	1909	⁵⁰² 503	50	400
Canet, Jean B. G. A., Paris, France, assignor to J. Whitworth & Company, (limited.), Openshaw, England. Breech-loading cannon.	424,378	Mar. 25	3045	⁸⁰⁹ 810	50	1739
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Co., (limited.), Manchester, England. Gun-carriage.	425,656	Apr. 15	1871	500	51	380
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Co., (limited.), Manchester, England. Controlling the action of fluid under pressure.	425,657	Apr. 15	1874	⁵⁰⁰ 501 502	51	381
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Company, (limited.), Openshaw, England. Pointing or laying guns.	426,239	Apr. 22	2756	722	51	561
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Company, (limited.), Openshaw, England. Apparatus for pointing or laying guns.	430,062	June 10	1465	³⁶³ 364	51	1764
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Company, (limited.), Openshaw, England. Breech-loading ordnance.	430,102	June 10	1529	³⁷⁹ 380	51	1776
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Company, (limited.), Openshaw, England. Apparatus for checking or controlling the recoil of guns.	430,920	June 24	2851	⁶⁹⁹ 700	51	2049
Canet, Jean B. G. A., Paris, France, assignor of one-half to J. Whitworth & Company, Limited, Manchester, England. Hydraulic brake apparatus.	442,014	Dec. 2	601	¹⁶² 163	53	1380
Canfield, Carlton W., Brownton, Minn. Running-gear for vehicles.	419,315	Jan. 14	1005	266	50	212
Canfield, Carlton W., Winthrop, Minn. Pump.	442,103	Dec. 9	754	203	53	1417
Canfield, James H., et al. (See Snee, William, assignor.)						
Canfield, Luther H., Hull, Iowa. Washing-machine.	425,861	Apr. 15	2173	579	51	439
Canfield, William W., New York, N. Y. Gas-burner.	431,716	July 8	1085	270	52	221
Cann, William, Atkinson, Ill. Pipe-wrench.	429,676	June 10	866	210	51	1648
Canner's Supply Company. (See Van Kannel, Theophilus, assignor.)						
Canney, Thomas J. (See Kryger, Henry H., assignor.)						
Canniff, Edgar, New Westminster, Canada. Car-coupling.	440,466	Nov. 11	1311	339	53	870
Canning, William P., assignor of one-half to Lowell Machine Shop, Lowell, Mass. Carding-engine.	431,685	July 8	1036	260	52	211
Cannon, William G., Southwark, county of Surrey, England. Radiator.	423,728	Mar. 18	2063	544	50	1543
Cantonbury, Crawford R., Brownwood, Tex. Burglar-alarm.	437,772	Oct. 7	153	47	53	32
Canton Steel Roofing Company. (See Belding, Thomas C., assignor.)						
Canton Steel Roofing Company. (See Wock, John, assignor.)						
Cantril, Simeon W. (See Barber, John F., assignor.)						
Capehart, Alexander S. (See Goodson, Capehart, and Travis.)						
Capek, John V., New York, N. Y., assignor to himself and E. H. Johnson, Greenwich, Conn. Electrical heater.	424,921	Apr. 1	749	200	51	145
Capek, John V., New York, N. Y., assignor to himself and E. H. Johnson, Greenwich, Conn. Electrical cooking-stove.	424,922	Apr. 1	751	²⁰⁰ 201	51	146
Capen, Charles A., et al. (See Lawton, Charles H., assignor.)						
Capen, Ebenezer S., assignor to P. Blaisdell & Company, Worcester, Mass. Friction-clutch.	432,179	July 15	1790	460	52	364
Capers, John G., Greenville, S. C. Garment-supporter.	422,719	Mar. 4	529	133	50	1236
Capewell, George A. and J. E., Woodbury, Conn. Weather-strip.	437,478	Sept. 30	3378	885	52	2051
Capewell, John E. (See Capewell, George A. and J. E.)						
Capitane, Emil, Eilenburg, Germany. Mechanical key-board player.	429,419	June 3	481	114	51	1563
Capitol Manufacturing Company. (See Bowman, Louis T., assignor.)						
Capitol Manufacturing Company. (See Schlesinger and Bowman, assignors.)						
Cappel, Adam, Dayton, Ohio. Umbrella.	437,287	Sept. 30	3066	803	52	1929
Capps, Frank L., assignor of one-half to A. L. Ide, Springfield, Ill. Telephone.	441,396	Nov. 25	2868	740	53	1181
Capps, John G. (See Williams and Capps.)						
Capron, Alphens, Winchester, N. H. Saw-table gage.	425,297	Apr. 8	1330	355	51	267
Capron, Elisha P. H., Norwalk, Conn. Shaft-coupling.	425,720	Mar. 4	521	133	50	1236
Capwell, Thomas R. (See Munger, Royal L., assignor.)						
Caradine, Virginia C., Sherman, Tex. Apparatus for washing and draining dishes.	419,497	Jan. 14	1270	338	50	267
Carbon Iron Company. (See Lash and Johnson, assignors.)						
Carbonizing Syndicate. (See Wass, Alfred G., assignor.)						
Card & Co., S. W. (See Smith, Frederick J., assignor.)						
Card, Joseph P., Chicago, Ill. Solution for preserving wood.	419,582	Jan. 14	1381	.....	50	291
Cardew, Philip, Chatham, county of Kent, assignor to B. M. Drake and J. M. Gorham, Westminster, England. Thermal cut-out.	421,240	Feb. 11	1207	311	50	802
Cardona, Joseph, Chicago, Ill. Boot and shoe cleaning and polishing machine.	419,244	Jan. 14	899	236	50	192
Cardozo, Albert W., assignor of one-fourth to A. Stoddart, Washington, D. C. Animal-trap.	421,066	Feb. 11	962	248	50	755
Carette, Georges, Nuremberg, Germany. Toy.	435,796	Sept. 2	646	171	52	1499
Carew, James M., New York, N. Y. Machine for applying adhesive material to the surface of paper, &c.	423,593	Mar. 18	1817	487	50	1502
Carew, Jeremiah. (See O'Brien, Joseph, assignor.)						
Carey, Anna K. (See Carey, James, Jr., and A. K.)						
Carey, Frank, Penn Yan, N. Y., assignor of one-half to J. W. Young, Tunkhannock, Pa. Steam-engine.	441,932	Dec. 2	469	¹²⁵ 126	53	1357
Carey, George W., Salem, Mass. Steam-engine connection.	435,645	Aug. 5	301	79	52	815
Carey, Harry, et al. (See Nevins, Thomas F., assignor.)						
Carey, James, Jr., and A. K., Baltimore, Md. Folding screen.	421,383	Feb. 18	1412	366	50	847
Carey, John. (See Dorn and Carey.)						
Carey, John, Syracuse, N. Y. Valve-seater.	424,957	Apr. 8	812	218	51	166
Carey, John B., Brooklyn, N. Y. Railway-gate.	437,089	Sept. 23	2725	712	52	1918
Carey, Robert, et al. (See Bateson, William, assignor.)						
Carey, Samuel. (See Polson, Gustavus A., assignor.)						
Carey, William, Montreal, Quebec, Canada. Stitch-soam connecting leather or equivalent stock.	422,182	Feb. 25	2557	676	50	1072
Carez, Eugène, Brussels, Belgium. Fermenting.	432,861	July 22	2838	52	573

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Carez, Eugène, Brussels, Belgium. Making ammonium nitrate.....	435,280	Aug. 26	2839		52	1334
Carhart, Lizzie D., Marion, Iowa. Darning-last.....	432,661	July 22	2527	648	52	512
Carlin, Willard S., East Saginaw, Mich. Spind-actuating device for dredging-machines.....	428,163	May 20	1716	435	51	1166
Carl, Arthur W., New London, Ohio. Detachable furniture-joint.....	430,111	June 17	1550	586	51	1790
Carl, Frederick, assignor to E. M. Noble and W. A. Raborg, Washington, D. C. Deposit-box.....	425,491	Apr. 15	1617	431	51	332
Carl, Irving L., and J. B. Paterson; said Paterson assignor to A. E. Cowles, San Diego, Cal. Ore-mill.....	433,670	Aug. 5	341	87	52	822
Carl, Lewis, Mount Carmel, Pa. Brake-shoe.....	437,676	Oct. 7	5	2	53	3
Carl, Reinhold A., Hearne, Tex. Riveting-machine.....	424,668	Apr. 1	358	94	51	69
Carl, Reinhold A., assignor of two-thirds to H. K. Davis and W. P. Ferguson, Hearne, Tex. Riveting-machine.....	433,761	Aug. 5	478	124	52	848
Carlaw, David, Glasgow, county of Lanark, Scotland. Letter-press printing and numbering-machine.....	425,298	Apr. 8	1331	356	51	268
Carlé, Louis, <i>et al.</i> (See Weigel, Robert, assignor.).....						
Carley, Horace S., New York, N. Y. Fan.....	429,884	June 10	1181	293	51	1709
Carley, William H., Boston, Mass., assignor to Weeden Sanitary Manufacturing Company, of Rhode Island. Attachment for siphons.....	422,721	Mar. 4	522	133	50	1236
Carlile, Lawrence J., and G. B. Rumph, Titusville, Fla. Combined fertilizer and insecticide.....	434,243	Aug. 12	1210		52	1002
Carlin, C. C., <i>et al.</i> (See Bond, Nathan O., assignor.).....						
Carlin, David, Pittsburg, Pa. Sand-core-making machine.....	432,790	July 22	2744	702	52	553
Carlson, Carl, assignor of two-thirds to A. Johnson and J. A. Olson, Minneapolis, Minn. Band-cutter and feeder.....	430,600	June 17	2315	569	51	1938
Carlson, Carl A. (See Linder and Carlson.).....						
Carlson, Carl O., Kansas City, Kans. Railway-track switch.....	437,675	Oct. 7	4	1, 2	53	3
Carlson, Frank A., Dallas, Tex. Piston-rod packing.....	427,045	May 6	19	6, 7	51	814
Carlson, Gustaf H., Lowell, Mass. Revolving table.....	430,063	June 10	1467	364	51	1764
Carlson, John. (See Holmgren, Peter F., assignor.).....						
Carlson, O. E. (See Benson, Elov, assignor.).....						
Carlstedt, Johan H., assignor of one-half to C. P. Malmqvist, Stockholm, Sweden. Bridle.....	439,836	Nov. 4	309	77	53	668
Carlstroem, Carl A., Brooklyn, N. Y. Quill or bobbin.....	431,800	July 8	1215	303	52	246
Carlton, Howard. (See Jones, Wilbur F., assignor.).....						
Carlton, Thomas W. (See Panter, Taite, and Carlton.).....						
Carlton, William F., Rochester, N. Y. Plate-holder for photographic cameras.....	432,974	July 29	3031	779	52	614
Carlyle, George, assignor of one-half to G. Maitland, Detroit, Mich. Calipers.....	425,208	Apr. 8	1136	316	51	242
Carnack, Henry C., East Portland, assignor of one-half to G. H. Durham, Portland, Oreg. Wire suspension-bridge.....	439,741	Nov. 4	167	43	53	640
Carman, Albert, assignor to himself and A. Martin, Winnipeg, Manitoba, Canada. Sad-iron.....	427,298	May 6	445	108	51	893
Carman, Alvin O., Pottersville, Mich. Knotting device for grain-binders.....	423,124	Mar. 11	1158	301	50	1363
Carman, Alvin O., Pottersville, Mich. Knotting device for grain-binders.....	423,125	Mar. 11	1162	{ 302 303 304 }	50	1364
Carman, Charles W., Hamburg, Iowa. Bridge-flooring.....	423,126	Mar. 11	1168	304	50	1365
Carman, Clarence A., Wyandance, N. Y. Thill-coupling.....	431,507	July 1	733	182	52	146
Carman, Clarence A., Paterson, N. J. Anti-rattler for thill-couplings.....	443,251	Dec. 23	2660	682	53	1806
Carman, Frank V., Oakland, Cal. Miter-box.....	420,530	Feb. 4	147	36	50	592
Carman, Mahlon, Towanda, Pa. Upright tubular steam-boiler.....	441,280	Nov. 25	2693	{ 698 699 }	53	1147
Carmichael, Alexander, <i>et al.</i> (See Purdy, Ormond E., assignor.).....						
Carmichael, Dwight B. (See Emery, Charles H. and J. P., assignors.).....						
Carmichael, Henry, Malden, Mass., assignor to Cumberland Manufacturing Company, Portland, Me. Lifting-pump.....	431,686	July 8	1038	260	52	212
Caruody, John T., assignor of one-fourth to D. C. H. Ross, Cedar Rapids, Iowa. Pulley.....	441,825	Dec. 2	311	84	53	1325
Carnahan, Alphretta, <i>et al.</i> (See Carnahan, Cyrus M., assignor.).....						
Carnahan, Cyrus M., assignor to A. Carnahan, Coraopolis, and J. C. Young, Robinson, Pa. Vehicle-tongue.....	427,499	May 6	711	178	51	953
Carnahan, Cyrus M., assignor to A. Carnahan, Coraopolis, and J. C. Young, Robinson, Pa. Frame for agricultural machinery.....	437,392	Sept. 30	3238	844	52	2021
Carnahan, Cyrus M., assignor to A. Carnahan, Coraopolis, and J. C. Young, Robinson, Pa. Rail joint.....	439,757	Nov. 4	186	49	53	644
Carnan, Bishop, assignor of one-half to C. W. Carnan, Baltimore, Md. Crank-wheel.....	443,931	Dec. 30	3733	954	53	2021
Carnan, C. Walter. (See Carnan, Bishop, assignor.).....						
Carnegie, Phipps & Company. (See Lauder and Simpson, assignors.).....						
Carnell, George, Philadelphia, Pa. Brick-machine.....	419,922	Jan. 21	1912	504	50	401
Carnell, George, Philadelphia, Pa. Brick-pressing machine.....	420,861	Feb. 4	639	{ 164 165 }	50	685
Carnell, George, Philadelphia, Pa. Brick-machine.....	438,986	Oct. 21	2036	543	53	401
Carnes, John, Lima, Ohio. Street-car gearing.....	422,069	Feb. 25	2384	630	50	1040
Carney, Edward, and J. H. Dixon, Toronto, Ontario, Canada; said Dixon assignor to said Carney. Printing-machine.....	420,436	Feb. 4	14	3	50	567
Carney, M. W., <i>et al.</i> (See Hammell, John, assignor.).....						
Carney, Sydney H. (See Hollingshead, William B., assignor.).....						
Carney, Thomas, assignor to M. Bensinger, Chicago, Ill. Cash register and indicator.....	422,375	Mar. 4	29	6, 7, 8	50	1140
Carney, Thomas, assignor to M. Bensinger, Chicago, Ill. Cash indicator and register.....	424,177	Mar. 25	2726	{ 727 728 }	50	1677
Carney, Thomas, assignor to M. Bensinger, Chicago, Ill. Cash-register.....	428,270	May 20	1883	474	51	1198
Carney, Thomas, and E. Snyder, assignors to M. Bensinger, Chicago, Ill. Cash register and indicator.....	428,269	May 20	1881	473	51	1198
Carpenter, Alfred B. (See Smith, Charles W., assignor.).....						
Carpenter, C. D. (See Carpenter, Clifton C., assignor.).....						
Carpenter, Charles C., and M. Phillips, New York, N. Y., assignors to said Carpenter. Bustle.....	419,181	Jan. 14	805	212	50	173
Carpenter, Charles E., assignor to Carpenter-Nevens Electro-Heating Company, Minneapolis, Minn. Electric-heating apparatus.....	429,559	June 3	689	168	51	1604
Carpenter, Charles E., assignor to Carpenter-Nevens Electro-Heating Company, Minneapolis, Minn. Electric-heating apparatus.....	429,560	June 3	692	169	51	1605
Carpenter, Charles E., assignor to Carpenter-Nevens Electro-Heating Company, Minneapolis, Minn. Electric soldering-iron.....	429,561	June 3	694	169	51	1605
Carpenter, Charles E., assignor to Carpenter-Nevens Electro-Heating Company, Minneapolis, Minn. Electric heating.....	429,562	June 3	695	169	51	1605
Carpenter, Charles E., assignor to Carpenter-Nevens Electro-Heating Company, Minneapolis, Minn. Electric soldering-iron.....	431,671	Aug. 5	342	87	52	822
Carpenter, Charles E., assignor to Carpenter-Nevens Electro-Heating Company, Minneapolis, Minn. Electric soldering-iron.....	436,119	Sept. 9	1152	301	52	1600

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Carpenter, Charles F., Louisville, Ky. Magnetic tool.....	429,012	May 27	3008	772	51	1435
Carpenter, Charles H., Richmond, Ind. Natural-gas burner.....	427,299	May 6	416	108	51	893
Carpenter, Charles H., and I. Briggs, Middleborough, Mass. Berry-picker.....	425,299	Apr. 8	1337	356	51	268
Carpenter, Charles W. (See Tefft and Carpenter.)						
Carpenter, Clarence E. (See Shoots and Carpenter.)						
Carpenter, Clarence E., assignor to J. M. Vangorden, Horseheads, N. Y. Pencil-sharpener.....	440,540	Nov. 11	1435	370	53	894
Carpenter, Clifton C., assignor to C. D. Carpenter, Rochester, N. Y. Fence.....	430,064	June 10	1468	364	51	1764
Carpenter Company, E. P. (See Baynton, Newell M., assignor.)						
Carpenter, Daniel A., Brooklyn, N. Y. Button-machine.....	425,209	Apr. 8	1197	317 318	51	242
Carpenter, Delos, Orion, Mich. Shoulder-brace and slide therefor.....	426,523	Apr. 29	3184	836	51	656
Carpenter, Edmund H., Jackson, Mich. Two-wheeled vehicle.....	437,749	Oct. 7	111	34	53	24
Carpenter, Francis W., Harrison, N. Y. Toy figure.....	432,693	July 22	2586	662	52	523
Carpenter, George B., Chicago, Ill. Tent.....	426,659	Apr. 29	3387	889	51	695
Carpenter, George J., Bethel, Mich. End-gate.....	426,768	Apr. 29	3560	928	51	728
Carpenter, George W., Toledo, Ohio. Dish-holder.....	433,977	Aug. 12	804	210	52	922
Carpenter, Giles C., Fillmore, N. Y. Farrier's anvil.....	437,355	Sept. 30	3173	829	52	2008
Carpenter, Henry, Davenport, Iowa. Combined anti-rattler and shaft-support.....	422,376	Mar. 4	25	8	50	1141
Carpenter, Henry L., Minneapolis, Minn. Automatic telephone-call.....	422,722	Mar. 4	523	134	50	1236
Carpenter, Hiram H. (See Duncan, Louis, assignor.)						
Carpenter, Hiram H., New York, N. Y. Electrical conductor.....	419,923	Jan. 21	1914	504	50	402
Carpenter, Hiram H., New York, N. Y. Electrode for secondary batteries.....	421,666	Feb. 18	1826	477	50	927
Carpenter, Isaac D., Dix, Ill. Strawberry-cultivator, &c.....	439,474	Oct. 28	2807	748	53	551
Carpenter, James, Brooklyn, N. Y. Vehicle wheel.....	443,745	Dec. 30	3451	885	53	1967
Carpenter, James H., Chicago, Ill. assignor of two-thirds to C. E. O'Hara, New York, N. Y., and Seymour Paper Company, Windsor Locks, Conn. Manufacturing colored paper.....	443,658	Dec. 30	3311	853	53	1940
Carpenter, James M., Pawtucket, R. I. Die-stock.....	434,320	Aug. 12	1327	345	52	1026
Carpenter, James W., Dayton, Ohio. Meat roaster and baker.....	426,712	Apr. 29	3482	911	51	713
Carpenter, James W., Dayton, Ohio. Revolving self-basting oven.....	427,671	May 13	967	243	51	1012
Carpenter, Jesse F., Berlin, Germany. Automatic valve for air-brakes.....	431,331	July 1	447	111	52	93
Carpenter, John. (See Sprague and Carpenter.)						
Carpenter, John N., et al. (See Spicer, John P., assignor.)						
Carpenter, Nathan G., Anstin, Ill. Transfer-table.....	440,419	Nov. 11	1248	323	53	857
Carpenter-Nevens Electro-Heating Company. (See Carpenter, Charles E., assignor.)						
Carpenter, Leslie M., Woonsocket, R. I. Vehicle-brake.....	419,110	Jan. 7	689	181	50	145
Carpenter, Orville, Attleborough, Mass. Automatic stop-motion for reels.....	420,770	Feb. 4	474	125	50	656
Carpenter, Varnum F., Cleveland, Ohio. Rotary pump.....	436,399	Sept. 16	1595	421	52	1695
Carpenter, Walter S., Wilkes-Barré, Pa. Bath-tub and wash-stand.....	437,479	Sept. 30	3379	885	52	2051
Carpenter, Wilbur M., St. Louis, Mo. Type-writing machine.....	437,090	Sept. 23	2726 713	712 713	52	1918
Carpenter, William S., and A. L. Montagne, Canandaigua, N. Y. Feed-cooker.....	425,300	Apr. 8	1337	357	51	268
Carpentier, Arsene, Caudry, France. Velocipede-wheel.....	434,041	Aug. 12	882	233	52	938
Carr, Bruce, et al. (See Hood and Jacob, assignors.)						
Carr, Bruce, et al. (See Mains, John F., assignor.)						
Carr, Charles, Boston, Mass. Life-guard for cars.....	429,082	May 27	3124	805	51	1456
Carr, Charles F. (See Huse and Carr.)						
Carr, Charles F., assignor to W. D. Huse, Laconia, N. H. Circular-knitting machine.....	430,268	June 17	1821	447	51	1842
Carr, Charles F., assignor to W. D. Huse, Laconia, N. H. Circular-knitting machine.....	435,394	Sept. 2	19	5, 6	52	1378
Carr, Clarence E., Andover, N. H. Trace attachment for hames.....	422,377	Mar. 4	26	8	50	1141
Carr, Clarence E., Andover, N. H. Hame.....	431,556	July 8	810	202	52	169
Carr, Courtland P., Chicago, Ill. Automatic adjuster for telegraph-lines.....	432,724	July 22	2626	672	52	531
Carr, James, Syracuse, N. Y. Key-seat ruler.....	428,890	May 27	2830	719	51	1400
Carr, James D., Sauk Centre, Minn. Fire-escape.....	437,091	Sept. 23	2731	713	52	1920
Carr, James D., Sauk Centre, Minn. Car-coupling.....	437,092	Sept. 23	2732	713	52	1920
Carr, James D., Sauk Centre, Minn. Hay-fork.....	440,011	Nov. 4	586	155	53	723
Carr, James L. (See Miller, John F., assignor.)						
Carr, John H. (See Haas, David, assignor.)						
Carr, Joseph J., Wilkes-Barré, assignor to H. Yeager, Forty Fort, Pa. Spinning top or toy.....	432,476	July 15	2230	577	52	448
Carr, Omar C., Grand Rapids, Ohio. Hedge-trimmer and lawn-mower combined.....	421,241	Feb. 11	1209	312	50	802
Carr, Robert S., Hamilton, Ohio. Adjustable table.....	427,223	May 6	303	78	51	871
Carr, Robert S., Hamilton, Ohio. Lawn-rake.....	443,567	Dec. 30	3166	813	53	1912
Carr, Robert S., assignor of two-thirds to W. B. Carr and G. P. Stevenson, Hamilton, Ohio. Train-telephone.....	442,799	Dec. 16	1862	481	53	1643
Carr, Rufus B., assignor of one-half to A. Howard, Boston, Mass. Clock striking mechanism.....	424,267	Mar. 25	2840	760	50	1700
Carr, Rufus B., assignor of one-half to A. Howard, Boston, Mass. Electro-magnetic watch-clock.....	424,268	Mar. 25	2842	760	50	1700
Carr, W. B., et al. (See Carr, Robert S., assignor.)						
Carr, William, and J. T. Mallahan, Ottawa, Ohio. Corn-cutter.....	432,508	July 22	2283	591	52	465
Carr, William H., Troy, assignor of one-half to W. A. Harder, Lansingburg, N. Y. Circular-knitting machine.....	431,801	July 8	1216	303 304	52	246
Carr, William M., assignor of two-thirds to W. J. Waterfill and E. B. Hahn, Tyrone, Ky. Cane-stripping machine.....	442,015	Dec. 2	604	163	53	1331
Carrère, John M., New York, N. Y. Portfolio.....	429,166	June 3	93	22	51	1490
Carrico, Henry F., Paducah, Ky. Washing-machine.....	431,557	July 8	812	202	52	169
Carrico, Thomas W., San Antonio, Tex. Dry-earth closet.....	420,332	Jan. 28	2554	676	50	530
Carrico, Thomas W., San Antonio, Tex. Vault or cell for outhouses.....	434,244	Aug. 12	1210	315	52	1002
Carrick, Robert, et al. (See Burke, Stephen L., assignor.)						
Carrier, Horace, Swanton, Ohio. Cultivator.....	424,462	Apr. 1	29	8, 9	51	8
Carriger, John H., Knoxville, Tenn. Washing-machine.....	420,637	Feb. 4	301	80	50	622
Carriger, John H., Knoxville, Tenn. Steam-engine.....	442,572	Dec. 9	1476	379	53	1558
Carrington, James H., New York, N. Y. Gas-stove.....	419,827	Jan. 21	1757	464	50	386
Carrington, James H., New York, N. Y. Gas-stove.....	420,325	Jan. 28	2397	638	50	501
Carroll, Charles E., et al. (See Bradley, Jay L., assignor.)						
Carroll, George H., Sterling, Ill. Road-cart.....	437,811	Oct. 7	214	65	53	43
Carroll, John E. (See French and Carroll.)						
Carroll, John H. (See French and Carroll.)						
Carroll, Lotal, et al. (See Admire, Joshua, assignor.)						
Carroll, Michael F., assignor of one-half to A. W. Downham, Hillsborough, Ohio. Vehicle-spring.....	422,048	Feb. 25	2356	622	50	1035
Carroll, Michael F., assignor of one-half to A. W. Downham, Hillsborough, Ohio. Vehicle-spring.....	441,746	Dec. 2	184	48	53	1298
Carroll, Monroe W., Provençal, La. Locomotive-engine.....	419,637	Jan. 51	1472	395	50	315

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Carroll, Patrick, Cohoes, N. Y. Mechanism for cleaning cotton	421,242	Feb. 11	1209	{ 312 313 }	50	802
Carroll, Ralph W., <i>et al.</i> (See Adams, Charles, assignor.)						
Carroll, Robert W., Memphis, Tenn. Bale-tie buckle	421,121	Feb. 11	1036	265	50	769
Carroll, Thomas, Noble, assignor of one-half to W. H. Wise, Winfield, Iowa. Cutting-tool	423,413	Mar. 18	1591	418	50	1454
Carroll, William. (See Bennett, Frederick M., assignor.)						
Carroll, William, Chicago, Ill. Electric-lamp post	426,660	Apr. 29	3388	889	51	696
Carroll, William, Columbus, Ohio. Clamp	427,300	May 6	417	108	51	893
Carroll, William T., Worcester, Mass. Reversing mechanism for counter-shafting	443,821	Dec. 30	3584	921	53	1992
Carskaddon, William T., <i>et al.</i> (See Briggs, Harrison T., assignor.)						
Carskaddon, Thomas R., Keyser, W. Va. Roofing	429,013	May 27	3010	772	51	1435
Carskaddon, Thomas R., Keyser, W. Va. Portable building	435,112	Aug. 26	2596	{ 685 686 }	52	1287
Carsley, Robert B., assignor to Triumph Heat and Light Company, New Bedford, Mass. Cabinet	425,492	Apr. 15	1618	431	51	332
Carson, Benjamin F., Nashville, Tenn. Churn-dasher	424,669	Apr. 1	359	95	51	70
Carson, David K. (See Schnieder and Carson.)						
Carson, George B. (See Worden, Miner E., assignor.)						
Carson, James G. (See Brandwood, Edward, assignor.)						
Carson, William F. (See Brandenburg, Edward A., assignor.)						
Carstensen, Larus F., assignor to Armstrong Manufacturing Company, Bridgeport, Conn. Bearing for bicycles	422,723	Mar. 4	524	134	50	1236
Carswell, Allan J. (See Cooper, Samuel, assignor.)						
Carswell, Morris. (See Sturrock and Macdougald, assignors.)						
Carter & Company. (See Carter, John R., assignor.) (Reissue.)						
Carter & Company. (See Cosby, Charles E., assignor.)						
Carter & Company. (See Hadstate and Martin, assignors.)						
Carter & Company. (See O'Hara, Walter W., assignor.)						
Carter & Company. (See Spear, Murray H., assignor.)						
Carter, David M. (See Sadler and Carter.)						
Carter, Edwin E., assignor to J. S. Scully, Pittsburg, Pa. Mining-machine. (Reissue)	11,058	Feb. 4	748	{ 192 193 }	50	706
Carter, Edwin E., assignor to J. S. Scully, Pittsburg, Pa. Truck for mining-machines	428,551	May 20	2298	584	51	1278
Carter, Edwin E., assignor to J. S. Scully, Pittsburg, Pa. Cutter for mining-machines	430,989	June 24	2957	726	51	2069
Carter, Edwin T. (See Chapman and Carter.)						
Carter, Frederick, and M. McChesney, North Platte, Nebr. Alarm for mill-elevators	430,921	June 24	2854	700	51	2050
Carter, George. (See Clough and Carter.)						
Carter, George W., and E. L. Dutton, Kenesaw, Nebr. Dish-washer	422,049	Feb. 25	2357	622	50	1036
Carter, Harry. (See Wright, William F., assignor.)						
Carter, Henry, Albion, N. Y. Ditching and excavating machine	421,122	Feb. 11	1037	266	50	769
Carter, Isaac M. (See Marley, James D., assignor.)						
Carter, James, Lockport, N. Y. Pressure-filter	430,797	June 24	2661	653	51	2014
Carter, James D. (See Ames, Timothy K., assignor.)						
Carter, James W., Tacoma, Wash. Stop-block for wagons	441,533	Nov. 25	3083	792	53	1223
Carter, John, and W. J. Whiting, assignors to T. W. and H. Webley, Birmingham, England. Revolver	432,368	July 15	2065	531	52	414
Carter, John, and W. J. Whiting, assignors to T. W. and H. Webley, Birmingham, England. Revolver	432,369	July 15	2067	532	52	414
Carter, John R., Los Angeles, Cal., assignor, by mesne assignments, to Carter & Company (limited), Niagara Falls, N. Y. Machine for numbering paper. (Reissue)	11,091	June 24	3019	741	51	2081
Carter, John V. B., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Pattern for founding	430,831	June 24	2715	665	51	2023
Carter, John W., <i>et al.</i> (See Nevins, Thomas F., assignor.)						
Carter, John W., Newton, Mass. Stopper for ink or other bottles	421,667	Feb. 18	1828	478	50	927
Carter, Michael, Jr., Chicago, Ill. Coupling and draft apparatus for cars	426,769	Apr. 29	3561	{ 928 929 }	51	728
Carter, Wallace H., East Milton, Mass. Hay-knife	422,724	Mar. 4	526	134	50	1237
Cartledge, John, <i>et al.</i> (See Armitage and Topham, assignors.)						
Carts, Jennie E., Baltimore, Md., and J. E. Gibbs, Jonesborough, Tenn.; said Gibbs assignor of part to said Carts. Water-proof leggin	421,906	Feb. 25	2163	567	50	999
Cartwright, David J. (See Potter and Cartwright.)						
Cartwright, David J. (See Potter, Cartwright, and Keyes.)						
Cartwright, David J., Boston, Mass., assignor to Electrical Safety Company, Portland, Me. Thermal cut-out	441,933	Dec. 2	472	126	53	1357
Cartwright, David J., Boston, and J. S. Potter, Newton, Mass.; said Cartwright assignor to said Potter. Electric cut-out	443,068	Dec. 16	2303	589	53	1730
Carty, Jerome, trustee. (See Leech and Himelspark, assignors.)						
Carty, Jerome, <i>et al.</i> (See Kitsée, Isidor, assignor.)						
Carty, John J., New York, N. Y. Means for reducing inductive disturbances in telephone-circuits	442,856	Dec. 16	1968	505	53	1664
Carty, John J., New York, N. Y., assignor to American Bell Telephone Company, Boston, Mass. Multiple telephony	425,862	Apr. 15	2174	579	51	439
Carty, John J., New York, N. Y., assignor to American Bell Telephone Company, Boston, Mass. Telephone system	425,863	Apr. 15	2177	579	51	440
Carty, John J., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Divided multiple switch-board	427,154	May 6	205	53	51	851
Carty, John J., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Multiple switch-board apparatus	427,155	May 6	207	53	51	852
Carty, John J., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	427,156	May 6	210	53, 54	51	852
Carty, John J., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	427,742	May 13	1086	274	51	1035
Carver, James W., Lynn, Mass., assignor to American Heading Manufacturing Company, of Maine. Wood-working machinery	432,975	July 29	3032	779	52	614
Carver, James W., Lynn, Mass., assignor to American Heading Manufacturing Company, of Maine. Wood-working machinery	432,976	July 29	3034	{ 779 780 }	52	615
Carver, James W., Pawlet, Vt., assignor to himself and G. L. Kelty, Brooklyn, N. Y. Gun-sight	424,640	Apr. 1	316	82	51	62
Carver, James W., Pawlet, Vt., assignor to himself and G. L. Kelty, Brooklyn, N. Y. Means for loading and capping cartridges	424,641	Apr. 1	316	82	51	62
Carver, James W., Pawlet, Vt., assignor to himself and G. L. Kelty, Brooklyn, N. Y. Ball-seater and capper combined	427,224	May 6	304	78	51	871
Carver, John M., Fair Forest, S. C. Kitchen-cabinet	423,025	Mar. 11	1005	264	50	1335

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Cary, George C., <i>et al.</i> (See Bearisto, Henry B., assignor.)						
Cary, Henry B., assignor of one-half to A. W. Eames, Los Angeles, Cal. Monkey-wrench.	427,672	May 13	968	243	51	1012
Cary Safe Company. (See Gochler, George J. H., assignor.)						
Cary, Spencer C., Baldwin, assignor to W. H. Vanderbilt, Brooklyn, N. Y. Metal hoop.	420,900	Feb. 4	706	182	50	697
Cary, Spencer C., Baldwin, assignor to W. H. Vanderbilt, Brooklyn, N. Y. Box-strap.	441,227	Nov. 25	2578	667	53	1129
Cary, Spencer C., Baldwin, assignor to W. H. Vanderbilt, Brooklyn, N. Y. Box-strap.	441,353	Nov. 25	2797	723	53	1167
Cary, Spencer C., Baldwin, assignor to W. H. Vanderbilt, Brooklyn, N. Y. Method of and machine for making metal box-straps.	441,354	Nov. 25	2798	723	53	1167
Cary, Spencer C., Baldwin, assignor to W. H. Vanderbilt, Brooklyn, N. Y. Making coiled metal box-straps.	441,355	Nov. 25	2800	723	53	1167
Cary, Spencer C., Baldwin, assignor to W. H. Vanderbilt, Brooklyn, N. Y. Reel for metal box-straps.	441,356	Nov. 25	2801	723 734	53	1167
Cary, Walter M., San Francisco, Cal. Street-railway-car truck.	424,269	Mar. 25	2845	761	50	1701
Casaday, James B. (See Peak and Casaday.)						
Casaday, James B., and M. Peak, Colorado Springs, Colo. Fender attachment for cars.	429,501	June 3	609	149	51	1588
Casanova, Henry J., St. Louis, Mo. Guitar or other similar stringed instrument.	425,864	Apr. 15	2180	579	51	440
Case, Adelbert B., Springfield, Mass. Pawl-and-ratchet device.	435,087	Aug. 26	2560	675	52	1280
Case, Alfred B. (See Huff, Andrew D., assignor.)						
Case, Charles A., New York, N. Y. Endless-chain elevator.	418,839	Jan. 7	281	68	50	59
Case, Charles A., New York, N. Y. Elevator.	433,762	Aug. 5	479	124	52	848
Case, Charles A., New York, N. Y. Drawing-pad.	435,395	Sept. 2	21	6, 7	52	1379
Case, Charles A., New York, N. Y. Drive-chain.	437,798	Oct. 7	467	132	53	89
Case, Charles L., <i>et al.</i> (See Kerr, George, assignor.)						
Case, Cromwell O., assignor to P. & F. Corbin, New Britain, Conn. Making pulleys.	421,668	Feb. 18	1828	478	50	927
Case, Cromwell O., assignor to P. & F. Corbin, New Britain, Conn. Wrought-metal pulley.	421,669	Feb. 18	1829	478	50	928
Case, Cromwell O., assignor to P. & F. Corbin, New Britain, Conn. Door-kuob.	421,670	Feb. 18	1830	478	50	928
Case, Frank B. (See Schade and Case.)						
Case, Frank B., Brooklyn, N. Y. Reversible latch.	433,325	July 29	3560	918	52	720
Case, George R. (See Birkery, Cornelius, assignor.)						
Case, George R. (See Birkery and Case.)						
Case, George R. (See Killian, Green V., assignor.)						
Case, George R., Hartford, Conn. Air-pump.	435,010	Aug. 26	2446	648	52	1259
Case, George R., and G. V. Killian, Mountain View, Ark. Wire-stretcher.	430,621	June 24	2360	577	51	1954
Case, Henry, assignor to M. A. Case, Brooklyn, N. Y. Sea-wall or breakwater.	420,928	Feb. 11	757	196	50	716
Case, Henry F., South Manchester, Conn. Water-box for paper-finishing rolls.	430,112	June 17	1551	386	51	1791
Case, Hiram A., assignor of one-half to G. E. Bradford, Troy, Pa. Car-coupling.	426,107	Apr. 22	2565	675	51	522
Case, J. S., <i>et al.</i> (See Demarest, Marcus E., assignor.)						
Case, Joel T., Bristol, Conn. Shaft-hanger and engine-case.	421,856	Feb. 18	2093	549	50	976
Case, Joel T., Bristol, Conn. Marine engine.	430,067	June 10	1472	365	51	1765
Case, Joel T., Bristol, Conn. Governor for steam-engines.	437,641	Sept. 30	3609	944	52	2097
Case, Joel T., Bristol, Conn. Balanced cut-off valve.	441,092	Nov. 18	2318	608	53	1076
Case, Joel T., Bristol, Conn. Steam-engine lubricator.	441,093	Nov. 18	2350	609	53	1077
Case, Joel T., Bristol, Conn. Steam-engine.	413,476	Dec. 23	3025	777 778	53	1877
Case, John M., Columbus, Ohio. Crushing-rolls.	419,498	Jan. 14	1271	339	50	267
Case, John M., assignor to Case Manufacturing Company, Columbus, Ohio. Dust-catching fan.	419,316	Jan. 14	1006	266	50	213
Case, John M., assignor to Case Manufacturing Company, Columbus, Ohio. Flour-bolt.	429,998	June 10	1349	334 335	51	1742
Case, Joseph D. (See Grisel and Severio, assignors.)						
Case, Joseph D., <i>et al.</i> (See Grisel, George, assignor.)						
Case, Joseph D., and C. W. Evans, Plainfield, N. J. Key-board self-playing attachment.	430,065	June 10	1469	364 365	51	1764
Case, Joseph D., and C. W. Evans, Plainfield, N. J. Electric piano-player.	430,066	June 10	1471	365	51	1765
Case, Lewis F., Jr., Goshen, Ind. King-bolt for vehicles.	429,753	June 10	978	240	51	1671
Case Manufacturing Company. (See Case, John M., assignor.)						
Case, Margaret A. (See Case, Henry, assignor.)						
Case, Nora M. (See Otis, Benjamin H., assignor.)						
Case Plow Works, J. I. (See Sobey, William, assignor.)						
Casebolt, Henry, San Francisco, Cal. Excavating apparatus.	432,116	July 15	1696	436	52	345
Casey, Denis, J. Mantion, and G. H. Millen, Hull, Quebec, Canada. Machine for boxing matches.	418,887	Jan. 7	365	87, 88	50	76
Casey, Dennis J., <i>et al.</i> (See Torrey, Augustus, assignor.)						
Casey, Firmin M., Mount Vernon, N. Y. Insulated nippers.	419,111	Jan. 7	690	182	50	145
Casey, James, and S. A. Morgan, Lehigh, Ind. Ter. Cotton-chopper.	434,764	Aug. 19	2042	534	52	1175
Casey, Jeremiah, Edgewater, N. J., assignor to Casey Machine and Supply Company, New York, N. Y. Box-nailing machine.	431,964	July 8	1452	367 368 369	52	293
Casey, Jeremiah, Edgewater, N. J., assignor to Casey Machine and Supply Company, New York, N. Y. Box-nailing machine.	432,477	July 15	2232	577 578 579	52	448
Casey Machine and Supply Company. (See Casey, Jeremiah, assignor.)						
Cash, Arthur W., Decatur, Ill., assignor to Typograph Company, Hartford, Conn. Type-writing machine.	425,931	Apr. 15	2280	603 604	51	458
Cash, Arthur W., Bridgeport, assignor to Typograph Company, Hartford, Conn. Type-writing machine.	427,500	May 6	712	178	51	953
Cash, Arthur W., assignor to Typograph Company, Hartford, Conn. Type-writing machine.	428,891	May 27	2831	719	51	1400
Cash, Arthur W., assignor to Armstrong Manufacturing Company, Bridgeport, Conn. Pipe threading and cutting-off machine.	434,424	Aug. 19	1502	392 393	52	1068
Cash, Arthur W., assignor, by mesne assignments, to J. V. Pilcher, Louisville, Ky. Cuff-holder.	442,169	Dec. 9	851	229	53	1436
Cash, David V., Johnson City, Tenn. Wrench.	436,647	Sept. 16	1988	520	52	1766
Cash, Francis C., Lynn, Mass. Railway-switch and means for operating the same.	441,397	Nov. 25	2570	741	53	1181
Cash, Robert W., and D. R. Brace, said Brace assignor of one-half to W. A. Munger, Hannibal, Mo. Recoil self-cocking gun.	426,916	Apr. 29	3764	983	51	769
Cashen, William B. (See Bishop, Joseph, assignor.)						
Cashin, Michael, Rifton Glen, N. Y. Hair-pin.	424,670	Apr. 1	360	95	51	70
Cashin, Michael, New York, N. Y. Grain-measuring device.	437,093	Sept. 23	2733	714	52	1920
Cashner, William, Pleasant Hill, Mo. Sash-balance.	443,391	Dec. 23	2887	742	53	1850
Casler, Benjamin G., Cleveland, Ohio. Show-rack.	421,907	Feb. 25	2164	568	50	1000
Casper, Henry, New Orleans, La. Coin-operated lock for turn-stiles.	439,107	Oct. 28	2216	595	53	442
Casper, Edward, <i>et al.</i> (See Tavernier, Alphonse E., assignor.)						
Casper, Frank L., Howe's Cave, N. Y. Table-leaf support.	421,384	Feb. 18	1414	366	50	847
Casper, Henry, New Orleans, La. Sleeping-car.	422,499	Mar. 4	196	53, 54	50	1174

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Casper, Louis, Cheyenne, Wyo. Station-indicator	442,610	Dec. 16	1539	{ 397 398 }	{ 53 }	1579
Cass, N., <i>et al.</i> (See Nott, Henry W., assignor.)						
Cass, Nathaniel. (See Cass, Thomas M. and N.)						
Cass, Riley, <i>et al.</i> (See Boner, William W., assignor.)						
Cass, T. M., <i>et al.</i> (See Nott, Henry W., assignor.)						
Cass, Thomas M., and N., Cameron; said N. Cass assignor to S. P. Cross, Milan County, Tex. Power device for baling-presses	433,887	Aug. 5	668	173	52	887
Cassard, Harry L., Baltimore, Md. Telephone toll-box	425,161	Apr. 8	1125	{ 298 299 }	{ 51 }	226
Cassard, Harry L., Baltimore, Md. Coin-released telephone-lock	428,828	May 27	2738	695	51	1380
Casseday, Albert J., <i>et al.</i> (See Casseday, James, assignor.)						
Casseday, James, assignor of two-thirds to W. J. Casseday, New York, N. Y., and A. J. Casseday, Baltimore, Md. Calendar	439,810	Nov. 4	267	67	53	660
Casseday, Walter J., <i>et al.</i> (See Casseday, James, assignor.)						
Cassella & Co., Leopold. (See Ganf, Leo, assignor.)						
Cassella & Co., Leopold. (See Hoffmann and Weinberg, assignors.)						
Cassella & Co., Leopold. (See Weinberg, Arthur, assignor.)						
Cassett, William M. (See Hoagland, John B., assignor.)						
Cassidy, Isabel, assignor to London Toilet Bazar Company, New York, N. Y. Toilet-mask	438,800	Oct. 21	1729	464	53	342
Cassidy, James W., and E. M. Smith, assignors of one-third to J. Scott, Cohoes, N. Y. Knitting-machine stop mechanism	430,512	June 17	2181	536	51	1913
Cassidy Patrick, <i>et al.</i> (See Finch, Arthur L., assignor.)						
Cassil, John M. (See Geiger, Harry M., assignor.)						
Castanien, Alfred. (See Leekron and Castanien.)						
Caster, John, Minneapolis, Minn. Perforating-machine	424,759	Apr. 1	502	136	51	98
Casterline, Floyd W. (See Crannell, Charles W., assignor.)						
Castle & Co., Wilmet. (See Fickett, William S., assignor.)						
Castle, Goswin, Rome, N. Y. Shoe-heel	419,499	Jan. 14	1272	339	50	267
Castle, John M. (See Mayow and Castle.)						
Castlo, Oliver H., Indianapolis, Ind. Steam-engine	424,093	Mar. 25	2611	696	50	1655
Castleman, Morris N., assignor to H. H. Palmer, G. E. King, and S. D. Palmer, Rockford, Ill. Churn-closure	441,611	Nov. 25	3205	825	53	1247
Castner, Hamilton Y., London, England. Purifying aluminium chloride	422,500	Mar. 4	198	54	50	1174
Casto, Frank, assignor of one-half to A. J. Perks, Springfield, Ohio. Pitman-connection	422,914	Mar. 11	839	218	50	1304
Castor, Samuel B. (See Castor, William H. and S. B.)						
Castor, William H. and S. B., Noblesville, Ind. Apparatus for utilizing natural gas for raising water	441,056	Nov. 18	2285	593	53	1064
Caswell, George, Dayton, Ohio. Cigar-machine	436,559	Sept. 16	1847	486	52	1740
Caswell, Robert B., Baltimore, Md. Calking vessels	430,375	June 17	1983	489	51	1875
Cathélineau, René, Rennes, France. Screw-press	433,763	Aug. 5	482	{ 125 126 }	{ 52 }	849
Catlett, Joseph O., and T. A. Brant, Lawn Ridge, Kans. Fodder-cutting machine	422,009	Feb. 25	2301	608	50	1026
Catlin, Charles A., assignor of one-half to C. S. Sweetland, Providence, R. I. Plastic composition	429,999	June 10	1351	.....	51	1743
Catlin, Charles A., assignor to Rumford Chemical Works, Providence, R. I. Baking-powder or preparation	439,267	Oct. 28	2481	.....	53	490
Cattley, Ernest M., Toronto, Ontario, Canada. Sash-fastener	443,356	Dec. 23	2836	729	53	1810
Catton, George B., Auburn, N. Y. Whip-socket and rein-holder	429,677	June 10	867	210	51	1649
Catz, Jacob, Cologne, Prussia, Germany. Alarm	419,924	Jan. 21	1915	505	50	402
Cauderay, Jules, Paris, France. Electric meter	431,248	July 1	327	80, 81	52	66
Cauderay, Jules, Paris, France. Electric meter	434,501	Aug. 19	1619	{ 423 424 425 }	{ 52 }	1092
Caughy, Charles M., Baltimore, Md. Attachment for preventing the refilling of bottles	430,172	June 17	1625	406	51	1806
Caulfield, John, South Bend, Ind. Car-door	419,925	Jan. 21	1915	505	50	402
Cavalli, Giosef A., assignor of one-half to C. N. Kirkbride and R. H. Jury, San Mateo, Cal. Key-hole guard	430,563	June 17	2254	553	51	1926
Cave, Arthur D., Bostwick, Nebr. Plow for listed corn	422,010	Feb. 25	2302	608	50	1026
Caven, John, Indianapolis, Ind. Domestic water-purifier	441,826	Dec. 2	312	84	53	1325
Caverhill, Frank, <i>et al.</i> (See Hess, Edwin C., assignor.)						
Caverly, Herbert D. (See Dennis, Benjamin F., assignor.)						
Cavett, William K., assignor of one-third to W. Bunton, Pittsburg, Pa. Submarine ram and torpedo-exploder	420,406	Jan. 28	2659	705	50	550
Cavner, Alexander R., Chicago, Ill. Power-gearing for cars in train	439,108	Oct. 28	2218	{ 595 596 }	{ 53 }	443
Cawthon, Orville F. (See Belknap and Cawthon.)						
Cayce, Henry P., San Marcos, Tex. Sash-balance	439,742	Nov. 4	168	43	53	640
Cazin, Francis M. F., West Fairlee, Vt. Apparatus for drying starch or other solid matter	424,760	Apr. 1	504	136	51	98
Cazin, Francis M. F., New York, N. Y. Matrix-making machine	435,344	Aug. 26	2954	784	52	1354
Cecil, Thomas H., <i>et al.</i> (See Hall, Thadens M., assignor.)						
Cella, Gerolamo, <i>et al.</i> (See Paci, Giuseppe, assignor.)						
Celluloid Manufacturing Company. (See Hyatt, John W., assignor.)						
Celluloid Manufacturing Company. (See Wood and Gillmore, assignors.)						
Celluloid Manufacturing Company. (See Wood and Gillmore, assignors.) (Reissue.)						
Celluloid Manufacturing Company of New York. (See Hyatt, John W., assignor.)						
Celluloid Novelty Company. (See Furman, John A., assignor.)						
Celluloid Varnish Company. (See Todd, Edmund N., assignor.)						
Central City Soap Company. (See Mitchell, John B., assignor.)						
Central Paper and Fiber Company. (See Kaffenberger, Gustav, assignor.)						
Central School Supply House. (See Henckel, George, assignor.)						
Century Gas Stove and Furnace Company. (See Hawley, Henry Q., assignor.)						
Century Ice Machine Company. (See Bayer, Hector v., assignor.)						
Century Press Company. (See Benedict, Gilbert H., assignor.)						
Ceperley, George W., assignor of one-half to J. J. Goldman, Milwaukee, Wis. Heel-bur-nishing machine	441,398	Nov. 25	2871	741	53	1181
Cervený, Vladimir E., and J. Nowak, Chicago, Ill. Trousers	428,271	May 20	1885	474	51	1199
Chable, August F., Marion, Kans., assignor of one-half to J. C. Price, Evansville, Ind. Vapor-burner	441,747	Dec. 2	185	49	53	1299
Chabot, Cyprien, G. Rehfuß, Philadelphia, and E. B. Moore, West Chester, Pa., assignors to said E. B. Moore. Button-hole sewing-machine	439,109	Oct. 28	2220	{ 596 597 }	{ 53 }	443
Chace, Albert F., assignor of one-half to J. S. Moulton, Boston, Mass. Velocipede	433,720	Aug. 5	411	105	52	835

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Chadbourne, Albert H., Philadelphia, Pa. Contact for overhead electric railways.....	438,404	Oct. 14	1122	303	53	920
Chadwick, Alice A., Brooklyn, N. Y. Apron.....	431,332	July 1	449	111	52	92
Chadwick, David C., Friendship, N. Y. Butter-jar.....	428,040	May 13	1537	389	51	1122
Chadwick, George B., Portsmouth, N. H. Machine for grinding cocks automatically.....	430,142	June 17	1589	396	51	1798
Chadwick, Hale, Penacook, N. H. Cooking utensil.....	426,240	Apr. 22	2758	722	51	562
Chadwick, Julian W., Brooklyn, assignor to Legerman Typotheter Company, New York, N. Y. Type-setting machine.....	429,754	June 10	979	240	51	1671
Chaffey, Elswood, Santa Monica, Cal. Wave-motor.....	426,167	Apr. 22	2650	696	51	539
Chaffey, Elswood, Santa Monica, Cal. Mechanism for transmitting power.....	434,916	Aug. 26	2314	611	52	1234
Chaffey, Elswood, Santa Monica, Cal. Mechanism for transmitting power.....	439,110	Oct. 28	2222	597	53	445
Chaffey, Elswood, Santa Monica, assignor of one-half to B. H. Fairchild, Claremont, Cal. Car brake and starter.....	442,700	Dec. 16	1680	431	53	1608
Chaffin, Alvin B., and O. A. Cone, Lowville, N. Y. Latch for car-doors.....	429,502	June 3	610	149	51	1588
Chainey, Amédé, assignor of two-thirds to A. C. Watson and D. F. Merrow, North Shapleigh, Me. Wrench.....	440,889	Nov. 18	2014	518	53	1012
Chaize, Jacques. (See Chaize, Nicolas and J.)						
Chaize, Nicolas and J., St. Etienne, France. Circuit-interrupter.....	438,344	Oct. 14	1030	280	53	203
Chalkley, Bernard D., Richmond, Va. Leather finishing machine.....	443,896	Oct. 30	3674	946	53	2010
Challoner, Frank, Oshkosh, Wis. Shingle-sawing machine.....	430,564	June 17	2254	553	51	1926
Challoner, Frank, Oshkosh, Wis. Spalt-dropping mechanism for shingle-sawing machines.....	442,171	Dec. 9	854	229	53	1437
Challoner, Frank, Omro, Wis. Shingle-sawing machine.....	442,170	Dec. 9	852	229	53	1436
Challoner's Sons, George. (See Pierson, Pike, assignor.)						
Chalupsky, Mathias, Detroit, Mich. Mechanism for operating awnings.....	424,270	Mar. 25	2846	761	50	1701
Chamberlain, Charles C., Muskegon, Mich. Machine for making enspindors.....	419,888	Jan. 7	367	88, 89	50	77
Chamberlain, Daniel, Boston, Mass. Shutter-fastener.....	429,259	June 3	220	55	51	1515
Chamberlain, Elizabeth, New York, N. Y. Yarn-reel.....	430,419	June 17	2044	504	51	1887
Chamberlain, Jacob C. (See Chamberlain, Rufus N. and J. C.)						
Chamberlain, Jacob C., New York, N. Y. Holder for commutator-brushes.....	423,309	Mar. 11	1442	376	50	1417
Chamberlain, Jacob C., New York, N. Y. Device for unloading, recharging, and reloading electric-car batteries.....	427,459	May 6	656	164 } 165 }	51	941
Chamberlain, Jacob C., New York, N. Y. Device for unloading, recharging, and reloading electric-car storage-batteries.....	433,851	Aug. 5	613	159	52	876
Chamberlain, Jacob C., and W. L. Silbereisen, New York, N. Y.; said Silbereisen assignor to said Chamberlain. Composite pinion.....	426,982	Apr. 29	3854	1007	51	786
Chamberlain, Marcus W., Hackettstown, N. J. Machine for expanding can-covers.....	433,271	July 29	3484	899	52	705
Chamberlain, Rufus N. and J. C., New York, N. Y. Connecting device for battery-terminals.....	423,310	Mar. 11	1443	376	50	1417
Chamberlain, William A., et al. (See Watson, Nelson M., assignor.)						
Chamberlain, William M., Sheffield, Ala., H. B. Smith, Barre, Mass., and R. L. Warner, Portland, Oreg. Vehicle-wrench.....	427,743	May 13	1090	274	51	1036
Chamberlin, Asa W., Stratford, Iowa. Wind-wheel.....	426,241	Apr. 22	2750	722 } 723 }	51	562
Chamberlin, Franklin L., Cleveland, Ohio. Hoisting and conveying apparatus.....	419,583	Jan. 14	1382	370	50	291
Chamberlin, Franklin L., Cleveland, Ohio. Hoisting and conveying apparatus.....	432,977	July 29	3037	780	52	615
Chamberlin, George W. (See Turley, Chamberlin, and Pomeroy.)						
Chamberlin, James N., Marietta, Ohio. Lubricating-gland.....	429,717	June 10	928	228	51	1661
Chamberlin, John V., assignor of three-fourths to W. H. Elwell, J. J. and J. M. Warren, Worcester, Mass. Scissors.....	422,915	Mar. 11	841	218	50	1305
Chamberlin, Joseph O., Kirkville, Iowa. Measuring-vessel.....	436,212	Sept. 9	1296	338	52	1628
Chambers, Adelbert, assignor to J. A. Manning, Troy, N. Y. Apparatus for treating vegetable substances.....	425,980	Apr. 22	2377	629	51	486
Chambers Brothers Company. (See Chambers, Cyrus, Jr., assignor.)						
Chambers Brothers Company. (See Gardiner, Hubert, assignor.)						
Chambers, Cyrus, Jr., Wynnewood, assignor to Chambers Brothers Company, Philadelphia, Pa. Off-bearing belt for brick-machines.....	421,385	Feb. 18	1415	366	50	848
Chambers, Cyrus, Jr., assignor to Chambers Brothers Company, Philadelphia, Pa. Clay-elevator.....	421,857	Feb. 18	2094	550	50	976
Chambers, Harry, Moorestown, N. J. Toy.....	441,468	Nov. 25	2991	770	53	1204
Chambers, James, Columbus, Ind. Gate.....	423,216	Mar. 11	1296	338	50	1391
Chambers, John H., Schenectady, N. Y. Method of treating corpses.....	431,687	July 8	1040	260	52	212
Chambers, Moses, New Britain, Conn. Sash-fastener.....	423,217	Mar. 11	1297	338	50	1391
Chambers, William H., Fulton, Ky., assignor of one-fifth to J. T. Holman, Harris Station, Tenn. Thermostatic circuit-closer.....	426,917	Apr. 29	3767	984	51	769
Chambers, William J., Merchantsville, N. J. Umbrella or parasol.....	429,420	June 3	423	115	51	1503
Chambers, William W., Washington, D. C. Vehicle-shaft protector.....	422,183	Feb. 25	2558	676	50	1072
Chamblin, Hemburn M., Newton, Ill. Mechanical telephone.....	439,475	Oct. 28	2809	748	53	551
Chamblin, James R., Pemberville, Ohio. Car-coupling.....	421,243	Feb. 11	1213	313	50	803
Chamlee, Jeff D., Levita, Tex. Horse-detacher.....	436,400	Sept. 16	1596	422	52	1695
Champion Clasp Company. (See Stodd, Thomas C., assignor.)						
Champion Nailing Machine Company. (See Eppler, Andrew, Jr., assignor.)						
Champion Saw Company. (See Bole, Robert J., assignor.)						
Champion Shelf Manufacturing Company. (See Hamilton, John W., assignor.)						
Champion Tool and Handle Works. (See Postal, Frank S., assignor.)						
Champlin, Amos F., Granby, Conn. Machine for sewing looped fabrics.....	421,549	Feb. 18	1655	429	50	893
Champlin, Amos F., Granby, Conn. Trimming attachment for machines for sewing looped fabrics.....	421,550	Feb. 18	1658	430 } 429 }	50	894
Chandler, Clarence A., East Bridgewater, Mass. Machine for separating lint from cotton-seed.....	422,916	Mar. 11	842	218 } 219 }	50	1305
Chandler, Horace B., Kansas City, Kans. Mustache-shield.....	440,541	Nov. 11	1436	370	53	894
Chandler, John, Brooklyn, N. Y. Safety-lock and switch system for railways.....	438,604	Oct. 21	1408	381	53	283
Chandler, Noël, Hednesford, county of Stafford, England. Single-acting steam-engine.....	420,862	Feb. 4	641	165	50	685
Chandler, Noël, Hednesford, county of Stafford, England. Cut-off gear for engines.....	428,453	May 20	2165	544	51	1253
Chandler & Price. (See Price, William H., Jr., assignor.)						
Chandler, Rufus K., Verdon, Va. Combined pincushion and paper-weight.....	429,083	May 27	3126	806	51	1457
Chandor, Leslio, St. Petersburg, Russia. Hydrocarbon-burner.....	426,168	Apr. 22	2651	697	51	540
Chantrell, Felix, Reading, Pa. Screw-driver.....	419,638	Jan. 21	1474	395	50	315
Chantrell, Felix, Reading, Pa., assignor to Union Hardware Company, Torrington, Conn. Tool-handle.....	427,460	May 6	659	165	51	942
Chanute, Octave, Kansas City, Mo. Preserving timbered structures.....	430,063	June 10	1473	366	51	1765
Chapdelaine, Abondus, Nicolet, Quebec, Canada. Shoe-fastening.....	425,301	Apr. 8	1338	357	51	269
Chapel, Adoniram J., Arkansas City, Kans. Car-coupling.....	421,671	Feb. 18	1831	479	50	928
Chapelean, Alfred. (See Lafaille, William H., assignor.)						
Chapin, Daniel A., and C. A. King, Boston, Mass. Chair and fish-plate for railway-joints.....	437,288	Sept. 30	3066	803	52	1989

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Chapin, H. L., <i>et al.</i> (See Chapin, Myron H., assignor.)						
Chapin, Harlow F., Brockport, N. Y. Car-coupling.	437,900	Oct. 7	344	100	53	67
Chapin, Myron H., New York, assignor to H. L. Chapin, Brooklyn, N. Y., and B. B. Groom, Pan Handle, Tex. Material for lamp-wicks.	430,832	June 24	2716	666	51	2023
Chapin, Myron H., Chicago, Ill., assignor to B. B. Groom, Pan Handle, Tex., and H. L. Chapin, Brooklyn, N. Y. Wick material.	431,033	July 1	8	2	52	4
Chapin, Theophile, West Torrington, Conn. Clothes-line holder.	441,934	Dec. 2	473	126	53	1357
Chapin, William G., Brooklyn, N. Y. Machine for making tubes or cartons from paper boxes, &c.	438,838	Oct. 21	1806	{ 481 482 }	{ 53 }	356
Chapin, William G., Brooklyn, N. Y. Machine for making tubes or cases for paper boxes, &c.	440,585	Nov. 11	1504	388	53	906
Chapin, William H., Toledo, Ohio. Manufacture of handles for cutlery.	431,034	July 1	9	3	52	4
Chapleau, Samuel E. S., Ottawa, Canada. Steam-locomotive.	437,376	Sept. 30	3217	839	52	2017
Chapline, William P., J. P. Dutton, and J. E. Campbell, Higginsville, Mo. Filter.	438,060	Oct. 7	602	164	53	115
Chapman, Charles A., London, England. Catheter.	419,926	Jan. 21	1917	505	50	402
Chapman, Charles M., Fort Edward, N. Y. Banjo.	440,012	Nov. 4	587	{ 155 156 }	{ 53 }	723
Chapman, Coit T., Elliott, S. C. Cotton-planter and fertilizer-distributor.	423,311	Mar. 11	1444	376	50	1418
Chapman, Edward C., Leadville, assignor of one-half to L. Greenwald, Lake County, Colo., Irrigating apparatus.	426,169	Apr. 22	2653	697	51	540
Chapman, Elwood, Constant, Kans. Door-check.	442,953	Dec. 16	2132	548	53	1695
Chapman, Ernest E., Doylestown, assignor of one-half to F. Noller, Fountain Prairie, Wis. Grain-separator.	432,370	July 15	2069	532	52	414
Chapman, Eugene M. (See Ingram and Chapman.)						
Chapman, Eugene M., and N. D. Ingram, Holyoke, Mass. Button.	423,984	Mar. 25	2454	652	50	1625
Chapman, Frank M., New York, N. Y. Adjustable mirror.	422,501	Mar. 4	200	54	50	1174
Chapman, Frank M., New York, N. Y. Theatrical appliance.	423,372	Mar. 11	1529	{ 401 402 }	{ 50 }	1435
Chapman, George A. (See Newbury and Chapman.)						
Chapman, George A., and J. H. Newbury, Guilfordland, N. Y. Device for cutting screw-threads.	423,729	Mar. 18	2065	544	50	1543
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Hoof-toe contractor and side-expander.	421,672	Feb. 18	1833	479	50	928
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Carriage-spring.	425,162	Apr. 8	1127	299	51	226
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Toe-weight.	428,243	May 20	1840	462	51	1191
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Horseshoe.	428,802	May 27	2693	684	51	1372
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Horseshoe.	431,021	June 24	3010	738	51	2079
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Hoof-expander.	431,022	June 24	3010	738	51	2079
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Horseshoe.	434,821	Aug. 19	2120	555	52	1190
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Tool for applying and removing horseshoe guard-plates.	440,099	Nov. 4	707	188	53	747
Chapman, George W., Geneva, Nebr. Hame-tug.	431,437	July 1	625	156	52	126
Chapman, James A., Lakeland, Fla. Fruit-gatherer.	424,271	Mar. 25	2847	761	50	1701
Chapman, Jay W., Detroit, Mich. Machine for cutting stave or barrel veneer.	435,480	Sept. 2	145	41, 42	52	1403
Chapman, Jeremiah E., Plymouth, N. H. Box-binding machinery.	431,249	July 1	329	81	52	66
Chapman, John A., Milwaukee, Wis. Anti-rattler for thill-couplings.	437,677	Oct. 7	6	2	53	4
Chapman, John J., Nettlebs, Va. Millstone-dressing machine.	420,185	Jan. 28	2333	617	50	490
Chapman, Leonard, assignor to Continental Oxygen Company, (limited,) Westminster, England. Apparatus for the production of oxygen.	412,864	Jan. 7	322	78	50	68
Chapman, Luke, Collinsville, Conn. Inspirator.	428,592	May 27	2374	603	51	1312
Chapman, Luna F., and J. A. Montgomery, Georgetown, Tex. Rack for holding and exhibiting rolls of goods.	435,281	Aug. 26	2840	751	52	1334
Chapman, Mark C. (See Chapman, Matthew T., assignor.)						
Chapman, Matthew T., assignor to himself and M. C. Chapman, Aurora, Ill. Apparatus for and process of sinking wells.	443,069	Dec. 16	2304	596	53	1730
Chapman, Matthew T., assignor to himself and M. C. Chapman, Aurora, Ill. Well-sinking apparatus.	443,070	Dec. 16	2306	{ 590 591 }	{ 53 }	1731
Chapman, Matthew T., assignor to himself and M. C. Chapman, Aurora, Ill. Well-sinking apparatus.	443,071	Dec. 16	2312	{ 592 593 }	{ 53 }	1731
Chapman, Matthew T., assignor to himself and M. C. Chapman, Aurora, Ill. Well-sinking apparatus.	443,072	Dec. 16	2317	593	53	1732
Chapman, Phillip. (See King and Chapman.)						
Chapman, Rockwell S., San Francisco, Cal. Hose-reel.	440,838	Nov. 18	1941	498	53	997
Chapman, Rush P., Hartford, Conn. Apparatus for ornamenting hollow ware.	442,246	Dec. 9	960	253	53	1458
Chapman, Rush P., Hartford, and E. T. Carter, Meriden, Conn. Apparatus for ornamenting hollow ware.	426,557	Apr. 29	3235	848	51	666
Chapman, Thomas C., Warsaw, Mo. Gate-latch.	420,142	Jan. 28	2261	598	50	477
Chapman, Thomas P., assignor to Acme Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter.	424,923	Apr. 1	754	201	51	146
Chapman, W. W. (See Henderson, John T., assignor.)						
Chapman, Wilder B., Omro, Wis. Horse-collar.	419,500	Jan. 14	1273	339	50	267
Chapman, William H., Portland, Me., assignor to Giant Electric Motor Company, Boston, Mass. Electric motor.	428,454	May 20	2166	{ 544 545 }	{ 51 }	1253
Chappatte, Edward C., Philadelphia, Pa. Apparatus for ornamenting watch-cases, &c.	427,501	May 6	713	179	51	953
Chappatte, Edward C., assignor to Keystone Watch Case Company, Philadelphia, Pa. Watch-bow fastener.	438,094	Oct. 7	654	178	53	126
Chappell, George H., New York, N. Y. Motor.	440,913	Nov. 18	2059	532	53	1020
Chappell, George H., New York, N. Y. Mechanism for changing speed.	441,281	Nov. 25	2694	699	53	1148
Chappell, George H., New York, N. Y. Bicycle.	441,627	Nov. 25	3232	834	53	1252
Chappell, George H., assignor of one-half to F. Lavandeyra, New York, N. Y. Apparatus for indicating races.	432,694	July 22	2587	{ 662 663 }	{ 52 }	523
Chappell, George H., assignor of one-half to J. M. Heyman, New York, N. Y. Rotary gas engine.	441,865	Dec. 2	374	98	53	1338
Chappell, George H., assignor of one hundred and twenty-seven two-hundredths to J. M. Heyman, New York, and T. F. Bourne, Clifton, N. Y. Balanced steam-valve.	443,450	Dec. 23	2975	766	53	1867
Chappell, Richard, Moosomin, North-West Territories, Canada. Compound metal sheet.	435,014	Aug. 26	2451	649	52	1260
Chappell, Thomas C., and E. D. Moore, Baltimore, Md.; said Moore assignor to said Chappell. Letter-box. (Reissue)	11,059	Feb. 11	1397	359	50	836

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Chard, William P., <i>et al.</i> (See Rundell, Commodore D., assignor.)						
Charest, John T., Red Bluff, assignor of one-third to J. Marcott, San José, Cal. Water-front attachment for boilers	422,070	Feb. 25	2385	{ 630 631 }	{ 50	1040
Charles, Albert, and J. W. Garrison, Blue Mound, Kans. Portable frame for stock-scales	433,516	Aug. 5	110	32	52	778
Charles, August, Cincinnati, Ohio. Horse-collar	431,558	July 8	813	203	52	170
Charles, Stephen A., Lexington, Ky. Registering apparatus for watering-carts	433,071	July 29	3184	819	52	644
Charlesworth, Alfred E., Seattle, Wash. Syringe attachment	429,374	June 3	415	98	51	1550
Charlton, William B., Philadelphia, Pa. Meat, hammock, or other hook	423,730	Mar. 18	2066	544	50	1543
Charlton, William W., Wooster, Ohio. Monkey-wrench	439,743	Nov. 4	168	44	53	641
Charnock, John M., assignor to Hersey Brothers, Boston, Mass. Drier	423,670	Mar. 18	1981	522	50	1528
Charnock, John M., assignor to Hersey Brothers, Boston, Mass. Drier for drying sugar, grain, &c.	423,671	Mar. 18	1983	523	50	1528
Charshee, Bennett W., Cumberland, Md. Puzzle	428,455	May 20	2169	545	51	1253
Chase, Amos F., Lynn, Mass. Water-proof garment	422,917	Mar. 11	845	219	50	1305
Chase, Andrew J., Boston, Mass., assignor to Kansas City Packing and Chase Refrigerating Company, of Maine. Refrigerating apparatus	433,272	July 29	3485	900	52	705
Chase, Carroll W., Dover, N. H. Combined harrow, pulverizer, and leveler	426,242	Apr. 22	2760	723	51	562
Chase, Charles D., St. Louis, Mo., assignor to C. D. Chase Syrup Company, of Missouri. Shipping-can	437,094	Sept. 23	2734	714	52	1920
Chase, Charles W., <i>et al.</i> (See Chase, Frank H., assignor.)						
Chase Cotton Gin Company. (See Chase, Frank H., assignor.)						
Chase, David, Middleport, Ohio. Curtain-fixture	422,292	Feb. 25	2739	721	50	1106
Chase, Frank H., Haverhill, Mass., assignor to Chase Cotton Gin Company, of New Hampshire. Cotton-gin roller	435,885	Sept. 2	788	209	52	1527
Chase, Frank H., Haverhill, Mass., assignor to Chase Cotton Gin Company, of New Hampshire. Roller cotton-gin	435,886	Sept. 2	789	210	52	1527
Chase, Frank H., Haverhill, Mass., assignor to Chase Cotton Gin Company, of New Hampshire. Roller cotton-gin	437,172	Sept. 23	2884	751	52	1946
Chase, Frank H., assignor of two-thirds to L. W. and C. W. Chase, Haverhill, Mass. Roller cotton-gin	418,908	Jan. 7	405	99	50	84
Chase, Frederick F., Plainfield, N. J. Ticket-holder	424,642	Apr. 1	318	82	51	62
Chase, George E., Fernandina, Fla. Divided axle for railway-cars	441,133	Nov. 25	2423	628	53	1100
Chase, George N. (See Kirchner and Chase.)						
Chase, George W. (See Boothby, Edward K., assignor.)						
Chase, George W., Tonawanda, N. Y. Indicator	437,480	Sept. 30	3381	885	52	2052
Chase, Harry B., and J. L. Seaton, Youngstown, Ohio. Bag-holder	431,648	July 8	960	240	52	199
Chase, Henry A., Boston, Mass. Electric cut-out	432,978	July 29	3039	{ 780 781 }	{ 52	615
Chase, Henry A., Boston, Mass. Electric cut-out	432,979	July 29	3041	781	52	616
Chase, Henry A., Boston, Mass. Fuse-block and lightning-arrester	432,980	July 29	3042	781	52	616
Chase, James, Rochester, N. Y. Copy-holder for type-writers	425,406	Apr. 15	1487	394	51	307
Chase, James, Rochester, N. Y. Electric-lamp support	430,622	June 24	2361	578	51	1955
Chase, John M. (See Weston, Emile R., assignor.)						
Chase, John S., New Salem, Kans. Grain-meter	438,370	Oct. 14	1066	{ 290 291 }	{ 53	210
Chase, Joseph C., New Orleans, La. Street-car brake	440,467	Nov. 11	1312	339	53	870
Chase, Josiah B., Newton, Mass. Fastening for gloves, &c.	437,750	Oct. 7	113	35	53	25
Chase, Lester J., Buffalo, N. Y. Fire-escape ladder	430,173	June 17	1627	406	51	1806
Chase, Lorenzo W., <i>et al.</i> (See Chase, Frank H., assignor.)						
Chase, Milton, Haverhill, Mass. Nail-blank plate	436,401	Sept. 16	1597	422	52	1695
Chase, Oliver R., Boston, Mass. Machine for working confectionery	441,640	Dec. 2	18	6	53	1266
Chase, Rodney G., Boston, Mass. Pipe-coupling	424,463	Apr. 1	31	9	51	9
Chase, Rodney G., Boston, Mass. Car-heating apparatus	439,268	Oct. 28	2483	666	53	490
Chase, Sidney E., Wolcottville, Ind. Grain-separator	432,117	July 15	1698	436	52	346
Chase, Stephen H., San José, Cal. Saw-bit holder	435,556	Sept. 2	270	75	52	1427
Chase Syrup Company, C. D. (See Chase, Charles D., assignor.)						
Chase, Waldron, Medicine Lodge, Kans. Fluo-stopper	429,718	June 10	929	228	51	1661
Chase, William H., Holton, Kans. Corn-harvesting machine	432,735	July 22	2628	672	52	532
Chasles, Henri C., Paris, France. Ironing, finishing, and drying machine	423,121	Dec. 23	2438	623	53	1762
Chassagne, Paul J., <i>et al.</i> (See Layng, William H., assignor.)						
Chassagne, Paul J., Akron, Ohio. Sash-holder	429,503	June 3	611	150	51	1588
Chassagne, Paul J., assignor of five-eighths to S. S. Miller and W. R. Palmer, Akron, Ohio. Line-holder	430,922	June 24	2855	701	51	2050
Chassagne, Paul J., assignor of five-eighths to S. S. Miller and W. R. Palmer, Akron, Ohio. Hanger for incandescent lamps	434,917	Aug. 26	2317	612	52	1234
Chater, William, assignor of one-half to W. W. Howard, Denver, Colo. Gate	430,246	June 17	1752	436	51	1830
Chatfield, Eben S. (See Ross and Chatfield.)						
Chatfield, James M., Thomaston, Conn. Winding-drum	436,824	Sept. 23	2296	605	52	1835
Chatfield, Leston O., Benton Harbor, Mich. Electric indicator	440,013	Nov. 4	589	156	53	723
Chattanooga Plow Company. (See Sanders and Buchanan, assignors.)						
Chatterton, Fenimore. (See Barnes, Thomas, assignor.)						
Chauff, Cyprian, Bonnet Carré, La. Land-picker	419,415	Jan. 14	1160	308	50	245
Chauvet, Joseph. (See Beardslee and Chauvet.)						
Cheesman, James I., assignor of one-third to C. Baltzell, Altoona, Pa. Machine for making welded chains	423,731	Mar. 18	2067	{ 545 546 }	{ 50	1544
Cheetham, Joseph. (See Duerden and Cheetham.)						
Cheetham, Thomas. (See Gage and Cheetham.)						
Cheever, Calvin R. (See Phelps, Richard N. R., assignor.)						
Cheever, Henry D., New York, N. Y. Hose or tubing	420,863	Feb. 4	643	166	50	686
Cheever, John D. (See McMahan, John M., assignor.)						
Cheever, John H., assignor to Okonite Company, New York, N. Y. Protective covering for electric cables	431,104	July 1	110	.....	52	24
Chellis, Edwin R. (See Ridlon, Gideon T., assignor.)						
Cheney, Charles W., and F. A. Haskins, Athol, Mass. Pitch-board	440,344	Nov. 11	1105	283	53	831
Cheney, Joseph W., Three Rivers, Mass. Lappet-loom	440,943	Nov. 18	2108	{ 547 548 }	{ 53	1030
Cherbonnier, Edward G., Ferguson, Mo. Bottle-packing case	441,228	Nov. 25	2580	668	53	1130
Cherrie, Josiah J. (See Kent, Artemas A., assignor.)						
Cherrière, Emile, Hamilton, Ontario, Canada. Machine for reversing meat-casings	427,046	May 6	20	7	51	814
Cherry, George. (See Cherry, John and G.)						
Cherry, John and G., Berea, Nebr. Churn-motor	443,720	Dec. 30	3413	877	53	1959
Chesebro, Denison S., Syracuse, N. Y. Tube-cutter	422,725	Mar. 4	527	135	50	1237
Chesney, Ezekiel M., Sistersville, W. Va. Car-coupling	439,269	Oct. 28	2484	666	53	491
Chesnut, John, Martinsburg, W. Va. Car-coupler	436,336	Sept. 16	1480	386	52	1673

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Chester Twist Drill and Tool Company. (See Van Haagen, Claus, assignor.)						
Chesterton, Ernest H., Los Angeles, Cal. Waffle-iron handle.....	427,835	May 13	1227	310	51	1062
Chevalier, Emile, and L. Bnette, Paris, France. Dumping-car.....	427,047	May 6	21	7	51	815
Chew, Noah M., Southport, Ind. Plant-setting machine.....	440,738	Nov. 18	1758	453	53	965
Chicago Bank Note Company. (See Ottman, William, assignor.)						
Chicago Can Company. (See Beaman, Charles F., assignor.)						
Chicago Daily News Company. (See Reilly, Frank W., assignor.)						
Chicago Hardware Manufacturing Company. (See Cook, George W., assignor.)						
Chicago Laundry Dryer Company. (See Shannon, Oscar M., assignor.)						
Chicago Matrix Machine Company. (See Redfield, Casper L., assignor.)						
Chicago Safe and Lock Company. (See Gross, Edgar J., assignor.)						
Chicago Safe and Lock Company. (See Teal and Gross, assignors.)						
Chicago Spring Butt Company. (See Morrow, Charles, assignor.)						
Chichester, Lemuel A., assignor to Chichester Manufacturing Company, Phenicia, N. Y. Folding chair.....	432,478	July 15	2240	579	52	450
Chichester, Lemuel A., assignor to Chichester Manufacturing Company, Phenicia, N. Y. Machine for molding chair-backs.....	441,935	Dec. 2	474	{ 126 127 }	{ 53 53 }	1357
Chichester Manufacturing Company. (See Chichester, Lemuel A., assignor.)						
Chick, George H., Kansas City, Mo. Muffle-furnace for desulphurizing ores.....	434,502	Aug. 19	1622	{ 425 426 }	{ 52 52 }	1093
Chick, Thomas T., et al. (See Smith, Walter, assignor.)						
Chickasaw Saddlery Company. (See Trask, Wilber C., assignor.)						
Child, Charles T., Brooklyn, N. Y. Method of and apparatus for connecting dynamos.....	439,929	Nov. 4	454	118	53	697
Child, Franklin D., Newton, Mass. Piston-packing.....	423,985	Mar. 25	2455	652	50	1625
Child, Franklin D., Newton, Mass. Piston-packing.....	424,855	Apr. 1	653	172	51	126
Children, Edwin, East Dubuque, Ill. Wheeled cultivator.....	434,765	Aug. 19	2044	{ 534 535 }	{ 52 52 }	1175
Childs, Edward D., Milwaukee, Wis. Shoe-nailing machine.....	443,357	Dec. 23	2837	730	53	1841
Childs, James, Cedar Lea, Clapham Common, county of Surrey, England. Apparatus for making infusions.....	423,127	Mar. 11	1169	{ 304 305 }	{ 50 50 }	1365
Childs, Wallace. (See Smith and Childs.)						
Childs, William H. H., Brooklyn, N. Y. Roofing fabric.....	429,885	June 10	1181	293	51	1709
Chilman, William H., Walkerville, Ontario, Canada. Basket-cover.....	413,568	Dec. 30	3168	814	53	1913
Chilton, George A., et al. (See Rose, William P., assignor.)						
Chirnock, George H., Brooklyn, N. Y. Music-sheet for mechanical musical instruments.....	443,252	Dec. 23	2661	683	53	1806
Chisholm, Boyd & White. (See White and Boyd, assignors.)						
Chisholm, Charles A., Sterling Run, Pa. Combined mop and wringer.....	437,143	Sept. 23	2842	738	52	1938
Chisholm, Charles P. and J. A., Oakville, Canada. Hulling peas.....	421,244	Feb. 11	1214	314	50	803
Chisholm, John A. (See Chisholm, Charles P. and J. A.)						
Chisholm, Murdoch, Halifax, Nova Scotia, Canada. Uterine repositr.....	424,178	Mar. 25	2729	728	50	1678
Chisholm, William, Sr. (See Dow, Joseph H., assignor.)						
Chisolm, Laurens N., Charleston, S. C. Smoke-conductor for railway-trains.....	432,862	July 22	2840	{ 727 728 }	{ 52 52 }	573
Chittenden, Harvey M., Danbury, assignor to Hat Dipping Machine Company, South Norwalk, Conn. Apparatus for dipping hat-bodies.....	436,771	Sept. 23	2191	{ 578 579 }	{ 52 52 }	1814
Chittenden, Hiram M. (See Terrell and Chittenden.)						
Choice, John B., et al. (See Anderson, Henry C., assignor.)						
Chope, Thomas, San Francisco, Cal. Combined adjustable screen and window-shade fixture.....	443,315	Dec. 23	2776	{ 711 712 }	{ 53 53 }	1827
Choquette, Alfred E., Milwaukee, Wis. Rein-guard for vehicle-thills.....	441,134	Nov. 25	2424	628	53	1100
Chouteau, Pierre, St. Louis, Mo. Holder for photographic plates.....	424,857	Apr. 1	654	173	51	127
Chouteau, Pierre, St. Louis, Mo. Engine.....	434,976	Aug. 26	2394	634	52	1250
Chouteau Manufacturing Company. (See Schmidt, William F., assignor.)						
Christ, Gustave A., assignor of one-half to C. H. Pelton, Grand Rapids, Mich. Rail-joint.....	434,766	Aug. 19	2047	535	52	1175
Christensen, John, Kansas City, Mo. Life-preserver.....	426,363	Apr. 22	2929	770	51	598
Christenson, Andrew O. (See Malone, Charles J., assignor.)						
Christenson, Frederick, Fair View, Utah. Crushing-fork.....	440,861	Nov. 18	1974	508	53	1003
Christiansen, Hans P., assignor to himself and J. Hansen, Oakland, Cal. Hydraulic motor.....	428,829	May 27	2740	695	51	1381
Christiansen, John, Quincy, assignor of one-half to A. Burnham, Boston, Mass. Boiler.....	435,353	Aug. 26	2974	789	52	1357
Christie, Benjamin B., Dayton, Ohio. Petroleum-vapor generator and burner.....	421,551	Feb. 18	1660	430	50	894
Christie, George E., Paterson, N. J. Ear-phone rest.....	418,682	Jan. 7	23	6	50	7
Christie, James H., Brooklyn, N. Y. Machine for manufacturing veneer cylinders.....	436,625	Sept. 16	1941	510	52	1758
Christie, Mary H., Toronto, Ontario, Canada. Flower or plant holder.....	427,402	May 6	565	141	51	923
Christie, William H., and C. Keck, Cincinnati, Ohio. Card-board-bevel-cutting machine.....	422,726	Mar. 4	528	135	50	1237
Christie, William R., assignor of one-half to Jungerman Brothers, New York, N. Y. Registering toy bank.....	422,116	Feb. 25	2462	651	50	1055
Christie, William W., Hillburn, N. Y. Railway-signal compensator.....	432,155	July 15	1760	452	52	358
Christin, Olive C., Brodie, Cal. Steam food-cooker.....	432,663	July 22	2843	728	52	574
Christmann, Charles L., New York, N. Y. Shirt.....	425,981	Apr. 22	2378	629	51	486
Christmann, Michael. (See Krell, Henry P., assignor.)						
Christoffel, Anna. (See Christoffel, John B., assignor.)						
Christoffel, John B., assignor to A. Christoffel, Brooklyn, N. Y. Coiled-wire brush.....	422,117	Feb. 25	2465	652	50	1055
Christoffel, John B., assignor to A. Christoffel, Brooklyn, N. Y. Boiler-tube scraper.....	422,128	Mar. 11	1171	305	50	1366
Christopher, George, and R. W. Leftwich, London, England. Tea extract and making the same.....	425,982	Apr. 22	2379	.....	*51	486
Christy, John, Dayton, Ky. Apparatus for raising and lowering steamboat-chimneys.....	431,375	July 8	1331	334	52	268
Chubb, Edwin A. (See Hatfield and Chubb.)						
Chubb, Thomas H., Post Mills, Vt. Frame for landing-nets.....	422,502	Mar. 4	201	55	50	1175
Chubb, Thomas H., Post Mills, Vt. Boat or canoe chair.....	441,534	Nov. 25	3084	792	53	1223
Chubbuck, H. Eugene, Springfield, Ohio. Insulator-bracket.....	436,120	Sept. 9	1153	301	52	1601
Chumard, Melchoir, Richmond, Va. Lifting-jack.....	419,927	Jan. 21	1918	506	50	402
Church, Alvin T., East Oakland, Cal. Sash-holder.....	433,672	Aug. 5	343	88	52	823
Church, Benjamin S., New York, N. Y. Apparatus for detecting waste of water.....	428,075	May 20	1589	404	51	1141
Church, Charles L., Bangor, Me. Puzzle.....	442,511	Dec. 9	1378	353	53	1539
Church, Duane H., Waltham, Mass. Lathe for turning pinion-shafts.....	432,791	July 22	2746	703	52	554
Church, Eugene L., Harvard, Ill. Seal-lock.....	411,936	Dec. 2	476	127	53	1358
Church, Francis E., Kalamazoo, Mich. Spring-tooth harrow.....	433,218	Mar. 11	1298	338	50	1391
Church, Frank S., Detroit, Mich., assignor, by mesne assignments, to Automatic Store Service Company, Portland, Me. Track-curve for store-service apparatus.....	437,566	Sept. 30	3511	916	52	2077
Church, Frank S., Detroit, Mich., assignor to Automatic Store Service Company, Portland, Me. Cash and parcel carrier.....	437,567	Sept. 30	3512	916	52	2077
Church, Frank S., Detroit, assignor to A. and A. A. Caille and E. A. Owen, East Saginaw, Mich. Cash-carrier.....	441,641	Dec. 2	20	6	53	1266
Church, James E., Minneapolis, Minn. Napkin-holder.....	441,282	Nov. 25	2695	699	53	1148

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Church, Joseph B., Washington, D. C., assignor to Eastman Dry Plate and Film Company, Rochester, N. Y. Photographic shutter	440,137	Nov. 11	770	{ 202 203 }	{ 53	769
Church, Melvin B., Grand Rapids, Mich. Ornamentation of walls	429,929	Feb. 11	759	196	50	716
Church, Melvin B., Grand Rapids, Mich. Ornamentation of walls	437,095	Sept. 23	2735	715	52	1921
Church, William, St. Paul, Minn. Device for polishing and buffing	436,868	Sept. 23	2419	629	52	1856
Churchill, Charles L., Roanoke, Va. Railway-rail joint	433,273	July 29	3488	900	52	706
Churchill, Edwin J., New Hartford, N. Y. Sleigh	437,379	Oct. 7	468	132	53	89
Churchill, Joel B., Lakeland, La. Feed-water heater and filter	426,918	Apr. 29	3768	984	51	769
Churchman, Thomas C., Sacramento, Cal. Car wheel and axle	422,727	Mar. 1	529	135	50	1237
Churchward, James, Brooklyn, N. Y., assignor to Dunham Manufacturing Company, of Maine. Railway-spike	421,386	Feb. 18	1417	367	50	848
Churchward, James, Brooklyn, N. Y., assignor to Dunham Manufacturing Company, Boston, Mass. Wear-plate for railway-ties	425,407	Apr. 15	1489	399	51	307
Cincinnati Ice Machine Company. (See Alford, Rinman, and De Coppel, assignors.)	434,918	Aug. 26	2317	612	52	1234
Cincinnati Ice Machine Company. (See Rinman, Gustave O., assignor.)						
Cincinnati Milling Machine Company. (See Holz, Frederick, assignor.)						
Ciner, Emanuel, New York, N. Y. Ear-ring	435,354	Aug. 26	2976	789	52	1357
Cinamond, David, Denver, Colo. Eyelet for traces, &c	431,105	July 1	111	28	52	24
Cladek, Frank T., Rahway, N. J. Buck for beer-coolers	435,282	Aug. 26	2841	752	52	1334
Claiborne, Robert C. and W. C., Well Spring, Tenn. Combined hoe and seed-dropper	419,928	Jan. 21	1919	506	50	403
Claiborne, William C. (See Claiborne, Robert C. and W. C.)						
Clancy, John P., Scottdale, Pa. Car-brake	440,014	Nov. 4	590	{ 156 157 }	{ 53	723
Clapp Automatic Fire Extinguisher Company. (See Clapp, Joseph, assignor.)						
Clapp, Dwight C., assignor of two-thirds to D. M. Estey and Estey Manufacturing Company, Owosso, Mich. Bureau, &c	432,371	July 15	2071	532	52	415
Clapp, Dwight C., assignor of two-thirds to D. M. Estey and Estey Manufacturing Company, Owosso, Mich. Drawer-guide for bureaus or like articles of furniture	432,372	July 15	2072	533	52	415
Clapp, Henry W., Northampton, Mass. Work-box	418,683	Jan. 7	24	7	50	7
Clapp, Henry W., Concord, N. H. Animal watering-trough	439,290	Oct. 28	2521	675	53	497
Clapp, Joseph, Evanston, assignor to Clapp Automatic Fire Extinguisher Company, Chicago, Ill. Automatic valve	425,751	Apr. 15	2011	536	51	409
Clapp, Joseph, Evanston, assignor to Clapp Automatic Fire Extinguisher Company, Chicago, Ill. Automatic valve	425,752	Apr. 15	2012	536	51	409
Clapp, Joseph, Evanston, assignor to Clapp Automatic Fire Extinguisher Company, Chicago, Ill. Automatic sprinkler	425,753	Apr. 15	2014	537	51	409
Clapp, Joseph, Evanston, assignor to Clapp Automatic Fire Extinguisher Company, Chicago, Ill. Automatic sprinkler	439,864	Nov. 4	351	91	53	676
Clapp, Joseph, Evanston, assignor to Clapp Automatic Fire Extinguisher Company, Chicago, Ill. Automatic valve	440,100	Nov. 4	708	188	53	747
Claro, Frederick, Preston, Ontario, Canada. Radiator	420,437	Feb. 4	15	4	50	567
Claret, John J., Tottenham, county of Middlesex, England. Rotary liquid-meter	426,919	Apr. 29	3768	984	51	770
Clark, Albert M., Ann Arbor, Mich. Attachment for windmills	435,682	Sept. 2	476	126	52	1466
Clark, Alexander E., Buckholts, Tex. Trace-carrier	437,096	Sept. 23	2736	715	52	1921
Clark, Alexander H., Fond du Lac, Wis. Bicycle	420,036	Jan. 28	2089	{ 551 552 }	{ 50	443
Clark, Alfred, Montpelier, Vt. Dental anodyne	420,186	Jan. 28	2335		50	490
Clark, Amasa B., Chicago, Ill. Truck for cars	435,918	Sept. 9	844	222	52	1544
Clark, Ambrose B., Meriden, Conn. Caster	440,875	Nov. 18	1994	514	53	1008
Clark, Asa. (See Ashly, Lucius E., assignor.)						
Clark, Byron W. S., Los Angeles, Cal. Incubator	424,599	Apr. 1	249	66	51	51
Clark, C. E., et al. (See Loree, Perry E., assignor.)						
Clark Cash Register Company. (See Clark, James W., assignor.)						
Clark, Chapman S., Kansas City, Mo. Gravel-washer	422,378	Mar. 4	27	8, 9	50	1142
Clark, Charles B., Chicago, Ill., assignor to A. R. Baker, Indianapolis, Ind. Temporary binder	443,667	Dec. 30	3328	857	53	1943
Clark, Charles D., assignor to W. Deering & Company, Chicago, Ill. Molding-machine	419,639	Jan. 21	1475	396	50	315
Clark, Charles E., Franklin, Mass. Bedstead	420,187	Jan. 28	2335	617	50	490
Clark, Charles M., Canandaigua, N. Y. Swinging gate	440,619	Nov. 18	1570	404	53	928
Clark, Charles W., Malden, Mass. Coal or ash sifter	423,373	Mar. 11	1530	402	50	1435
Clark Chemical Works. (See Orcutt, Charles H., assignor.)						
Clark, Chester W., Mishawaka, Ind. Plow	434,245	Aug. 12	1211	315	52	1003
Clark & Co., John S. (See Forshay, Harry C., assignor.)						
Clark, Cornelius, Brooklyn, N. Y. Mat	439,865	Nov. 4	352	91	53	676
Clark, D. P., et al. (See Loree, Perry E., assignor.)						
Clark, Dallas P., Jersey City, N. J. Vehicle-spring	423,219	Mar. 11	1299	339	50	1391
Clark, Eddy L., et al. (See Rhoads, Frank B., assignor.)						
Clark, Edward, New York, N. Y. Harness	421,123	Feb. 11	1042	267	50	771
Clark, Edward, deceased, Newburg, N. Y.; S. V. Harron administrator. Electric conductor	437,568	Sept. 30	3513	917	52	2077
Clark, Edward A. (See Voss, Dettlef C., assignor.)						
Clark, Edward W., et al. (See Clark, Edwin M., assignor.)						
Clark, Edwin M., assignor to himself, E. W. Clark, and L. Muldoon, Butte City, Mont. Apparatus for oxidizing or desulphurizing ore	428,830	May 27	2741	696	51	1381
Clark, Edwin M., assignor to himself, E. W. Clark, and L. Muldoon, Butte City, Mont. Apparatus for roasting ores	440,468	Nov. 11	1314	340	53	871
Clark, Edwin M., assignor to himself, E. W. Clark, and L. Muldoon, Butte City, Mont. Apparatus for oxidizing and desulphurizing ores	440,469	Nov. 11	1315	340	53	871
Clark Electric Company. (See Clark, Ernest P., assignor.)						
Clark, Elizabeth, et al. (See Clark, John, assignor.)						
Clark, Ernest P., assignor to Clark Electric Company, New York, N. Y. Safety device for dynamos	426,108	Apr. 22	2565	675	51	523
Clark, Ernest P., assignor to Clark Electric Company, New York, N. Y. Safety device for dynamos	426,109	Apr. 22	2567	675	51	523
Clark, Ernest P., assignor to Clark Electric Company, New York, N. Y. Safety device for dynamos	426,110	Apr. 22	2568	{ 675 676 }	{ 51	523
Clark, Ezra C., and G. D. Briggs, Rochester, N. Y. Marquetry	424,958	Apr. 8	814	218	51	166
Clark, Ezra E., Northampton, Mass. Curtain-fixture	422,379	Mar. 4	28	9	50	1142
Clark, Francis L. (See Welsh, Clark, and Moore.)						
Clark, Frank J., Ashland, Neb. Roller for listed corn	440,015	Nov. 4	594	157	53	724
Clark, Frank M., Tilton, N. H., assignor to Mechanical Specialties Manufacturing Company, Boston, Mass. Check-punch	422,728	Mar. 4	539	135	50	1237

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Clark, Frank M., Tilton, N. H., assignor to Mechanical Specialties Company, Boston, Mass. Pressure-indicator for steam-engines.....	430,467	June 17	2119	521	51	1900
Clark, Frank W., London, England, assignor, by mesne assignments, to United Gas Lamp Company, of New Jersey. Regenerative gas-lamp.....	430,468	June 17	2121	521	51	1901
Clark, Franklin E., Detroit, Mich. Pillow-sham holder.....	432,261	July 15	1913	490	52	386
Clark, Fred F., trustee, <i>et al.</i> (See Stolp, Mary E., assignor.)						
Clark, Fred L. (See Schaadt and Clark.)						
Clark, George H., Sacramento, Cal. Burial apparatus.....	441,937	Dec. 2	478	127	53	1358
Clark, George M., <i>et al.</i> (See Abshagen, Ernest, assignor.)						
Clark, George P., Windsor Locks, Conn. Barrel-truck.....	422,729	Mar. 4	532	136	50	1238
Clark, George S., Philadelphia, Pa. Safety-vault or like structure.....	440,914	Nov. 18	2061	533	53	1021
Clark, George W., Newark, N. J. Pipe-hanger.....	430,623	June 24	2364	578	51	1955
Clark, Harrison. (See Teal, Daniel E., assignor.)						
Clark, Henry A. (See Tregurtha, Alfred T., assignor.)						
Clark, Horace J., Westfield, N. Y. Ore-mill.....	437,017	Sept. 23	2623	685	52	1897
Clark, Horace L., Rutherford, N. J. Wick-raiser.....	440,739	Nov. 18	1760	453	53	966
Clark, Horace L., Rutherford, N. J. Wick-lift for lamps.....	441,642	Dec. 2	21	7	53	1266
Clark, Hudson S., Sigourney, Iowa. Stump-extractor.....	429,504	June 3	612	150	51	1589
Clark, James. (See Garrett, Davis, assignor.)						
Clark, James, Medina, N. Y. Friction-clutch.....	432,600	July 22	2415	623	52	491
Clark, James, Tacoma, Wash. Device for protecting piles or other timbers.....	443,897	Dec. 30	3676	946	53	2011
Clark, James F. (See Sturtevant and Clark.)						
Clark, James H., assignor of one-fourth to R. O. Eastman, Western, Nebr. Pool-register..	433,117	July 29	3261	{ 839 840 }	{ 52 50 }	{ 659 803 }
Clark, James M., Mount Sterling, Ohio. Car-coupling.....	421,245	Feb. 11	1215	314	50	803
Clark, James M., Louisville, Ky. Siphon.....	423,129	Mar. 11	1173	305	50	1366
Clark, James W., Etna, Ohio, assignor to Clark Cash Register Company. Cash indicator and register.....	422,878	Mar. 4	769	{ 196 197 }	{ 50 50 }	{ 1284 1284 }
Clark, Joel C., Morristown, N. J. Registering system for telephone-exchanges.....	433,445	Aug. 5	14	4	52	760
Clark, John, Detroit, Mich. Hand-power carpet-beater.....	422,715	May 27	2573	652	51	1348
Clark, John, Chicago, Ill. Toe-weight for horses.....	431,802	July 8	1218	305	52	246
Clark, John, assignor to E. Clark, E. Gilmartin, M. F. Demarest, and I. Smith, Brooklyn, N. Y. Wrench.....	424,858	Apr. 1	656	173	51	127
Clark, John H., Boston, Mass. Elevator.....	420,771	Feb. 4	476	126	50	656
Clark, John J., Elgin, Ill. Rotary engine.....	423,986	Mar. 25	2457	652	50	1625
Clark, John P., Jr., Jackson, Mich. Window.....	424,179	Mar. 25	2730	728	50	1678
Clark, John P., Jr., Jackson, Mich. Window-blind.....	440,238	Nov. 11	934	241	53	802
Clark, Johnson E., Massillon, Ohio. Traction-engine.....	430,833	June 24	2717	666	51	2024
Clark, Joseph E., and S. C. Taft, Franklin, Mass. Machine for scouring wool.....	424,405	Mar. 25	3103	{ 823 824 }	{ 50 50 }	{ 1751 1751 }
Clark, Joseph M., Colfax, Wash. Double-acting pump.....	432,373	July 15	2072	533	52	415
Clark, Joseph P. (See Musgrave and Clark.)						
Clark, Joseph V., assignor of two-thirds to G. E. Walton and N. K. Royse, Cincinnati, Ohio. Machine for grinding and polishing balls.....	423,512	Mar. 18	1737	458	50	1483
Clark, Joshua L. (See Rea and Clark.)						
Clark, Joshua L., Pittsburg, Pa., C. H. Culver and J. H. Stratton, Akron, Ohio. Refrigerating-machine.....	420,188	Jan. 28	2337	618	50	490
Clark, Joshua L., Pittsburg, Pa., C. H. Culver and J. H. Stratton, Akron, Ohio. Apparatus for threading pipe-fittings.....	420,189	Jan. 28	2338	618	50	490
Clark, Justin E., Andover, Mass. Car-coupling.....	439,476	Oct. 28	2810	{ 748 749 }	{ 53 53 }	{ 552 552 }
Clark, Louie H., Denver, Colo. Device for manifold copying.....	429,336	June 3	358	85	51	1539
Clark, Martin M., assignor to Western Electric Company, Chicago, Ill. Galvanic battery.....	423,594	Mar. 18	1849	{ 487 488 }	{ 50 50 }	{ 1502 1502 }
Clark, Melville, Chicago, Ill. Organ-action.....	439,111	Oct. 28	2224	598	53	444
Clark, Nathan B., U. S. Navy, and F. B. King, Washington, D. C. Steam-boiler.....	421,387	Feb. 18	1418	367	50	848
Clark, Newman S., assignor of one-half to G. Higgins, Omaha, Nebr. Brick and pottery kiln.....	432,601	Dec. 2	2417	623	52	491
Clark, Norman, assignor of one-half to S. P. Giddings, Sterling, Ill. Treadle mechanism.....	441,748	July 2	186	49	53	1299
Clark, Norman, assignor to J. H. and E. F. Lawrence, Sterling, Ill. Door-hanger roller.....	439,112	Oct. 28	2227	599	53	444
Clark, Otto B., <i>et al.</i> (See Spear, Anson R., assignor.)						
Clark, Owen A., Fife Lake, Mich. Snow-plow.....	426,435	Apr. 29	3058	801	51	632
Clark, Ozro C. (See Buzzell, George H., assignor.)						
Clark, R. W. (See Danforth and Clark.)						
Clark, Robert J., Chestnut Level, Pa. Harness.....	429,084	May 27	3126	806	51	1457
Clark, Robert W., Buffalo, N. Y. Steam-trap.....	423,220	Mar. 11	1300	339	50	1391
Clark, Roswel M., <i>et al.</i> (See Newby, Albert S., assignor.)						
Clark, Samuel B. (See Peterson and Clark.)						
Clark, Simon, Winston, Mo. Churn.....	436,213	Sept. 9	1297	338	52	1628
Clark, Stephen A., Terre Haute, Ind. Die for making turn-buckles.....	435,033	Aug. 26	2479	656	52	1265
Clark, Thomas J. (See Bouvier, Louis P., assignor.)						
Clark, Willard S., and F. N. Folsom, Brooklyn, N. Y.; said Folsom assignor to said Clark. Can.....	427,502	May 6	714	179	51	954
Clark, William A., <i>et al.</i> (See Menendez, Gabriel A., assignor.)						
Clark, William A., Ottawa, Ontario, Canada. Fruit-basket.....	418,684	Jan. 7	25	7	50	7
Clark, William A., Crisp, Ga. Truck.....	423,672	Mar. 18	1984	523	50	1529
Clark, William B., Newark, N. J. Line-fastener.....	423,312	Mar. 11	1445	376	50	1418
Clark, William C. (See Bush and Clark.)						
Clark, William G., Hergott Springs, South Australia. Welding compound.....	427,969	May 13	1438	{ 156 157 }	{ 51 52 }	{ 1101 126 }
Clark, William H., Albion, Pa. Cash indicator and register.....	431,438	July 1	626	174	52	888
Clark, William H., Albion, Pa. Cash indicator and register.....	433,888	Aug. 5	669	174	52	888
Clark, William H., Albion, assignor of one-fourth to Lovell Manufacturing Company, Limited, Erie, Pa. Cash indicator and register.....	435,396	Sept. 2	22	7, 8	52	1379
Clark, William H., Albion, assignor of one-fourth to Lovell Manufacturing Company, Limited, Erie, Pa. Cash indicator and register.....	435,397	Sept. 2	25	8, 9	52	1379
Clark, William H., Albion, assignor of one-fourth to Lovell Manufacturing Company, Limited, Erie, Pa. Cash indicator and register.....	435,398	Sept. 2	28	10, 11	52	1380
Clark, William H., Albion, assignor of one-fourth to Lovell Manufacturing Company, Limited, Erie, Pa. Combined cash register and indicator and adding-machine.....	435,399	Sept. 2	31	11, 12	52	1381
Clark, William H., Albion, assignor of one-fourth to Lovell Manufacturing Company, Limited, Erie, Pa. Cash indicator and register.....	435,400	Sept. 2	36	12, 13	52	1381
Clark, William H. and W. J., Salem, Ohio. Uniting the edges of sheet metal.....	430,000	June 10	1352	335	51	1743
Clark, William H. and W. J., Salem, Ohio. Window-screen.....	435,797	Sept. 2	648	171	52	1499
Clark, William H., and F. W. Collins, Costland, N. Y. Stove.....	430,923	June 21	2856	701	51	2051

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Clark, William J. (See Clark, William H. and W. J.)						
Clark, William P., Elberton, Ga. Car-coupling	431,333	July 1	450	112	52	92
Clark, William P., Medford, Mass. Draft-tube for effervescing drinks or other liquids	412,611	Dec. 16	1541	398	53	1580
Clark, William S., Philadelphia, Pa. Expandible plug for testing pipes	437,289	Sept. 30	3067	803	52	1989
Clark, Winfield M., <i>et al.</i> (See Severance, Asahel J., assignor.)						
Clarke, Alexander and J. F., Essex Centre, Ontario, Canada. Combination-tool	423,513	Mar. 18	1738	458	50	1483
Clarke, Arthur B., Atlanta, Ga. Combined seesaw and roundabout	420,716	Feb. 4	402	107	50	643
Clarke, Charles E. (See Ganss, Clarke, and Dengler.)						
Clarke, Charles J., Mount Crawford, Va. Sash-fastener	437,852	Oct. 7	273	82	53	54
Clarke, Christopher, Northampton, Mass. Spiral stairway	432,599	July 22	2413	622	52	491
Clarke, David C., <i>et al.</i> (See Taylor, George E., assignor.)						
Clarke, Edward F., Walsall, England. Apparatus for compressing air or other gases	428,456	May 20	2170	546 547	51	1254
Clarke, George D., Chicago, Ill. Electro-magnet	424,703	Apr. 1	412	108	51	81
Clarke, George H. (See Ferguson, Fergus M., assignor.)						
Clarke, George H. (See Reilly, Owen, assignor.)						
Clarke, George H., and S. W. Robinson, Columbus, Ohio. Paper-cutter	423,855	Mar. 18	2243	593	50	1578
Clarke, George R., Montell, Tex. Feeder for sheets of paper, &c.	419,501	Jan. 14	1274	340	50	267
Clarke, George R., Montell, Tex., assignor to Ajax Envelope Company, of New York. Envelope or bag machine	430,728	June 24	2545	622 623 624	51	1991
Clarke, John F. (See Clarke, Alexander and J. F.)						
Clarke, Milo M., Westery, R. I. Car-coupling	429,886	June 10	1182	293	51	1709
Clarke, Thomas, Wolfville, Nova Scotia, Canada. Washing-machine	434,699	Aug. 19	1956	508	52	1156
Clarke, Thomas C., Shrewsbury, N. J. Elevated railway	427,836	May 13	1228	310	51	1062
Clark's Coking and Smokeless Furnace Company. (See Hatch, Jesse W., assignor.)						
Clarkson, Joseph T., assignor to S. B. Bailey, Amesbury, Mass. Buckboard	429,260	June 3	221	55	51	1515
Clason, Abraham T., Danbury, Conn. Machine for pinning out hat-bodies	427,554	May 13	798	200 201	51	980
Class, John, Canton, Ohio. Glass cutting and drawing frame	419,640	Jan. 21	1476	396	50	316
Classen, Mathias. (See Ravenstein, Anton H., assignor.)						
Clandon, Joseph A. I., Glenwood Springs, Colo. Sewer-trap	428,457	May 20	2173	547	51	1254
Clannach, Martin B., and A. Smith, Mexia, Tex. Wire stretching and reeling machine	439,720	Nov. 4	138	37	53	634
Claus, Peter, and E. Gengenbach, New York, N. Y. Brush-holder for dynamos	418,685	Jan. 7	26	7	50	7
Clause, John J., Chicago, Ill. Electrotype-plate-bending machine	437,420	Sept. 30	3288	859	52	2031
Clause, John J., and F. Randolph, Chicago, Ill. Apparatus for applying varnish, &c.	430,269	June 17	1822	447	51	1842
Claussen, Alexander E., Scottville, Ill. Velocipede	433,252	Aug. 5	613	160	52	876
Claussen, Edward E., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Triangular paper bag	426,770	Apr. 29	3563	929	51	729
Claussen, Edward E., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Making paper bags	426,771	Apr. 29	3564	929	51	729
Claussen, Edward E., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper bag and making the same	426,772	Apr. 29	3565	929 930	51	729
Claussen, Edward E., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Making paper bags	426,773	Apr. 29	3566	930	51	729
Claussen, Edward E., Hartford, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper bag	426,774	Apr. 29	3566	930 931	51	730
Claussen, Hans P., Milwaukee, Wis., assignor to B. Nordberg Company, of Wisconsin. Friction-clutch	429,085	May 27	3128	806	51	1457
Clawson, Leonard E., San Francisco, Cal. Continuous sectional chimney	435,557	Sept. 2	271	75	52	1427
Claxton, James, <i>et al.</i> (See Beacock, George, assignor.)						
Clay, Harry G., Jr. (See Pepper, David, Jr., assignor.)						
Clay, Richard, London, and J. E. Marchant, Hemel Hempstead, county of Hertford, England. Feed appliance for type-setting machines	430,624	June 24	2367	578	51	1956
Clay Shingle Company. (See Donaldson, John E., assignor)						
Clay, William H., Paris, Ky. Gate	426,243	Apr. 22	2762	723 724	51	563
Claypool, Albert, Toledo, Ohio. Rubber tire for wheels	431,223	July 1	293	72	52	60
Claypoole, Washington, Philadelphia, Pa. Coal-chute	429,840	June 10	1111	274	51	1606
Clayton Aniline Company. (See Dreyfus, Charles, assignor.)						
Clayton, Darius D. (See Eagleston, William, assignor.)						
Clayton, Elijah K. and J., Huntington, Ind. Brake-head and shoe	440,542	Nov. 11	1437	370	53	894
Clayton, Henry, Hoboken, and L. Bried, Union Hill, N. J. Safety clothes-line support	441,535	Nov. 25	3085	793	53	1223
Clayton, John. (See Clayton, Elijah K. and J.)						
Clear, John, Andersonville, Tenn. Churn	440,345	Nov. 11	1105	283	53	831
Clearwater, Alfred A., Wilcox, Pa. Liquid-heating device	438,469	Oct. 14	1211	328	53	238
Clarry, Michael. (See Emery, Jonathan, assignor.)						
Cleathero, Edward T., Brockley, county of Kent, and J. A. Nichols, Islington, county of Middlesex, England. Feeding apparatus for printing-machines	430,513	June 17	2183	536 537	51	1914
Cleveland, Elias A., Belvidere, Ill. Bed-bottom	440,393	Nov. 11	1190	307	53	848
Cleaver, Fremont J., and G. Fassold, Pittsburg, Pa. Automatic regulator for dynamos and motors	440,016	Nov. 4	595	157	53	724
Cleaver, Isaac K., Deadwood, Cal. Hanging-up attachment for stamp-batteries	434,555	Aug. 19	1701	445	52	1109
Cleck, James D., Abingdon, Va. Harrow	441,938	Dec. 2	479	127 128	53	1358
Clegg, Wesley, Bradford, England. Velocipede	427,048	May 6	22	7, 8	51	815
Clem, David B., Lansdale, Pa. Mechanism for operating hatchway-doors	421,388	Feb. 18	1421	368	50	849
Clemans, Charles C., <i>et al.</i> (See Anderson, Henry C., assignor.)						
Clemens, Emerson F., Albion, Ind. Music notation	438,429	Oct. 14	1152	312	53	226
Clemens, Ernest V., New York, N. Y., assignor to De La Vergne Refrigerating Machine Company, of New York. Pipe-hanger	437,018	Sept. 23	2626	686	52	1898
Clemens, Ernest V., New York, N. Y., assignor to De La Vergne Refrigerating Machine Company, of New York. Pipe-joint	437,019	Sept. 23	2627	686	52	1898
Clemens, Willard, Le Roy, N. Y. Horse hay-rake	419,828	Jan. 21	1758	465	50	369
Clement, Charles H., assignor of one-half to J. B. Hoar, Northville, Mich. Spring air-gun	434,862	Aug. 19	2176	570	52	1201
Clement, Dolphus, Lansdale, Pa. Game apparatus	443,668	Dec. 30	3329	858	53	1944
Clement, Frank H., Rochester, N. Y. Lathe	429,603	June 10	762	184	51	1629
Clement, Joseph H., Carlton, N. Y. Pea-harvester	439,344	Oct. 28	2612	696	53	515
Clement, Lewis M., Oakland, G. C. Watriss and L. Heynemann, San Francisco, Cal. Turn-table	427,970	May 13	1438	364	51	1101
Clement, Nathan S., Florence, Mass. Oil-burner	429,755	June 10	982	240 241	51	1672
Clement, Stephen W., Philadelphia, Pa. Folding tent-frame	439,384	Oct. 28	2676	713	53	526

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Clement, Thomas, Glasgow, county of Lanark, Scotland. Apparatus for testing liquids...	424,643	Apr. 1	318	83	51	63
Clement, Thomas, Glasgow, Scotland. Testing liquids.....	437,356	Sept. 30	3175	{ 829 830 }	52	2008
Clements, Albion P., Winterport, Me. Curry-comb.....	441,136	Nov. 25	2425	628	53	1101
Clements, Benjamin P. (See Wilson, Benjamin F., assignor.)						
Clements, Calvin F., Dayton, Mo. Clamp.....	425,658	Apr. 15	1878	502	51	382
Clements, Frank B., Tuscaloosa, Ala. Hub and axle.....	425,754	Apr. 15	2015	537	51	410
Clements-Kropp, Charles, San Francisco, Cal. Musical notation.....	429,841	June 10	1112	274	51	1696
Clements, Thomas, assignor to J. Cunningham Son & Company, Rochester, N. Y. Journal for carriage-wheels.....	439,113	Oct. 28	2229	599	53	444
Clements, William M., <i>et al.</i> (See Hildebrandt, Edwin S., assignor.)						
Clements, William W., Sumner, Ga. Gate-latch.....	429,505	June 3	613	150	51	1589
Clemmensen, Lars. (See Batter, Frank, assignor.)						
Clemson, Corydon H., Chicago, Ill. Piano-action.....	441,283	Nov. 25	2696	699	53	1148
Clemson, Richard W., assignor to Wheeler, Madden & Clemson Manufacturing Company, Middletown, N. Y. Saw-handle.....	434,767	Aug. 19	2048	535	52	1176
Clelland, Milton A., assignor of one-half to C. M. Prevear, San Francisco, Cal. Pneumatic railway.....	423,130	Mar. 11	1174	306	50	1366
Clerk, Charles R., Toronto, Canada. Type-writing machine.....	438,430	Oct. 14	1153	312	53	226
Cleveland, Arthur. (See Cleveland, James B. and A.)						
Cleveland, Charles E., Fond du Lac, Wis. Automatic lumber-trimmer.....	436,402	Sept. 16	1597	422	52	1695
Cleveland Cooperage and Machine Company. (See Reed, Lemon M., assignor.)						
Cleveland, James B. and A., Lyons Farnus, N. J. Lifting-jack.....	421,552	Feb. 18	1662	431	50	894
Cleveland, Ralph D., Minneapolis, Minn. Car-door fastening.....	423,404	Mar. 11	1576	413	50	1444
Cleveland Rubber Company. (See Foote, Ernest N., assignor.)						
Cleveland, William B., Cleveland, Ohio. Transferring batteries.....	425,493	Apr. 15	1619	432	51	332
Cleveland, William B., Cleveland, Ohio. Power-transmitting mechanism.....	433,446	Aug. 5	17	5	52	760
Cleveland Window Shade Company. * (See Ludlow, Washington I., assignor.)						
Cleves, William B., Binghamton, N. Y. Trowel.....	441,135	Nov. 25	2425	628	53	1100
Cliff, Arthur J., Chicago, Ill. Smoke-preventing attachment for furnaces.....	438,839	Oct. 21	1809	482	53	356
Cliff, Edward, Nyack, N. Y. Vehicle-spring.....	429,842	June 10	1113	275	51	1696
Cliff, Edward, Nyack, N. Y. Graduated spiral spring.....	431,250	July 1	330	82	52	66
Cliff, Edward, Nyack, N. Y. Wagon-bolster spring.....	431,251	July 1	331	82	52	67
Clifford, Caleb, Gloversville, N. Y. Preparing fertilizers.....	434,977	Aug. 26	2396		52	1250
Clifford, Charles C., Swissvale, Pa. Reel and take-off apparatus.....	439,114	Oct. 28	2230	599	53	445
Clifford, Isidore E., London, England. Apparatus for receiving coin and automatically delivering a receipt therefor.....	423,313	Mar. 11	1446	{ 377 378 379 }	50	1418
Clifford, James. (See Clifford, Thomas and J.)						
Clifford, John E., <i>et al.</i> (See Yenne, Jesse, assignor.)						
Clifford, John M. (See Woodbury, Orson B., assignor.)						
Clifford, Joseph C., U. S. Army. Nut-lock.....	431,252	July 1	333	82	52	67
Clifford, Michael, and H. L. Warner, Birmingham, Ala.; said Warner assignor of one-half to said Clifford. Thill-tug.....	442,512	Dec. 9	1379	353	53	1539
Clifford, Oscar F., <i>et al.</i> (See Dyer, Isaac T., assignor.)						
Clifford, Patrick, Quincy, and M. Bray, Newton, Mass. Shoe-buckle.....	421,553	Feb. 18	1663	431	50	895
Clifford, Patrick, Quincy, and J. Coupal, Boston, Mass. Boot or shoe nailing machine.....	440,394	Nov. 11	1191	{ 307 308 }	53	848
Clifford, Thomas and J., West Superior, Wis. Clay-grinding mill.....	432,602	July 22	2419	624	52	492
Clift, Estes G. (See Thompson, William R., assignor.)						
Clift, John W., Wellington, England, assignor to G. Waite, Baldwinsville, Mass. Convertible chair.....	439,721	Nov. 4	139	37	53	635
Climer, Frank O., Indianapolis, Ind. Portable copying-press.....	420,037	Jan. 28	2091	552	50	443
Cline, Cyrus. (See Maxfield, Samuel, assignor.)						
Cline Frederick N., assignor to R. King, Chicago, Ill. Machine for making castings.....	427,837	May 13	1228	{ 310 311 }	51	1062
Cline, George J., Goshen, Ind. Wire-fence machine.....	419,502	Jan. 14	1277	340	50	268
Cline, George J., Goshen, Ind. Fence.....	430,717	Feb. 4	403	107	50	643
Cline, Theodore S. (See Way, George P., assignor.)						
Clink, George V., Keokuk, Iowa. Feed-mill or grinding-machine.....	419,750	Jan. 21	1638	{ 435 436 437 }	50	345
Clinton, Charles M., and J. McNamara, Ithaca, N. Y. Type-writing machine.....	443,932	Dec. 30	2733	{ 954 955 956 }	53	2022
Clinton Wire Cloth Company. (See Miles, Purches, assignor.)						
Clinton Wire Cloth Company. (See Searles, Benjamin, assignor.)						
Clogg, Levin H., <i>et al.</i> (See Rich, George, assignor.)						
Close, Charles H., Danbury, Conn. Window-shade fixture.....	436,121	Sept. 9	1154	301	52	1601
Close, Daniel H., New York, N. Y. Brick-mold-sanding machine.....	426,775	Apr. 29	3568	{ 931 932 }	51	730
Close, Daniel H., New York, N. Y. Manufacturing brick.....	430,376	June 17	1983	489	51	1875
Close, John W., assignor of one-half to J. C. Graves, Buffalo, N. Y. Machine for railway construction.....	421,908	Feb. 25	2166	{ 568 569 }	50	1000
Close, Thomas J., Philadelphia, Pa. Machine for casting metals.....	441,643	Dec. 2	22	7	53	1266
Close, William, Leona, Kans. Band-cutter and feeder.....	429,014	May 27	3011	773	51	1435
Closser, Horace A. (See Petersen and Closser.)						
Closz, Charles, St. Ansgar, Iowa. Grain-separating screen.....	434,246	Aug. 12	1214	315	52	1003
Closz, Charles, St. Ansgar, Iowa. Grain-separating screen.....	434,247	Aug. 12	1215	316	52	1003
Closz, Charles, St. Ansgar, Iowa. Grain-separating screen.....	434,248	Aug. 12	1216	316	52	1003
Closz, Charles, St. Ansgar, Iowa. Grain-separator.....	434,249	Aug. 12	1217	{ 316 317 }	52	1004
Cloud, James M., <i>et al.</i> (See Rollings, Eliphalet J., assignor.)						
Cloud, John W., Buffalo, N. Y. Spring.....	442,721	Dec. 16	1733	448	53	1617
Clough, John, and G. Carter, Bradford, England. Variable-speed gear for velocipedes.....	426,524	Apr. 29	3185	836	51	656
Clough, William R., Brooklyn, N. Y. Machine for making corkscrews.....	441,137	Nov. 25	2426	{ 629 630 }	53	1101
Clouse, Joseph N., St. Louis, Mo. Wagon.....	431,508	July 1	733	183	52	146
Clouse, Joseph N., assignor to St. Louis Toy Company, St. Louis, Mo. Velocipede.....	433,829	Aug. 5	672	174	52	888
Clouse, William L., Tiffin, Ohio. Wire-nail machine.....	422,918	Mar. 11	847	{ 219 220 }	50	1306
Clouse, William L., assignor to W. R. Anderson, Tiffin, Ohio. Heading, forging, and up-setting machine.....	430,834	June 24	2720	{ 666 667 }	51	2024
Clouser, Samuel F., Brooklyn, assignor to F. J. Wall, New York, N. Y. Car replacing and derailling device.....	439,291	Oct. 28	2522	676	53	498

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Clouth, Franz, Nippes, near Cologne, Prussia, Germany. Driving-belt.....	421,246	Feb. 11	1215	314	50	803
Clow, Benjamin and G. E., Jersey City, N. J. Nut-wrench.....	436,073	Sept. 9	1078	279	52	1588
Clow, George E. (See Clow, Benjamin and G. E.)						
Cloyes, James H. (See Stanley and Cloyes.)						
Cluff, Gertie D., Lodi, Cal. Garment-supporter.....	433,617	Aug. 5	260	69	52	807
Cluff, Samuel J. (See Sheppard, Hazlett, and Cluff.)						
Clugage, Francis R., Mankato, Kans. Corn-harvester.....	438,142	Oct. 14	723	{ 198 199 }	{ 53 }	146
Clune, Michael. (See Bowne and Clune.)						
Cluskey, Fredrick, Lakenan, Mo. Truss.....	430,924	June 24	2857	701	51	2050
Clute, Ella. (See Pettingell, Benjamin C., assignor.)						
Clyde, Moses S., and W. Welsb, Mount Olive, Ill. Broom-head.....	428,665	May 27	2480	630	51	1331
Clyde Type Writer Company. (See Schuckers, Jacobs W., assignor.)						
Coady, Peter P. (See Barbier and Coady.)						
Coan, Noah, Cincinnati, Ohio. Band-saw machine.....	442,420	Dec. 9	1232	{ 313 319 722 723 }	{ 53 }	1509
Coas, Edward K., Gloucester, Mass. Machine for making metal cylinders.....	422,293	Feb. 25	2740	{ 722 723 }	{ 50 }	1106
Coates, John F., Terre Haute, Ind. Oil-burner.....	443,477	Dec. 23	3027	728	53	1877
Cobb, Charles, Albion, Idaho. Thread-case.....	424,180	Mar. 25	2731	{ 728 729 }	{ 50 }	1678
Cobb, Charles, and M. Solomon, Albion, Idaho. Cabinet for spool-thread.....	424,272	Mar. 25	2847	762	50	1701
Cobb, Henry B., Wilmington, Del. Manufacturing insulating-tubing for electric conduct- ing-wires.....	440,395	Nov. 11	1195	-----	53	849
Cobb, Henry B., Wilmington, Del. assignor to Cobb Vulcanite Wire Company, of Dela- ware. Electric conductor.....	429,304	June 3	305	72	51	1528
Cobb, Henry B., Wilmington, Del. assignor to Cobb Vulcanite Wire Company, of Dela- ware. Electric conductor.....	429,305	June 3	306	72	51	1528
Cobb, Henry B., Wilmington, Del. assignor to Cobb Vulcanite Wire Company, of Dela- ware. Joint for electric conductors.....	429,306	June 3	307	73	51	1529
Cobb, Henry B., Wilmington, Del. assignor to Cobb Vulcanite Wire Company, of Dela- ware. Underground conduit for electric wires.....	429,307	June 3	309	73	51	1529
Cobb, Sam B., Chicago, Ill. Electric lamp.....	419,829	Jan. 21	1760	465	50	369
Cobb, Samuel C., Janesville, Wis. Cultivator.....	425,210	Apr. 8	1201	318	51	243
Cobb, Samuel C., Janesville, Wis. Disk-sharpener.....	435,599	Sept. 2	334	93	52	1439
Cobb, Samuel C., Janesville, Wis. Cultivator.....	436,472	Sept. 16	1714	{ 452 453 }	{ 52 }	1717
Cobb Vulcanite Wire Company. (See Cobb, Henry B., assignor.)						
Cobb Vulcanite Wire Company. (See Thatcher, Duncan, assignor.)						
Cobb, Winfield S., Holbrook, assignor to J. W. Forrest, Everett, Mass. Stitch-setting-up device for sewing-machines.....	421,095	Feb. 11	1005	257	50	763
Cobban, James, Brooklyn, N. Y. Paddle-wheel.....	424,704	Apr. 1	413	108	51	82
Coble, Anthony, Montgomery City, Mo. Wagon-standard.....	442,421	Dec. 9	1232	319	53	1510
Coblentz, Jean B., et al. (See Schmitt, Johann, assignor.)						
Cobllyn, Frederic, Seraing, Belgium. Railway-chair.....	431,138	July 1	153	40	52	32
Coburn, Byron, Cardwell, Va. Machine for converting motion.....	443,132	Dec. 23	2439	624	53	1762
Coburn, Lemuel, assignor to Coburn Trolley Track Manufacturing Company, Holyoke, Mass. Trolley-support for step-ladders.....	426,983	Apr. 29	3855	1008	51	786
Coburn, Lemuel, and W. J. Sumner, assignors to Coburn Trolley Track Manufacturing Company, Holyoke, Mass. Door for cars or other structures.....	432,225	July 15	1859	{ 477 478 }	{ 52 }	376
Coburn Trolley Track Manufacturing Company. (See Coburn, Lemuel, assignor.)						
Coburn Trolley Track Manufacturing Company. (See Coburn and Sumner, assignors.)						
Cochennour, John S., Olney, Ill. Minnow-trap.....	427,049	May 6	23	8	51	815
Cocheu, Theodore, Brooklyn, N. Y. Street-sign for lamps.....	420,675	Feb. 4	347	91, 92	50	632
Cocheu, Theodore, Brooklyn, N. Y. Street-sign for lamps. (Reissue).....	11,092	July 1	788	196	52	156
Cochran, Andrew. (See Grubb, Renben J., assignor.)						
Cochran, Andrew, Trenton, N. J. Pipe-coupling.....	428,076	May 20	1592	404	51	1141
Cochran, Clarence F., West Branch, Mich. Horseshoe.....	430,069	June 10	1475	366	51	1766
Cochran, Edward A., assignor of one-fifth to E. J. Beach, Pasadena, Cal. Pendulum bar treadle.....	421,858	Feb. 18	2096	550	50	977
Cochran, Edward A., assignor of one-half to C. A. Sawtelle and E. J. Beach, Pasadena, Cal. Horse-clipping machine.....	426,920	Apr. 29	3770	984	51	770
Cochran, Frederic B., New York, N. Y. Coin-operated vending-machine.....	425,163	Apr. 8	1128	{ 299 300 }	{ 51 }	227
Cochran, Frederic B., Brooklyn, N. Y. Coin-operated machine.....	434,768	Aug. 19	2049	535	52	1176
Cochran, Frederic B., Brooklyn, N. Y. Coin-operated vending-machine.....	440,470	Nov. 11	1317	341	53	871
Cochran, George W., assignor of one-half to B. Franklin, New York, N. Y. Secondary battery.....	434,376	Aug. 12	1411	371	52	1043
Cochran, James, Brooklyn, assignor to Lalanc & Grosjean Manufacturing Company, New York, N. Y. Cooking-vessel.....	422,380	Mar. 4	29	9	50	1142
Cochran, James S. (See Watkins and Cochran.)						
Cochran, John, and J. R. Bond, Tottenham, Ontario, Canada. Fore sight for rifles.....	428,458	May 20	2174	547	51	1254
Cochrane, David, Philadelphia, Pa. Separator.....	420,718	Feb. 4	404	{ 107 108 }	{ 50 }	644
Cochrane, Frederic W., Wyandotte, Kans. Ice-cream freezer.....	436,337	Sept. 16	1482	387	52	1673
Cochrane, Jacob, assignor to himself and A. Armstrong, Hill City, S. D. Device for pro- pelling vessels.....	432,864	July 22	2844	728	52	574
Cochrane, John A., Cleveland, Ohio. Flat-iron.....	437,773	Oct. 7	155	48	53	32
Cochrane, Philip W., assignor to Nye & Treck, Philadelphia, Pa. Circular-rib-knitting machine.....	420,772	Feb. 4	481	126	50	657
Cochrane Roller Mills Company. (See Brewster, Frank H., assignor.)						
Cochrane, Seabird H. B., assignor of one-half to J. M. Friedrich, Troy, Ohio. Nut-locking washer for bolts.....	435,345	Aug. 26	2959	785	52	1354
Cochrane, William B. (See Stevens, Alfred L., assignor.)						
Cockburn, Thomas B., Hamilton, Ontario, Canada. Lathing.....	419,416	Jan. 14	1161	308	50	245
Codding, Charles A., and L. E. Wilbur, Dowagiac, Mich. Pan-making machine.....	430,835	June 24	2724	668	51	2025
Coddington, Archibald I., Jr. (See Rudy, John H., assignor.)						
Coddington, Vantyle W., Kansas City, Mo. Separable pulley.....	420,038	Jan. 28	2092	552	50	443
Coddington, Vantyle W., Kansas City, Mo. Pulley.....	443,268	Dec. 23	2688	{ 689 690 }	{ 53 }	1811
Coddington, Vantyle W., Kansas City, Mo. Separable pulley.....	443,269	Dec. 23	2689	690	53	1811
Cody, Abraham S., Midland, Mich. Apparatus for illuminating buildings with coal-oil.....	425,302	Apr. 8	1339	{ 357 358 }	{ 51 }	269

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Cody, Frank L. (See Pontious, Marshall E., assignor.)						
Coe, Arthur, <i>et al.</i> (See Sandford, Charles, assignor.)						
Coe Brass Manufacturing Company. (See Ellis, John F., assignor.)						
Coe Brass Manufacturing Company. (See Hendey, Thomas C., assignor.)						
Coe Brass Manufacturing Company. (See Hine, Adelbert P., assignor.)						
Coe Brass Manufacturing Company. (See Johnson, Edward W., assignor.)						
Coe Brass Manufacturing Company. (See Steele, Elisha J., assignor.)						
Coe, Henry I., New York, N. Y., and J. J. McBride, Ridgefield Park, N. J., said McBride assignor to said Coe. Device for operating elevator-hatchway doors.	419,317	Jan. 14	1008	{ 266 267	50	213
Coe, Henry I., New York, N. Y., and J. J. McBride, Ridgefield Park, N. J., said McBride assignor to said Coe. Hatchway-door.	419,503	Jan. 14	1278	{ 340 341	50	268
Coe, John H., Philadelphia, Pa. Device for preventing the racing of ships' propellers.	433,274	July 29	3488	900	52	706
Coefield, John, Franklin, Pa. Road cart.	433,517	Aug. 5	111	32	52	778
Coen, Abraham, Gardner, Kans. Washing-machine.	442,612	Dec. 16	1544	399	53	1581
Coerper, Carl, assignor to Helios Actien-Gesellschaft für Elektrisches Licht und Telegraphenbau, Ehrenfeld, Prussia, Germany. Electric-arc lamp.	429,787	June 10	1027	251	51	1679
Coffee, Robert W., Bedford City, Va. Machine for manipulating fine-cut tobacco.	436,032	Sept. 9	1004	{ 262 263	52	1575
Coffeen, Francis E., Kanopolis, Kans. Tightener for fences.	437,569	Sept. 30	3515	917	52	2078
Coffey, Barton H., Philadelphia, Pa. Chemical-feeder for filters.	423,514	Mar. 18	1739	458	50	1483
Coffield, Peter T., New Carlisle, assignor to Superior Machine Company, Springfield, Ohio. Tap.	441,284	Nov. 25	2697	700	53	1148
Coffin, Peter T., assignor of one-half to C. H. Paxson, New Carlisle, Ohio. Steam-engine.	428,803	May 27	2694	684	51	1372
Coffield, Peter T., assignor of one-half to J. V. Perrine, New Carlisle, Ohio. Valve casing and seat.	437,097	Sept. 23	2737	715	52	1921
Coffin, Abbott, <i>et al.</i> (See Frost, Nathaniel N., assignor.)	438,572	Oct. 14	1357	368	53	268
Coffin, Arthur W., San Francisco, Cal. Ticket-punch.	440,839	Nov. 18	1942	493	53	997
Coffin, Arthur W., assignor to Coffin Combination Punch and Ticket Company, Oakland, Cal. Conductor's recording-punch.	434,142	Aug. 12	1055	272	52	979
Coffin, Charles L., Detroit, Mich. Welding by electricity.	419,032	Jan. 7	578	146	50	122
Coffin, Charles L., Detroit, Mich. Electric welding.	419,033	Jan. 7	578	146	50	122
Coffin, Charles L., Detroit, Mich. Electric welding.	422,730	Mar. 4	533	136	50	1238
Coffin, Charles L., Detroit, Mich. Welding metals by electricity.	423,732	Mar. 18	2071	546	50	1544
Coffin, Charles L., Detroit, Mich. Method of and apparatus for electric welding.	423,733	Mar. 18	2072	546	50	1545
Coffin, Charles L., Detroit, Mich. Welding metals by electricity.	423,734	Mar. 18	2073	546	50	1545
Coffin, Charles L., Detroit, Mich. Welding metals by electricity.	423,735	Mar. 18	2074	547	50	1545
Coffin, Charles L., Detroit, Mich. Welding metals electrically.	423,736	Mar. 18	2075	547	50	1545
Coffin, Charles L., Detroit, Mich. Electric welding.	425,164	Apr. 8	1136	300	51	229
Coffin, Charles L., Detroit, Mich. Electric welding.	427,971	May 13	1440	364	51	1102
Coffin, Charles L., Detroit, Mich. Welding metals electrically.	428,459	May 20	2175	548	51	1254
Coffin, Charles L., Detroit, Mich. Electric soldering-iron.	431,439	July 1	629	157	52	127
Coffin, Charles L., Detroit, Mich. Method of and apparatus for welding by electricity.	435,283	Aug. 26	2842	752	52	1334
Coffin, Charles L., Detroit, Mich. Heating metals by electricity.	435,284	Aug. 26	2843	752	52	1335
Coffin, Charles L., Detroit, Mich. Welding metals electrically.	437,570	Sept. 30	3516	917	52	2078
Coffin, Charles L., Detroit, Mich. Electrically welding metals.	437,571	Sept. 30	3517	917	52	2078
Coffin, Charles L., Detroit, Mich. Automatic vending apparatus.	439,477	Oct. 28	2212	749	53	552
Coffin, Charles L., Detroit, Mich. Automatic vending apparatus.	439,478	Oct. 28	2213	749	53	552
Coffin, Charles L., Detroit, Mich. Welding metals electrically.	442,954	Dec. 16	2133	549	53	1696
Coffin, Charles L., assignor of one-half to G. H. Lothrop, Detroit, Mich. Treating ore containing lead, silver, and zinc.	442,016	Dec. 2	606	.....	53	1381
Coffin, Charles W. (See Coffin, Melvin H., assignor.)						
Coffin Combination Punch and Ticket Company. (See Coffin, Arthur W., assignor.)						
Coffin, Eben M., Hubbardston, Mass. Combined lathing and furring strip for buildings.	437,886	Oct. 7	322	95	53	63
Coffin, Joseph R. and W. B. Bliss, Nebr. Point for well-sinking machines.	436,889	Sept. 23	2444	638	52	1863
Coffin, Melvin H., Chelsea, assignor of one-half to C. W. Coffin, Lawrence, Mass. Counting-register.	423,374	Mar. 11	1531	402	50	1435
Coffin, Thomas E., Richmond, Va. Gate.	440,620	Nov. 18	1571	404	53	928
Coffin, Walter G., Seekonk, Mass. Device for drying boots.	426,111	Apr. 22	2570	676	51	523
Coffin, William B. (See Coffin, Joseph R. and W. B.)						
Coffman, Harvey G., Washington Court-House, Ohio. Paper-file.	436,214	Sept. 9	1298	338	52	1628
Coffman, Lewis C. (See Messmore, Rienzi W., assignor.)						
Coffman, Martin. (See Coffman, Samuel M. and M.)						
Coffman, Samuel M. and M., Georgeville, Mo. Gate.	438,987	Oct. 21	2037	544	53	401
Coggeshall, Carol H., assignor to Perfect Check Protector Company, St. Louis, Mo. Check-marker.	441,057	Nov. 18	2287	593	53	1065
Cogswell, George H. H. (See Beers, Bradford E., assignor.)						
Cogswell, William H., Chicago, Ill., assignor to A. J. McMahon. Rotary clipper.	430,070	June 10	1477	366	51	1766
Cohen, Louis, Brooklyn, N. Y. Shirt.	424,959	Apr. 8	816	218	51	166
Cohen, Robert L., Camden, N. J. Armature.	423,026	Mar. 11	1006	264	50	1335
Cohen, Simon, <i>et al.</i> (See Mayfield, Elmer J., assignor.)						
Cohen, Stanley A., New York, N. Y. Holder or clasp.	425,983	Apr. 22	2381	630	51	486
Cohen, Victor E., assignor to Wonderful Burner Company, Philadelphia, Pa. Attachment for increasing the illuminating power of gas-jets.	427,050	May 6	24	8	51	815
Cohenius, Abraham, New York, N. Y. Bottle-stopper.	435,207	Aug. 26	2735	721	52	1314
Cohman, William, Philadelphia, Pa. Galvanic battery.	440,420	Nov. 11	1251	323	53	857
Cohn, Casper L. (See Mitchell, Frederick J., assignor.)						
Cohn, Charles. (See Cohn, Max, assignor.)						
Cohn, Edward, <i>et al.</i> , trustees. (See McGregor, John A. K., assignor.)						
Cohn, Harry. (See Livingston, Blum, Wollenweber, Westheimer, and Cohn.)						
Cohn, Herman, <i>et al.</i> , trustees. (See McGregor, John A. K., assignor.)						
Cohn, Julius M. (See Stearn, Emil, assignor.)						
Cohn, Max, assignor of one-third to C. Cohn, Milwaukee, Wis. Type-writing machine.	432,981	July 29	3043	{ 781 782	52	616
Cohn, Max, assignor of one-third to C. Cohn, Milwaukee, Wis. Type-writing machine.	432,982	July 29	3045	{ 782 783	52	617
Cohn, Oscar, Brooklyn, N. Y. Cleaning device for type-writing machines.	430,469	June 17	2123	521	51	1901
Coit, Charles H., Cleveland, Ohio. Pipe-rack.	419,112	Jan. 7	691	182	50	146
Coit, Charles H., Glenville, assignor to Avery Stamping Company, Cleveland, Ohio. Pipe-rack.	429,421	June 3	483	115	51	1564
Colahan, Charles, Cleveland, Ohio. Grain-binder.	425,565	Apr. 15	1721	461	51	352
Colbath, George W., Concord, N. H. Car truck and axle.	434,655	Aug. 19	1878	491	52	1143
Colbert, Augustus, Taylor, La. Vehicle-step.	420,143	Jan. 28	2262	599	50	477
Colborne, Oliver, Chicago, Ill. Vertical anti-friction engine.	423,515	Mar. 18	1740	458	50	1483

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Colburn, Frederick C., Arlington, N. J., and J. R. France, New York, N. Y., assignors to Arlington Manufacturing Company, of New Jersey. Indelible print or picture	426,170	Apr. 22	2654	51	540
Colburn, Frederick C., Arlington, N. J., and J. R. France, New York, N. Y.; said Colburn assignor to Arlington Manufacturing Company, of New Jersey. Indelible print or picture	429,843	June 10	1114	.....	51	1696
Colby, Albert H., assignor to himself and O. W. Owen, McHenry, Ill. Horse bay-rake	432,509	July 22	2285	{ 591 } 592	{ 52 }	465
Colby, Charles A., and J. C. Strong, Buffalo, N. Y. Electric time-dial	424,273	Mar. 25	2849	762	50	1702
Colby & Co., J. (See Colby, Thomas E., assignor.)						
Colby, Edward A., New Haven, Conn. Electric furnace for melting metals	428,378	May 20	2059	{ 518 } 519	{ 51 }	1234
Colby, Edward A., New Haven, Conn. Electric induction device	428,379	May 20	2061	519	51	1234
Colby, Edward A., New Haven, Conn. Melting, refining, and casting metals	428,552	May 20	2249	584	51	1278
Colby, Edward A., Newark, N. J. Reversing-key	442,800	Dec. 16	1864	481	53	1643
Colby, Edward J., Chicago, Ill. Combined stove-pipe thimble and ventilator	418,783	Jan. 7	188	46	50	42
Colby, Edward J., Chicago, Ill. Coffee-pot	433,673	Aug. 5	345	88	52	823
Colby, Edward J., Chicago, Ill. Coin-controlled optical instrument	436,905	Sept. 23	2469	644	52	1867
Colby, Edward J., Chicago, Ill. Skirt-elevator	437,678	Oct. 7	7	2	53	4
Colby, Edward J., assignor to Colby Improvement Company, Chicago, Ill. Coin-controlled opera-glass	434,377	Aug. 12	1412	371	52	1043
Colby, Frank W., assignor to W. Deering, Chicago, Ill. Self-binding harvester	439,292	Oct. 28	2523	{ 676 } 677 678	{ 53 }	498
Colby, Gilbert A., Chicago, Ill. Steam-boiler	436,033	Sept. 9	1007	263	52	1575
Colby, Harlan P., assignor to Colby Wagon Company, Grand Rapids, Mich. Vehicle-spring	425,984	Apr. 22	2382	630	51	487
Colby, Henry H., Tallula, Ill. Culvert	426,112	Apr. 22	2571	676	51	524
Colby Improvement Company. (See Colby, Edward J., assignor.)						
Colby, John N., assignor of two-thirds to L. Englehardt, Boston, and A. Lawrence, Wintthrop, Mass. Grating-machine	439,930	Nov. 4	455	119	53	697
Colby, Lucius W. (See Hacker, Colby, and Helten.)						
Colby, Royal L., Alexandria, Minn. Thrashing-machine	433,764	Aug. 5	484	126	52	850
Colby, Thomas E., assignor to J. Colby & Co., Brooklyn, N. Y. Button-hole sewing-machine	441,058	Nov. 18	2288	{ 593 } 594	{ 53 }	1065
Colby Wagon Company. (See Colby, Harlan P., assignor.)						
Colby Wringer Company. (See Stinson, Charles K., assignor.)						
Colden, George, Avoca, Mich. Gate-latch	440,396	Nov. 11	1195	308	53	849
Coldwell, Thomas, Newburg, N. Y. Lawn-mower	426,984	Apr. 29	3857	1008	51	786
Cole, Charles, Chicago, Ill. Hydrocarbon injector burner	423,131	Mar. 11	1175	306	50	1366
Cole, Cobb. (See Tatum and Cole.)						
Cole, Cyrus C., Albion, Mich. Bridle-bit	424,538	Apr. 1	154	44	51	33
Cole, David, and J. Pedder, Doon, Ontario, Canada. Apparatus for carbonizing vegetable fiber in wool	443,358	Dec. 23	2838	730	53	1841
Cole, De Witt C., New York, N. Y. Corset-clasp	439,385	Oct. 28	2678	713	53	527
Cole, Ernest H. (See Day and Cole.)						
Cole, Eugene M., Union Church, N. C. Seed-planter	439,773	Nov. 4	214	56	53	650
Cole, George, London, county of Middlesex, England. Mechanism for transmitting motion to toy figures and objects	423,905	Mar. 25	2333	{ 614 } 615	{ 50 }	1603
Cole, George, London, England. Musical top	425,368	Apr. 8	1426	381	51	286
Cole, George B. (See Bandy and Cole.)						
Cole, George H., Atlanta, Ga. Adjustable vise	423,737	Mar. 18	2077	547	50	1545
Cole, George H., Atlanta, Ga. Adjustable bench-vise	427,572	Sept. 30	3518	918	52	2078
Cole, George W. (See Brown, Harvey, assignor.)						
Cole, Harrison, Columbus, Ohio. Device for hitching animals	422,381	Mar. 4	30	9	50	1142
Cole, Joseph S., assignor of one-half to L. H. Baldwin, Albany, Ind. Combined clothes-rack, ironing-table, and clothes-drier	427,051	May 6	25	8	51	815
Cole, Marcellus, Washington, D. C. Filtering apparatus	440,229	Nov. 11	935	241	53	802
Cole, Okey K., Parkersburg, W. Va. Governor	423,221	Mar. 11	1303	339	50	1392
Cole, William H. (See Fisk, Anos, assignor.)						
Cole, William J., and E. W. Kerrihard, Red Oak, Iowa. Churn	426,525	Apr. 29	3187	836	51	656
Cole, William R., Pottsville, Pa. Mucilage-bottle	424,539	Apr. 1	155	44	51	33
Cole, William R., Pottsville, Pa. Wick-trimmer	436,934	Sept. 23	2516	659	52	1876
Cole, William R., Pottsville, Pa. Funnel	442,857	Dec. 16	1970	505	53	1664
Cole, William R., assignor to American Store Railway Company, Detroit, Mich. Stereo-service apparatus	425,023	Apr. 8	916	243	51	185
Coleman, Charles C., Birmingham, Ala. Nut-lock	420,294	Jan. 28	2505	664	50	521
Coleman, Charles C., Birmingham, Ala. Pipe-wrench	429,719	June 10	930	228	51	1661
Coleman, Clarence W. (See Coleman, Clyde J., assignor.)						
Coleman, Clarence W. (See Coleman, Clyde J. and C. W.)						
Coleman, Clyde J., assignor of one-half to C. W. Coleman, Gideon, Kans. Button-setting machine	432,374	July 15	2074	{ 533 } 534	{ 52 }	415
Coleman, Clyde J. and C. W., Chicago, Ill. Button-attaching machine	432,375	July 15	2079	534	52	417
Coleman Hardware Company. (See Taxis, Gideon R., assignor.)						
Coleman Hardware Company. (See Zattan, Charles, assignor.)						
Coleman, Isaiah B., Elmira, N. Y. Clover-feed cutter	426,364	Apr. 22	2930	770	51	598
Coleman, Seymour, et al. (See Fisher, Joseph H., assignor.)						
Coler, Peter P., Clyman, Wis. Grain-binder. (Reissue)	11,103	Aug. 19	2276	{ 597 } 598 599	{ 52 }	1219
Coler, Peter P., Clyman, Wis., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder. (Reissue)	11,102	Aug. 19	2272	{ 595 } 596 597	{ 52 }	1219
Coleridge, Stephen, Addlestone, county of Surrey, England. Auto-mobile mooring apparatus for torpedoes	420,864	Feb. 4	644	{ 166 } 167	{ 50 }	686
Coles, David H. (See Coles, John L. and D. H.)						
Coles, David H., Brooklyn, N. Y. Sewing-machine	429,333	Jan. 28	2555	{ 677 } 678	{ 50 }	530
Coles, David H., Brooklyn, N. Y. Quilting-machine	434,250	Aug. 12	1221	{ 317 } 318	{ 52 }	1004
Coles, David H., Brooklyn, assignor to Manhattan Quilting and Manufacturing Company, New York, N. Y. Sewing-machine	421,816	Feb. 18	2017	534	50	963
Coles, David H., Brooklyn, assignor to Manhattan Quilting and Manufacturing Company, New York, N. Y. Sewing-machine	423,856	Mar. 18	2245	593	50	1578
Coles, Henri H., Philadelphia, Pa. Machine for treating fibrous plants	443,037	Dec. 16	2261	580	53	1722
Coles, Henri H., Philadelphia, Pa., assignor to Coles Manufacturing Company, of Pennsylvania. Grinding-mill	437,144	Sept. 23	2843	739	52	1939

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Coles, John L. and D. H., Brooklyn, assignors to Empire State Manufacturing Company, New York, N. Y. Parallel jaw-tool	424,274	Mar. 25	2849	762	50	1702
Coles, John L. and D. H., Brooklyn, assignors to Empire State Manufacturing Company, New York, N. Y. Hanger for coats or other articles	421,275	Mar. 25	2850	762	50	1702
Coles Manufacturing Company. (See Coles, Henri H., assignor.)						
Coles, Thomas L. (See Munsie, James F., assignor.)						
Colgate, Arthur E., assignor to F. G. Otto & Sons, New York, N. Y. Galvanometer	428,746	May 27	2617	665	51	1356
Colgate, Arthur E., assignor to F. G. Otto & Sons, New York, N. Y. Galvanometer	429,887	June 10	1184	294	51	1709
Colgate, Arthur E., assignor to F. G. Otto & Sons, New York, N. Y. Magneto-electric machine	431,559	July 8	814	203	52	170
Colgate, Arthur E., assignor to F. G. Otto & Sons, New York, N. Y. Photographic camera	437,290	Sept. 30	3068	{ 803 804 }	{ 52 53 }	1929
Colgrove, James, Clear Water, Minn. Potato-digger	437,679	Oct. 7	7	3	53	4
Colin, Theodore F., assignor of three-fourths to L. Shook and J. Bishop, Pittsburg, Pa., and T. J. Vandergrift, Jamestown, N. Y. Obtaining chlorine compounds from natural gas	427,744	May 13	1092	274	51	1036
Colket, George H. (See Lockwood, George E., assignor.)						
Collbran, H., et al. (See Reeser, John W., assignor.)						
Colles, Edward M., R. C. Kitchell, and D. C. Applegate, Princeton, Ind. Washing-machine	427,745	May 13	1094	275	51	1037
Colley, George H., assignor to Bortree Manufacturing Company, Jackson, Mich. Corset	419,641	Jan. 21	1478	396	50	316
Colley, George H., assignor to Bortree Manufacturing Company, Jackson, Mich. Corset	423,595	Mar. 18	1850	488	50	1502
Collier, James W., New York, N. Y. Incandescent-electric-lamp socket	438,431	Oct. 14	1155	312	53	227
Collier, James W., New York, N. Y. Incandescent-electric-lamp socket	441,059	Nov. 18	2291	594	53	1066
Collier, John T., Coffeeville, Tex. Attachment for cotton-plows	418,686	Jan. 7	27	8	50	8
Collier, John W., assignor to J. McLean, Lockport, N. Y. Machine for securing hangers to the corners of books	443,498	Dec. 30	3062	788	53	1893
Collier, William R., Colmesneil, Tex. Pulley-hub	438,283	Oct. 14	942	254	53	185
Collin, Simon C., Braddock, Pa. Converter-ladle	429,337	June 3	359	85	51	1539
Colling, Charles J., Cincinnati, Ohio. Crimping-machine	441,399	Nov. 25	2874	742	53	1182
Collings, William H., Collingswood, N. J. Vacuum-evaporator	421,163	Feb. 11	1102	223	50	783
Collins, Annie H. and M. G. Camden, N. J. Syringe	437,481	Sept. 30	3382	886	52	2052
Collins, Baalam R., Southside, Tenn. Cider-mill	438,679	Oct. 21	1519	410	53	304
Collins, Benjamin F. (See Smith, Collins, and Shook.)						
Collins, Charles M., South Bend, assignor of one-half to Dodge Manufacturing Company, Mishawaka, Ind. Hydrocarbon-burner	426,713	Apr. 29	3484	911	51	713
Collins, Cyrus F. (See Robinson and Collins.)						
Collins, Eli, Little Rock, Ark. Heating apparatus for railway-cars	431,106	July 1	112	28, 29	52	24
Collins, Frank M., Walden, assignor of one-half to E. P. Callaban, Brooklyn, N. Y. Invalid-bed apparatus	440,471	Nov. 11	1321	{ 341 342 }	{ 53 53 }	872
Collins, Frank W. (See Clark and Collins.)						
Collins, Frank W., Cortland, N. Y. Nut-lock	423,738	Mar. 18	2078	547	50	1545
Collins-Goodin Manufacturing Company. (See Collins, Olmstead, assignor.)						
Collins, John O., Farmville, Va. Car-coupling	434,978	Aug. 26	2397	635	52	1250
Collins, John W. (See Crabtree and Collins.)						
Collins, John W. (See Elliott, Collins, and Reid.)						
Collins, Matthew G. (See Collins, Annie H. and M. G.)						
Collins, Olmstead, St. Louis, Mo., assignor to Collins-Goodin Manufacturing Company, of Missouri. Wire-straightener	435,285	Aug. 26	2844	{ 752 753 }	{ 52 52 }	1335
Collins Plow Company. (See Brown and Gehrt, assignors.)						
Collins Plow Company. (See Gehrt, Albert A., assignor.)						
Collins, Reuben G., assignor to Tamarack Osceola Copper Manufacturing Company, Dollar Bay, Mich. Rotary swaging-machine	440,304	Nov. 11	1046	269	53	820
Collins, Robert F., Manchester, Ohio. Churn	429,506	June 3	614	150	51	1589
Collins, Samuel, Philadelphia, Pa. Type-writing machine	433,765	Aug. 5	485	126	52	850
Collins, Thomas. (See Wahlin, Lundstrom, and Collins.)						
Collins, Timothy J., assignor of two-thirds to J. R. B. Ransom and T. F. Randolph, Toledo, Ohio. Tilting-chair	418,687	Jan. 7	28	8	50	8
Collins, Wallace G., et al. (See Young, Otis W., assignor.)						
Collins, William F., New York, N. Y., assignor of one-fourth to W. A. Rosenbaum, Jersey City, N. J. Dynamo-electric machine	435,015	Aug. 26	2452	649	52	1260
Collins, William G. (See Walker and Collins.)						
Collins, William G., Newark, N. J. Stair-carpet fastener	418,972	Jan. 7	496	124	50	104
Collins, William G., East Orange, N. J. Stair-carpet fastener	426,661	Apr. 29	3389	890	51	696
Collins, William S. and Z. M., Toronto, Canada. Water-motor	436,595	Sept. 16	1903	500	52	1750
Collins, Zorobable M. (See Collins, William S. and Z. M.)						
Collinson, Joshua. (See Underwood, Frank, assignor.)						
Collord, Charles A. (See Wiggin and Collord.)						
Collyer, Charles W., Philadelphia, Pa., assignor to Rochester Lasting Machine Company, Rochester, N. Y. Leather-heading machine	436,752	Sept. 16	2161	568	52	1801
Collyer, Frank, Brooklyn, N. Y. Base-ball-score keeper	423,027	Mar. 11	1007	265	50	1335
Colony, Charles W., assignor of one-half to F. Brown and J. R. Allen, Sandy Creek, N. Y. Holdback for vehicles	419,140	Jan. 7	727	191	50	152
Colquhoun, James, Clifton, Ariz. Ter. Disintegrating slag	443,898	Dec. 30	3677	947	53	2011
Colt, James B., New York, N. Y. Mounting for chromatropes	430,113	June 17	1552	386	51	1791
Colt, James B., New York, N. Y. Magic lantern	430,114	June 17	1553	386	51	1791
Colt, James B., New York, N. Y. Lamp for magic lanterns	430,115	June 17	1554	387	51	1791
Coltebaugh, Samuel R., Indiana, Pa. Breast-chain for harness	421,817	Feb. 18	2019	534	50	964
Colton, George A., Chicago, Ill. Sliding-door hanger	433,721	Aug. 5	412	106	52	835
Colton, George A., Chicago, Ill. Door-hanger	433,722	Aug. 5	413	106	52	836
Colton, George A., Chicago, Ill. Bench-hook	438,096	Oct. 7	656	178	53	127
Colton, George A., Chicago, Ill. Screw-driver	438,097	Oct. 7	658	179	53	127
Colton, George A., Chicago, Ill. File-cleaner	438,098	Oct. 7	659	179	53	127
Colton, George A., Chicago, Ill. Transom lifter	438,099	Oct. 7	659	179	53	127
Colton, George A., Chicago, Ill. Door-hanger	442,422	Dec. 9	1234	319	53	1510
Colton, George A., Chicago, Ill. Sliding-door lock	443,899	Dec. 30	3678	947	53	2011
Colton, George A., La Fayette, N. Y. Sash-balance	434,700	Aug. 19	1957	509	52	1156
Colton, George A., La Fayette, N. Y. Indicator for letter-boxes	438,095	Oct. 7	655	178	53	127
Colton, Octavius J., Galesburg, Ill. Corn-planter	419,318	Jan. 14	1009	267	50	213
Coltrin, William H., Chicago, Ill. Toy	434,769	Aug. 19	2051	536	52	1176
Colt's Patent Fire Arms Manufacturing Company. (See Thomson, John, assignor.)						
Columbus Cash Register Company. (See Watt, Sern P., assignor.)						
Columbus Machine Company. (See Watt, Sern P., assignor.)						
Colville, William B., et al. (See Horsfall, William, assignor.)						
Colvin, Alfred, Carrollton, Miss. Car-coupling	430,729	June 24	2550	624	51	1991

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			Spec.	Dr. g.	Vol.	Page.
Colvin, Henry F., Philadelphia, Pa. Steam-engine.....	428,892	May 27	2832	720	51	1400
Colvin, Robert J., Lancaster, Pa. Gage-cock.....	435,286	Aug. 26	2846	753	52	1336
Colvin, Robert J., assignor of two-thirds to J. L. Steinmetz, J. E. Malone, Lancaster, G. Weidman, A. D. Hoffer, and B. F. Hean, Lebanon, Pa. Rail-joint.....	419,182	Jan. 14	806	212	50	174
Colwell, William S., Pittsburg, Pa. Triple thermic motor.....	432,510	July 22	2287	592	52	465
Colwell, William S., Pittsburg, Pa. Triple thermic motor.....	432,511	July 22	2289	{ 592 593 }	{ 52 }	466
Colyer, Joseph H., <i>et al.</i> (See Tourangin, Ernest, assignor.)						
Combination Stove and Water Heater Company. (See Brewer, Gilbert T., assignor.)						
Combs, Edgar S., Rochester, N. Y., assignor to W. S. King, Minneapolis, Minn. Lasting-machine.....	436,772	Sept. 23	2196	579	52	1815
Combs, Edgar S., Rochester, N. Y., assignor to W. S. King, Minneapolis, Minn. Lasting-machine.....	443,429	Dec. 23	2939	756	53	1860
Combs, Edgar S., and H. M. Goodhue, Rochester, N. Y., assignors to W. S. King, Minneapolis, Minn. Lasting-machine.....	436,773	Sept. 23	2197	{ 579 580 }	{ 52 }	1815
Combs, William F., Macon, Ga. Printer's composing-stick.....	431,440	July 1	630	158	52	127
Comer, Henry B., assignor to H. S. Hale, Philadelphia, Pa. Railway-car seat.....	429,563	June 3	696	169	51	1605
Comly, James I., Philadelphia, Pa. House.....	443,203	Dec. 23	2589	{ 665 666 }	{ 53 }	1793
Commager, David H. (See Blakeley, John D., assignor.)						
Commander, Herman, Milwaukee, Wis. Wave-power.....	440,397	Nov. 11	1197	308	53	849
Commercial Telegram Company. (See Mahnken, Henry, assignor.)						
Compton, H. T., <i>et al.</i> (See Ludwig, John C., assignor.)						
Compton, Melvin D., Newark, N. J. Electrical amusement-reporting apparatus.....	435,964	Sept. 9	907	239	52	1565
Comstock, Archibald Y. (See St. Aubin and Comstock.)						
Comstock Brothers. (See Ladd, Hernon W., assignor.)						
Comstock, Charles, Indianapolis, Ind. Short-turning vehicle.....	432,226	July 15	1861	478	52	377
Comstock, Charles, Indianapolis, Ind. Short-turning vehicle.....	432,227	July 15	1862	478	52	377
Comstock, Charles, Indianapolis, Ind. Short-turning vehicle.....	432,228	July 15	1864	478	52	377
Comstock, Charles, Indianapolis, Ind. Road-cart.....	438,345	Oct. 14	1031	{ 280 281 }	{ 53 }	203
Comstock, Harry, Fulton, N. Y. Fire-arm.....	422,731	Mar. 4	533	136	50	1238
Comstock, Harry, Fulton, N. Y. Pipe-cutter.....	426,171	Apr. 22	2656	697	51	541
Comstock, Harry, Fulton, N. Y. Leather-cutting tool.....	427,461	May 6	660	166	51	942
Comstock, Harry, Fulton, N. Y. Pipe-cutter.....	440,017	Nov. 4	596	154	53	725
Comstock, Henry W. (See Berry, Robert C., assignor.)						
Comstock, James L., Bear Grove, Iowa. Attachment for tongueless cultivators.....	422,919	Mar. 11	849	221	50	1306
Comstock, John A., Evanston, Ill. Bottle-holding device.....	435,401	Sept. 2	40	14	52	1383
Comstock, John J., <i>et al.</i> (See Mackenzie, James A., assignor.)						
Comstock, William H., Oskaloosa, Iowa. Bottle-filling machine.....	425,659	Apr. 15	1879	502	51	383
Conant, Albert F., Boston, Mass. Pocket memorandum-book.....	426,776	Apr. 29	3571	932	51	730
Conant, Leonard B., Thorp, Mich. Combined plow-point and colter.....	438,911	Oct. 21	1917	510	53	376
Conboy, Daniel, Toronto, Canada. Knob-eyelet for carriage-top curtains.....	442,858	Dec. 16	1970	506	53	1664
Conboy, Daniel, Toronto, Canada. Buggy-top.....	443,846	Dec. 30	3610	922	53	1998
Conde, George H., assignor of one-half to W. McGeoch, Albany, N. Y. Metallic bat-stretcher.....	424,094	Mar. 25	2613	696	50	1655
Conder, William W., Hebo, Oreg. Milk-cooler.....	430,336	June 17	1931	472	51	1864
Conderman, George W., Philadelphia, Pa. Insulator for heating pipes.....	441,644	Dec. 2	24	7	53	1267
Condit, Nathan W., Jr., Jersey City, N. J. Refrigerating apparatus.....	421,673	Feb. 18	1834	479	50	929
Condit, Frederic. (See Squire, Charles R., assignor.)						
Condon, Samuel E., Brooklyn, N. Y. Support for picture or other frames.....	430,377	June 17	1986	490	51	1875
Condon, Terrence J. (See Keeling, Squire, assignor.)						
Condron, Henry, assignor of one-half to W. H. Barry, Chicago, Ill. Plane-bit.....	426,636	Apr. 29	3357	880	51	689
Condron, Joseph B. (See Rooney, Gaspar S., assignor.)						
Cone, Hiram, Oneida, N. Y. Wood-working clamp.....	424,960	Apr. 8	817	219	51	166
Cone, Orrin A. (See Chaffin and Cone.)						
Conegan, Malachi E., Rochester, N. Y. Wall ornament.....	440,764	Nov. 18	1807	467	53	973
Conekin, Dawson, Wilmington, N. C., assignor of one-half to E. A. Jablonsky, New York, N. Y. Steam-boiler.....	435,798	Sept. 2	648	171	52	1499
Conestoga Cigar Machine Company. (See Abraham and Martin, assignors.)						
Conestoga Cigar Machine Company. (See Martin, Edwin K., assignor.)						
Congdon Brake Shoe Company. (See Sargent, William D., assignor.)						
Congdon, Charles H., St. Paul, Minn. Chromatic pitch-pipe.....	439,115	Oct. 28	2231	599	53	445
Congdon, Joseph T., assignor of one-half to F. S. Weeks, Woonsocket, R. I. Curtain-ring.....	435,919	Sept. 9	846	223	52	1545
Conger, Omer T., Indianapolis, Ind. Water-heater.....	436,575	Sept. 16	1874	{ 492 493 }	{ 52 }	1745
Conger, William R., St. Albans, Vt. Car-door guard.....	438,432	Oct. 14	1156	313	53	227
Conkle, Charles A., and J. A. McCulloch, Philadelphia, Pa. Type-writing machine.....	434,919	Aug. 26	2318	612	52	1234
Conkle, Charles A., and J. A. McCulloch, Philadelphia, Pa. Type-writing machine.....	436,338	Sept. 16	1484	387	52	1673
Conklin Automatic Cultivator Company. (See Conklin, Edward R., assignor.)						
Conklin, Charles A., Adrian, Mich. Coffin-fastener.....	443,822	Dec. 30	3585	922	53	1993
Conklin, Edward R., Wauseon, Ohio, assignor to Conklin Automatic Cultivator Company. Cultivator.....	443,703	Dec. 30	3389	870	53	1954
Conklin, John R., Wright, Iowa. Corn-harvesting machine.....	423,469	Mar. 18	1672	{ 441 442 }	{ 50 }	1470
Conklin, Lester, <i>et al.</i> (See Addy, Richard, assignor.)						
Conklin, Nathaniel A., Brooklyn, N. Y. Water-closet valve.....	429,422	June 3	485	115	51	1564
Conkling, Gurdon, Glens Falls, N. Y. Magnetic separator.....	420,334	Jan. 28	2558	678	50	531
Conkling, Gurdon, Glens Falls, N. Y. Magnetic separator.....	422,732	Mar. 4	536	136	50	1238
Conkling, Gurdon, Glens Falls, N. Y. Belt for ore-separators.....	423,906	Mar. 25	2334	615	50	1603
Conkling, Gurdon, Glens Falls, N. Y. Separating magnetic particles.....	423,907	Mar. 25	2335	615	50	1603
Conkling, Gurdon, Glens Falls, N. Y. Magnetically concentrating ore.....	441,060	Nov. 18	2292	{ 594 595 }	{ 53 }	1066
Conley, Michael, Chicago, Ill., assignor of two-thirds to J. C. and F. B. Ricketson, Milwaukee, Wis. Electric signal for engines.....	442,104	Dec. 9	755	203	53	1418
Conley, Miles D., O'Daniel, Tex. Wagon-spring.....	422,050	Feb. 25	2359	623	50	1036
Conly, Mahlon S., Hyde Park, Ill. Track-instrument for railway-signals.....	428,041	May 13	1538	390	51	1122
Conly, Mahlon S., Hyde Park, Ill. Block signaling system for railways.....	431,017	June 24	3000	737	51	2077
Conly, Mahlon S., Chicago, Ill., assignor to United States Electric Railway Signal Company, New York, N. Y. Block-signal system.....	435,482	Sept. 2	151	43, 44	52	1404
Conly, Mahlon S., Hyde Park, assignor of two-thirds to W. B. Sterrett, Chicago, and J. F. Weare, Hyde Park, Ill. Producing alternating electric currents.....	428,042	May 13	1541	390	51	1122
Conn, Charles G., Elkhart, Ind. Musical wind-instrument.....	436,696	Sept. 16	2061	540	52	1781
Conn, Charles G., and W. F. Seidel, Elkhart, Ind.; said Seidel assignor to said Conn. Cornet.....	442,955	Dec. 16	2134	549	53	1696

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Connell, Christopher C., and J. B. Johnson, Mount Vernon, Ark. Revolving cotton-box ..	421,554	Feb. 18	1664	431	50	895
Connell, David W., Flint, Mich. Device for laying siding ..	429,604	June 10	764	184	51	1629
Connell, John P., Kensington Conn. Gong door-bell ..	423,414	Mar. 18	1592	418	50	1455
Connell, William H., Wilmington, Del. Rail-joint ..	439,116	Oct. 28	2232	600	53	445
Connell, William H., Wilmington, Del. Rail-joint ..	439,117	Oct. 28	2233	600	53	445
Connell, William H., Wilmington, Del. Rail-joint ..	439,118	Oct. 28	2234	600	53	445
Connell, William H., Wilmington, Del. Rail-joint ..	439,119	Oct. 28	2235	601	53	446
Connolly, Daniel. (See Schafer, Christian E., assignor.)						
Connolly, James T., Milton, Pa. Device for tapping stay-bolt holes ..	443,234	Dec. 23	2639	677	53	1802
Connolly, Jeremiah J., Elmira, N. Y. Drapery-holder ..	443,133	Dec. 23	2440	624	53	1763
Connolly, John S., Plainfield, N. J. Car-motor ..	426,985	Apr. 29	3858	1009	51	786
Connolly, Patrick, Rochester, N. Y. Chill for car-wheels ..	427,052	May 6	26	9	51	816
Conner, Alfred, Exeter, N. H. Vehicle-spring ..	441,400	Nov. 25	2877	743	53	1183
Conner, Florence F., Cincinnati, Ohio. Trace-support ..	422,382	Mar. 4	31	10	50	1143
Conner, Lewis D., Oberlin, Ohio. Blasting rock ..	423,908	Mar. 25	2336	615	50	1604
Conner, Richeard, and R. Wallbillich, New Orleans, La. Shutter-fastener ..	435,799	Sept. 2	650	171	52	1500
Conner, William A., Pittsburg, Pa. Cable-hanger ..	420,638	Feb. 4	302	80	50	622
Conner, William M., assignor of one-half to J. W. Smith, Indianapolis, Ind. Mail-ponch ..	438,680	Oct. 21	1520	410	53	304
Connett, Matthew F., Kansas City, Mo. Display device ..	422,570	Mar. 4	295	75, 76	50	1192
Connett, Matthew F., Springfield, Ill. Machine for making wire-and-picket fence ..	424,276	Mar. 25	2851	{ 763 764 }	50	1702
Connett, Matthew F., assignor to W. F. Langly, Kansas City, Mo. Hand fence-machine ..	434,378	Aug. 12	1413	371	52	1044
Connolly, John. (See Royce and Connolly.)						
Connolly, William, Boston, Mass. Filter ..	426,489	Apr. 29	3139	824	51	647
Connolly, William A., assignor of three-fifths to B., V., and J. Altman, New York, N. Y. Machine for picking fur-skins ..	419,830	Jan. 21	1761	{ 465 466 467 }	50	369
Connor, Bernard M., Waukon, Iowa. Draft-equalizer ..	421,909	Feb. 25	2169	569	50	1001
Connor, Miles, Pueblo, Col. Hose-coupling ..	435,800	Sept. 2	651	172	52	1500
Connor, Patrick S., Lake, Ill. Tanner's tool ..	427,555	May 13	801	201	51	980
Connor, William R., New York, N. Y. Adjustable frame for vehicles ..	425,985	Apr. 22	2383	630	51	487
Conover, Alfred, Absecon, N. J. Ship's hank ..	437,573	Sept. 30	3519	918	52	2079
Conrad, Charles E., Hastings, Nebr. Spring-motor ..	432,071	Feb. 25	2386	631	50	1041
Conrad, John, assignor of one-third to S. E. Nixon, Burlington, Iowa. Smoke-consumer ..	422,018	July 15	1540	392	52	316
Conrad, Thomas C., Philadelphia, Pa. Toy engine ..	433,275	July 29	3489	900	52	706
Conrad, William C. (See Thiele, Felix, assignor.)						
Conrader, Rudolph, Erie, Pa. Pitman oil-cup ..	429,086	May 27	3130	807	51	1458
Conradson, Conrad M. (See Nordberg and Conradson.)						
Conradson, Conrad M., Milwaukee, assignor to Gisholt Machine Company, Madison, Wis. Pulley ..	429,507	June 3	616	151	51	1589
Couried, Heinrich. (See Wiesner, Josef, assignor.)						
Conroy, James C., Pittsburg, Pa., assignor of one-half to Union Water Meter Company, Worcester, Mass. Cut-off and relief apparatus for gas-mains ..	424,761	Apr. 1	508	137	51	99
Conroy, James C., Pittsburg, Pa., assignor of one-half to Union Water Meter Company, Worcester, Mass. System for distributing gas ..	426,172	Apr. 22	2657	698	51	541
Conroy, Leighlin, New York, N. Y. Breech-loading gun ..	437,574	Sept. 30	3521	{ 918 919 }	52	2079
Conroy, Thomas, and L. P. Fuhrman, assignors of one-third to A. W. Dold, Kansas City, Mo. Shut-off device for engines ..	442,956	Dec. 16	2135	549	53	1696
Consene, George. (See Sharp and Consene.)						
Consolidated Car Heating Company. (See Barnes, David L., assignor.)						
Consolidated Car Heating Company. (See Belisle, Victor, assignor.)						
Consolidated Car Heating Company. (See Foley, Frank P., assignor.)						
Consolidated Car Heating Company. (See Leland, Edwin A., assignor.)						
Consolidated Car Heating Company. (See McElroy, James F., assignor.)						
Consolidated Car Heating Company. (See Sewall, James H., assignor.)						
Consolidated Car Heating Company of West Virginia. (See Sewall, James H., assignor.)						
Consolidated Fastener Company. (See Kraetzer, Edwin J., assignor.)						
Consolidated Fruit Jar Company. (See Whitaker, Richard, assignor.)						
Consolidated Telephone Construction and Maintenance Company. (See Graham, Alfred, assignor.)						
Consolidated Temperature Controlling Company. (See Butz, Albert M., assignor.)						
Constantine, Thomas S. (See Groth, William, assignor.)						
Contant, Arthur S., et al. (See Muterspaugh, Andrew R., assignor.)						
Continental Oxygen Company. (See Brin, Arthur, assignor.)						
Continental Oxygen Company. (See Chapman, Leonard, assignor.)						
Continuous Rail Joint Company of America. (See Fearey, Frederick T., assignor.)						
Continuous Rail Joint Company of America. (See Speicher, John, assignor.)						
Contrell, John, Jr., Newark, N. J. Toy ..	426,113	Apr. 22	2571	676	51	524
Converse, Edmund. (See Turner, William A., assignor.)						
Converse, Edmund, Worcester, Mass. Pinless clothes-line ..	440,915	Nov. 18	2063	533	53	1021
Converse, Edmund C. (See Lynch, Harry B., assignor.)						
Converse, Frank B., New York, N. Y. Corset clasp ..	418,688	Jan. 7	29	8	50	8
Converse, Frank B., New York, N. Y. Corset-clasp ..	436,473	Sept. 16	1715	453	52	1717
Converse, Lyman P., assignor of one-half to P. Fish, Chicago, Ill. Stove ..	419,417	Jan. 14	1162	309	50	245
Converse, Lyman P., assignor of one-half to P. Fish, Chicago, Ill. Argand burner ..	419,418	Jan. 14	1163	309	50	245
Converse, Maschil D., New York, N. Y. Nail-extractor ..	432,019	July 15	1542	392	52	316
Conway, Isaac H., St. Paul, Minn. Bow-facing rowing-gear ..	429,678	June 10	868	{ 210 211 }	51	1649
Conway, James M., Spring Garden, Va. Barrel-hoop ..	441,645	Dec. 2	25	7	53	1267
Conway, Patrick, New York, N. Y. Valve ..	425,756	Apr. 15	2018	537	51	410
Conway, Richard, Argenville, assignor of one-half to R. H. Norton, Troy, Mo. Nut-lock ..	423,028	Mar. 11	1009	265	50	1336
Conway, Thomas K., Waterbury, Conn. Necktie-fastener ..	425,865	Apr. 15	2180	580	51	440
Conway, William O., assignor of one-half to L. K. Powell, Mount Gilead, Ohio. Hoisting apparatus ..	434,701	Aug. 19	1959	509	52	1157
Conyers, Charles A. (See Bottorff and Conyers.)						
Conyngnam, Philip, assignor of one-half to W. R. Gibbons, Wilkes-Barré, Pa. Band-pulley ..	423,132	Mar. 11	1177	306	50	1367
Coogan, T. C., et al. (See Ludwig, John C., assignor.)						
Cook, Adam. (See Payson, Aurin M., assignor.)						
Cook, Alfred F., St. Louis, Mo. Deep-well pump ..	421,247	Feb. 11	1216	315	50	803
Cook, Alonzo, St. Paul, Minn. Bilge-water pump ..	419,929	Jan. 21	1920	506	50	403
Cook, Americus V., Dexter, Mo. Sash-fastener ..	440,138	Nov. 11	773	203	53	769
Cook, Ben C., Sterling, assignor to Eureka Company, Rock Falls, Ill. Vehicle-spring ..	425,755	Apr. 15	2017	537	51	410

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Cook, Burton H., Brooklyn, N. Y. Rotary sifter	419,751	Jan. 21	1642	436	50	346
Cook, Charles A., assignor to Burns, Silver & Co., Bridgeport, Conn. Latch	435,683	Sept. 2	479	126	52	1467
Cook, Charles B., Erie, Kans. Harrow	433,518	Aug. 5	111	32	52	778
Cook, Charles I., and H. M. Britton, Odebolt, Iowa. Portable corn-crib	426,714	Apr. 29	3486	912	51	713
Cook, Daniel B., Norwich, N. Y. Balancing device for wheels	430,270	June 17	1824	447	51	1842
Cook, David, Belpre, Ohio. Sad-iron	442,513	Dec. 9	1380	353	53	1539
Cook, David N., Salem, Mass. Railway-chair	436,774	Sept. 23	2199	580	52	1816
Cook, David S., Columbus, Ohio. Car-door	423,739	Mar. 18	2079	548	50	1545
Cook, Edward M., New York, N. Y. Treating residues of distillation	439,639	Nov. 4	29	53	612	
Cook, Emory B., Marlborough, Mass. Tool-handle	428,893	May 27	2833	720	51	1401
Cook, Emory B., Marlborough, Mass. Making tool-handles	428,894	May 27	2834	720	51	1401
Cook, Eugene, Kalamazoo, Mich. Vehicle-spring	420,990	Feb. 11	851	219	50	734
Cook, Everett, Livermore Falls, Me. Pipe-wrench	420,039	Jan. 28	2093	552	50	444
Cook, Frank, Jr. (See Hankenhof, Julius, assignor.)						
Cook, Frank B. (See Beach and Cook.)						
Cook, Frank S., Springfield, Ohio, assignor to W. W. Leggett and T. H. Simpson, Detroit, Mich. Nut-tapping machine	438,605	Oct. 21	1412	{ 382 } 383	{ 53 } 284	
Cook, Frederick W., San Francisco, Cal. Sawdust-burner	421,555	Feb. 18	1665	431	50	895
Cook, George W., Macon, Ill. Attachment for printing-presses	431,224	July 1	295	73	52	60
Cook, George W., Chicago, Ill., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Sash-fastener	421,350	Feb. 11	1362	353	50	830
Cook, George W., assignor to Chicago Hardware Manufacturing Company, Chicago, Ill. Sash-fastener	426,986	Apr. 29	3859	1009	51	787
Cook, George W., assignor to L. M. Smith, Chicago, Ill. Safety oil-can	432,229	July 15	1864	479	52	377
Cook, Gustave, assignor to A. Rosenfield, New Orleans, La. Suspender-buckle	441,285	Nov. 25	2699	700	53	1149
Cook, Harlow W., Ottawa, Kans. Washing-machine	420,589	Feb. 4	230	59, 60	50	609
Cook, Henry, Philadelphia, Pa. Amalgamator	431,441	July 1	631	158	52	127
Cook, Henry F., St. Louis, Mo. Strainer for wells	426,921	Apr. 29	3772	985	51	770
Cook, Henry F., St. Louis, Mo. Mechanical movement	431,442	July 1	633	{ 158 } 159	{ 52 } 128	
Cook, Henry O., deceased, Wyoming, N. J.; J. M. Hicks administrator. Combination railway tie and sleeper	437,812	Oct. 7	215	65	53	43
Cook, Hiram T., and F. Shepard, Alba, Mich. Can-opener	432,603	July 22	2421	624	52	492
Cook, Hugo, Indianapolis, Ind. Adding-machine	430,001	June 10	1354	335	51	1743
Cook, Israel. (See Willett, Robert A., assignor.)						
Cook, James L., Chicago, Ill. Steam-separator	422,733	Mar. 4	536	137	50	1239
Cook, John, San Francisco, Cal. Sail	425,122	Apr. 8	1055	280	51	213
Cook, John H., Washington, D. C. Blower-support	435,402	Sept. 2	41	14	52	1383
Cook, John J., East Springfield, N. Y. Plow	425,211	Apr. 8	1203	318	51	244
Cook, Louis P., Clarendon, N. Y. Rein-holder	422,294	Feb. 25	2742	723	50	1106
Cook, Mansfield J., Syracuse, assignor of one-fourth to S. H. Cook, Jr., Camillus, N. Y. Carpet-stretcher	435,920	Sept. 9	847	223	52	1545
Cook, Osceola R., and L. Hinds; said Cook assignor to S. Eastman, Providence, R. I. Hair-clipping machine	431,965	July 8	1456	369	52	293
Cook, Sheldon E., Holdrege, Nebr. Reservoir-syringe	430,514	June 17	2187	538	51	1914
Cook, Sidney H., Jr. (See Cook, Mansfield J., assignor.)						
Cook, Stephen M., East Attleborough, Mass. Carriage fifth-wheel	420,423	Jan. 28	2681	710	50	554
Cook, Stephen M., Mansfield, and J. E. Sherman, Attleborough, Mass. Shaper attachment for lathes	441,939	Dec. 2	480	128	53	1358
Cook, Theodore A., Brooklyn, N. Y. Machine for hooping and heading kegs	428,831	May 27	2742	{ 696 } 697	{ 51 } 1381	
Cook, Thomas J., Fremont, Ohio. Broom-holder	420,040	Jan. 28	2094	553	50	444
Cook, William, Salt Lake City, Utah Ter. Flue for steam-boilers	426,922	Apr. 29	3772	985	51	770
Cook, William, and J. R. Gent, Columbus, Ind. Bolting-reel	430,836	June 24	2725	668	51	2025
Cook, Winfield S. (See Westbrook and Cook.)						
Cooke, C. L., et al. (See House, John, assignor.)						
Cooke, Edward T., and W. H. Mackay, St. Louis, Mo. Electric-lighting system	432,745	July 22	2662	681	52	538
Cooke, Ernest W., Chicago, Ill., assignor to American Roller Bearing Company, of Illinois. Car-wheel	425,932	Apr. 15	2284	{ 604 } 605	{ 51 } 458	
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Car-axle box	442,351	Dec. 9	1129	294	53	1488
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Roller journal-box	442,352	Dec. 9	1130	294	53	1488
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Wagon axle and hub	442,353	Dec. 9	1131	295	53	1489
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Car-axle box and journal-bearing	442,354	Dec. 9	1132	295	53	1489
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Hanger for shafting	442,355	Dec. 9	1134	295	53	1489
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Roller-bearing	442,356	Dec. 9	1135	296	53	1490
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Journal-box	442,357	Dec. 9	1137	296	53	1490
Cooke, Ernest W., assignor to American Roller Bearing Company, Chicago, Ill. Roller-bearing	442,358	Dec. 9	1138	296	53	1490
Cooke, Ezekiel T., and N. Kidney, Mansfield, Ohio. Door-check	442,359	Dec. 9	1139	297	53	1490
Cooke, George K., Jamaica, N. Y. Gas-burner	435,732	Sept. 2	545	144	52	1480
Cooke, George K., Jamaica, N. Y. Dial for time-pieces	419,183	Jan. 14	807	213	50	174
Cooke, George K., Jamaica, N. Y. Dial for time-pieces	436,051	Sept. 9	1042	271	52	1582
Cooke, Henry J. W. S., East Orange, N. J. Cooling and refrigerating apparatus	423,133	Mar. 11	1178	{ 307 } 308	{ 50 } 1367	
Cooke, Horace G., assignor to himself and J. W. Cooke, Paterson, N. J. Screw-cutting machine	432,262	July 15	1915	490	52	386
Cooke, James W. (See Cooke, Horace G., assignor.)						
Cooke, Osborn R., Salem, Ohio. Mortise-lock	427,157	May 6	211	54	51	853
Cooke, Osborn R., Salem, Ohio. Lock	428,553	May 20	2301	584	51	1279
Cooke, Richard K., Jr., New York, N. Y. Pipe-hanger	437,482	Sept. 30	3382	886	52	2052
Coolahan, William J., and W. G. Fleeman, Dunning, Ill. Step-ladder	428,460	May 20	2176	548	51	1255
Coolbaugh, Frank W., East Orange, and I. G. Hooper, Newark, N. J., assignors to G. J. Magee and A. Lathrop, Corning, N. Y. Railway time-signal	440,890	Nov. 18	2015	{ 518 } 519 520	{ 53 } 1012	
Cooley, Charles H., assignor to Pratt & Whitney Company, Hartford, Conn. Automatic regulator for grain-scales	421,556	Feb. 18	1666	432	50	895

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Cooley, Charles H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	442,722	Dec. 16	1734	{ 448 449 450 451 }	53	1618
Cooley, Charles H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	442,723	Dec. 16	1739	{ 450 451 }	53	1618
Cooley, Charles H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	443,569	Dec. 30	3168	814	53	1913
Cooley, Charles H., and F. H. Richards, assignors to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	434,702	Aug. 19	1960	509	52	1157
Cooley, Charles H., and F. H. Richards, assignors to Pratt & Whitney Company, Hartford, Conn. Scale-beam for grain-weighers.	440,740	Nov. 18	1760	453	53	966
Cooley, Charles H., and F. H. Richards, assignors to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	442,724	Dec. 16	1745	{ 451 452 453 }	53	1619
Cooley, Charles H., and F. H. Richards, assignors to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	442,859	Dec. 16	1971	506	53	1665
Cooley, Charles H., and F. H. Richards, assignors to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	442,860	Dec. 16	1974	507	53	1665
Cooley, Charles H., and F. H. Richards, assignors to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	442,861	Dec. 16	1975	507	53	1665
Cooley, Charles H., and F. H. Richards, assignors to Pratt & Whitney Company, Hartford, Conn. Grain-weigher.	443,933	Dec. 30	3736	956	53	2022
Cooley, Franklin S., assignor of one-half to W. H. Hoskins, Philadelphia, Pa. Paper-file.	434,379	Aug. 12	1415	372	52	1044
Cooley, Fred W., assignor of two-thirds to J. C. Haynes, Minneapolis, Minn. Cover for inkstands.	438,573	Oct. 14	1358	368	53	268
Cooley, George T. (See Stults, Richard, assignor.)						
Cooley, Henry W., Boston, Mass. Regulator for dynamos.	423,909	Mar. 25	2337	616	50	1604
Cooley, Sherman P., New Britain, Conn. Attaching knobs to their shanks.	439,120	Oct. 28	2236	601	53	446
Coombs, Abraham L., Lynn, Mass., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Two-needle sewing-machine and guide therefor.	419,584	Jan. 14	1384	371	50	291
Coombs, Abram L., Saugus, assignor to G. S. Covell, Lynn, Mass. Shoe-pattern.	423,987	Mar. 25	2458	653	50	1625
Coombs, Thomas P., Woburn, Mass. Leather-dressing machine.	437,483	Sept. 30	3383	886	52	2052
Coomes, Martin F., Louisville, Ky. Step-ladder.	442,360	Dec. 9	1140	297	53	1491
Coomes, Martin F., and A. W. Hyde, Louisville, Ky. Carburizing malleable cast-iron or low-carbon steel.	422,118	Feb. 25	2467	.....	50	1055
Coomes, Martin F., and A. W. Hyde, Louisville, Ky. Carburizing malleable cast-iron or low-carbon steel.	422,119	Feb. 25	2467	.....	50	1055
Coomes, Martin F., and A. W. Hyde, Louisville, Ky. Carburizing malleable cast-iron or low-carbon steel.	422,120	Feb. 25	2468	.....	50	1055
Coomes, Martin F., and A. W. Hyde, Louisville, Ky. Carburizing malleable cast-iron or low-carbon steel.	422,121	Feb. 25	2469	.....	50	1056
Coomes, Martin F., and A. W. Hyde, Louisville, Ky. Manufacturing and tempering steel.	440,139	Nov. 11	774	.....	53	769
Coon, James V. D., C. C. Morian, and M. C. Follett, Olean, N. Y. Apparatus for supplying hot and cold drinks.	441,628	Nov. 25	3235	834	53	1253
Coons, Charles and S. K., Binghamton, N. Y. Dish-drainer.	423,740	Mar. 18	2081	548	50	1546
Coons, Samuel K. (See Coons, Charles and S. K.)						
Coop, Walter, Melbourne, Victoria. Apparatus for manufacturing lead shot or balls.	426,923	Apr. 29	3773	985	51	771
Coop, William L., Providence, R. I. Gymnasium walking-track.	437,887	Oct. 7	323	95	53	63
Cooper, Albert. (See Metzger and Cooper.)						
Cooper, Alfred, Baltimore, Md. Propeller for steam-vessels.	421,818	Feb. 18	2020	535	50	964
Cooper, Alfred J., and E. E. Wiggell, London, England. Electric deep-sea sounder.	418,889	Jan. 7	370	90	50	77
Cooper, Charles. (See Cooper, George, assignor.)						
Cooper, Charles. (See Hurley, Daniel, assignor.)						
Cooper, Charles, Newark, N. J. Ice-creeper.	425,093	Apr. 8	1013	271	51	204
Cooper, Charles B., New York, N. Y. Shingle.	422,571	Mar. 4	298	76	50	1193
Cooper, Charles B., New York, N. Y. Metallic roofing.	429,015	May 27	3013	773	51	1436
Cooper, E. T., et al. (See Kurtz, John A., assignor.)						
Cooper, Edward B., Philadelphia, Pa. Pyrometer.	430,271	June 17	1825	447	51	1842
Cooper, Flavel F., Nashville, Tenn. Game-counter.	434,425	Aug. 19	1507	394	52	1069
Cooper, George, assignor of one-half to C. Cooper, Bennington, Vt. Trimming attachment for looped fabric sewing-machines.	426,244	Apr. 22	2763	724	51	563
Cooper, George, assignor of one-half to C. Cooper, Bennington, Vt. Machine for sewing looped fabrics.	433,766	Aug. 5	487	127	52	850
Cooper, Glen W. (See McClary, Thomas D., assignor.)						
Cooper, Henry. (See O'Brien and Cooper.)						
Cooper, Howard W., assignor to American Steel Gear Company, Toledo, Ohio. Vehicle running-gear.	435,208	Aug. 26	2736	722	52	1314
Cooper, Hugh M., Humphreys, Mo. Churn.	430,174	June 17	1628	407	51	1806
Cooper, James J., Philadelphia, Pa. Carburetor.	427,225	May 6	305	78	51	872
Cooper, John. (See Livingstone, William, assignor.)						
Cooper, Joseph C., Brooklyn, N. Y. Composition for treating fuel.	424,961	Apr. 8	818	.....	51	167
Cooper, Leslie A., assignor of one-half to Fiske, Coleman & Co., Boston, Mass. Regenerative gas-lamp.	442,613	Dec. 16	1546	399	53	1581
Cooper, Miles, Chicago, Ill. Pipe-tongs.	430,768	June 24	2618	641	51	2005
Cooper, Robert S., Humphreys, Mo. Vise.	440,543	Nov. 11	1438	371	53	894
Cooper, Samuel, Manchester, N. H., assignor of one-fourth to A. J. Carswell, Newton, Mass. Machine for labeling bottles, &c.	439,270	Oct. 28	2485	{ 666 667 }	53	491
Cooper, Sherman, et al. (See Fink, William M., assignor.)						
Cooper, Watkins H., Opelika, Ala. Seed-planter and fertilizer-distributor.	439,811	Nov. 4	268	68	53	660
Cooper, William A., West Grove, Pa. Car-coupling.	430,226	Jan. 28	2398	638	50	502
Cooper, William B., Philadelphia, Pa. Pyromagnetic generator and motor.	422,295	Feb. 25	2743	{ 723 724 }	50	1107
Cooper, William F., Dubuque, Iowa. Wood-working machine.	427,158	May 6	213	54	51	853
Cooper, William M., Allegheny, Pa. Apparatus for casting steel.	423,375	Mar. 11	1533	403	50	1435
Cope, George, West Chester, Pa. Canvas-stretching device.	424,095	Mar. 25	2614	696	50	1655
Cope, George, West Chester, Pa. Canvas-stretching device.	424,096	Mar. 25	2615	697	50	1656
Cope, George W. (See Curtis, Lewis E., assignor.)						
Cope, John O. (See Hughes and Cope.)						
Cope, Thomas J., Philadelphia, Pa. Laying electric conductors.	423,134	Mar. 11	1181	308	50	1367
Cope, Thomas J., Philadelphia, Pa. Apparatus for laying electric conductors.	443,823	Dec. 30	3587	922	53	1993
Cope, Thomas J., Philadelphia, Pa. Apparatus for laying conductors in conduits.	443,824	Dec. 30	3588	922	53	1993
Copeland, Brommie, Salem, N. Y. Machine for testing watches.	443,695	Dec. 30	3378	{ 867 868 }	53	1952

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Copeland, Charles C., <i>et al.</i> (See Quinn, James W., assignor.)						
Copeland, George W., Malden, and J. E. Crisp, Somerville, Mass. Lasting-machine	422,734	Mar. 4	537	{ 137 138 139 410 411 412 }	50	1239
Copeland, George W., Malden, and J. E. Crisp, Somerville, Mass., assignors to Copeland Manufacturing Company, Portland, Me. Boot-treating machine	438,681	Oct. 21	1521	{ 410 411 412 }	53	304
Copeland, George W., Malden, J. E. Crisp, Somerville, and E. F. Grandy, Boston, Mass. Lasting-machine head	439,051	Oct. 21	2122	570	53	417
Copeland Improved Lasting and Tacking Company. (See Grandy, Edward F., assignor.)						
Copeland, Lewis A., Providence, R. I. Street-railway switch	440,305	Nov. 11	1049	270	53	821
Copeland, Lucius D., Camden, N. J. Steam-engine	420,930	Feb. 11	759	196	50	716
Copeland, Lucius D., Camden, N. J., assignor to Northrop Manufacturing Company. Steam-generator	425,986	Apr. 22	2384	{ 631 632 633 }	51	487
Copeland Manufacturing Company. (See Copeland and Crisp, assignors.)						
Copeland, William M., <i>et al.</i> (See Quinn, James W., assignor.)						
Copeland, William M., Stewart's Run, Pa. Water-regulator for boilers	436,215	Sept. 9	1299	339	52	1628
Copeland, William M., Stewart's Run, Pa. Device for operating oil-wells	436,216	Sept. 9	1300	339	52	1628
Copenhaver, Jacob, Glen Hope, Pa. Fence-post	428,390	May 20	1937	487	51	1208
Coplen, John D., Denver, Colo. Ore distributor and sampler	442,017	Dec. 2	607	163	53	1381
Copleston, Henry, Kansas City, Mo. Display-jar	422,184	Feb. 25	2559	677	50	1073
Copleston, Lancelot, Nyack, N. Y. Damper-regulator	423,673	Mar. 18	1985	523	50	1529
Copp, Julius. (See Rogers, William S., assignor.)						
Copp, Monroe M., Elm Hall, Mich., assignor to J. P. Sharp, Chicago, Ill. Veterinary operating-table	439,052	Oct. 21	2123	{ 570 571 }	53	418
Coppuck, Malcolm M., assignor to C. S. Dotre and C. A. Blackburn, Philadelphia, Pa. File-hinder	434,625	Aug. 19	1812	474	52	1132
Coran, John C., Lowell, Mass. Machine for finishing tubes	426,526	Apr. 29	3188	837	51	656
Coram, Stephen, and J. Kuolt, Utica, N. Y.; said Coram assignor to said Kuolt. Velocipede	443,499	Dec. 30	3065	789	53	1893
Corban, John, and J. F. Green, Piedmont, Ohio. Car-coupling	435,287	Aug. 26	2847	753	52	1336
Corbet, Henry. (See Wheeler, Franklin C., assignor.)						
Corbett, Henry. (See Wheeler, Franklin C., assignor.)						
Corbett, George, Bradford, Pa. Rig for drilling wells	428,461	May 20	2177	{ 548 549 }	51	1255
Corbett, George, Bradford, Pa. Tower	428,462	May 20	2179	549	51	1255
Corbett, Joseph, assignor of one-half to T. F. Shaw and H. M. Woolf, New York, N. Y. Lock	424,859	Apr. 1	657	{ 173 174 }	51	127
Corbin, Charles B., assignor of one-half to F. Van Haften, Grand Rapids, Mich. Combined fishing rod and reel	436,302	Sept. 9	1424	371	52	1654
Corbin, P. & F. (See Case, Cromwell O., assignor.)						
Corbin, P. & F. (See Glover, Charles, assignor.)						
Corcoran, Daniel J., Dedham, Mass. Envelope and finger moistener	419,419	Jan. 14	1164	309	50	246
Corcoran, Luke H., <i>et al.</i> (See Reason, Walter M., assignor.)						
Corcoran, Martin, <i>et al.</i> (See Ludwig, John C., assignor.)						
Corcoran, Patrick W., Seneca, Ill. Hame-staple	442,105	Dec. 9	756	203	53	1418
Cordé, Frank. (See Thompson, Joseph, assignor.)						
Cording, Albert. (See Steurwald and Cording.)						
Cordley, William J., assignor of one-half to W. D. Moses, Richmond, Va. Electrical conductor for the transmission of power	427,746	May 13	1095	275	51	1037
Cordova, Gabriel J. de, and P. A. Isaacs, Kingston, Jamaica, West Indies. Vehicle-wheel	431,334	July 1	451	112	52	92
Cordrey, Henry L., Mount Union, Iowa. Thill-coupling	425,403	Sept. 2	42	14	52	1383
Corey, Arthur O., Council Grove, Kans. Toothpick	420,531	Feb. 4	148	36	50	593
Corey, Arthur O., Council Grove, Kans. Combined dental mallet and pliers	433,592	Aug. 5	227	60	52	800
Corey, Daniel W., Galena, Ill. Road-cart	429,016	May 27	3014	{ 773 774 }	51	1436
Corey, John A., Rockville, R. I. Saw-handle	442,361	Dec. 9	1142	297	53	1491
Corey, William. (See Jenkins, John J., assignor.)						
Corkhill, Henry R., Sr., Rochester, N. Y. Pamphlet-covering machine	438,265	Oct. 14	908	{ 247 248 }	53	179
Corl, Cyrus, and A. P. Porr, Alta, Iowa. Belt-tightener	442,514	Dec. 9	1381	353	53	1539
Corley, Daniel B., Abilene, Tex. Roof-screw	436,775	Sept. 23	2200	580	52	1816
Corliss, Frank F. (See Swift, Horace E., assignor.)						
Corliss, George F., Mansfield, Ohio. Trolley-equalizer	426,436	Apr. 29	3059	801	51	632
Cormaek, Mark N., New York, N. Y., and S. Whitlock, Shelton, Conn. Ink-fount for printing-presses	436,847	Sept. 23	2338	616	52	1843
Corman, Charles A., Cochituate, Mass. Punching and eyeletting machine	443,570	Dec. 30	3171	{ 814 815 }	53	1913
Corn, John F. (See Lemmon, John A., assignor.)						
Cornelius, Charles, <i>et al.</i> (See Duryee, Schnyler, assignor.)						
Cornelius, Charles, Neillsville, Wis., assignor to G. F. McCulloch. Wash-board	440,101	Nov. 4	710	188	53	747
Cornelius, Charles, and H. Schildhauer, Neillsville, Wis. Press for making glass wash-boards	424,049	Mar. 25	2552	{ 680 681 }	50	1643
Cornell, Elijah B., assignor to Natural Gas Fuel Company, Philadelphia, Pa. Heating in furnaces	434,380	Aug. 12	1415	372	52	1044
Cornell, George B., New York, N. Y. Vending-machine	441,536	Nov. 25	3086	793	53	1223
Cornell, George H. (See Munger and Cornell.)						
Cornell, Stephen E., Brooklyn, N. Y. Box or canister	428,272	May 20	1886	475	51	1199
Cornell, William N., Pulaski, N. Y. Preparing wood pulp	433,326	July 29	3561	919	52	720
Cornell, William N., Brownville, N. Y. Machine for making imitation burls	435,684	Sept. 2	480	127	52	1467
Cornell, William N., Brownville, N. Y. Scraper for cleaning the peripheries of rolls	438,143	Oct. 14	726	199	53	146
Cornely, Emile, Paris, France. Cutting and grinding device for sewing or embroidering machines	418,909	Jan. 7	406	100	50	85
Corner, Clay C. (See Hawkins, Samuel K., assignor.)						
Cornforth, Edwin. (See Bradford, Charles W., assignor.)						
Corning, David, and C. H. Sprague, Danbury, Conn. Power-lever	433,978	Aug. 12	805	210	52	922
Corning, Frederick G., New York, N. Y. Apparatus for transferring electric-car batteries	434,579	Aug. 19	1730	{ 453 454 455 }	52	1115
Corning, Frederick G., New York, N. Y. Apparatus for transferring electric-car batteries	434,580	Aug. 19	1732	{ 454 455 456 }	52	1116
Corning, Frederick G., New York, N. Y. Apparatus for transferring electric-car batteries	434,581	Aug. 19	1735	455	52	1116
Corning, Frederick G., New York, N. Y. Mechanism for transferring electric-car batteries	434,582	Aug. 19	1737	{ 455 456 }	52	1116

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Corning, Frederick G., New York, N. Y. Apparatus for transferring electric-car batteries.	434,863	Aug. 19	2178	{ 570 571 654 }	52	1202
Corning, Frederick G., New York, N. Y. Apparatus for transferring electric-car batteries.	439,237	Oct. 28	2435	{ 653 654 }	53	482
Cornish, Harry B., Jackson, Tenn. Coffee-pot.	424,671	Apr. 1	361	95	51	70
Cornish, Harry B., and S. M. Higginson, Rutherford, Tenn. Folding poultry-crate.	434,321	Aug. 12	1328	346	52	1026
Cornish, John A., Hope, Ark. Fire-place backing and grate.	437,575	Sept. 30	3523	919	52	2079
Cornish, O. S., et al. (See Curtis, David W., assignor.)						
Cornog, Isaac P., Philadelphia, Pa. Insulator for electric wires.	419,642	Jan. 21	1479	396	50	316
Cornwall, John, New York, N. Y. Book-cover.	431,876	July 8	1332	335	52	268
Cornwall, John B., assignor to Barnard & Leas Manufacturing Company, Moline, Ill. Wood-split pulley.	429,564	June 3	698	170	51	1606
Cornwall, John B., assignor of one-half to E. J. Reed, Moline, Ill. Shoe-holder.	434,583	Aug. 19	1739	456	52	1117
Cornwell, Clark, Ypsilanti, Mich. Apparatus for producing bisulphites.	432,604	July 22	2422	624	52	492
Cornwell, Clark, Ypsilanti, Mich. Key for attaching pulleys to shafts.	435,600	Sept. 2	335	93	52	1439
Cornyn, James M. (See Winternight, Henry A., assignor.)						
Corpman, Winfield S., Lebanon, Pa. Weather-strip.	424,540	Apr. 1	156	45	51	33
Corson, Cesar, Paris, France. Apparatus for dyeing.	430,925	June 24	2858	702	51	2051
Corson, Cesar, Paris, France. Apparatus for dyeing skins.	437,173	Sept. 30	2891	753	52	1955
Corrugated Wire Fastening Company (See Howard, Elijah L., assignor.)						
Corry, William, Cincinnati, Ohio, assignor to Hall's Safe and Lock Company of Ohio. Safe, vault, &c.	434,503	Aug. 19	1623	426 599	52	1093
Corsa, George, New York, N. Y. Type-making mechanism.	443,085	Dec. 23	2346	{ 600 601 601 }	53	1745
Corsa, George, New York, N. Y. Form-setting and type-casting machine.	443,086	Dec. 23	2356	{ 602 603 604 }	53	1747
Corscaden, Thomas. (See Hart and Corscaden.)						
Corser, Edson J. (See Martin and Corser.)						
Cort, Warren L., Brooklyn, N. Y. Gas-stove burner.	441,537	Nov. 25	3089	794	53	1224
Cortese, Michele, Philadelphia, Pa. Railway-signal.	435,801	Sept. 2	652	172	52	1500
Corthell, Frederick H. (See Hunter and Corthell.)						
Cortis, William P., et al. (See Young, Charles, assignor.)						
Corwin, Seth M., Greenport, N. Y. Machine for removing star-fish from oyster-beds.	436,935	Sept. 23	2517	659	52	1876
Corwine, Quinton, et al. (See Howard, Mendel, assignor.)						
Cory, Alfred R., New York, N. Y. Cash-carrier.	429,338	June 3	360	86	51	1539
Cory, David U., Englewood, N. J. Grate-bar.	433,519	Aug. 5	112	33	52	779
Cosby, Charles E., Minneapolis, Minn., assignor to Carter & Company, Limited, Niagara Falls, N. Y. Manifold memorandum-book.	442,362	Dec. 9	1142	298	53	1491
Cosby, James M., Elberton, Ga. Car-coupling.	419,752	Jan. 21	1645	437	50	346
Cosgrove, J. A. (See Cosgrove, John, assignor.)						
Cosgrove, John, Oxford, Ind., assignor of one-half to J. A. Cosgrove, Utica, Ill. Thill-coupling.	419,319	Jan. 14	1012	267	50	214
Cosh, William M., Baltimore, Md. Apparatus for the manufacture of gas.	427,747	May 13	1098	{ 275 276 }	51	1037
Cosner, Alfred C. (See Swank and Cosner.)						
Cosper, William H., Chicago, Ill. Machine for manufacturing weather-stripping.	432,726	July 22	2629	{ 672 673 }	52	532
Costello, Michael W., Boston, Mass. Reefing and furling sails.	436,169	Sept. 9	1228	320	52	1614
Costello, Thomas H. (See Andrews, Schustek, and Costello.)						
Costello, Thomas H., Chicago, Ill. Coin-controlled opera-glass.	440,248	Nov. 11	948	244	53	805
Costello, Thomas H., Chicago, Ill. Coin-controlled opera-glass.	440,249	Nov. 11	950	244	53	805
Costello, Thomas H., assignor to A. H. Andrews & Company, Chicago, Ill. Coin-controlled apparatus.	432,983	July 29	3048	783	52	617
Costello, Charles W., Waterborough, Me. Tip-up for fishing.	434,426	Aug. 19	1509	394	52	1069
Costigan, Joseph P., St. Paul, Minn., assignor of one-third to J. C. Henry. Pipe-joint.	426,924	Apr. 29	3775	985	51	771
Costigan, Joseph P., assignor of one-third to J. C. Henry, St. Paul, Minn. Pipe-joint.	437,915	Oct. 7	364	105	53	71
Coté, Alphonse, New York, N. Y. Detachable pipe-coupling.	422,296	Feb. 25	2749	724	50	1107
Coté, Frank X., Biddeford, Me. Bed-slat support.	432,767	Aug. 5	488	127	52	851
Coté, Louis, St. Hyacinthe, Canada. Heel-stiffener machine.	435,481	Sept. 2	148	42, 43	52	1404
Côté, Théophile, Levis, Quebec, Canada. Tobacco-cutter.	433,768	Aug. 5	488	127	52	851
Cott, Charles M., Meadville, Pa. Index.	426,114	Apr. 22	2573	677	51	524
Cotter, C. H., et al. (See Lottridge, William, assignor.)						
Cotter, William J., et al. (See Goss, Charles E., assignor.)						
Cottier, William T., Oakland, Cal. Ventilator.	432,817	July 22	2783	711	52	561
Cottle, Luther M., assignor to T. B. Jeffery and R. P. Gormully, Chicago, Ill. Tubular metal joint.	421,482	Feb. 18	1550	400	50	874
Cotton, Charles W., Indianapolis, Ind., assignor to American Wheel Company, Chicago, Ill. Preparing spokes.	441,286	Nov. 25	2699	700	53	1149
Cotton, Charles W., Indianapolis, Ind., W. C. Margedant, J. T. Gardner, and A. W. G. Margedant, Hamilton, Ohio, assignors to American Wheel Company, Chicago, Ill. Spoke-facing machine.	439,053	Oct. 21	2125	571	53	418
Cotton, Charles W., Indianapolis, Ind., W. C. Margedant, J. T. Gardner, and A. W. G. Margedant, Hamilton, Ohio, assignors to American Wheel Company, Chicago, Ill. Machine for preparing spokes.	439,386	Oct. 28	2680	713	53	527
Cotton, Clifton H., Brooklyn, N. Y. Printing-press.	438,988	Oct. 21	2038	544	53	401
Cottrell, Calvert B. (See Whitbread, Samuel J., assignor.)						
Cottrell, Calvert B., Stonington, Conn. Cylinder printing-machine.	424,097	Mar. 25	2616	{ 697 698 }	50	1656
Cottrell, Calvert B., Westerly, R. I. Feeding mechanism for cylinder printing-machines.	420,621	Feb. 4	278	74	50	618
Cottrell, Calvert B., Westerly, R. I. Feeding apparatus for printing-machines.	422,572	Mar. 4	300	77	50	1193
Cottrell, Calvert B., Westerly, R. I. Offset mechanism for printing-machines.	425,123	Apr. 8	1957	{ 281 282 }	51	213
Cottrell, Calvert B., Westerly, R. I. Sheet-delivery apparatus for printing-machines.	430,378	June 17	1987	{ 490 491 }	51	1875
Cottrell, Calvert B., Westerly, R. I. Feeding apparatus for printing-machines.	431,201	July 1	251	64	52	52
Cottrell, Calvert B., Westerly, R. I. Printing-machine.	433,234	July 29	3428	885	52	693
Cottrell, Calvert B., Westerly, R. I. Delivery apparatus for printing-machines.	412,862	Dec. 16	1977	{ 507 508 }	53	1666
Coughlan, Timothy J. (See Gardner, Oliver H., assignor.)						
Coughlin, Cornelius, Cincinnati, Ohio. Track-sweeper.	435,404	Sept. 2	43	14	52	1383
Coughlin, David E., Milford, N. J. Electric stop-motion for looms.	432,512	July 22	2291	593	52	466

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Couhig, Bartholomew J., Youngstown, Ohio. Wood-filler.....	432,118	July 15	1699	52	346
Coulson, Charles H. (See Johnson, George W., assignor.)						
Coulson, David E., Galesburg, Ill. Ship joint and coupling for dental engines	430,420	June 17	2045	504	51	1887
Coulson, William H., Jersey City, N. J. Glazed structure.....	429,375	June 3	416	98, 99	51	1550
Coulston, Joseph W. (See Wyckoff, Ambrose B., assignor.)						
Coultaus, Joseph A., Brooklyn, assignor to Waterbury Rubber Company, New York, N. Y. } Hose-winding machine.....	419,320	Jan. 14	1012	{ 268 269	{ 50	214
Coulter, James P., Aurora, and T. Hibbert, Cochran, Ind. Draft and bnfing mechanism for railway-cars.....	432,376 422,920	July 15 Mar. 11	2083 850	535 221	52 50	417 1306
Coulter, Richard D., Orange City, Fla. Fruit-car.....	434,381	Aug. 12	1417	372	52	1044
Coulter, Thomas H., assignor of one-half to F. A. Taft, Dayton, Ohio. Water-wheel gov- ernor.....	433,327	July 29	3563	919	52	720
Coulter, Wesley, Pittsburg, Pa. Sash-fastener.....	419,184	Jan. 14	809	{ 213 214	{ 50	174
Countryman, George W., Birmingham, Iowa. Sash-fastener.....	420,144	Jan. 28	2263	599	50	478
Coupal, Joseph. (See Clifford and Coupal.)						
Coupal, Peter A., assignor to Automatic Staple Nailing Machine Company, Boston, Mass. } Staple-driving machine.....	438,100	Oct. 7	660	{ 179 180 181	{ 53	128
Courtney, John J., Minneapolis, Minn. Mowing-machine.....	442,573	Dec. 9	1477	{ 379 380	{ 53	1559
Courtemanche, Moïse, Montreal, Quebec, Canada. Portable scaffold	423,988	Mar. 25	2459	653	50	1626
Courtright, Edgar, assignor of three-fourths to T. I. Everett, Stellwagen & Kynoch, and Brooks Bros., St. Ignace, Mich. Water-motor.....	419,321	Jan. 14	1015	269	50	215
Courvoisier Wilcox Manufacturing Company. (See Benton, Thomas K., assignor.)						
Cousens, Alfred, Detroit, Mich. Game.....	432,792	July 22	2749	703	52	554
Cousins, John W., Southsea, county of Hants, England. Artificial ear-drum.....	419,420	Jan. 14	1165	309	50	246
Couture, John B. (See Caleb and Couture.)						
Covell, Edgar C. (See Beckford and Covell.)						
Covell, Edgar C., and E. S. Cram, Laconia, N. H. Knitting stockings.....	443,900	Dec. 30	3679	947	53	2012
Covell, Edward T., New Bedford, Mass. Fastening for horseshoes.....	441,940	Dec. 2	481	128	53	1359
Covell, George S. (See Coombs, Abram L., assignor.)						
Covell, Lyman T. (See Staples, Covell, and Heagle.)						
Covert, D'Estaing S. (See Burton, Augustus G., assignor.)						
Covert, D'Estaing S. (See Pumpelly, James K., assignor.)						
Covert, Enoch, Farmer Village, N. Y. Vehicle-pole tip.....	430,116	June 17	1555	387	51	1792
Covert, Enoch, Farmer Village, N. Y. Lifting-jack.....	432,230	July 15	1865	479	52	378
Covington, Sarah E., Bellefontaine, Ohio. Flower-stand.....	422,297	Feb. 25	2751	735	50	1108
Cowan, Charles B. (See Ash, Joseph S., assignor.)						
Cowan, Joseph P., Chartiers, Pa. Platform-scale.....	441,827	Dec. 2	313	84	53	1325
Cowan, Samuel L., assignor of one-half to C. B. Emmert, Clarksburg, Ind. Coffee-grinder..	420,773	Feb. 4	483	126	50	657
Cowden, Forbes C., Parsons, Kans. Train-board.....	419,185	Jan. 14	813	{ 214 215	{ 50	175
Cowdery, John S., Sandusky, Ohio. Machine for the manufacture of crayons	437,751	Oct. 7	114	35	53	25
Cowdery, John S., Sandusky, Ohio. Machine for manufacturing crayons, carpenters' chalk, &c.....	437,752	Oct. 7	117	35, 36	53	26
Cowell, Hiram, assignor of one-half to W. T. Ford, Zanesville, Ohio. Means for carrying off leakage from gas-mains.....	425,369	Apr. 8	1428	382	51	286
Cowell, John J., Newark, N. J. Sash-fastener.....	423,741	Mar. 18	2081	548	50	1546
Cowen, Charles B., Pittsburg, Pa. Car-coupling.....	435,209	Aug. 26	2737	722	52	1314
Cowen, Robert, Cambridge, assignor to Boston Woven Hose Company, Boston, Mass. } Hose-machine.....	422,185	Feb. 25	2559	{ 677 678 679	{ 50	1073
Cowen, Robert, Cambridge, and G. C. Beckwith, Somerville, assignors to Boston Woven Hose Company, Boston, Mass. Hose-machine.....	419,987	Jan. 21	2006	{ 528 529 530	{ 50	419
Cowgrill, Christian D., assignor of one-half to C. A. Lowry, Terre Haute, Ind. Permuta- tion-padlock.....	429,017	May 27	3015	774	51	1436
Cowles, Alfred E. (See Carl and Paterson, assignors.)						
Cowles, Barton S., Bristol, Conn. Call-bell.....	426,777	Apr. 29	3572	932	51	731
Cowles, Byron K. (See Whitney and Cowles.)						
Cowles, Edward P., New Decatur, Ala. Piston for locomotives	421,164	Feb. 11	1104	{ 283 284	{ 50	783
Cowles, George C., East Saginaw, Mich. Pulley.....	429,116	June 3	19	5	51	1476
Cowles, George C., assignor of one-half to E. Germain, East Saginaw, Mich. Pulley	426,662	Apr. 29	3390	890	51	696
Cowles, Henry, Utica, N. Y. Hot-air furnace.....	422,921	Mar. 11	852	222	50	1307
Cowles, J. Edward. (See Smith, William F., Jr., and G. C., assignors.)						
Cowles, Maud H. (See Vanderbeyden, Charles W., assignor.)						
Cowley, James T., Lowell, Mass. Apparatus for drilling.....	431,107	July 1	113	29, 30	52	24
Cowley, James T., Lowell, Mass. Drilling-machine.....	431,108	July 1	117	30	52	25
Cowley, James T., Lowell, Mass. Cash register and indicator.....	443,982	Dec. 30	3823	{ 974 975	{ 53	2038
Cowley, James T., Lowell, Mass., assignor to Lamson Consolidated Store Service Company, Newark, N. J. Store-service apparatus.....	440,765	Nov. 18	1808	468	53	974
Cox, Albert G. (See Wanamaker, Charles B., assignor.)						
Cox, Alfred S., London, Canada. Oven.....	440,840	Nov. 18	1944	499	53	998
Cox, Andrew D., West Winchester, Ontario, Canada. Journal-box.....	432,156	July 15	1761	452	52	358
Cox, Andrew D., West Winchester, Ontario, Canada. Shaft-banger.....	432,157	July 15	1762	452	52	358
Cox, Charles A. and J. F., Louisville, Ky. Electrical signal-operating device.....	418,910	Jan. 7	408	{ 101 102	{ 50	85
Cox, Charles A. and J. F., Louisville, Ky. Automatic fire-alarm.....	424,860	Apr. 1	658	174	51	127
Cox & Co., I. H. (See Trullender, Frederick, assignor.)						
Cox, George M., assignor of one-half to J. C. Terman, Mansfield, Ohio. Two-wheeled ve- hicle.....	423,910	Mar. 25	2338	616	50	1604
Cox, Harris G., San José, Cal. Check-bit.....	427,576	Sept. 30	3524	919	52	2079
Cox, Harry B., Hartford, Conn. Thermo-electric generator.....	434,429	Aug. 19	1513	395	52	1070
Cox, Harry B., Hartford, Conn. Thermo-electric generator.....	434,500	Aug. 19	1618	423	52	1092
Cox, Harry B., New Haven, Conn., assignor to Electric Generator Company, Portland, Me. Thermo-electric battery.....	434,427	Aug. 19	1510	394	52	1069
Cox, Harry B., New Haven, Conn., assignor to Electric Generator Company, Portland, Me. Thermo-electric generator.....	434,428	Aug. 19	1511	394	52	1070
Cox, Henry, Jr., London, England. Gas-burner.....	412,863	Dec. 16	1980	508	53	1666
Cox, Henry F., Altoona, Pa. Rail-chair.....	420,438	Feb. 4	16	4	50	567

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Cox, Henry F., Altoona, Pa. Rail-joint	439,722	Nov. 4	142	37	53	635
Cox, Israel W., assignor of one-half to J. M. McCoy, Gold Hill, Oreg. Tongs for holding plowshares	419,599	Jan. 14	1413	378	50	297
Cox, Jacob. (See Campbell and Cox.)						
Cox, Jesse. (See Brainard, Adelbert M., assignor.)						
Cox, John J. (See Kelley and Cox.)						
Cox, Joseph F. (See Cox, Charles A. and J. F.)						
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Type-bed-operating mechanism	433,396	July 29	3650	942	52	738
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Web-cutting mechanism for printing-presses	435,355	Aug. 26	2976	789	52	1357
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Paper-feed mechanism for printing-presses	438,522	Oct. 14	1292	350	53	255
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Paper-web-tension device for printing-machines	438,529	Oct. 14	1295	350	53	255
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Paper-cutter for printing-presses	439,479	Oct. 28	2814	749	53	552
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Web-adjusting mechanism for printing-presses	439,723	Nov. 4	143	38	53	635
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Printing-press	441,138	Nov. 25	2431	630 631 632	53	1102
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Paper-folding machine	441,646	Dec. 2	26	8	53	1267
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Inking device for printing-presses	441,789	Dec. 2	252	67	53	1313
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Inking device for printing-presses	441,790	Dec. 2	254	68	53	1314
Cox, Millard F., et al. (See Trissal, William T., assignor.)						
Cox, Samuel A., assignor of one-half to R. Wadsworth, Wyoming, N. Y. Drenching-bit	432,513	July 22	2292	593	52	467
Cox, Seaborn J. M., Johnston, S. C. Horse-collar	442,864	Dec. 16	1981	509	53	1666
Cox Stove Company, Abram. (See Mott and Rankin, assignors.)						
Cox Stove Company, Abram. (See Pfahler, William H., assignor.)						
Cox Stove Company, Abram. (See Rankin, Thomas J., assignor.)						
Cox, William A., Eureka, Kans. Fly-trap for screen-doors	441,287	Nov. 25	2701	700	53	1149
Cox, William W. (See Kellogg and Cox.)						
Coxe, Eckley B. (See Richards, Francis H., assignor.)						
Coxe, Eckley B. (See Salmon, Samuel, assignor.)						
Coxe, Eckley B. (See Wagner, John R., assignor.)						
Coxe, Eckley B., Drifton, Pa. Packing for pistons, piston-rods, &c.	419,034	Jan. 7	579	146 147	50	123
Coxe, Eckley B., Drifton, Pa. Mechanical movement	419,037	Jan. 7	583	148 149	50	123
Coxe, Eckley B., Drifton, Pa. Coal-screening mechanism	438,527	Oct. 14	1291	349 350	53	254
Coxe, Eckley B., Drifton, Pa. Elevator apparatus	441,288	Nov. 25	2702	701 702	53	1149
Coxe, Eckley B., and S. Salmon, Drifton, Pa.; said Salmon assignor to said Cox. Mechanical movement	419,035	Jan. 7	581	147 148	50	123
Coxe, Eckley B., and S. Salmon, Drifton, Pa.; said Salmon assignor to said Cox. Mechanical movement	419,036	Jan. 7	582	148	50	123
Coxe, Eckley B., and S. Salmon, Drifton, Pa.; said Salmon assignor to said Cox. Mechanism for screening coal	419,113	Jan. 7	692	182 183 184	50	146
Coxeter, Samuel J. (See Upward, Alfred R., assignor.)						
Coy, Frederick W., Boston, and A. C. Paul, Lynn, assignors to A. Fuller and E. C. Judd, Boston, Mass. Sole-pressing machine	436,034	Sept. 9	1011	263 264	52	1576
Coyle, Andrew M., assignor to J. C. Edwards, Washington, D. C. Automatic race-course	425,370	Apr. 8	1429	382 383	51	286
Coyle, Andrew M., assignor, by mesne assignments, to H. G. Rogers, Washington, D. C. Coin-operated shooting-gallery	441,613	Nov. 25	3208	826	53	1248
Coyle, Dan, Clarksville, Tex. Rod for end-gates	437,642	Sept. 30	3611	944	52	2097
Coyne, Martin T., et al. (See Martin, Washington A., assignor.)						
Cozart, William T., Shelbyville, Ill. Nut-lock	441,749	Dec. 2	188	49	53	1299
Crabb, Lindsay T., Eminence, Ky. Overcheck-bit for bridles	443,703	Aug. 19	1963	509	52	1157
Crabtree, Charles W., and J. W. Collins; said Crabtree assignor to H. D. Harper, Kinston, N. C. Stove-damper	436,697	Sept. 16	2062	541	52	1782
Cracraft, Richard, assignor of one-half to E. R. Hardy, Abingdon, Ill. Cultivator	429,888	June 10	1184	294	51	1710
Craddick, Annie E., et al. (See Harbaugh, Samuel V., assignor.)						
Craft, William B., St. Louis, Mo. Sand-screening apparatus	419,930	Jan. 21	1922	507	50	404
Crafton, Tilton L., Sidney, Ark. Tanning hides	435,922	Sept. 9	849		52	1545
Crafts, Francis H., assignor to E. & B. Holmes Wood Working Machinery Department, Buffalo, N. Y. Device for adjusting the pressure-plates of planing-machines	440,018	Nov. 4	597	158	53	725
Crafts, George H., Atlanta, Ga. Draw-bridge	433,328	July 29	3564	919	52	720
Crafts, John L., Somerville, Mass. Extension roof-ladder	434,176	Aug. 12	1108	287	52	983
Craggs, Henry B. (See Craggs, Wesley and H. B.)						
Craggs, Wesley and H. B., Kilbourne, Ill. Press-drill	434,504	Aug. 19	1625	427	52	1094
Craig, Dudley L., Silver King, Ariz. Ter. Adding-machine	434,251	Aug. 12	1224	318	52	1005
Craig, Edward L., San Francisco, Cal. Apparatus for separating and grading ores	443,901	Dec. 30	3681	948	53	2012
Craig, Franklin P., Springfield, Mo. Claw-bar	432,299	July 15	1981	506	52	398
Craig, John B., St. Louis, Mo. Shoe-tie fastener	426,663	Apr. 29	3391	890	51	696
Craig, John G. (See Nolan, James, assignor.)						
Craig, Lee D., San Francisco, Cal. Ore-feeder	426,245	Apr. 22	2765	724	51	563
Craig, Mathew C., Boyd, Wis. Rack for wagon-beds	425,303	Apr. 8	1341	358	51	269
Craig, Percy L. (See White, Henry, assignor.)						
Craig, Thomas S., assignor of one-half to W. B. Logsdon, Hubbell, Nebr. Steam-cooker	420,335	Jan. 28	2559	679	50	531
Craig, Warren H., Lawrence, Mass. Sight-feed lubricator	421,389	Feb. 18	1423	368	50	849
Craig, William, Brooklyn, N. Y. Check-valve	442,284	Dec. 9	1021	269	53	1468
Craige, Edward H., Brooklyn, N. Y. Mechanical tracing-pen	426,925	Apr. 29	3776	986	51	771
Craige, Edward H., Brooklyn, N. Y. Mechanical tracing-pen	426,987	Apr. 29	3860	1009 1010	51	787
Craige, Edward H., assignor to E. B. Jordan, Brooklyn, N. Y. Sewing-machine cover	437,145	Sept. 23	2844	739	52	1939
Craigie, Henry, San Francisco, Cal. Dental plugger	420,532	Feb. 4	149	37	50	593
Craigie, Hugh H., Stamford, Conn. Siphon flush-tank	433,447	Aug. 5	18	5	52	760

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Craigie, Hugh H., Stamford, Conn. Water-closet.....	440,755	Nov. 18	1792	463	53	970
Crain, William O. (See Hazard and Crain.)						
Cram, Elisha S. (See Covell and Cram.)						
Cram, Elisha S., and G. S. Roberts, Meredith, N. H., assignors of one-half to C. F. Brown, Reading, and A. W. Crossley, Boston, Mass. Smoke and steam discharge for locomotives.....	427,673	May 13	969	244	51	1012
Cram, William H. H., Detroit, Mich. Store-service apparatus.....	439,387	Oct. 28	2682	714	53	527
Cramer, A. F. C., <i>et al.</i> (See Insti, Johann A. W., assignor.)						
Cramer, Anthony F., Detroit, Mich. Automatically-adjustable plunger for brick-machines.....	427,972	May 13	1440	364	51	1109
Cramer, Anthony F., Detroit, Mich. Hook-bar for the mold-delivery devices of brick-machines.....	427,973	May 13	1442	364	51	1102
Crampton, Thomas P. C., assignor of one-half to A. Essinger, London, England. Electric-arc lamp.....	442,018	Dec. 2	608	164	53	1382
Crandall, George L., Binghamton, N. Y. Box-loop.....	419,643	Jan. 21	1480	397	50	316
Crandall, Charles M., assignor to M. Lyman, Waverly, N. Y. Toy.....	436,455	Sept. 16	1684	444	52	1711
Crandall, Corydon E. (See Harris and Crandall.)						
Crandall, Corydon E., Canandaigua, N. Y. Fruit-jar holder.....	439,931	Nov. 4	456	119	53	697
Crandall, Herman E., New Britain, Conn. Store-service apparatus.....	442,265	Dec. 9	988	261	53	1463
Crandall, Jesse A., Brooklyn, N. Y. Bicycle.....	436,305	Sept. 9	1428	372	52	1655
Crandall, Jesse A., assignor of one-half to G. W. Northridge, Brooklyn, N. Y. Artist's easel and case combined.....	436,303	Sept. 9	1426	372	52	1655
Crandall, Jesse A., assignor of two-thirds to G. W. Northridge and J. C. Cable, Brooklyn, N. Y. Child's carriage.....	436,304	Sept. 9	1427	372	52	1655
Crandall, Robert S. (See Magruder, John C., assignor.)						
Crandall, Vincent A., Syracuse, N. Y. Railway-gate.....	420,865	Feb. 4	645	167	50	686
Crandell, Eustace, Alexander, Kans. Cultivator attachment.....	438,759	Oct. 21	1672	449	53	331
Crane Brothers Manufacturing Company. (See Hayden, James T., assignor.)						
Crane & Co., J. S. (See Crane, John S., assignor.)						
Crane Company. (See Anderson, James M., assignor.)						
Crane, Edward B., California, Mo. Tack extractor and hammer.....	429,508	June 3	616	151	51	1589
Crane, Elizabeth E. (See Hendricks, Adam C., assignor.)						
Crane, George W., and H. Bradshaw, Topeka, Kans. Device for feeding paper.....	418,942	Jan. 7	458	{ 112 113 114 }	50	96
Crane, John S., assignor to J. S. Crane & Co., Lake Village, N. H. Filling-burr for knitting-machines.....	421,248	Feb. 11	1217	315	50	804
Crane, John S., assignor to Crane Manufacturing Company, Lake Village, N. H. Knitting-machine burr.....	441,612	Nov. 25	3207	826	53	1248
Crane Manufacturing Company. (See Crane, John S., assignor.)						
Crane, Newton, Newton, Mass. Photographic camera.....	439,121	Oct. 28	2237	601	53	446
Crane, Richard T., Chicago, Ill. Detecting leaks in soil-pipes.....	434,106	Aug. 12	993	259	52	960
Crane, Sylvanus B., Oxford Junction, Iowa. Station-indicator.....	430,117	June 17	1556	387	51	1792
Crane, Theodore F., and W. R. Withers, Newark, N. J. Musical instrument.....	425,987	Apr. 22	2387	631	51	488
Crane, Thomas R., Heathsville, Va. Harrow.....	438,405	Oct. 14	1123	{ 303 304 }	53	220
Crane, Thomas S. (See Hart and Crane.)						
Crane, Thomas S., East Orange, N. J., assignor to E. Bradley, New York, N. Y. Straight-ener for board-cutting machines.....	425,988	Apr. 22	2388	633	51	488
Crane, William F. D., Philadelphia, Pa. Commutator.....	424,406	Mar. 25	3106	824	50	1751
Crane, Thomas, Bay City, Mich. Bucket-attaching link for chain conveyers.....	422,735	Mar. 4	543	139	50	1239
Crankshaw, John H. (See MacLaurin, George S., assignor.)						
Cranell, Charles W., assignor of one-half to F. W. Casterline, Oberlin, Kans. Pump.....	425,660	Apr. 15	1882	503	51	383
Cranell, Charles W., assignor of one-half to F. W. Casterline, Oberlin, Kans. Compound pump.....	425,933	Apr. 15	2226	605	51	459
Cranell, Charles W., assignor of one-half to T. Scott, Oberlin, Kans. Cutting apparatus for mowers or harvesters.....	428,077	May 20	1594	405	51	1141
Cranney, James, <i>et al.</i> (See Rafferty, Patrick, assignor.)						
Cranska, Floyd, Moosup, Conn. Yarn-separator for spinning or twisting machines.....	440,841	Nov. 18	1945	499	53	998
Crapo, Squire E., Dartmouth, Mass. Paint-pail, brush-holder, and paint-stirrer.....	419,555	Jan. 14	1385	371	50	291
Crary, L. H. (See Thorp, Thomas J., assignor.)						
Craven, Phineas P., West Brunswick, near Melbourne, Victoria. Type-setting machine.....	422,122	Feb. 25	2469	{ 652 653 }	50	1056
Craven, Phineas P., West Brunswick, Victoria. Type-distributing machine.....	441,750	Dec. 2	189	50, 51	53	1299
Cravens, J. W., <i>et al.</i> (See Robinson, Clark, assignor.)						
Craver, David Z., Richmond, Va. Machine for cutting cheroots.....	437,853	Oct. 7	274	82	53	54
Craw, Erastus H., New York, N. Y. Hydraulic railway.....	425,408	Apr. 15	1490	{ 400 401 }	51	307
Crawford, Amos H., Liverpool, N. Y. Lantern.....	435,134	Aug. 26	2626	695	52	1293
Crawford, Andrew L. (See Bidwell, William F., assignor.)						
Crawford, Edward S., assignor to W. Caldwell, Milford, Ill. Gate.....	438,144	Oct. 14	727	{ 199 200 }	53	147
Crawford, Humphrey M. (See Fry, Greenwood, assignor.)						
Crawford, James W., Gresham, Pa. Grip or clamp.....	436,967	Sept. 23	2560	669	52	1885
Crawford, John, <i>et al.</i> (See Hard, Franks, and Loomis, assignors.)						
Crawford, John, assignor to W. G. Duffield and H. A. Weeks, New York, N. Y. Gas-regulator.....	439,586	Oct. 28	2971	{ 788 789 }	53	584
Crawford, John C., Iola, Kans. Gate.....	441,469	Nov. 25	2992	770	53	1204
Crawford, Middleton, Liverpool, county of Lancaster, England. Separation of metals from their ores.....	420,377	Jan. 28	2618	695	50	542
Crawford, Middleton, Liverpool, England. Grinding and amalgamating mill.....	433,163	July 29	3328	861	52	672
Crawford, Peter R., Cleveland, Ohio. Exhaust-head.....	434,042	Aug. 12	883	233	52	938
Crawford, Robert S., Washington, D. C. Bicycle-bearing.....	421,557	Feb. 18	1668	430	50	896
Crawford, William J., administrator. (See Turner, Isaac P., assignor.)						
Crawford, William R., Newark, N. J. Book and binding therefor.....	429,889	June 10	1185	294	51	1710
Crawley, Cornelius H. (See Tuquet, Bondard, and Crawley.)						
Cray, William H., <i>et al.</i> (See Smith, Wesley, assignor.)						
Craycroft, Thomas B., Panoche, Cal. Water way and gate for reservoirs.....	436,170	Sept. 9	1229	320	52	1614
Creelich, Louis J., assignor to A. Warren, St. Louis, Mo. Lifting-jack.....	430,421	June 17	2046	505	51	1887
Creelman, John A. (See Norwood, Clarence L., assignor.)						
Creelman, William J., assignor to Woodbury Engine Company, Rochester, N. Y. Steam-engine governor.....	434,252	Aug. 12	1230	319	52	1006
Cregier, Dewitt C., Chicago, Ill. Paving compound.....	429,117	June 3	20		51	1476
Crehan, Hubert, Pittsburg, Pa. Screw-cutting machine.....	431,560	July 8	814	{ 203 204 }	52	170

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Creigh, Alfred E., Ronceverte, W. Va. Cant-hook	421,124	Feb. 11	1043	267	50	771
Creigh, Alfred E., Ronceverte, W. Va. Pike-pole	443,038	Dec. 16	2264	581	53	1722
Creighton, George W., Philadelphia, Pa. Rail-joint	433,329	July 29	3565	919	52	721
Creighton, John, assignor of one-half to C. H. Drury, Hartford, Ohio. Pulverizer attachment for plows	439,587	Oct. 23	2974	769	53	5-4
Creps, La Fayette, Sheridan Lake, Colo. Mail-bag	431,335	July 1	452	112	52	93
Cressler, Will T., Newport, Ky. Hand-stamp	430,625	June 24	2369	579	51	1957
Cressman, George W., Barron Hill, Pa. Pulp-engine	432,300	July 15	1982	506	52	398
Crows, George B., Denver, Colo. Music-leaf turner	442,596	Dec. 9	1511	388 389	53	1566
Crows, James M., Arlington, Tenn. Cotton-scraper	424,962	Apr. 8	819	219	51	167
Crows, James M., Arlington, Tenn. Cotton-chopper	433,520	Aug. 5	113	33	52	779
Crows & Owen, <i>et al.</i> (See Hardy, Franklin D., assignor.)						
Crows, Thomas B., <i>et al.</i> (See Ashmead, Seely W., assignor.)						
Crider, John, Concordia, Kans. Shelf-bracket	427,462	May 6	661	166	51	943
Crighton, Spencer, Manchester, England. Machine for opening and cleaning fibrous materials	440,221	Nov. 11	911	234	53	798
Crim, George W. (See Crim, John W. and G. W.)						
Crim, George W. and J. W., New Market, Va. Seam-compressing machine	434,322	Aug. 12	1330	346	52	1026
Crim, John W. (See Crim, George W. and J. W.)						
Crise, John W., Forest Hill, Ind. Carpet-stretcher	431,443	July 1	634	159	52	128
Crim, John W. and G. W., New Market, Va. Roofing-tool	419,831	Jan. 21	1766	467 468	50	370
Crippen, Edwin, assignor of three-eighths to P. J. Reilly, New Orleans, La. Combined water-tower and extension-ladder	423,135	Mar. 11	1182	308 309 310	50	1368
Crismore, Morgan S., Odessa, Nebr. Animal-trap	436,217	Sept. 9	1301	339	52	1629
Crisp, Joseph E. (See Copeland and Crisp.)						
Crisp, Joseph E. (See Copeland, Crisp, and Grandy.)						
Crispell, Isaiah D., West Stockbridge, Mass. Ash sifter and safe	419,114	Jan. 7	694	183	50	146
Crispell, Isaiah D., West Stockbridge, Mass. Glove-donning implement	429,890	June 10	1187	295	51	1710
Cristman, William J., assignor to C. R. Snell and M. Deimel, Herkimer, N. Y. Bed	425,409	Apr. 15	1494	401	51	308
Criswell, James A., assignor of one-half to F. A. Genth, Jr., Philadelphia, Pa. Railway brake-shoe	425,304	Apr. 8	1342	358	51	269
Criswell, Peter S., Wheeling, W. Va. Wagon-brake	437,916	Oct. 7	365	105	53	71
Crites, John W., San Francisco, Cal. Mining	439,812	Nov. 4	270	68	53	661
Crittenden, Louis S., Canaseraga, N. Y. Cultivator	432,818	July 22	2784	712	52	561
Crittenden, Louis S., Canaseraga, N. Y. Farm-wagon	443,902	Dec. 30	3682	948	53	2012
Croasdale, Edgar, Philadelphia, Pa. Dynamo-electric machine or electric motor	428,380	May 20	2062	519	51	1235
Crocker, Filtering Company. (See Crocker, James A., assignor.)						
Crocker, Francis A. (See Decker, William T., assignor.)						
Crocker, George D., Oakland, Cal. Hinge for window-sashes	420,439	Feb. 4	17	4	50	568
Crocker, George D., Oakland, Cal. Swinging window	431,202	July 1	255	64, 65	52	53
Crocker, George D., Oakland, Cal. Window-sash hinge	432,119	July 15	1699	436	52	346
Crocker, Henderson J., Jr., Orinda, Tenn. Combined cultivator, harrow, and marker	420,336	Jan. 23	2560	679	50	531
Crocker, James A., Brooklyn, N. Y., assignor to Crocker Filtering Company of New York. Filtering-machine	424,464	Apr. 1	33	9, 10	51	9
Crocker, James A., Brooklyn, N. Y., assignor to Crocker Filtering Company of New York. System of filtration of water for city or town supplies	426,988	Apr. 29	3862	1010 1011	51	787
Crocker, Leonard B., <i>et al.</i> (See Hager, Charles, assignor.)						
Crocker, Luther O., Braintree, Mass. Feed-water strainer for boilers	432,793	July 22	2749	703	52	554
Crockett, Charles H., and C. C. Allen, Boston, Mass. Combined fire-alarm telegraph and gas-lighting device	430,175	June 17	1629	407	51	1806
Crockett, Charles H., and L. C. Dedrick, Schenectady, N. Y. Telegraph-key	438,530	Oct. 14	1297	351	53	256
Crockett, David T., Bridgeport, Conn. Combined strainer and discharge-cock for varnish-tanks	435,921	Sept. 9	848	223	52	1545
Crockett, Edmund S., Woonsocket, R. I. Lamp-burner attachment	428,463	May 20	2181	549	51	1255
Croft, Eng'ne. (See Herz and Terloff, assignors.)						
Crofford, Warren K. (See Bardsley and Crofford.)						
Crofford, Warren K., New York, N. Y. Paper-clip	433,979	Aug. 12	805	211	52	922
Croftut, Warren N. (See McDonah, Robert, assignor.)						
Croftut, David F. (See Moulton and Croftut.)						
Croft, David L., Springfield, Ohio. Rein-holder	428,666	May 27	2481	631	51	1331
Croll, Charles, Upper Lehigh, Pa. Boring and drilling tool	429,261	June 3	222	55	51	1515
Cromer, Charles D., <i>et al.</i> (See Kinsey, Jacob O., assignor.)						
Cromer, Lawrence W. (See Gavin and Cromer.)						
Cromer, Thomas L., assignor of one-half to C. Schuwirth, Olmus, Tex. Corn-planter	421,674	Feb. 18	1835	480	50	929
Cromer, Thomas L., and C. Schuwirth, Olmus, Tex. Seed-planter	437,774	Oct. 7	156	48	53	32
Crompton Loom Works. (See Wyman, Horace, assignor.)						
Crompton Loom Works. (See Wyman and Gordon, assignors.)						
Cronwell, William L., Roscommon, Mich. Gate	436,596	Sept. 16	1904	500	52	1751
Cronin, Cornelius J., Findlay, Ohio. Low-water alarm for boilers	423,257	Mar. 18	2247	593	50	1579
Cronin, Cornelius J., Findlay, Ohio. Steam-boiler	423,858	Mar. 18	2248	594	50	1579
Cronin, Daniel, assignor of one-half to C. A. and W. E. Durrenbeck, Utica, N. Y. Car-brake	438,433	Oct. 14	1157	313	53	227
Cronise, Carrie C. (See Page, Charles L., assignor.)						
Cronk, Adolphus V., Ord, Nebr. Adjustable hame	424,407	Mar. 25	3108	824	50	1752
Cronk, Castellio E. and J. D., Belvidere, Ill. Sled	432,514	July 22	2293	593	52	467
Cronk, Homer G., Apopka, Fla. Churn	422,736	Mar. 4	544	139	50	1240
Cronk, Joel D. (See Cronk, Castellio E. and J. D.)						
Cronk, William, Havana, N. Y. Door-hanger	427,838	May 13	1230	311	51	1062
Crook, Fredrick. (See Thompson and Crook.)						
Crook, Robert N., assignor of one-half to A. Lyles, Alexandria, Va. Draw-bar for car-couplers	436,753	Sept. 16	2163	568	52	1801
Crooker, William W., Lynn, Mass. Blacking and burnishing boots or shoes	438,470	Oct. 14	1212	328	53	238
Crookes, Thomas, Sheffield, county of York, England. Razor-guard	429,605	June 10	765	184	51	1629
Crooks, William L., Sonoma, and T. Robin, San Francisco, Cal. Hair-restorer	421,675	Feb. 18	1836	.....	50	929
Cropley, Arthur B., <i>et al.</i> (See Baldwin, George E. D., assignor.)						
Cropper, Henry S. (See Birks and Cropper.)						
Crosbie, John A., Methuen, Mass., assignor to McKay & Copeland Lasting Machine Company, Portland, Me. Machine for making tack-strips	431,561	July 8	818	204	52	171
Crosby Automatic Signal Company. (See Crosby and Mossberg, assignors.)						
Crosby, Darwin E., Philadelphia, Pa. Steam-engine	434,143	Aug. 12	1056	273	52	972
Crosby, Edward H., Boston, Mass., assignor to Crosby Electric Company, New York, N. Y. Galvanic battery	437,393	Sept. 30	3239	844	52	2021

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Crosby Electric Company. (See Crosby, Edward H., assignor.)						
Crosby Electric Company. (See Hussey, Charles A., assignor.)						
Crosby, Frank L., Farmer City, Ill. Metallic hame	433,980	Aug. 12	806	211	52	922
Crosby, George S., assignor to Pratt & Letchworth, Buffalo, N. Y. Toy locomotive	421,676	Feb. 18	1837	480	50	929
Crosby, George S., assignor to Pratt & Letchworth, Buffalo, N. Y. Collar-fastener	426,246	Apr. 22	2766	725	51	563
Crosby, George S., assignor to Pratt & Letchworth, Buffalo, N. Y. Toy horse	435,685	Sept. 2	481	127	52	1467
Crosby, James H., Boston, Mass., and F. Mossberg, assignors, by mesne assignments, to Crosby Automatic Signal Company, Providence, R. I. Automatic signaling apparatus	428,667	May 27	2481	631	51	1331
Crosby, John B., Bonshaw, Canada, assignor to himself, and J. H. Orpin, Providence, R. I. Shaft-tug	429,606	June 10	766	185	51	1630
Crosby, Oliver, St. Paul, Minn. Friction-clutch	425,989	Apr. 22	2390	634	51	488
Crosby Steam Gage and Valve Company. (See Bosworth, Charles B., assignor.)						
Crosby, William H., et al. (See Daellenbach, Charles R., assignor.)						
Crosby, William R. (See Lewis and Crosby.)						
Croze, Andrew J., Indianapolis, Ind. Bridle-bit	425,212	Apr. 8	1204	319	51	244
Crosland, James F. L., Manchester, and W. H. Bailey, Salford, county of Lancaster, Eng. Stand for portable force-pumps	427,403	May 6	567	141 142	51	924
Crosman, G. J. (See Heinrich, Emil, assignor.)						
Crosman, John C. (See Bacon, Stephen T., assignor.)						
Cross, Parmer R., Hammond, Ind. Press	431,444	July 1	635	159	52	128
Cross, Sterling P. (See Cass, Thomas M. and N., assignors.)						
Cross, Thomas B., Baltimore, Md. Hat-band	424,465	Apr. 1	35	10	51	10
Cross, Walter D., and J. P. Reagan, Lima, Ohio. Rope-socket	430,176	June 17	1631	407	51	1807
Cross, William. (See Baxter and Cross.)						
Crossan, Edwin M., and M. L. Devers, Bethany, Me. Hame-staple and trace-tug clip	421,558	Feb. 18	1669	432	50	896
Crosser, David, Cardonia, Ind. Window-sash	437,980	Oct. 7	469	133	53	90
Crosse, Charles H., Hinsdale, Ill. Clasp	420,941	Jan. 28	2095	553	50	444
Crossley, Arthur W., et al. (See Cram and Roberts, assignors.)						
Crossley, Arthur W., et al. (See Porter, Daniel R., assignor.)						
Crossley, Harry A., Cleveland, Ohio. Brake for motor-cars	432,020	July 15	1544	392	52	317
Crossley, Harry A., Cleveland, Ohio. Radiator	437,680	Oct. 7	9	3	53	4
Crossley, Harry A., Cleveland, Ohio. Brake for motor-cars	440,398	Nov. 11	1198	309	53	849
Crossley, Louis J., W. Emmott, Halifax, and J. F. Harrison, Bradford, county of York, England. Means for effecting communication in telephone systems	427,974	May 13	1443	365	51	1102
Crossmyer, William M. J. (See Murphy, Robert E., assignor.)						
Crouch, Frank V., Carrollton, Mo. Heating apparatus for omnibuses, carriages, &c	426,926	Apr. 29	3778	987	51	771
Crow, Benjamin F., St. Louis, Mo. Cable-grip car	431,936	July 8	1408	357	52	283
Crow, Bennington F., assignor to R. H. Jenks, Cleveland, Ohio. Stop mechanism for mortising-machines	421,859	Feb. 18	2097	550	50	977
Crow, John C. (See Curtiss, Rosman D., assignor.)						
Crow, William H., Mark Centre, Ohio. Fodder-fork	422,922	Mar. 11	854	222	50	1307
Crowder, David F., assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper cutter	428,464	May 20	2182	550	51	1256
Crowder, James. (See Rylands, Crowder, and Morant.)						
Crowell, Albert I., assignor of one-half to F. B. Goddard, New York, N. Y. Button	418,689	Jan. 7	31	8	50	8
Crowell, David, Yarmouth, Mass., assignor of one-half to A. Hallett, Bath, Me. Jib-bank	423,859	Mar. 18	2248	594	50	1579
Crowell, George G., Cincinnati, Ohio. Tool for dressing abrasive surfaces	426,490	Apr. 29	2140	824	51	648
Crowell, George G., Cincinnati, Ohio. Journal-bearing for emery grinding-machines	441,139	Nov. 25	2438	632	53	1103
Crowell, H. P., et al. (See Burnmeister, Frederick, assignor.)						
Crowell, Howard H., Syracuse, N. Y. Double-pole snap-switch	436,122	Sept. 9	1155	302	52	1601
Crowell, John H., Vineyard Haven, Mass. Finger-nail cutter	442,247	Dec. 9	961	254	53	1458
Crowell, Luther C., Brooklyn, N. Y. Delivery mechanism for printing-machines	419,644	Jan. 21	1481	397	50	316
Crowell, Luther C., Brooklyn, N. Y. Web-printing mechanism	419,832	Jan. 21	1767	468	50	370
Crowell, Luther C., Brooklyn, N. Y. Sealing attachment for sheet-delivery mechanism	419,833	Jan. 21	1769	469	50	371
Crowell, Luther C., Brooklyn, N. Y. Delivery apparatus for printing-machines	419,834	Jan. 21	1773	470 471	50	371
Crowell, Luther C., Brooklyn, N. Y. Web-severing mechanism	419,835	Jan. 21	1780	471	50	372
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Printing-machine	429,891	June 10	1188	295 296	51	1710
Crowell, Luther C., Brooklyn, assignor to R. Hoe & Co., New York, N. Y. Web printing and delivering machine	431,840	July 8	1275	320 321	52	258
Crowell, Myron D. (See Lamb and Crowell.)						
Crowell, Myron D., assignor of one-half to W. A. Lamb, Hartford, Conn. Lock-wheel for valve-stems	441,357	Nov. 25	2802	724	53	1168
Crowfoot, Joseph, and G. Doolittle, Bridgeport, Conn. Machine for making wire tubing	434,920	Aug. 26	2319	612 613	52	1235
Crowley, Henry C., Atlanta, Ga. Locomotive head-light	422,503	Mar. 4	202	55	50	1175
Crowley, John S., et al. (See Newhall, John F., assignor.) (Reissue.)						
Crowner, Frederick D., Canton, N. Y. Drain-trap	441,751	Dec. 2	196	51	53	1301
Crozier, Alfred O., et al. (See Raymond, Silas H., assignor.)						
Crumb, Charles C., Burlingame, Kans. Surface cultivator and pulverizer	440,993	Nov. 18	2182	564	53	1045
Crumbaugh, John W., and L. C. Prater, Kansas City, Mo. Car door	443,956	Dec. 30	2772	963	53	2028
Crummett, George F. (See Beard and Crummett.)						
Crumpp, Frank H., Washington, D. C. Baggage-check	428,465	May 20	2183	550	51	1256
Crumpp, Robert J., Owensborough, Ky. Scaffold	423,989	Mar. 25	2460	653	50	1626
Cryderman, Jacob, Milwaukee, Wis. Cam	432,301	July 15	1983	506	52	398
Crysler, John W. (See Jones, John P., assignor.)						
Crystal, John H. (See Shannon, William H., assignor.)						
Cuddington, Peter, Courtland, Mich. Stump-puller	430,422	June 17	2047	505	51	1888
Cuff, Arthur S., Kilburn, England. Ladder-balcony	437,333	Sept. 30	3129	818	52	2000
Culbertson, James C., Goshenville, Pa. Hay elevator and carrier	420,533	Feb. 4	151	37	50	593
Culbertson, John N., Buffalo, N. Y., assignor to American Bell Telephone Company, Boston, Mass. Telephone circuit and apparatus	419,645	Jan. 21	1482	397 398	50	317
Cull, Peter J., assignor to J. C. Wellinger, Pittsburg, Pa. Car-brake	434,253	Aug. 12	1232	319	52	1006
Cullons, John T., assignor of two-thirds to H. S. Mettlen, H. A. Kent, and B. F. Jones, Kansas City, Mo. Brick-kiln	437,577	Sept. 30	3525	920	52	2080
Culman, Daniel A., Jr., Kansas City, Mo. Hood for electric lamps	419,186	Jan. 14	816	215	50	175
Culmer, John W., New Brighton, Pa. Gas-meter	429,423	June 3	466	115 116	51	1564
Culmer, John W., New Brighton, Pa. Gas-meter	429,424	June 3	490	116 117	51	1565
Culmer, John W., New Brighton, Pa. Gas-meter	437,020	Sept. 23	2627	686 687	52	1899

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Culmer, John W., New Brighton, Pa. Gas-producer.....	437,098	Sept. 23	2738	{ 715 716 717 128 }	{ 52 }	1921
Culmer, John W., New Brighton, Pa. Gas-producer.....	441,941	Dec. 2	483	{ 129 130 }	{ 53 }	1359
Culp, Charles M., South Bend, Ind. Railway-rail bed.....	431,253	July 1	334	82	52	67
Culp, Samuel T., assignor of one-third to C. W. Little, Denver, Colo. Show-stand.....	434,414	Aug. 12	1485	387	52	1058
Culp, Samuel T., assignor of one-third to C. W. Little, Denver, Colo. Merchandise-exhibitor.....	434,415	Aug. 12	1487	{ 387 388 }	{ 52 }	1058
Culver, Charles H. (See Clark, Culver, and Stratton.)						
Culver, George A. and J. P., Blue Springs, Nebr. Dust-collector.....	441,140	Nov. 25	2439	632	53	1103
Culver, John P. (See Culver, George A. and J. P.)						
Culver, John P., Los Angeles, Cal. Pipe.....	429,844	June 10	1116	275	51	1697
Culver, Lucius L., St. Louis, Mo. Water-beater.....	438,531	Oct. 14	1298	351	53	256
Culver, Willard B., Pittston, Pa. Safety boiler-feed.....	436,284	Sept. 9	1398	364	52	1649
Culver, William H., Grand Rapids, Mich. Pump.....	422,383	Mar. 4	31	10	50	1143
Cumberbatch, Isaac, Newark, N. J. Condensed-water trap.....	421,559	Feb. 18	1669	432	50	896
Cumberland Manufacturing Company. (See Carmichael, Henry, assignor.)						
Cummer, Franklin D., Cleveland, Ohio. Pulverizing-machine.....	432,934	July 29	3049	{ 783 784 }	{ 52 }	618
Cumming, George, San Francisco, Cal. Automatic damper for steam-boilers.....	431,162	July 1	193	49	52	40
Cumming, James. (See Vail, Allen, assignor.)						
Cumming, William B. (See Paterson and Cumming.)						
Cummings, Charles C. (See Franklin, Rhodolph H., assignor.)						
Cummings, Edward N. (See Hutchinson, Robert M., assignor.)						
Cummings, Edward N., Lynn, Mass. Piano-action.....	420,007	Jan. 21	2043	539	50	425
Cummings, Edward N., Lynn, Mass. Pianissimo-action for pianos.....	430,002	June 10	1359	336	51	1744
Cummings, Evelyn D., Boston, Mass., assignor to Singer Manufacturing Company of New Jersey. Feeding mechanism for sewing-machines.....	427,556	May 13	802	{ 201 202 }	{ 51 }	981
Cummings, George P., New York, N. Y. Machine for dressing the commutators in dynamo-machines.....	443,270	Dec. 23	2691	690	53	1811
Cummings, Henry H., Malden, Mass. Rivet-setting machine.....	427,557	May 13	804	202	51	981
Cummings, Henry H., Malden, assignor to Standard Groove Rivet Company, Boston, Mass. Rivet-setting machine.....	432,231	July 15	1866	{ 479 480 481 }	{ 52 }	378
Cummings, Henry H., Malden, assignor to Union Button Sewing Machine Company, Boston, Mass. Sewing-machine for barring button-holes.....	435,686	Sept. 2	482	{ 127 128 }	{ 52 }	1468
Cummings, Henry H., Malden, Mass. Street-car.....	441,647	Dec. 2	28	8, 9	53	1267
Cummings, John, Grand Rapids, Mich. Thill-coupling.....	435,733	Sept. 2	546	144	52	1480
Cummings, John M. (See Burr and Cummings.)						
Cummings, John R., Chicago, Ill. Stereotype-plate and device for locking the same.....	442,364	Dec. 9	1145	299	53	1491
Cummings, John R., New York, N. Y. Stereotype's casting apparatus.....	433,449	Aug. 5	24	6	52	761
Cummings, John R., New York, N. Y. Stereotype-casting apparatus.....	442,515	Dec. 9	1382	354	53	1540
Cummings, John R., New York, N. Y., assignor, by mesne assignments, to American Press Association, of Illinois. Clamping device for stereotypers' casting-boxes.....	433,448	Aug. 5	22	6	52	761
Cummings, John R., New York, N. Y., assignor to American Press Association, Chicago, Ill. Stereotype-casting apparatus.....	442,363	Dec. 9	1143	298	53	1491
Cummings, William D., Allegheny, Pa. Filter.....	424,762	Apr. 1	509	{ 137 138 }	{ 51 }	99
Cummings, William H., Chicago, Ill. Grain-shoveling apparatus.....	422,123	Feb. 25	2474	{ 653 654 }	{ 50 }	1057
Cummings, Uriah, New Haven, Conn. Rock-drill.....	432,794	July 22	2750	704	52	554
Cummins, Arthur E., 118 Haverstock Hill, county of Middlesex, England. Bale-press.....	429,188	June 3	122	{ 28 29 30 31 }	{ 51 }	1494
Cummins, George W., Vienna, N. J. Preventing oxidation and deoxidation of copper when heated.....	429,892	June 10	1192	296	51	1711
Cummins, Michael, Leadville, Colo. Boomerang-thrower.....	429,230	June 3	183	44	51	1507
Cummins, Michael, and L. Greenwald; said Cummins assignor to J. Lindsay and said Greenwald, Leadville, Colo. Necktie-fastener.....	437,578	Sept. 30	3526	920	52	2080
Cumnock, James W. (See Ammann, Cumnock, and Stafford.)						
Cundall, James A., Manchester, England. Apparatus for printing on folded piece-goods.....	438,225	Oct. 14	845	229	53	168
Cundall, Robert, Shipley, county of York, England. Paper-folding machine.....	429,262	June 3	224	56	51	1515
Cuninghame, John C. (See Lüthrig and Cuninghame.)						
Cunneen, Cornelius F. (See Cunneen, Peter J. and C. F.)						
Cunneen, Peter J. and C. F., New Rochelle, N. Y. Safety-valve.....	438,471	Oct. 14	1213	329	53	238
Cunningham, Albert, Milwaukee, Wis. Band-saw mill.....	427,404	May 6	568	142	51	924
Cunningham, Albert, Milwaukee, Wis. Steam-boiler.....	434,656	Aug. 19	1879	491	52	1143
Cunningham, Albert, Milwaukee, Wis. Direct-acting steam-feed works for saw-mills.....	434,657	Aug. 19	1881	491	52	1143
Cunningham, Andrew J., Dixon, Ill. Manufacturing feather mattresses.....	438,682	Oct. 21	1525		53	305
Cunningham, Charles E. (See Holman and Cunningham.)						
Cunningham, Charles E. (See Warnick and Cunningham.)						
Cunningham, Charles E., and W. D. Warnick, Baltimore, Md. Piano-stool.....	431,803	July 8	1220	305	52	247
Cunningham, Gilbert H., San Francisco, Cal. Stencil and stencil-plate.....	433,769	Aug. 5	489	127	52	851
Cunningham, Herman E., Philadelphia, Pa. Card-forming machinery.....	437,021	Sept. 23	2631	687	52	1899
Cunningham, Herman E., assignor to J. Smith & Company, Philadelphia, Pa. Grinder for card-clothing.....	424,763	Apr. 1	511	138	51	100
Cunningham, John, assignor to A. Fowler, Chicago, Ill. Apparatus for singeing hogs.....	430,769	June 24	2619	642	51	2005
Cunningham, John H., Chelsea, Mass. Support for trolley-wires.....	421,677	Feb. 18	1839	480	50	929
Cunningham, Patrick. (See Martin and Cunningham.)						
Cunningham, Patrick, New Bedford, Mass., assignor to Applegate Boot and Shoe Lasting Company, Portland, Mo. Lasting-machine.....	424,861	Apr. 1	662	{ 175 176 }	{ 51 }	128
Cunningham Son & Company, James. (See Clements, Thomas, assignor.)						
Cunningham, Wilber J., Rapid City, S. D. Windmill.....	427,975	May 13	1445	{ 365 366 }	{ 51 }	1103
Cunningham, William F., assignor of one-half to E. Rutzler, Brooklyn, N. Y. Valve for steam-boilers.....	433,618	Aug. 5	260	69	52	808
Cunnington, Joseph G. S., Covent Garden, county of Middlesex, England. Fuse and fuse-block.....	433,770	Aug. 5	490	128	52	851
Cupples, Samuel. (See West, James, assignor.)						
Curit, W. J. (See Wagg, Charles H., assignor.)						
Curlett, Louis K., et al. (See Shubert, Harold C., assignor.)						
Curlin, Seth, Union City, Tenn. Decoy.....	430,565	June 17	2256	554	51	1926

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Curnow, William. (See Hobson, Charles H., assignor.)						
Curran, Peter, Susquehanna, Pa. Gage	440,621	Nov. 18	1572	405	53	928
Curran, Thomas, New York, N. Y. Mold for making plaster slabs	442,957	Dec. 16	2136	550	53	1697
Curran, Thomas, New York, N. Y. Mold for making plaster slabs	442,958	Dec. 16	2138	550	53	1697
Currey, Charles F. (See Hart, Currey, and Bridge.)						
Currie, James A., Springfield, Ohio. Manufacturing hominy-flakes or corn-flakes	427,159	May 6	215	55	51	853
Currie, Stanley C. C., Philadelphia, Pa., assignor to United Electric Improvement Com- pany, Gloucester City, N. J. Electric motor	419,245	Jan. 14	901	{ 236 237 }	{ 50 50 }	193
Currie, Stanley C. C., Philadelphia, Pa., assignor to United Electric Improvement Com- pany, Gloucester City, N. J. Making cores for electro-magnets	421,067	Feb. 11	963	-----	50	755
Currie, Stanley C. C., Philadelphia, Pa., assignor to United Electric Improvement Com- pany, Gloucester City, N. J. Regulation of alternate-current generators	423,029	Mar. 11	1011	265	50	1336
Currie, Stanley C. C., Philadelphia, Pa., assignor to United Electric Improvement Com- pany, Gloucester City, N. J. Electric motor	427,748	May 13	1101	276	51	1038
Currie, Stanley C. C., Philadelphia, Pa., assignor to United Electric Improvement Com- pany, Gloucester City, N. J. Measuring and registering electric energy	427,749	May 13	1104	276	51	1038
Currie, Stanley C. C., assignor to United Gas Improvement Company, Philadelphia, Pa. Secondary battery	422,504	Mar. 4	203	55	50	1175
Currie, Stanley C. C., assignor to United Gas Improvement Company, Philadelphia, Pa. Secondary battery	422,505	Mar. 4	204	55	50	1175
Currie, Stanley C. C., assignor to United Gas Improvement Company, Philadelphia, Pa. Electric-motor apparatus	431,649	July 8	961	240	52	199
Currie, Stanley C. C., assignor to United Gas Improvement Company, Philadelphia, Pa. Regulation and control of storage-batteries	438,145	Oct. 14	730	{ 200 201 }	{ 53 53 }	147
Currie, Stanley C. C., assignor to United Gas Improvement Company, Philadelphia, Pa. Apparatus for measuring the strength of electric currents	438,226	Oct. 14	848	230	53	169
Currie, Stanley C. C., assignor to United Gas Improvement Company, Philadelphia, Pa. Insulating appliance for electric batteries	438,532	Oct. 14	1300	352	53	257
Currie, Stanley C. C., assignor, by mesne assignments, to United Gas Improvement Com- pany, Philadelphia, Pa. Electro-magnetic clutch	434,382	Aug. 12	1418	372	52	1044
Currie, Stanley C. C., assignor, by mesne assignments, to United Gas Improvement Com- pany, Philadelphia, Pa. Method of and apparatus for measuring electric currents	442,423	Dec. 9	1235	319	53	1510
Currier, Alfred, Grand Rapids, Mich. Caster	436,698	Sept. 16	2063	541	52	1782
Currier, Alfred, assignor of one-half to D. H. Powers, Grand Rapids, Mich. Anti-rattler for thill-couplings	433,397	July 29	3651	942	52	738
Currier, Jacob B., Lowell, Mass., assignor to Currier Telephone Bell Company, of Massa- chusetts. Electric call	425,594	Apr. 15	1765	474	51	361
Currier, Mahlon D., Lawrence, Mass. Agitator for stuff-chests	438,606	Oct. 21	1418	383	53	285
Currier, Mahlon D., and R. A. Brendel, Lawrence, Mass. Agitator for stuff-chests	436,015	Sept. 9	978	256	52	1569
Currier Telephone Bell Company. (See Currier, Jacob B., assignor.)						
Currier Telephone Bell Company. (See Rice, David H., assignor.)						
Curriu, John, Southbridge, Mass., assignor to S. Eastman, Providence, R. I. Eyeglasses	425,595	Apr. 15	1768	474	51	361
Curry, Clarence G. and J. B., Louisville, Ky. Core for casting metal pipes and cylinders	419,187	Jan. 14	816	{ 215 216 }	{ 50 50 }	176
Curry, Harriet A., Groton, S. D. Adjustable pattern for drafting garments	438,607	Oct. 21	1419	{ 383 384 }	{ 53 53 }	285
Curry, James B. (See Curry, Clarence G. and J. B.)						
Curry, James H. (See Anderson, William W., assignor.)						
Curry, James H. (See Haines and Curry.)						
Curry, James H., et al. (See Thompson, John B., assignor.)						
Curry, John E., assignor of one-half to M. E. Hayes, Boston, Mass. Dumping apparatus	425,596	Apr. 15	1769	{ 474 475 }	{ 51 51 }	361
Curticeo, Jesse M., Louisville, Ky. Churn	427,053	May 6	27	9	51	816
Curticeo, Jesse M., Louisville, Ky. Fan	427,054	May 6	29	10	51	816
Curticeo, Jesse M., Louisville, Ky. Kitchen-cabinet	425,579	Sept. 2	306	85	52	1434
Curticeo, William H., assignor to Portable Fan Company, Louisville, Ky. Portable fan	423,737	Mar. 4	546	149	50	1240
Curtin, Andrew F., Medford, Mass. Hub or coupling for ventilating-pipes	441,289	Nov. 25	2706	702	53	1150
Curtin, Anthony, et al. (See Getchell, Charles E., assignor.)						
Curtis, John, Elk Falls, Kans. Horseshoe	427,976	May 13	1448	366	51	1103
Curtis, Andrew J., Monroe, assignor of one-half to J. H. Gordon, Brooks, Me. Pipe-wrench	425,371	Apr. 8	1432	383	51	286
Curtis, Charles F. (See Williams and Hackett, assignors.)						
Curtis, Charles H., Astor, Fla. Fruit sizer and grader	439,932	Nov. 4	457	{ 119 120 }	{ 53 53 }	697
Curtis & Curtis. (See Curtis, Lewis B., assignor.)						
Curtis & Curtis. (See Curtis, Roderick P., assignor.)						
Curtis & Curtis. (See Curtis, Roderick P. and L. B., assignors.)						
Curtis, David W., Fort Atkinson, Wis. Churn-closure	438,284	Oct. 14	942	254	53	185
Curtis, David W., assignor to O. S. Cornish and W. S. Greene, Fort Atkinson, Wis. Milk-vat	425,494	Apr. 15	1620	432	51	333
Curtis, Frank, Jr. (See Morrow and Curtis.)						
Curtis, George L., Chicago, Ill. Artificial tooth	424,050	Mar. 25	2554	681	50	1644
Curtis, George L., Syracuse, N. Y. Dental bridge	424,924	Apr. 1	755	201	51	147
Curtis, Henry J., Hartford, Conn. Bicycle-stand	431,740	July 8	1123	280	52	229
Curtis, Herbert N., New York, N. Y. Electric conduit	435,536	Sept. 2	237	65, 66	52	1420
Curtis, Judson J., et al. (See Langan, William B., assignor.)						
Curtis, Lewis B. (See Curtis, Roderick P. and L. B.)						
Curtis, Lewis B., Southport, assignor to Curtis & Curtis, Bridgeport, Conn. Pipe and bolt- threading attachment for lathes	439,122	Oct. 28	2240	602	53	446
Curtis, Lewis E., assignor to G. W. Cope, Chicago, Ill. Automatic cut-nail machine	424,925	Apr. 1	757	{ 201 202 }	{ 51 51 }	147
Curtis, Lyman T., et al. (See Skinner, Edward B., assignor.)						
Curtis, Nelson, Boston, Mass. Heat-regulator	441,648	Dec. 2	29	9	53	1268
Curtis, Roderick P., Southport, assignor to Curtis & Curtis, Bridgeport, Conn. Machine for simultaneously threading a plurality of bolts	437,291	Sept. 30	3069	{ 804 805 }	{ 52 52 }	1990
Curtis, Roderick P., Southport, assignor to Curtis & Curtis, Bridgeport, Conn. Pipe-thread- ing machine	443,501	Dec. 30	3068	790	53	1894
Curtis, Roderick P., Southport, assignor to Curtis & Curtis, Bridgeport, Conn. Pipe-thread- ing machine	443,502	Dec. 30	3069	790	53	1894
Curtis, Roderick P. and L. B., Southport, assignors to Curtis & Curtis, Bridgeport, Conn. Pipe-threading machine	443,500	Dec. 30	3067	789	53	1894
Curtis, Silas E., et al. (See Skinner, Edward B., assignor.)						
Curtis, William, Sullivan, Ind. Clothes-drier	434,921	Aug. 26	2321	613	52	1235
Curtis, William H. (See Allington and Curtis.)						
Curtis, William H. (See Kitchell, Oscar, assignor.)						
Curtis, William H., et al. (See Olmsted, David, assignor.)						
Curtis, William H., East Saginaw, Mich. Dust-collector	420,296	Jan. 28	2507	665	50	521

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Curtiss, Rosman D., assignor of one-half to J. C. Crow, Chicago, Ill. Sash-fastener.....	429,167	June 3	94	22	51	1490
Curtiss, Willard, assignor to W. T. and W. H. Powers, Grand Rapids, Mich. Machine for dressing the teeth of gear-wheels.....	431,139	July 1	154	40	52	33
Curtiss, William P., New London, Ohio. Hoop-shaving machine.....	429,376	June 3	423	100	51	1552
Curtius, Theodor, Erlangen, Germany. Hydrazin.....	422,334	Feb. 25	2805		50	1119
Cuttright, John E., Onslow, Iowa. Combined rack and dish-warmer.....	440,421	Nov. 11	1252	324	53	858
Curved Electrotype Plate Company. (See Furlong, Patrick M., assignor.)						
Curwen, Camden, Starke, Fla. Portable sawing-machine.....	431,445	July 1	636	160	52	129
Cushing, George W., Omaha, Nebr. Stock-car.....	429,509	June 3	617	151	51	1590
Cushing, George W., Omaha, Nebr. Car-seat.....	430,071	June 10	1478	367	51	1766
Cushing, George W., Chicago, Ill. Car-seat.....	441,942	Dec. 2	485	130	53	1359
Cushing, Henry H. (See Jenking, George R., assignor.)						
Cushing, John P., Boston, Mass. Indicator for elevators.....	429,189	June 3	125	31	51	1495
Cushing, Maria J., New York, N. Y. Sifting-shovel.....	427,055	May 6	32	10	51	817
Cushing, Robert D., Boston, Mass. Overhead conductor for electric railways.....	440,789	Nov. 18	1854	478	53	981
Cushing, Ruel J., Bangor, Me. Gun-sight.....	439,271	Oct. 28	2489	667	53	492
Cushman Car Wheel Company. (See Haugh and Leach, assignors.)						
Cushman, Abe L., Concord, N. H. Car-axle lubricator.....	421,351	Feb. 11	1363	353	50	830
Cushman, Abe L., Concord, N. H. Dust-guard for car-axle boxes.....	437,643	Sept. 30	3612	945	52	2007
Cushman, Abe L., assignor to J. A. White, Concord, N. H. Car-axle lubricator.....	437,394	Sept. 30	3240	814	52	2021
Cushman, Amos A., and G. W. Stinebring, Shreve, Ohio. Friction-clutch.....	442,308	Dec. 9	1059	277	53	1475
Cushman, Asa, assignor to O. C. Devereux, Providence, R. I. Separable button.....	434,177	Aug. 12	1110	287	52	984
Cushman, Austin E., Hartford, Conn. Face-plate jaw.....	435,405	Sept. 2	44	15	52	1383
Cushman, Elmer S., Delhi Mills, Mich. Wrench.....	439,388	Oct. 28	2683	714	53	528
Cushman, George H., and E. H. Taylor, Lynn, Mass., assignors, by mesne assignments, to Cushman Paper Box Machine Company, Portland, Me. Paper-box-making machine.....	418,690	Jan. 7	31	9,10	50	8
Cushman, George H., and E. H. Taylor, Lynn, Mass.; said Taylor assignor to said Cushman. Paper-box-making machine.....	420,901	Feb. 4	707	{ 182 } { 183 }	50	697
Cushman, Henry S., Milford, Mass. Harness-terret.....	420,042	Jan. 28	2096	553	50	444
Cushman Paper Box Machine Company. (See Cushman and Taylor, assignors.)						
Cusson, Japhet S., Fredonia, N. Y. Riding-saddle.....	443,087	Dec. 23	2367	604	53	1749
Custer, Zora B., Dansville, N. Y. Thill-coupling.....	419,421	Jan. 14	1166	310	50	246
Cutcliffe, Edward, East Bethany, N. Y. Cultivator-tooth.....	418,691	Jan. 7	43	10	50	10
Cuthbert, William M. (See Donn and Cuthbert.)						
Cuthbertson, Joseph, assignor to Boss Cuthbert Company, Bunker Hill, Ill. Arbor-bearing.....	422,298	Feb. 25	2752	725	50	1108
Cutler, Charles, <i>et al.</i> (See Toney, Ferris D., assignor.)						
Cutler, Fred H., Buffalo, N. Y. Blotter-support.....	421,390	Feb. 18	1424	369	50	850
Cutler, George A., <i>et al.</i> (See Raymond, Silas H., assignor.)						
Cutler, James L., Piketon, Ohio. Apparatus for electrical communication.....	426,989	Apr. 29	3863	1012	51	787
Cutler, James L., Piketon, assignor to J. A. Sullivan, F. O. Loveland, and G. Mallon, Cincinnati, Ohio. Electrical communication.....	421,371	Feb. 11	1390	359	50	834
Cutler, James L., Piketon, assignor to J. A. Sullivan, F. O. Loveland, and G. Mallon, Cincinnati, Ohio. Electrical communication.....	433,619	Aug. 5	261	70	52	808
Cutler, Joseph W., Rochester, N. Y. Letter-box.....	430,626	June 24	2370	579	51	1957
Cutler, Samuel, Millwall, county of Middlesex, England. Apparatus for heating and circulating water, &c.....	433,330	July 29	3567	920	52	721
Cutler, Samuel, Millwall, England. Guide-framing of gas-holders.....	438,472	Oct. 14	1215	329	53	239
Cuttell, Joe S., assignor of one-half to R. N. Thomas, Bingham, Iowa. Corn-husker.....	436,776	Sept. 23	2201	580	52	1816
Cutter, Henry B. (See Stanley, Lucius T., assignor.)						
Cutter, Henry B. (See Stanley and Cutter.)						
Cutter, James H., Utica, N. Y. Calendar.....	420,440	Feb. 4	18	4	50	568
Cutter, Martin A., Allegheny, Pa. Lock-hinge.....	429,845	June 10	1117	{ 275 } { 276 }	51	1697
Cutter Tower Company. (See Lugin, Horatio N. H., assignor.)						
Cutter, Watson G. (See Rossney, William C., assignor.)						
Cutts, Charles D., and E. E. Seates, Fort Fairfield, Me. Handle for tinware.....	443,039	Dec. 16	2264	581	53	1722
Cuyahoga Manufacturing Company. (See Garlick, Edward C., assignor.)						
Cyclone Manufacturing Company. (See Ross, Noble G., assignor.)						
Czischek, Ludwig, Vienna, Austria-Hungary. Valve-gear.....	435,994	Sept. 9	952	250	52	1564
Czvetkovics, Mitar D., Vienna, Austria-Hungary. Weir.....	441,470	Nov. 25	2992	{ 770 } { 771 }	53	1204
D'Arcus, Henry, assignor to Swann & Whitehead, Trenton, N. J. Lamp-wick-adjusting device.....	438,101	Oct. 7	666	181	53	129
D'Arcy-Irvine, John, Rowth, county of Dublin, Ireland. Pneumatic apparatus for throwing life-lines.....	433,674	Aug. 5	346	88	52	823
D'Arros, Felix C., and J. C. Righter, Salem, N. J. Ventilating-blind.....	421,165	Feb. 11	1105	284	50	783
D'Heunse, Rudolph. (See Servus, Ferdinand, assignor.)						
Dabbs, William, Little Rock, Ark. Attachment for bicycles.....	436,403	Sept. 16	1599	422	52	1696
Dacus, Augusta, San Antonio, Tex. Dress-stay.....	440,140	Nov. 11	775	203	53	769
Dacus, Robert H., Dardanelle, Ark. Aerating and water pump.....	438,061	Oct. 7	604	{ 164 } { 165 }	53	116
Dadisman, Clara B., Omaha, Nebr. Bunion-protector.....	434,979	Aug. 26	2398	635	52	1251
Daellenbach, Charles R., Allegheny, Pa. Swimming apparatus.....	424,277	Mar. 25	2261	765	50	1704
Daellenbach, Charles R., Allegheny, assignor of three-fourths to R. Glasser, H. Schoene-feldt, and W. H. Crosby, Pittsburg, Pa. Air-brake.....	442,019	Dec. 2	610	{ 164 } { 165 }	53	1382
Daffron, Wesley. (See Morgan and Daffron.)						
Daft Electric Light Company. (See Daft, Leo, assignor.)						
Daft, Leo, Plainfield, N. J., assignor to Daft Electric Light Company, New York, N. Y. Carbon brush for motors.....	427,674	May 13	971	{ 244 } { 245 }	51	1013
Daft, Leo, Plainfield, N. J., assignor to Daft Electric Light Company, New York, N. Y. Electric cut-out.....	431,035	July 1	11	3	52	4
Daggett & Clapp. (See Peck, Frederick A., assignor.)						
Daggett, George E., Bridgeport, Conn. Railway-rail brace.....	429,168	June 3	95	23	51	1490
Daggett, Henry S., Lamar, Colo. Motor for clipping machines.....	422,738	Mar. 4	547	140	50	1210
Daggett, Homer M., Jr. (See Dillon, Louis W., assignor.)						
Dahl, Olaus A., Mona, Iowa. Thill-coupling.....	440,472	Nov. 11	1324	342	53	873
Dahlstrom, Andrew, Ashton, Mich. Advertising or display device.....	429,893	June 10	1193	296	51	1711
Dahlstrom, Leopold, assignor of one-half to R. Menzel, Santa Clara, Cal. Valve mechanism for double-acting pumps.....	439,480	Oct. 28	2815	750	53	553
Dain, Albert E., Pittsburg, Pa. Ink-bottle.....	428,554	May 20	2302	585	51	1279
Dain, Albert E., Pittsburg, Pa. Tubular boiler.....	438,090	Oct. 7	646	{ 176 } { 177 }	53	124
Dain, Albert E., assignor of three-fifths to J. Q. Everson and J. H. Roney, Pittsburg, Pa. Bottle-stopper.....	420,676	Feb. 4	349	92	50	632

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Dain, James M., Ashmore, Ill. Scythe	436,474	Sept. 16	1718	453	52	1718
Dainty, Elijah, Coal Bluff, Pa. Hoisting-machine	420,077	Feb. 4	350	92, 93	50	632
Dainty, Elijah, Coal Bluff, Pa. Cable-grip	431,125	Feb. 11	1044	267	50	771
Dainty, Elijah, Coal Bluff, Pa. Metallic railway-tie	432,377	July 15	2084	535	52	418
Dainty, Elijah, Coal Bluff, Pa. Cable-grip	443,392	Dec. 23	2888	742	53	1851
Dakin, Charles S. (See Olcott, William W., assignor.)						
Dale, George L., New York, N. Y. Neckscarf	437,579	Sept. 30	3527	920	52	2080
Dales, John H., assignor to G. Dalton, Leeds, county of York, England. Steam-engine	423,742	Mar. 18	2082	{ 549 550 }	50	1546
Daley, John J., Brooklyn, N. Y. Ironing-machine	419,504	Jan. 14	1279	341	50	268
Daley, John J., Brooklyn, N. Y. Ironing-machine	420,774	Feb. 4	484	{ 126 127 }	50	657
Daley, John J., Brooklyn, N. Y. Ironing-machine	427,463	May 6	662	166	51	943
Daley, Joseph, Emporia, Kans. Two-wheeled vehicle	425,566	Apr. 15	1732	462	51	353
Daley Manufacturing Company. (See Daley, Michael, assignor.)						
Daley, Michael, assignor to Daley Manufacturing Company, De Kalb, Ill. Harrow	434,383	Aug. 12	1419	373	52	1045
Dalie, John G., Springfield, Ohio. Steam-boiler	436,123	Sept. 9	1156	302	52	1601
Dallas, Martha, Atlanta, Ga. Combination grate and stove	435,965	Sept. 9	909	240	52	1556
Dalling, William G. (See Leyson and Dalling.)						
Dallmeyer, Thomas R., London, and F. Beauchamp, Tottenham, England. Photographic shutter	436,404	Sept. 16	1600	423	52	1696
Dalrymple, Hartwell A., Rutland, Vt. Chair	424,466	Apr. 1	36	10	51	10
Dalrymple, Hartwell A., Rutland, Vt. Ball-caster	424,467	Apr. 1	37	11	51	10
Dalrymple, Hartwell A., Rutland, Vt. Ball-caster	440,346	Nov. 11	1106	284	53	831
Dalton, Andrew W., Meriden, Conn. Buckle	427,839	May 13	131	311	51	1062
Dalton, George. (See Dales, John H., assignor.)						
Dalton, George W., Enola, Ark. Umbrella-holder	437,681	Oct. 7	9	3	53	4
Dalton, James M. (See Viney and Dalton.)						
Dalton, John, assignor to T. G. Lee, Danvers, Mass. Safety-hook for electric lights	426,778	Apr. 29	3574	933	51	731
Dalton, John H., Philadelphia, Pa. Waste-box	441,141	Nov. 25	2440	632	53	1103
Dalton, John R., Hammond, Wis., assignor to A. R. Starkey, St. Paul, Minn. Hoisting and loading apparatus	436,732	Sept. 16	2112	556	52	1792
Dalton, Patrick J., New York, N. Y. Power apparatus	435,802	Aug. 5	491	128	52	851
Dalton, Thomas, Chicago, Ill. Combined cigar-cutter and match-safe	439,481	Oct. 28	2816	750	53	553
Dalumi, Julius A., New York, N. Y. Folding ladder	437,174	Sept. 30	2897	754	52	1956
Daly, James. (See Rundquist, Peter, assignor.)						
Daly, John F. (See Barrett and Daly.)						
Daly, Michael, Pittsburg, Pa. Sand-pipe for locomotives	435,210	Aug. 26	2738	722	52	1314
Dalzell, Allan C., Jr., Sag Harbor, N. Y. Manufacturing watch-crown pieces	435,802	Sept. 2	655	172	52	1501
Dambach, Edward, Evans City, Pa. Extensible mantel	420,775	Feb. 4	485	127	50	658
Damerson, W. T., et al. (See Fleming, Peter F., assignor.)						
Damm, Frederick C., Cleveland, Ohio. Machine for molding plastic material	422,186	Feb. 25	2565	{ 679 680 }	50	1074
Damm, Frederick C., Cleveland, Ohio. Machine for making bird-targets	434,107	Aug. 12	995	259	52	961
Dammann, Conrad A., St. Louis, Mo. Holdback	440,347	Nov. 11	1107	284	53	831
Damon, George L., Boston, Mass. Electric safe-lock	437,682	Oct. 7	10	4	53	5
Damon, George L., Boston, Mass. Safe-door	440,695	Nov. 18	1689	434	53	951
Damon, Walter E. (See Besse, Edgar F., assignor.)						
Damren, Samuel G., Auburn, Me. Machine for making paper boxes	423,415	Mar. 18	1593	{ 418 419 }	50	1455
Dana, Junius. (See Allderdice, Winslow, assignor.)						
Dana, Lester D., Wapaca, Wis. Friction-clutch	431,446	July 1	638	160	52	129
Dana, William F., Belpre, Ohio. Device for manipulating can-cages	424,278	Mar. 25	2362	765	50	1704
Dancel, Christian. (See Valiant and Dancel.)						
Dancel, Christian, New York, N. Y., assignor to J. Munyan, Worcester, Mass. Mechanism for winding bobbins	420,441	Feb. 4	19	5	50	568
Daucyger, Simon, Dayton, Ohio. Tag	435,406	Sept. 2	45	15	52	1383
Danforth & Clark. (See Olin, Fred C., assignor.)						
Danforth, George E., assignor of one-half to A. B. Hoffman, Lynn, Mass. Machine for stretching hides or skins	423,030	Mar. 11	1013	266	50	1336
Danforth, John W., Buffalo, N. Y. Gas-stove	413,088	Dec. 23	2368	{ 604 605 }	53	1749
Danforth, John W., and R. W. Clark, Buffalo, N. Y. Gas and air mixer	422,299	Feb. 25	2752	725	50	1108
Danforth, Roderick F., assignor of one-half to H. P. Holden, Washington, D. C. Combined stove, lamp, and lantern	428,043	May 13	1543	390	51	1122
Dangler Stove and Manufacturing Company. (See Ruppel, Henry, assignor.)						
Daniel, William H., assignor to himself and W. H. Palmer, Chicago, Ill. Feed-trough	443,503	Dec. 30	3070	791	53	1894
Danielowsky, Carl, Breslau, Prussia, Germany. Medicine-spoon	427,254	May 6	355	91	51	880
Daniels, Archibald F. G., Walthamstow, county of Essex, England. Eraser	434,505	Aug. 19	1626	427	52	1094
Daniels, Fred H., Worcester, Mass. Rod-rolling mill	419,432	Jan. 14	1167	310	50	246
Daniels, Fred H., Worcester, Mass. Rolling-mill	429,425	June 3	493	117	51	1566
Daniels, Fred H., Worcester, Mass. Rolling-mill	440,696	Nov. 18	1690	{ 435 436 }	53	951
Daniels, Henry E. C., and T. Kane, Chicago, Ill., assignors to said Kane. Stool	425,305	Apr. 8	1343	358	51	269
Daniels, Henry H., Cincinnati, Ohio. Combination padlock	431,336	July 1	453	112	52	93
Daniels, Joseph, Hartford, Conn., assignor to Edison United Phonograph Company, of New York. Graphophone	436,576	Sept. 16	1875	493	52	1746
Daniels, Luther, et al. (See Nourse, James K. P., assignor.)						
Daniels, Rienzi A., Minneapolis, Minn. Weighing and price scale	442,218	Dec. 9	925	245	53	1451
Daniels, Thomas J., assignor to Sperry & Co., San Francisco, Cal. Machine for sewing up the mouths of filled bags	427,750	May 13	1106	277	51	1039
Daniels, William H., St. Louis, Mo. Car-axle lubricator	422,011	Feb. 25	2303	609	50	1026
Danielson, Wilhelm G., and W. Merrill, Richmond, Utah Ter. Sulky-plow	430,423	June 17	2050	505	51	1888
Dauks, Aaron T., Melbourne, Victoria. Register for gas or other meters	433,331	July 29	3567	920	52	721
Danks, Frank, assignor of part to H. R. Osborn and J. H. Bissell, Troy, N. Y. Machine for making rivets	441,229	Nov. 25	2581	{ 668 669 }	53	1130
Danks, Joseph J., Cincinnati, Ohio. Keg and barrel washing machine	434,430	Aug. 19	1513	395	52	1070
Danley, Hardin, Newton, Kans. Poultry-car	431,337	July 1	458	113	52	94
Dannals, William R., Philadelphia, Pa. Bottle-filling machine	440,916	Nov. 18	2064	{ 533 534 }	53	1021
Danner, William. (See Koch and Danner.)						
Dansinger, Robert. (See Beach and Dansinger.)						
Danzonbaker, Howe E., Philadelphia, Pa. Bicycle	440,944	Nov. 18	2113	{ 548 549 }	53	1031

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Darley, Cecelia B., Philadelphia, Pa. Corn-cutting device	422,384	Mar. 4	33	10	50	1143
Darling, Esck R. (See Stiner and Darling.)						
Darling, George W., Owosso, Mich. Blacking-brush	437,175	Sept. 30	2898	754	52	1956
Darling, Henry M., assignor to A. S. Davis, Seneca Falls, N. Y. Cutting-tool	436,306	Sept. 9	1429	373	52	1656
Darling, Joseph, Baldwin, Pa. Horse checking and unchecking device	424,181	Mar. 25	2733	729	50	1678
Darling, Joseph, Baldwin, Pa. Rivet-catcher for pumps	436,218	Sept. 9	1302	339	52	1629
Darling, Samuel, Providence, R. I. Vernier-scale	442,020	Dec. 2	613	165	53	1383
Darling, William H., assignor of two-thirds to L. Bock, Jr., and G. P. Harrington, New York, N. Y. Electric locomotive	419,753	Jan. 21	1646	437	50	347
Darmancier, Michel. (See Daudeteau and Darmancier.)						
Darmstadt, Frank, Brooklyn, N. Y. Soil-pipe stopper or closer	422,739	Mar. 4	548	140	50	1241
Darnell, Calvin F., Indianapolis, Ind., assignor to Indianapolis Fence Company, of Indiana. Gate	428,716	May 27	2574	652	51	1348
Darnell, Calvin F., Indianapolis, Ind., assignor to Indianapolis Fence Company, of Indiana. Gate-hinge	430,272	June 17	1826	448	51	1843
Darrach, Julia. (See Darrach, Samuel A., assignor.)						
Darrach, Samuel A., Newark, N. J. Letter-box	427,464	May 6	663	166	51	943
Darrach, Samuel A., assignor to J. Darrach, Newark, N. J. Game apparatus	443,073	Dec. 16	2320	593	53	1733
Darraeq, Pierre A., Le Pré St. Gervais, France. Sewing-machine	425,539	Apr. 15	1683	449	51	345
Darragh, Angus J., Allegheny, Pa. Leather-stuffing wheel	421,249	Feb. 11	1219	315	50	804
Darrall, Thomas M., Wheeling, W. Va. Minnow-bucket	435,211	Aug. 26	2738	722	52	1314
Darrow, Charles E., New Holland, assignor of one-half to A. T. and W. E. Osborn, Wabash, Ind. Automatic gate for railway street-crossings	431,877	July 8	1333	335	52	268
Dart, Albert E., assignor of three-fourths to O. C. Heath, T. C. Hidden, Providence, and T. M. Wheeler, Greenwich, R. I. Union-coupling	424,468	Apr. 1	38	11	51	10
Dart, Edward, assignor to F. Haines, New York, N. Y. Artificial stone-block pavement	421,483	Feb. 18	1552	401	50	874
Dart, Edward, assignor to F. Haines, New York, N. Y. Artificial stone-block pavement	421,560	Feb. 18	1671	433	50	896
Dart, Lewis, deceased; W. E. Goodwin administrator and assignor, by mesne assignments, to Type-Writing Machine Company, Hartford, Conn. Type-writing machine	432,479	July 15	2241	579	52	450
Dasher, Hiram D., assignor of two-thirds to S. Miller and J. Kleindorf, Middletown, Pa. Railway-tie	439,482	Oct. 28	2817	750	53	553
Dashiell, Robert B., Annapolis, Md. Device for manipulating breech-plugs	435,803	Sept. 2	656	173	52	1591
Dates, John H., Philadelphia, Pa. Stop-clock	428,717	May 27	2576	652	51	1348
Datner, Leopold, Brooklyn, N. Y. Neckscarf	429,806	June 10	1055	259	51	1684
Dattlebaum, Marcus, San Francisco, Cal. Umbrella attachment	423,990	Mar. 25	2461	653	50	1626
Dauber, August, Bochum, Germany. Helical loading apparatus	431,650	July 8	964	240	52	199
Dauchy, Arthur H., San Diego, Cal. Valve and faucet	433,072	July 29	3187	819	52	644
Danchy, Arthur H., San Diego, Cal. Valve and faucet	433,198	July 29	3380	874	52	683
Daudeteau, Louis M. R., Vannes, and M. Darmancier, Saint-Chamond, France. Mechanism for breech-loading guns	426,779	Apr. 29	3575	933	51	731
Paul, Anthony, Stuttgart, Germany. Churn	424,600	Apr. 1	250	66	51	51
Davaillon, Joseph, Cincinnati, Ohio. Cloak	437,377	Sept. 30	3219	839	52	2017
Davelaar, Martin, Milwaukee, Wis. Brick-machine	422,506	Mar. 4	206	56	50	1176
Davenport, Charles R., Washington, D. C. Bicycle	420,145	Jan. 28	2264	599	50	478
Davenport, Henry H., and D. A. Brosius, Vermillion, S. D. Well-sinking machine	422,021	Dec. 2	614	165	53	1383
Davenport, James B., Hartford, Conn. Sleeping-car	430,890	Sept. 23	2445	638	52	1863
Davenport, Samuel A. (See Hitchcock, Charles A., assignor.)						
Davenport, Samuel A., et al. (See Burnley, William, assignor.)						
Davenport, William H., Norwalk, Conn. Adjustable extractor for breech-loading guns	442,106	Dec. 9	756	204	53	1418
Davey, Henry, Westminster, England. Pumping-engine	434,704	Aug. 19	1964	510	52	1158
David, Augustin O., Paris, France, assignor to E. Miamay, Elizabeth, N. J. Machine for making spring-wedges for railway-chairs	424,408	Mar. 25	3109	824	50	1752
David, Jacob, Brooklyn, N. Y. Folding bed	428,200	May 20	1765	446	51	1175
Davids, William, assignor of one-half to J. P. Beck, Remsen, Iowa. Car-coupling	428,164	May 20	1717	435	51	1166
Davidson, Abner W., Leavenworth, Kans. Automatic coal-cage	443,430	Dec. 23	2941	756	53	1860
Davidson, Andrew C. and S., and G. A. Barber, Toronto, Canada. Baby-walker	432,378	July 15	2085	535	52	418
Davidson, Arthur W., and C. Sigmund, Philadelphia, Pa. Piano	427,240	May 13	1231	312	51	1063
Davidson, Benjamin R., Fayetteville, Ark. Mechanical and electrical railway-signal	436,777	Sept. 23	2201	581	52	1816
Davidson, Benjamin R., Fayetteville, Ark. Railway time-signal	436,913	Sept. 23	2487	650	52	1871
Davidson, Charles, Guelph, Ontario, Canada. Device for transmission of power	432,772	Aug. 5	493	128	52	851
Davidson, Charles O., Carrington, Mo. Stock-gard for railway-crossings	428,078	May 20	1596	405	51	1142
Davidson, Edward C. (See Farrer, Camille A., assignor.)						
Davidson, George, and R. A. Dixon, Paris, Ontario, Canada. Circular-knitting machine	427,465	May 6	663	167	51	943
Davidson, Henry, Dalston, assignor to Improved Screw Cork Company, Limited, London, England. Machine for cutting screw-threads	437,580	Sept. 30	3528	921	52	2080
Davidson, Henry, and H. Hart, London, England; said Hart assignor to said Davidson. Road coupling or joint	432,695	July 22	2591	663	52	524
Davidson, Marshall T., Brooklyn, N. Y. Duplex valve for pumping-engines	431,180	July 1	221	55, 56	52	46
Davidson, Robert J., assignor to Ramapo Iron Works, Hillburn, N. Y. Railway-switch	422,573	Mar. 4	303	77	50	1194
Davidson, Samuel. (See Davidson and Barber.)						
Davidson, Samuel L. (See Hoke, Quinton J., assignor.)						
Davidson, Thomas. (See Vécey and Davidson.)						
Davidson, Thomas, Montreal, Canada. Stove-pipe or other sheet-metal cylinder	437,981	Oct. 7	470	133	53	90
Davie, William R., Landsford, S. C. Harrow	428,895	May 27	2835	721	51	1401
Davies Brothers & Co. (See Davies, Edward A., assignor.)						
Davies, Edward A., assignor to Davies Brothers & Co., (limited,) Wolverhampton, county of Stafford, England. Galvanizing plates	425,661	Apr. 15	1884	503	51	384
Davies, Edwin L. (See Bansemer and Davies.)						
Davies, Evan T., Portland, Oreg. Saw-mill set-works	438,062	Oct. 7	605	165	53	116
Davies, Jacob M., New Castle, Pa. Mold for casting sad-irons	430,337	June 17	1932	473	51	1864
Davies, John C. (See Blackmer, Robert M., assignor.)						
Davies, Joseph D., Cincinnati, Ohio. Device for operating steam-engine indicators	441,142	Nov. 25	2441	633	53	1103
Davies, Mattie P. (See Robinson, Walter H., assignor.)						
Davies, Owen T., Brighton, Cal. Combined ditcher and cultivator	439,933	Nov. 4	460	120	53	698
Davies, Richard W., Croydon, near Sydney, New South Wales. Brick-machine	439,322	Oct. 28	2581	689	53	509
Davies, Roderick T., Southington, Conn. Hydrocarbon-burner	443,316	Dec. 23	2777	712	53	1827
Davies, T. W., et al. (See Henshaw, Fred M., assignor.)						
Davies, Thomas A., New York, N. Y. Wear-plate for railway-rail ties	421,678	Feb. 18	1840	480	50	930
Davies, Thomas A., New York, N. Y. Bulk-head for railway-tracks	421,679	Feb. 18	1841	481	50	930

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Davis, Adelbert S. (See Darling, Henry M., assignor.)						
Davis, Albert, Plankinton, S. D. Corn-planter	424,541	Apr. 1	158	45	51	33
Davis, Albert T. L. (See Pepper and Davis.)						
Davis, Albert T. L., Lake Village, N. H. Circular-knitting machine	438,346	Oct. 14	1032	{ 281 282 }	{ 53 }	204
Davis, Alexander H. S., Washington, D. C., assignor of one-half to A. C. Brown, Minneapolis, Minn. Car-coupling attachment	437,644	Sept. 30	3613	945	52	2097
Davis, Arthur, Ogdensburg, N. Y. Blind-hinge	434,323	Aug. 12	1332	347	52	1027
Davis, Augustus H., and O. E. Byrd, Crawfordsville, Ind. Shaft-holder for vehicles	433,773	Aug. 5	493	128	52	851
Davis, Brice S., assignor of one-half to E. E. Park, Greenfield Centre, N. Y. Combined anvil and vise	426,990	Apr. 29	3871	1012	51	789
Davis, Calvin R., assignor of one-half to L. F. Kimberlin, Indianapolis, Ind. Cultivator	418,692	Jan. 7	44	10	50	10
Davis Carriage Company. (See Hess and Hawes, assignors.)						
Davis, Charles A., Peoria, Ill. Road-cart	423,860	Mar. 18	2249	594	50	1579
Davis, Charles A., Peoria, Ill. Two-wheeled vehicle	425,410	Apr. 15	1495	402	51	308
Davis, Charles A., Rochester, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Vulcanizer	420,590	Feb. 4	231	60	50	610
Davis, Charles A., Rochester, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Vulcanizer. (Reissue)	11,105	Aug. 26	3024	800	52	1367
Davis, Charles C., et al. (See Quigg, Lewis, assignor.)						
Davis, Charles C., Los Angeles, Cal. Device for inducing full respiration	443,204	Dec. 23	2591	666	53	1794
Davis, Charles E., and C. Lewis, Neosho, Mo. Neck-yoke	441,538	Nov. 25	3090	794	53	1224
Davis, Clyde, Luray, Mo. Wire-working tool	425,580	Sept. 2	308	85	52	1434
Davis, Daniel and E. H., Elmira, N. Y. Nail-puller	426,491	Apr. 29	3141	825	51	648
Davis, David, and J. McComb, Buckingham, Ohio. Coal-drill	420,442	Feb. 4	23	5	50	569
Davis, David P., Allendale, N. J., assignor to New York Safety Steam Power Company, New York, N. Y. Balance for steam-engine eccentrics	419,836	Jan. 21	1781	472	50	372
Davis, Edward, assignor of one-half to E. B. Welch, Cambridge, Mass. Telephone	433,981	Aug. 12	807	211	52	922
Davis, Edward P., et al. (See Mathewson, James R., assignor.)						
Davis, Edwin F., Centralia, Kans. Lock	422,740	Mar. 4	549	141	50	1241
Davis, Elias M. (See Shepherd and Davis.)						
Davis, Etna H. (See Davis, Daniel and E. H.)						
Davis, Eugene A., Dover, N. H. Collapsible barrel-horse	420,776	Feb. 4	486	127	50	658
Davis, Fanny C., Pana, Ill. Dough kneading or mixing device	437,099	Sept. 23	2743	717	52	1922
Davis, Frank B., assignor of one-half to A. C. Mason, Chicago, Ill. Brush or mop head	434,254	Aug. 12	1234	319	52	1007
Davis, Frank E. (See Thompson, Joseph H., assignor.)						
Davis, Frank E., assignor to W. W. Harris, Charlestown, N. H. Fire-escape ladder	431,878	July 8	1336	336	52	269
Davis, Frank E., Boston, and J. Scott, Jr., Plymouth, Mass. Machine for covering wire, &c.	420,777	Feb. 4	487	{ 127 128 }	{ 50 }	658
Davis, Frank E., Boston, and J. Scott, Jr., Plymouth, Mass. Electric machine for covering wire, &c.	425,990	Apr. 22	2392	634	51	489
Davis, Frank E., Boston, and J. Scott, Jr., Plymouth, Mass. Electric motor	425,991	Apr. 22	2396	634	51	490
Davis, Frank E., Boston, and J. Scott, Jr., Plymouth, Mass. Machine for covering wire	428,201	May 20	1767	446	51	1175
Davis, Franklin T. (See Bigelow, Charles C., assignor.)						
Davis & Furber Machine Company. (See Ellison, James A., assignor.)						
Davis & Furber Machine Company. (See Wickers, George O., assignor.)						
Davis & Furber Machine Company. (See Wright, Edward, assignor.)						
Davis, George A. (See Young and Davis.)						
Davis, George E., Dubuque, Iowa. Camera and electrical flash-light attachment	421,484	Feb. 18	1553	401	50	874
Davis, George H., Washington, D. C. Printing from stencils	421,561	Feb. 18	1672	433	50	897
Davis, George L. (See Davis, Nathaniel, assignor.)						
Davis, George N., et al. (See Tracy, William P., assignor.)						
Davis, H. K., et al. (See Carl, Reinhold A., assignor.)						
Davis, Harriet E., Topeka, Kans. Dish-washer	438,533	Oct. 14	1301	352	53	257
Davis, Harrison N., Armourdale, Kans. Hydrocarbon-burner	442,959	Dec. 16	2139	550	53	1697
Davis, Harry S. (See Davis, William H., assignor.)						
Davis, Henry J., Central Institute, Ala. Plow	436,339	Sept. 16	1486	388	52	1674
Davis, Herbert F., Rome, Ga. Car-coupling	431,688	July 8	1042	261	52	212
Davis, Howard A., et al. (See Rodgers, William N., assignor.)						
Davis, John. (See Abrahams, John W., assignor.)						
Davis, John, New Bedford, Mass. Nut-lock	419,322	Jan. 14	1017	269	50	215
Davis, John, Boston, Mass. Stove for heating soldering-irons, &c.	423,377	Mar. 11	1535	403	50	1436
Davis, John, assignor to G. H. Bailey, Boston, Mass. Flat-iron	423,376	Mar. 11	1534	403	50	1435
Davis, John E., Washington, N. J. Type-writer cabinet	427,841	May 13	1292	312	51	1063
Davis, John E., and C. A. Lewis, Olax, Nebr. Car-coupling	430,247	June 17	1754	437	51	1830
Davis, John G., Detroit, Mich. Cash-carrier apparatus	443,903	Dec. 30	3653	948	53	2013
Davis, John H., et al. (See Harker, Henry K., assignor.)						
Davis, John H., assignor of one-third to Y. Bickham, Findlay, Ohio. Galvanic battery	430,990	June 24	2958	726	51	2069
Davis, John H., assignor of one-third to Y. Bickham, Findlay, Ohio. Carbon for electrical purposes and making the same	430,991	June 24	2960	721	51	2070
Davis, John K., Racine, Wis. Whiffletree-hook	428,896	May 27	2836	721	51	1401
Davis, John S., Toledo, Ohio. Starting mechanism for grain-binders	419,423	Jan. 14	1168	{ 310 311 }	{ 50 }	246
Davis, John S., Cleveland, Ohio. Means for attaching pulleys to shafts	438,608	Oct. 21	1421	384	53	286
Davis, John S., assignor of one-half to D. S. Troy, Montgomery, Ala. Hand-planter	431,841	July 8	1279	321	52	259
Davis, John S., assignor of one-half to D. S. Troy, Montgomery, Ala. Seeder and planter	431,842	July 8	1281	322	52	259
Davis, John W., et al. (See Wagemann, Edmund, assignor.)						
Davis, Joseph E., Lynn, Mass. Hose-coupling	419,988	Jan. 21	2012	531	50	420
Davis, Larkin L. (See Stevens, John H., assignor.)						
Davis, Leonard D. (See Sechrist, William, assignor.)						
Davis, Leonard L., Springfield, Mass. Bit-stock	432,180	July 15	1791	461	52	364
Davis, M. O. (See Davis, Wilson A., assignor.)						
Davis, Minor M., Brooklyn, N. Y. Switch apparatus	426,583	Apr. 29	3272	{ 858 859 }	{ 51 }	674
Davis, Moore & Co. (See Newton and Palmer, assignors.)						
Davis, Moses M., Rome, N. Y. Siphon-faucet	423,031	Mar. 11	1015	266	50	1337
Davis, Nathan. (See Ziv and Davis.)						
Davis, Nathan H., Philadelphia, Pa. Lid for journal-boxes	431,254	July 1	334	83	52	68
Davis, Nathan H., Greenville, S. C. Sully	432,819	July 22	2785	712	52	561
Davis, Nathaniel, Somerville, assignor of one-half to G. L. Davis, North Andover, Mass. Fanct.	423,596	Mar. 18	1851	488	50	1502
Davis, Orion L., Rochester, N. Y. Mechanism for operating the doors of elevator-wells	420,866	Feb. 4	646	167	50	686
Davis, Oscar, et al. (See Wagemann, Edmund, assignor.)						
Davis, Owen R., York, Pa., assignor to J. C. Swan, Greeley, Colo. Steam vacuum-pump	425,024	Apr. 8	918	244	51	186

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Davis, R. J. (See Anderson, Henry, assignor.)						
Davis, Richard W. H., and M. L. Lower, Black Lick, Pa. Machine for pressing brick....	435,171	Aug. 26	2681	708	52	1304
Davis, Robert B. (See Worley and Davis.)						
Davis, Robert C., assignor of one-half to R. R. Brown, Columbus, Ohio. Cutter-bar for harvesters.....	430,627	June 24	2372	579	51	1957
Davis, Robert J. (See Ames, Almon, assignor.)						
Davis, Samuel B., assignor of one-half to T. B. Myers, Clinton, Ind. Clod-fender.....	427,160	May 6	216	55	51	854
Davis, Thomas J., Omaha, Nebr. Supporting wheel or pulley.....	424,279	Mar. 25	2864	765	50	1704
Davis, Walter B., Wichita, Kans. Tongue-support.....	419,837	Jan. 21	1782	472	50	372
Davis, William, Los Angeles, Cal. Cultivator.....	432,021	July 15	1546	393	52	317
Davis, William E. (See Freeman and Davis.)						
Davis, William F., et al. (See Anderson, Henry C., assignor.)						
Davis, William H., El Dorado, Ohio. Dust-collector for thrashing-machines.....	429,018	May 27	3017	774	51	1436
Davis, William H., assignor of one-half to H. S. Davis, Daisy, Md. Hydraulic motor.....	442,424	Dec. 9	1237	320	53	1511
Davis, William H. H., Oakfield, Mich. Dome-support for arching cisterns.....	425,124	Apr. 8	1062	282	51	214
Davis, William J. (See Frazeur and Davis.)						
Davis, William M., East Weymouth, Mass. Suspending device for electric conducting-wires.....	430,926	June 24	2860	702	51	2052
Davis, Wilson A., assignor to M. O. Davis, Cairo, Ga. Fertilizer-distributor.....	441,791	Dec. 2	256	68	53	1314
Davis, Zebulon, Cleveland, Ohio. Combined umbrella and cane.....	433,332	July 29	3569	921	52	722
Davison, George J., assignor of one-half to W. F. Davison, Richmond, Va. Forceps for dental wedges.....	442,107	Dec. 9	757	204	53	1418
Davison, Henry J. (See Williams, Henry J., assignor.)						
Davison, William F. (See Davison, George J., assignor.)						
Davison, William H. (See Murphy and Davison.)						
Davol, Albert D. (See Burt and Davol.)						
Davol, James C. C., Fall River, Mass. Feed-water heater.....	424,764	Apr. 1	512	138	51	180
Davy, Charles, Sheffield, England. Hydraulic forging-press.....	430,837	June 24	2727	668 669 750 751	51	2025
Davy, Charles, Sheffield, England. Traveling crane.....	439,483	Oct. 28	2818	751	53	553
Davy, John W., Pittsburg, Pa. Insulator.....	421,819	Feb. 18	2020	535	50	964
Davy, John W., Pittsburg, Pa. Rail for elevated ways.....	421,820	Feb. 18	2023	535	50	964
Davy, Joseph, Oakland, and J. T. Dufau, San Francisco, Cal. Box-fastener.....	429,510	June 3	618	152	51	1590
Davy, Robert B., San Diego, Cal. Wave-motor.....	418,943	Jan. 7	461	114	50	97
Dawdy, Andrew J., Goshen, Ind. Printing-frame support.....	425,306	Apr. 8	1344	359	51	269
Dawdy, Andrew J., Goshen, Ind. Support for sun-print frames.....	433,333	July 29	3571	921	52	722
Dawes, Edmund, Philadelphia, Pa. Spinning or twisting machine.....	437,022	Sept. 23	2632	687	52	1900
Dawes, Robert, Philadelphia, Pa. Fifth-wheel for vehicles.....	421,166	Feb. 11	1106	284	50	783
Dawson, Charles B., Angus, Iowa. Rock or coal drilling machine.....	421,621	Feb. 18	2024	535	50	965
Dawson, Edward, Terre Haute, Ind. Shaft-lubricator.....	439,123	Oct. 28	2241	602	53	446
Dawson, Joseph, Hartford, Conn. Mucilage-moistener.....	432,605	July 22	2423	625	52	493
Dawson, Joseph, Hartford, Conn. Envelope-moistener.....	432,606	July 22	2424	625	52	493
Dawson, Luther, Lexington, Ky. Copy-holder.....	432,985	July 29	3052	784	52	618
Dawson, William, Philadelphia, Pa. Carburetor.....	420,591	Feb. 4	233	60, 61	50	610
Dawson, William, Philadelphia, Pa. Carbureting apparatus.....	429,426	June 3	496	118	51	1567
Dawson, William, Philadelphia, Pa. Book-rest.....	431,036	July 1	12	3	52	5
Dawson, William, Ogontz, Pa. Gas-burner.....	433,675	Aug. 5	348	89	52	824
Dawson, William H., and H. Goodwin, Manchester, England. Vegetable and fruit parer.....	427,056	May 6	33	10	51	817
Day, Albert H., assignor to A. R. Warren and W. Eddy, Mohawk, N. Y. Thill-tightener.....	442,108	Dec. 9	759	204	53	1419
Day, Augustus, Detroit, Mich. Track-cleaner.....	420,639	Feb. 4	303	80	50	623
Day, Augustus, Detroit, Mich. Railway-track cleaner.....	420,640	Feb. 4	304	80	50	623
Day, Benjamin H., Jr., West Hoboken, N. J. Buckle.....	438,912	Oct. 21	1918	510	53	376
Day, Erastus, Lakewood, Ohio. Hoisting and conveying apparatus.....	419,004	Jan. 7	537	134	50	113
Day, Fred W., Janesville, Wis. Automatic grain-weigher.....	431,140	July 1	156	40	52	33
Day, George F., and E. H. Cole, San Francisco, Cal. Wave-force pump.....	429,231	June 3	184	44	51	1567
Day, George W., Haverhill, assignor to W. W. Jacques, Newton, Mass. Manufacture of boots or shoes.....	424,862	Apr. 1	666	176	51	129
Day, George W., Haverhill, assignor to W. Shaw, W. D. Hobbs, and H. D. Hyde, trustees, Boston, Mass. Manufacture of shoes.....	440,994	Nov. 18	2183	565	53	1045
Day, James, and F. Handy, Hazleton, Wis. Gate.....	430,103	June 10	1532	381	51	1777
Day, John, New York, N. Y. Lambrequin-pin.....	418,693	Jan. 7	45	11	50	10
Day, Lorenzo. (See Taft and Day.)						
Day, Patrick H., Springfield, Ill. Gate for swinging bridges.....	428,079	May 20	1597	405 406	51	1142
Day, Patrick L., Cleveland, Ohio. Guide device.....	438,683	Oct. 21	1526	412	53	305
Day, Patrick L., assignor of one-half to W. Arkless, Cleveland, Ohio. Reel-guide and reel.....	423,674	Mar. 18	1986	523 524	50	1529
Day, Ralph B., Mansfield, assignor to Stillwell & Bierce Manufacturing Company, Dayton, Ohio. Live-steam purifier.....	434,324	Aug. 12	1333	347	52	1027
Day, Theodore D., Elizabeth, N. J. Suspenders.....	436,095	Sept. 9	1108	287	52	1593
Day, William H., Morgan, Tex. Churn.....	435,113	Aug. 26	2598	686	52	1287
Day, Winfield S., Kingsley, Mich. Farm-gate.....	441,752	Dec. 2	197	52	53	1301
Dayton, Augustus J., Brooklyn, N. Y. Rest for fishing-rods.....	420,592	Feb. 4	234	61	50	610
Dayton Fan and Motor Company. (See Nickum, George S., assignor.)						
Dayton, Melville E., et al. (See Shannon, Oscar M., assignor.)						
Dayton, Poole & Brown, et al. (See Douglas, Charles H., assignor.)						
Dayton, William H., Torrington, Conn. Machine for making tubes.....	434,431	Aug. 19	1515	395	52	1070
Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Machine for grinding needle-shanks.....	434,432	Aug. 19	1516	395 396	52	1071
De Armit, Thompson B., Turtle Creek, Pa. Coal-tipple.....	424,098	Mar. 25	2620	698	50	1656
De Bruce, Archibald B., Arkansas City, Kans. Plow attachment.....	439,575	Oct. 28	2953	784	53	580
De Butts, John, Centreville, Md. Corn planter and marker.....	440,917	Nov. 18	2067	534	53	1021
De Camp, A. J., et al. (See Reckenzaun, Anthony, assignor.)						
De Castro, Angel, assignor to De Castro Electric Generator Company, New York, N. Y. Means for generation and conversion of electric energy.....	432,022	July 15	1547	393 394	52	318
De Castro Electric Generator Company. (See De Castro, Angel, assignor.)						
De Choubersky, Charles, Paris, France. Bathing apparatus.....	430,146	Jan. 28	2264	599 600	50	478
De Coppel, Francis V. (See Alford, Rinman, and De Coppel.)						
De Estenoz, Francisco R., Philadelphia, Pa. Apparatus for pressing cigars.....	439,934	Nov. 4	462	121	53	698
De Forest, Lockwood. (See Baynes, John, assignor.)						
De Forest, O. Lansing, Janesville, Wis. Ax.....	438,990	Oct. 21	2040	543	53	402
De Frehn, Charles H., Williamsport, Md. Chair.....	443,504	Dec. 30	3071	791	53	1894

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De Grain, Reinhold F., Washington, D. C. Game apparatus.....	435,805	Sept. 2	661	174	52	1502
De Groff, George W., Boston, Mass. Slide-valve.....	433,853	Aug. 5	614	160	52	876
De Groot Electric Company. (See Jackson, Abram W., assignor.)						
De Haer, Oswald, Düsseldorf, Germany. Scaffold-bracket.....	438,249	Oct. 14	882	239	53	174
De Haven, Isaac, Allegheny, Pa. Cooking-stove.....	431,255	July 1	336	83	52	68
De Kalb, Ada B., <i>et al.</i> (See De Kalb, Enoch E., assignor.)						
De Kalb, Emma A., <i>et al.</i> (See De Kalb, Enoch E., assignor.)						
De Kalb, Enoch E., Syracuse, N. Y. Spring-latch coupling.....	422,012	Feb. 25	2305	609	50	1026
De Kalb, Enoch E., Syracuse, N. Y. Device for mounting and operating swinging windows.	441,943	Dec. 2	486	130	53	1359
De Kalb, Enoch E., assignor to E. A. and A. B. De Kalb, Syracuse, N. Y. Artist's chair..	431,338	July 1	460	113	52	94
De La Mare, Thomas, Tooele City, Utah. Axle-skein.....	435,407	Sept. 2	46	15	52	1384
De La Matyr, Elias B. (See Beals, John F., assignor.)						
De La Vergne Refrigerating Machine Company. (See Clemens, Ernest V., assignor.)						
De Lacy, Charles M., Brooklyn, assignor of two-thirds to R. Seaman, New York, N. Y. Cap.....	430,003	June 10	1360	336	51	1745
De Lancey, John J., Binghamton, N. Y. Exhaust-nozzle for locomotives.....	442,767	Dec. 16	1812	469	53	1633
De Laski, Albert. (See Foote, Ernest N., assignor.)						
De Loach, Alonzo A., Atlanta, Ga. Saw-mill feed.....	434,626	Aug. 19	1813	474	52	1132
De Loach, Alonzo A., Atlanta, Ga. Saw-mill.....	434,770	Aug. 19	2052	536	52	1177
De Long, Charles F., <i>et al.</i> (See De Long, Frank E., assignor.)						
De Long, Frank E., assignor to himself, T. D. Richardson, and C. F. De Long, Philadelphia, Pa. Pin-fastening.....	432,302	July 15	1984	507	52	398
De Long, Julius, Brooklyn, N. Y. Attachment for window-sashes.....	427,977	May 13	1449	366	51	1103
De Long, Julius, Brooklyn, N. Y. Window-ventilator.....	433,450	Aug. 5	25	6	52	761
De Long, Oscar A., Wichita, Kans. Reversible envelope-fastener.....	427,236	May 6	308	79	51	872
De Longé, Louis N., Kansas City, Mo. Adjustable drum-clamp.....	422,742	Mar. 4	551	141	50	1241
De Loss, Fred. M. (See De Loss and Mears, assignors.)						
De Loss, Theodore H., and J. M. Mears; said De Loss assignor to said Mears and F. M. De Loss, Chicago, Ill. Music-leaf turner.....	432,120	July 15	1701	437	52	346
De Mars, Magloir. (See Fournier, Philandre, assignor.)						
De Mars, Magloir, Anburndale, Ohio. Metal wheel.....	425,993	Apr. 22	2398	635	51	490
De Nagy, Paul, Szepezd, Austria-Hungary. Cattle-marker.....	421,680	Feb. 18	1842	481	50	930
De Pauw Company, W. C. (See Schefold, Frank, assignor.)						
De Puy, Louis J., Phoenix, Ariz. Device for supplying gases and liquids to moving vehicles.....	432,121	July 15	1703	437	52	347
De Rochemaure, Count de la Salle, <i>et al.</i> (See Fresco, Joseph A., assignor.)						
De Rusett, Edwin W. (See Preston, De Rusett, Mullan, and McKirdy.)						
De Steiger, August F., <i>et al.</i> (See Marlett, William E., assignor.)						
De Steiger, Edward A., <i>et al.</i> (See Marlett, William E., assignor.)						
De Steiger, Joseph L., <i>et al.</i> (See Marlett, William E., assignor.)						
De Steiger, Philip R., <i>et al.</i> (See Marlett, William E., assignor.)						
De Vilbiss, Casper, Shellsburg, Iowa. Key-board attachment for pianos.....	434,384	Aug. 12	1420	373	52	1045
De Vilbiss, Casper, Shellsburg, Iowa. Key-board attachment for musical instruments.....	440,995	Nov. 18	2185	565	53	1045
De Vitt, Phillip M., Midland, Tex. Button for billiard-counters.....	440,945	Nov. 18	2115	549	53	1031
De Voe, Harvey J. (See Sutton and De Voe.)						
De Woese, Clinton B., and T. E. Maxwell, Sidney, Ohio. Umbrella-rack.....	421,352	Feb. 11	1364	353	50	830
De Witt, Evert, Hanford, Cal. Windmill.....	432,696	July 22	2591	663	52	524
De Witt, Gasheirie, <i>et al.</i> (See Justin, Joel G., assignor.)						
De Wyell, John C., Livonia, N. Y. Circular buttress.....	423,417	Mar. 18	1596	419	50	1455
De Young, Josephine, and S. Andrews, Minneapolis, Minn. Badge.....	430,730	June 24	2551	624	51	1992
De Zeng, Henry L., Geneva, N. Y., and C. Rees, Minneapolis, Minn. Rein-supporter.....	425,601	Sept. 2	336	93, 94	52	1440
Deacon, George F., Liverpool, county of Lancaster, England. Apparatus for recording the flow of water.....	428,804	May 27	2696	684	51	1372
Deacon, Sidney R., Los Angeles, Cal. Device for swinging sliding sashes.....	420,227	Jan. 23	2400	639	50	502
Deal, Anson, Kenton, Ohio. Fence.....	422,574	Mar. 4	305	78	50	1194
Deal, Josiah J., Canton, Ohio. Combination-lock.....	425,992	Apr. 22	2397	635	51	490
Deal, Josiah J., Canton, Ohio. Permutation-lock.....	436,597	Sept. 16	1905	501	52	1751
Dean, Carter B., Norborne, Mo. Dental forceps.....	421,250	Feb. 11	1220	316	50	804
Dean, Carter B., Norborne, Mo. Druggist's label case or cabinet.....	421,251	Feb. 11	1220	316	50	804
Dean, Charles A., and F. H. Robie, Boston, Mass. Mechanism for making striped paper bags.....	437,176	Sept. 30	2899	754	52	1956
Dean, Francis W., Cambridge, Mass. Compound engine.....	433,164	July 29	3229	862	52	672
Dean, Francis W., Cambridge, Mass. Electric locomotive.....	439,345	Oct. 28	2614	{ 696 697 11 12 13 }	53	515
Dean, Henry W., Norristown, assignor of part to J. Mundell, Philadelphia, Pa., S. A. Butler, Boston, E. F. Lothrop and J. H. Bowen, Lynn, Mass. Lasting-machine.....	418,694	Jan. 7	46	{ 11 12 13 }	50	10
Dean, Henry W., Norristown, assignor of part to J. Mundell, Philadelphia, Pa., S. A. Butler, Boston, E. F. Lothrop and J. H. Bowen, Lynn, Mass. Tack-feeding tube.....	418,695	Jan. 7	58	14	50	14
Dean, Henry W., Norristown, assignor of part to J. Mundell, Philadelphia, Pa., S. A. Butler, Boston, E. F. Lothrop and J. H. Bowen, Lynn, Mass. Tack-feeding tube.....	418,696	Jan. 7	60	14	50	14
Dean, Henry W., Norristown, assignor of part to J. Mundell, Philadelphia, Pa., S. A. Butler, Boston, E. F. Lothrop and J. H. Bowen, Lynn, Mass. Tacking-machine.....	418,697	Jan. 7	61	{ 14 15 16 }	50	14
Dean, Henry W., Norristown, assignor of part to J. Mundell, Philadelphia, Pa., S. A. Butler, Boston, E. F. Lothrop and J. H. Bowen, Lynn, Mass. Lasting-machine.....	418,699	Jan. 7	72	16, 17	50	16
Dean, Henry W., Norristown, and J. Mundell, assignors of part to J. Mundell, Philadelphia, Pa., S. A. Butler, Boston, E. F. Lothrop and J. H. Bowen, Lynn, Mass. Lasting and tacking-machine.....	418,698	Jan. 7	69	16	50	16
Dean, James B., Lompoc, and H. H. Earle, San Francisco, Cal. Brush attachment for dust-pans.....	439,744	Nov. 4	169	44	53	641
Dean, Patrick C. (See Freas, Louis, assignor.)						
Dean, William R., and W. H. Barnett, Ottawa, Kans. Cash and parcel carrier.....	421,822	Feb. 18	2026	536	50	965
Dean, William R., and W. H. Barnett, Ottawa, Kans. Tag-holder.....	431,562	July 8	820	205	52	171
Dean, William S. (See Kinnamon and Dean.)						
Deane, Francis B., Lynchburg, Va. Compound press.....	435,212	Aug. 26	2739	723	52	1314
Deane, William H., assignor to himself and J. J. Mahon, Brooklyn, N. Y. Electric alarm for clocks.....	435,213	Aug. 26	2741	723	52	1315
Dear, Joseph A., Jersey City, N. J. Fastening for printing-plates upon cylindrical surfaces. (Reissue).....	11,056	Jan. 21	2072	546	50	431
Dearborn, Clayton M., Lynn, Mass. Folding scaffold.....	429,427	June 3	497	{ 118 119 }	51	1567
Dearborn, John A., Kansas City, Mo. Flower structure.....	440,141	Nov. 11	775	203	53	770
Dearborn, Richard J., assignor of one-half to E. O. Ely, Boston, Mass. Buckle.....	422,741	Mar. 4	550	141	50	1241

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Dearth, William L., Frankfort, Ind. Metallic buggy-bed	426,715	Apr. 29	3487	912	51	713
Deatherage, Matthew H., near Jamestown, Mo. Mud-hook for traction-wheels	435,483	Sept. 2	156	44	52	1405
Deaton, John W., Springfield, Ohio. Box-opener	437,177	Sept. 30	2900	755	52	1956
Deaver, James R., Lyons, Nebr. Wire-stretcher	437,178	Sept. 30	2901	755	52	1956
Deblieux, Benjamin N., Bay St. Louis, Miss. Elevator	438,913	Oct. 21	1919	510	53	377
Debnam, Abraham B. C., Medina, Tenn. Seed-planter	419,838	Jan. 21	1784	472	50	372
Debth, William W., assignor to Page Steel Wheel Company, Toledo, Ohio. Tire-sizer	426,492	Apr. 29	3142	825	51	648
Decarie, Felix L., and P. Lord, assignors to said Decarie and J. Lee, Montreal, Canada. Hose attachment	435,734	Sept. 2	546	145	52	1480
Decker, Alexander C., Keokuk, Iowa. Curry-comb	430,628	June 24	2373	580	51	1957
Decker, John C. (See Shoemaker, George H., assignor.)						
Decker, John J., Lewbeach, N. Y. Boring-machine	426,365	Apr. 22	2931	770 771	51	598
Decker, Oscar R., Rochester, Ind. Watch-bow fastener	426,927	Apr. 29	3779	957	51	772
Decker, Oscar R., Rochester, Ind. Watch-case	440,544	Nov. 11	1438	371	53	894
Decker, Samuel W., Verdun, Nebr. Cultivator	438,989	Oct. 21	2039	545	53	402
Decker, William T., Rockport, assignor of one-half to F. A. Crocker, Leslie Run, Pa. Handle for table-cutlery	433,276	July 29	3490	901	52	706
Decollogne, Eugene, Paris, France. Feed-regulator	428,768	May 27	2647	670	51	1363
Decorator's Supply Company. (See Strahan, Simon, assignor.)						
Decrow, William E., Boston, Mass., assignor to Gamewell Fire Alarm Telegraph Company, New York, N. Y. Non-interfering signal-box	434,922	Aug. 26	2323	613	52	1235
Dederich, Charles, <i>et al.</i> (See Fleischer, Richard J., assignor.)						
Dederich, Joseph J. (See Willet, Nicholas M., assignor.)						
Dederick, Ezra, Milwaukee, Wis. Automatic clutch for car-starters	430,629	June 24	2374	580	51	1957
Dederick, Ezra, Milwaukee, Wis. Car-brake	432,515	July 22	2294	594	52	467
Dederick, Peter K., Loudonville, N. Y. Baling-press	419,646	Jan. 21	1489	398	50	318
Dederick, Peter K., Loudonville, N. Y. Baling-press	440,790	Nov. 18	1856	478	53	982
Dederick, Peter K., Loudonville, N. Y. Baling-press	440,791	Nov. 18	1857	478 479	53	982
Dedrick, Lansing C. (See Crockett and Dedrick.)						
Deeds, Harry W., Indianapolis, Ind. Electric valve-controller	436,219	Sept. 9	1303	340	52	1629
Deeley, Robert. (See Miller, Alexander, assignor.)						
Deems, Harvey F. (See Deems, Wilber A. and H. F.)						
Deems, Wilber A. and H. F., Garwood, Pa.; said Wilber A. Deems assignor to said H. F. Deems. Swinging gate	434,043	Aug. 12	884	233	52	938
Deere & Company. (See Moore, Gilpin, assignor.)						
Deering & Company, William. (See Clark, Charles D., assignor.)						
Deering & Company, William. (See Kennedy, Samuel V., assignor.)						
Deering & Company, William. (See Rice, George L., assignor.)						
Deering & Company, William. (See Stone, John A., assignor.)						
Deering & Company, William. (See Williams, Farmer R., assignor.)						
Deering, Mark L., Cleveland, Ohio. Graphophone	428,273	May 20	1887	475	51	1199
Deering, Mark L., Cleveland, Ohio, assignor to United Indurated Fibre Company, Portland, Me. Pulp-molding machine	432,379	July 15	2086	536	52	418
Deering, William. (See Colby, Frank W., assignor.)						
Deering, William, Evanston, Ill. Twine	437,378	Sept. 30	3220	839	52	2017
Deering, William, Louisville, Ky. Safety device for elevators	437,484	Sept. 30	3385	8-7	52	2053
Deering, William, Louisville, Ky. Saw-gin	440,918	Nov. 18	2068	535	53	1022
Deeter, Daniel E., Syracuse, Ind. Wire-fence machine	429,232	June 3	185	45	51	1507
Deets, Andrew, Plymouth, Pa. Car-block	441,539	Nov. 25	3092	794	53	1224
Deets, Charles A. (See Deets, John T. and C. A.)						
Deets, John T. and C. A., Farlington, Kans. Baling-press	431,109	July 1	118	30	52	25
Deeves, John F., and R. U. J. Gauthreaux, New Orleans, La. Puzzle	432,865	July 22	2846	729	52	574
Deeves, John F., and R. U. J. Gauthreaux, New Orleans, La. Indicator or directory	434,325	Aug. 12	1334	347	52	1027
Deeves, John F., and R. U. J. Gauthreaux, assignors to A. Keitel, New Orleans, La. Mechanical puzzle	435,804	Sept. 2	659	174	52	1502
Defiance Machine Works. (See Kettenring, Peter, assignor.)						
Defiance Machine Works. (See Seymour, Charles, assignor.)						
Degener, Paul, Brunswick, assignor to C. Spaeter, Coblenz, Germany. Purifying water	433,890	Aug. 5	673		52	888
Degnan, Patrick, and M. Meyer, St. Louis, Mo. Horse-collar	426,366	Apr. 22	2932	772	51	598
Deimel, Fritz, Berlin, Germany. Safety-stopper	427,255	May 6	356	91	51	880
Deimel, Fritz, Berlin, Germany. Rotary float	439,124	Oct. 28	2242	602 603	53	447
Déimel, Fritz, Berlin, Germany, assignor, by mesne assignments, to Safety Incandescent Oil and Gas Lamp Syndicate. Lamp-chimney	419,600	Jan. 14	1414	378	50	297
Déimel, Fritz, Berlin, Germany, assignor, by mesne assignments, to Safety Incandescent Oil and Gas Lamp Syndicate. Lamp-burner	419,601	Jan. 14	1416	379	50	297
Deimel, Menning, <i>et al.</i> (See Cristman, William J., assignor.)						
Deischer, James F., Lancaster, Ill. Car-coupling	439,054	Oct. 21	2129	572	53	418
Deitchler, Frederick F. and H. Mineola, Iowa. Listed-corn cultivator	420,043	Jan. 28	2096	553	50	444
Deitchler, Henry. (See Deitchler, Frederick F. and H.)						
Deitrick, John, Acasta, Mo. Wagon bolster-plate	443,571	Dec. 30	3174	815	53	1914
Deitsch, Charles and E. J., New York, N. Y. Belt-buckle	424,765	Apr. 1	513	138	51	100
Deitsch, Edward J. (See Deitsch, Charles and E. J.)						
Dejey, Agathe J., assignor to A. F. Dromery, Paris, France. Apparatus for producing printing-blocks	430,273	June 17	1827	448	51	1843
Dejonne, Max E., Stapleton, N. Y. Anti-fouling paint	441,290	Nov. 25	2707		53	1150
Dejonne, Max E., Stapleton, N. Y. Anti-corrosive and anti-fouling compound	441,291	Nov. 25	2707		53	1150
Dejonne, Max E., Stapleton, N. Y. Anti-fouling paint	441,292	Nov. 25	2708		53	1150
Delafield, Clarence, New York, N. Y. Settling-basin	424,542	Apr. 1	160	46	51	34
Delain, William, Earlham, Iowa. Apparatus for making woven wire fence	426,493	Apr. 29	3143	825	51	648
Delamar, Joseph, Poughkeepsie, N. Y. Machine for stripping and booking tobacco-leaves	435,135	Aug. 26	2628	695 696	52	1294
Delamare-Debontteville, Edouard F., and L. P. C. Malandin, Fontaine-le-Bourg, France. Governor for gas-engines and other like motors	424,099	Mar. 25	2621	698 699	50	1657
Delanceett, James T., Childwold, N. Y. Beveling-square	420,443	Feb. 4	24	5	50	569
Delano, Catherine, <i>et al.</i> (See Delano, David, assignor.)						
Delano, David, assignor to C. Delano and J. Boley, Baldwinsville, N. Y. Truss-hoop	437,645	Sept. 30	3614	945	52	2098
Delano, Eben A. (See Moody and Delano.)						
Delano, Milton, <i>et al.</i> (See Justin, Joel G., assignor.)						
Delany, Patrick B., New York, N. Y. Receiving apparatus for cable telegraphy	425,597	Apr. 15	1772	475	51	362
Delany, Patrick B., New York, N. Y. Telegraphy	440,766	Nov. 18	1810	468	53	974
Delany, Patrick B., New York, N. Y. Synchronous telegraphy	440,767	Nov. 18	1814	469	53	975

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Delany, Patrick B., New York, N. Y. Multiplex telegraphy.....	440,768	Nov. 18	1819	{ 469 470	{ 53	975
Delany, Patrick B., South Orange, N. J. Electro-magnetic instrument.....	426,247	Apr. 22	2767	725	51	563
Delany, Patrick B., South Orange, N. J. Electric bell.....	431,181	July 1	223	56	52	46
Delany, Patrick B., South Orange, N. J. Private-line telegraphy.....	431,651	July 8	965	241	52	199
Delavigne, Alphonse J., New Orleans, La. Folding table.....	433,277	July 29	3491	901	52	706
Delechanty, William E., Albany, N. Y. Trap for wash-basins.....	427,752	May 13	1111	278	51	1040
Delechanty, William E., Albany, N. Y. Bung and bushing.....	438,801	Oct. 21	1730	464	53	342
Dell, John. (See Mitchell, Kerr M., assignor.)						
Della Torre, Frank, Baltimore, Md. Eophone.....	441,860	Dec. 2	364	96	53	1336
Dellinger, Perry N., Whatcom, Wash. Rotary valve for engines.....	436,699	Sept. 16	2064	541	52	1782
Delmage, Mary J., North Billerica, Mass. Fruit-strainer.....	423,597	Mar. 18	1852	488	50	1502
Delohery, Michael, Danbury, Conn. Apparatus for dyeing hats.....	438,609	Oct. 21	1422	384	53	286
Delorieux, John. (See Toulouse and Delorieux.)						
Delorme, Charles, and E. Brechon, Trôyes, France. Metal railway-sleeper.....	429,607	June 10	766	185	51	1630
Demarest, A. H., et al. (See Demarest, Marcus E., assignor.)						
Demarest, John, assignor to J. L. Mott Iron Works, New York, N. Y. Grease-trap.....	436,124	Sept. 9	1157	302	52	1601
Demarest, Marcus E., assignor of two-thirds to A. H. Demarest and J. S. Case, Delaware, Ohio. Advertising-rack.....	421,252	Feb. 11	1221	316	50	805
Demarest, Mary F., et al. (See Clark, John, assignor.)						
Demarest, Peter E., Long Island City, N. Y. Slate-ruler.....	425,495	Apr. 15	1622	432	51	333
Demeritt, Bert R., et al. (See Laird, Wesley E., assignor.)						
Demers, Louis J. (See Picard, Charles T., assignor.)						
Deming, Caleb G. and S. P., Pleasanton, Kans. Corn-cutter.....	430,004	June 10	1361	{ 336 337	{ 51	1745
Deming, Charles G., Woodstock, N. Y. Anti-friction wheel.....	427,301	May 6	419	108	51	893
Deming, George E., et al. (See Keavy, Thomas E., assignor.)						
Deming, James K., assignor to Standard Life and Accident Insurance Company, Detroit, Mich. Ticket-case.....	436,052	Sept. 9	1044	271	52	1582
Deming, Smith P. (See Deming, Caleb G. and S. P.)						
Demme, Charles F., assignor to D. Ap. Jones and G. W. Fouts, Cleveland, Ohio. Blacking-case.....	443,825	Dec. 30	3590	922	53	1994
Denning, Henry C., Harrisburg, Pa. Combined mouth and nose piece for acoustical instruments.....	435,055	Aug. 26	2513	664	52	1271
Denning, William S., et al. (See Main, Fred F., assignor.)						
Denmorest, William O., Tewanda, Pa. Dish rinsing and drying crate.....	424,863	Apr. 1	668	176	51	129
Dempf, Joseph A., Washington, D. C. Circuit-closer.....	424,182	Mar. 25	2735	729	50	1679
Dempsey, Richard A. (See Callahan, Harry A., assignor.)						
Dempster, John T., Summit, N. J., assignor to Bergmann & Company, New York, N. Y. Electric-lamp socket.....	443,746	Dec. 30	3453	886	53	1967
Demuth, William. (See Booth, Ralph W., assignor.)						
Dengler, John. (See Ganss, Clarke, and Dengler.)						
Dengler, William, New York, N. Y. Nose-guard for eyeglasses.....	442,022	Dec. 2	615	165	53	1383
Denio, James W. (See King, William, assignor.)						
Denis, Geoffroy P., Chester, Pa. Furnace.....	422,187	Feb. 25	2567	680	50	1074
Denis, Geoffroy P., Chester, Pa. Furnace.....	422,188	Feb. 25	2569	680	50	1075
Denis, Geoffroy P., Chester, Pa. Furnace.....	422,189	Feb. 25	2570	681	50	1075
Denison, Charles E., and J. C. Parnell, Jeffersonville, Ohio. Saw-mill dog.....	441,944	Dec. 2	488	131	53	1360
Denison, Charles H., Springfield, Mass. Dark-lantern.....	431,563	July 8	821	205	52	171
Denison, Daniel B., assignor to himself and J. P. Ryan, New York, N. Y. Can.....	419,647	Jan. 21	1490	399	50	318
Denison, Linus S., Penza, Ohio. Carpet-stretcher.....	431,182	July 1	224	56	52	47
Denison, Sylvester P., Brooklyn, N. Y., assignor to G. R. Thompson, Philadelphia, Pa. Apparatus for cutting electrical conduit-pipes.....	431,564	July 8	822	205	52	172
Denison, Sylvester P., Brooklyn, N. Y., assignor to G. R. Thompson, Philadelphia, Pa. Apparatus for cutting pipes.....	432,480	July 15	2243	580	52	450
Denke, Alvin, Pittsburg, Pa. Rotary engine.....	439,935	Nov. 4	464	{ 121 122	{ 53	699
Denmead, John W. (See Zellers and Denmead.)						
Dennau, Peter, Sr., Montagne, Mich. Vehicle-wheel.....	427,057	May 6	34	11	51	817
Dennedy, Michael, Cincinnati, Ohio. Induction-valve for compression-pumps.....	422,385	Mar. 4	33	10, 11	50	1143
Dennes, Donald, and T. K. Rose, Denver, Colo. Apparatus for leaching ores.....	425,025	Apr. 8	919	244	51	186
Dennett, Daniel, Brookhaven, Miss. Chair attachment for tricycles.....	436,648	Sept. 16	1988	521	52	1767
Dennett, Moses M., Amesbury, Mass. Shifting-seat vehicle.....	438,610	Oct. 21	1422	385	53	286
Denney, Barclay M. (See Brinton and Denney.)						
Denney, Samuel L., Minneapolis, Minn. Combined hay-tedder and hay-rake.....	420,228	Jan. 28	2401	{ 639 640	{ 50	502
Denney, Samuel L., Lancaster, Pa. Combined tedder and hay-rake.....	430,566	June 17	2258	{ 554 555	{ 51	1926
Dennis, Adolphus S., Des Moines, Iowa. Type-writing machine.....	437,753	Oct. 7	119	36	53	26
Dennis, Benjamin F., assignor of one-half to H. D. Caverly, Dover, N. H. Book-holder.....	427,558	May 13	807	203	51	982
Dennis, Dwight S., administrator. (See Dennis, Samuel.)						
Dennis, Edward, Jr., and G. E. Williams, Sing Sing, N. Y. Toy pistol.....	430,338	June 17	1932	473	51	1864
Dennis, Edwin B., Excelsior, Mich. Calculator for percentages.....	432,380	July 15	2088	536	52	418
Dennis, Fredrick W., Omaha, Nebr. Toy.....	419,754	Jan. 21	1647	437	50	347
Dennis, Henry E., Buffalo, N. Y. Extension service-box for water or gas cocks.....	420,044	Jan. 28	2097	554	50	445
Dennis, Joseph W. (See Shoemaker, Frank A., assignor.)						
Dennis, Joseph W., and F. A. Shoemaker, Buffalo, N. Y. Reversing-valve for steam-engines.....	424,183	Mar. 25	2736	730	50	1679
Dennis, Lureston W. (See Foote, James B., assignor.)						
Dennis, Samuel, deceased; D. S. Dennis, Hornellsville, N. Y., administrator. Animal-trap.....	437,179	Sept. 30	2902	755	52	1957
Dennis, Wilber, Minneapolis, Minn. Engine-governor.....	435,923	Sept. 9	851	{ 223 224	{ 52	1546
Dennison, Benjamin L., Brunswick, Me. Globe for regenerative gas-lamps.....	423,416	Mar. 18	1596	419	50	1455
Dennison, Charles M. (See Averell, Ellicott D., assignor.)						
Dennison Manufacturing Company. (See Dyer, Henry K., assignor.)						
Denny, John N., et al. (See Webster, George L., assignor.)						
Denny, Nicholas, Saranac, Mich. Washing-machine.....	426,367	Apr. 22	2933	772	51	598
Denny, Thomas. (See Watson and Denny.)						
Densmore, Amos. (See Barron, Walter J., assignor.)						
Dont, Alfred, Le Mars, Iowa. Suspensory bandage.....	436,518	Sept. 16	1769	467	52	1728
Dont, John A., et al. (See Ricard, Louis, assignor.)						
Doutler, Frank, Parkville, Mich. Wheel.....	435,581	Sept. 2	309	86	52	1435
Denton, Daniel T., Tower, Minn. Counter-balance for chutes.....	425,994	Apr. 22	2399	635	51	490
Denton, Eben. (See Mahady, John, assignor.)						
Denton, Winfield S., Dallas, Tex. Fire-kindler.....	433,933	Aug. 12	736	191	52	911

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Denair, John T., Chicago, Ill. Device for locking stereotype-plates	430,630	June 24	2375	580	51	1958
Denzel, Eugene, Glen Ulin, N. D. Sale card or pamphlet	425,496	Apr. 15	1623	433	51	333
Depersenaire, Elisé, New York, N. Y. Re-enforced rattan structure	419,839	Jan. 21	1785	472	50	373
Depp, Frank A., assignor of one-half to J. L. Brown, Brookville, Pa. Combined corn sheller and husker	437,180	Sept. 30	2903	756	52	1957
Depp, Otis J., and S. J. Munn, assignors of one-fourth to P. M. Kling, St. Louis, Mo. Electric signaling device for moving vehicles	443,074	Dec. 16	2322	593	53	1733
Deprez, Marcel, Paris, France. Iron core for dynamo-electric machines	427,405	May 6	572	142	51	925
Deprez, Marcel, Paris, France. Rheostat or rheotome	437,412	Sept. 30	3275	854	52	2028
Depuy, Gilbert L., Garland, Tex. Type-writing machine	443,957	Dec. 30	3773	964	53	2029
Deraismes, Hippolite A., Elizabeth, N. J. Baggage check and ticket	424,963	Apr. 8	820	219	51	167
Déri, Maximilian. (See Zipernowsky and Déri.)						
Déri, Maximilian. (See Zipernowsky, Déri, and Bláthy.)						
Dernell, Ulrich and W. Milwankee, Wis.; said Ulrich Dernell assignor to said W. Dernell. Device for preserving and displaying vegetable products	431,509	July 1	735	183	52	146
Dernell, William. (See Dernell, Ulrich and W.)						
Derosier, Joseph. (See Skerry and Derosier.)						
Derrick, Franklin R., Brodhead, Wis. Trunk-fastener	437,581	Sept. 30	3530	921	52	2080
Derriey, Jules, Paris, France. Printing-machine	423,911	Mar. 25	2339	{ 616 617 632 633 }	50	1604
Derriey, Jules, Paris, France. Printing-machine	428,668	May 27	2484	{ 632 633 }	51	1331
Derschau, Albert von, Emden, Germany. Electrically-controlled lock for fire-arms	439,055	Oct. 21	2130	572	53	419
Derschau, Albert von, Weisenberg, Germany. Safety-lock for fire-arms	443,747	Dec. 30	3454	886	53	1968
Des Brisay, James. (See Barberie and Des Brisay.)						
Dés Lauries, Charles H., assignor to E. W. and F. H. Torrey, Weymouth, Mass. Shoe	425,598	Apr. 15	1774	475	51	362
Des Moines Buggy Company. (See Stanley and Cloyes, assignors.)						
Desant Electric Company. (See Desant, William F. Z., assignor.)						
Desant, William F. Z., New York, N. Y., assignor to Desant Electric Company, Columbus, Ohio. Railway-signal	435,558	Sept. 2	273	76	52	1428
Deschler, Henry D., Emaus, Pa. Motor	441,143	Nov. 25	2443	633	53	1104
Deschler, Henry D., and E. H. Fretz, Emaus, Pa. Shutter-worker	443,709	Dec. 30	3397	872	53	1955
Dessau, William F., Chicago, Ill. Pharmaceutical powder-divider	432,986	July 29	3053	784	52	619
Dessauer, Julius, Magdeburg, Prussia, Germany. Horse-cover	426,780	Apr. 29	3577	934	51	732
Desvernay, Maurice. (See Renault and Desvernay.)						
Detering, Cunibert. (See Silverberg and Detering.)						
Deire, Cyrus S., et al. (See Coppuck, Malcolm M., assignor.)						
Detrick, Myron H., Rock Falls, Ill. Water-strainer for steam-boilers	443,220	Dec. 23	2616	673	53	1798
Detroit Casket Company. (See Blackford, William H., assignor.)						
Detroit Electrical Works. (See Norton, James P., assignor.)						
Detroit Electrical Works. (See Rae, Frank B., assignor.)						
Detroit Lock and Manufacturing Company. (See Hamburjer, Ephraim, assignor.)						
Detroit Machine Screw Works. (See Taylor, Harrison H., assignor.)						
Detroit Motor Company. (See Blades, Harry H., assignor.)						
Detroit Sanitary Supply Company. (See Muckenhirn, Charles H., assignor.)						
Detwiler, Edwin L., assignor of one-half to J. E. Swartzbaugh, Dayton, Ohio. Filtering-joint and cut-off	436,171	Sept. 9	1230	320	52	1614
Detwiler, Jacob J., Jersey City, N. J. Signal	419,840	Jan. 21	1786	473	50	373
Detwiler, William B., Radnor, Ohio. Electric alarm letter-box	433,560	Aug. 5	175	47	52	790
Deumerlöhr, Georg F., Mindelheim, Germany. Eraser	436,891	Sept. 23	2445	639	52	1864
Deutscher Company, H. P. (See Deutscher and Snider, assignors.)						
Deutscher, Henry P., Hamilton, and W. J. Snider, Madison, assignors to H. P. Deutscher Company, Hamilton, Ohio. Harrow-cleaner	423,032	Mar. 11	1016	266	50	1337
Deutsch, Leon, et al. (See Weigel, Robert, assignor.)						
Deutsch, Sigmund, Philadelphia, Pa. Shirt-bosom	435,288	Aug. 26	2849	754	52	1336
Deutsche Patentfabrik Meyer, Focke & Company. (See Müller, Ludwig, assignor.)						
Deverall, Frederick J., Brooklyn, N. Y. Nozzle for oil-cans	442,285	Dec. 9	1022	270	53	1469
Devereux, Frank N. (See Gaghan, John, assignor.)						
Devereux, James, assignor of one-half to A. J. Millross, Detroit, Mich. House-moving truck	423,222	Mar. 11	1304	340	50	1392
Devereux, Oren C. (See Cushman, Asa, assignor.)						
Devereux, Oren C. (See Rhodes and Campbell, assignors.)						
Devereux, Walter B., Glenwood Springs, Colo. Apparatus for separating lead and base bullion from slags, mattes, and speiss	427,058	May 6	35	11	51	817
Devers, Merrit L. (See Crossan and Devers.)						
Dévigne, Antoine F., and J. P. Duand, La Cour-du-Pin, France. Batten-operating mechanism for power-looms	443,161	Dec. 23	2500	639	53	1773
Devine, Joseph P. (See Monday, Robert, assignor.)						
Devine, Warren H. J., Friend, Neb. Music-album and leaf-turner	420,229	Jan. 28	2404	640	50	503
Devitt, Andrew B., assignor to T. E. Devitt, Rosemount, Minn. Washing-machine	439,576	Oct. 28	2953	785	53	580
Devitt, Thomas E. (See Devitt, Andrew B., assignor.)						
Devlan, Harriett B., Jersey City, N. J. Anti-friction compound	434,016	Aug. 12	846	.....	52	930
Devlin, Bernard, Jersey City, N. J. Automatic steam-boiler feeder	439,484	Oct. 28	2819	751	53	554
Devlin, Thomas. (See Buehler, Rudolph R., assignor.)						
Devoll, Everett E., Verona, Wis. Adjustable support for shafts	420,593	Feb. 4	235	61, 62	50	610
Devonshire, Easton, assignor to Revolving Purifier Company, Limited, London, England. Revolving water-purifier	439,588	Oct. 28	2974	789	53	584
Devonshire, Easton, assignor to Revolving Purifier Company, Limited, London, England. Revolving water-purifier	439,589	Oct. 28	2976	790	53	588
Devonshire, Easton, assignor to Revolving Purifier Company, Limited, London, England. Revolving water-purifier	439,590	Oct. 28	2977	790	53	585
Devore, Daniel B., United States Army. Electric railway	430,515	June 17	2189	538	51	1914
Devore, L. M., et al. (See Rodlinger, Michael, assignor.)						
Devore, Levi M. (See Forry, Charles E., assignor.)						
Devore, Levi M. (See Schofield, Silas C., assignor.)						
Devore, Levi M., Freeport, Ill. Safety-book for filing papers	418,973	Jan. 7	496	121	50	104
Devore, Levi M., Freeport, Ill. Advertising device	439,866	Nov. 4	353	91	53	676
Devore, Levi M., Freeport, assignor to E. G. Russell, Rockford, Ill. Hook	419,141	Jan. 7	728	191	50	152
Dewar, Archibald T., Liverpool, county of Lancaster, England. Ship's boat	433,854	Aug. 5	615	160	52	877
Dewar, James. (See Abel and Dewar.)						
Dewar, James, Cambridge, county of Cambridge, and B. Redwood, Finchley, county of Middlesex, England. Distilling mineral oils and like products	419,931	Jan. 21	1923	507	50	404
Dewar, James, Cambridge, county of Cambridge, and B. Redwood, Finchley, county of Middlesex, England. Apparatus for the distillation of mineral oils and like products	426,173	Apr. 22	2660	699	51	541
Dewoese, Darius E., and S. Lane, Troy, Ohio; said Lane assignor to said Dewoese. Paper-reel	439,591	Oct. 28	2978	791	53	586

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Dewess, John W., Philadelphia, Pa. Sewing-machine.....	432,746	July 22	2664	681	52	538
Dewey Corporation. (See Dewey, Mark W., assignor.)						
Dewey, Ellsworth A., Battle Creek, Mich. Celery-banking machine.....	442,425	Dec. 9	1238	320	53	1511
Dewey, Hosea B., Milwaukee, Wis. Gate for air-flues.....	434,627	Aug. 19	1815	{ 474 475 }	52	1132
Dewey, James S., <i>et al.</i> (See Stoddard, Oscar, assignor.)						
Dewey, John J., assignor to Harvester and Binder Patent Company, St. Paul, Minn. Self-binding harvester.....	422,335	Feb. 25	2805	{ 738 739 740 741 742 }	50	1119
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric heating apparatus for electric-railway systems.....	418,911	Jan. 7	413	102	50	86
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Transforming and utilizing electrical energy.....	418,912	Jan. 7	415	102	50	86
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric railway.....	419,841	Jan. 21	1788	473	50	373
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric refrigeration.....	420,641	Feb. 4	306	81	50	623
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electrically heating bars, &c., for welding and working purposes.....	422,190	Feb. 25	2573	681	50	1076
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric heating apparatus.....	423,223	Mar. 11	1306	340	50	1392
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric-heating apparatus for electric-railway systems.....	425,757	Apr. 15	2018	535	51	410
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric-railway car.....	425,866	Apr. 15	2181	580	51	441
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric refrigerating apparatus for railway-cars.....	426,781	Apr. 29	3579	935	51	732
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric welding or metal-working.....	430,838	June 24	2729	669	51	2026
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Apparatus for working metals by electricity.....	430,839	June 24	2731	669	51	2026
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric riveting.....	432,727	July 22	2633	673	52	533
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric railway car.....	435,642	Sept. 2	414	111	52	1453
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric welding.....	435,643	Sept. 2	417	111	52	1454
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric welding.....	435,644	Sept. 2	418	112	52	1454
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric lighting and heating apparatus for electric railways.....	436,125	Sept. 9	1153	302	52	1602
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electrically heating bars, &c., for welding and working purposes.....	436,519	Sept. 16	1769	467	52	1728
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Utilizing electricity in the formation of sheet-metal articles.....	438,406	Oct. 14	1124	304	53	221
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Apparatus for forming or shaping sheet metal electrically.....	438,407	Oct. 14	1127	304	53	221
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Apparatus for forming or shaping sheet metal electrically.....	438,408	Oct. 14	1129	305	53	222
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Utilizing electricity in the formation of metallic cartridge-cases.....	438,409	Oct. 14	1131	305	53	222
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric motion-transmitter.....	439,577	Oct. 28	2955	785	53	581
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric railway.....	439,867	Nov. 4	355	92	53	676
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric welding and metal-working.....	441,401	Nov. 25	2877	743	53	1183
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electro-magnetic traction-increasing system.....	441,828	Dec. 2	315	85	53	1326
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric traction-increasing system.....	442,365	Dec. 9	1146	299	53	1491
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric soldering and cementing cans.....	443,748	Dec. 30	3455	886	53	1968
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Apparatus for electric soldering and cementing cans.....	443,749	Dec. 30	3459	886	53	1969
Dewing, Amasa J., San Francisco, Cal. Piano sounding-board.....	419,842	Jan. 21	1792	473	50	374
Dewitt, R. M., <i>et al.</i> (See Pike and Huffman, assignors.)						
Dexter, Charles L., Philadelphia, Pa. Machine for blanching almonds.....	421,681	Feb. 18	1843	481	50	930
Dexter, Lyman R., Jefferson, N. H. Sleigh.....	428,593	May 27	2375	604	51	1313
Dexter, Simon B., Glendale, Mont. Ore-roasting furnace.....	436,340	Sept. 16	1488	{ 388 389 }	52	1674
Dey, Anthony, <i>et al.</i> (See Ball, George M., assignor.)						
Dey, Harry E., New York, N. Y., assignor to P. H. Alexander, Hyde Park, Mass. Secondary battery.....	418,700	Jan. 7	76	17	50	17
Dey, Harry E., New York, N. Y., assignor to P. H. Alexander, Hyde Park, Mass. Cut-out for secondary batteries.....	418,701	Jan. 7	77	17	50	17
Dey, Harry E., New York, N. Y., assignor to P. H. Alexander, Hyde Park, Mass. Cut-out for secondary batteries.....	418,702	Jan. 7	78	18	50	17
Dey, Harry E., New York, N. Y., assignor to P. H. Alexander, Hyde Park, Mass. Forming secondary-battery plates.....	418,703	Jan. 7	79	18	50	18
Dezell, Robert B., Canton, N. Y. Boot-jack.....	427,675	May 13	972	245	51	1013
Di Marzo, Vincent, Louisville, Ky. Apparatus for feeding oil to lamps.....	429,353	June 3	383	90	51	1544
Dial, Robert, assignor of one-half to N. D. Jennings, Ramsey, Ill. Car-coupling.....	434,385	Aug. 12	1423	373	52	1045
Dial, Wilbur F., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Feeding mechanism for sewing-machines.....	436,053	Sept. 9	1045	271	52	1582
Dial, Wilbur F., and F. W. Ostrom, assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Feeding mechanism for sewing-machines.....	436,054	Sept. 9	1046	272	52	1583
Diamond, George W., and S. Trudeau, Manteno, Ill. Adjustable rope-reel.....	442,309	Dec. 9	1060	277	53	1476
Dibble, Fernando J. (See Upton and Dibble.)						
Dibble, Morton A., Jackson, Mich. Alarm-latch.....	428,381	May 20	2065	520	51	1235
Dibble, William H., Brooklyn, N. Y. Dental mallet.....	442,768	Dec. 16	1814	470	53	1633
Dibert, Loyd C., San Francisco, Cal. Oat-huller.....	418,865	Jan. 7	325	79	50	68
Dice, Jacob G., and G. O. Houck, Springfield, Ohio. Submerged folding oar or paddle.....	427,842	May 13	1234	312	51	1063
Dice, Peter M., North Manchester, Ind., assignor of one-half to E. L. Webster. Land-marker.....	422,191	Feb. 25	2575	681	50	1076
Dick, Alexander H., Cramer's Hill, N. J. Grindstone tool-holder.....	422,743	Mar. 4	552	141	50	1241
Dick, Joseph, New York, N. Y. Stock-memoranda tablet.....	424,184	Mar. 25	2737	730	50	1679
Dick, Joseph, Canton, Ohio. Fodder-cutter.....	433,521	Aug. 5	115	33, 34	52	779
Dick, Joseph C. F., Chicago, Ill. Button-fastener.....	433,669	Dec. 30	3330	858	53	1944
Dick, Robert, Glasgow, Scotland. Apparatus for manufacturing web fabrics.....	432,303	July 15	1984	507	52	399
Dickelman, Joseph L., Forest, Ohio. Metal-roof cleat.....	430,927	June 24	2861	703	51	2052

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Dicken, Thomas M., <i>et al.</i> (See Knobelspies, Rudolph, assignor.)						
Dickerman, Elmer W. (See Sullivan, John T., assignor.)						
Dickerman, George F. (See Ferguson, John H., assignor.)						
Dickerman, Lewis M., Rosalie, Tex. Plow	438,347	Oct. 14	1039	282	53	205
Dickerson, Edward N. (See Holliday, John, assignor.)						
Dickerson, Edward N. (See Mackenzie-Hughes, Edward W., assignor.)						
Dickerson, Edward N. (See Macy, Josiah H., assignor.)						
Dickerson, Edward N., New York, N. Y. Thermo electric element	433,451	Aug. 5	26	7	52	761
Dickerson, Edward N., deceased; E. N. Dickerson, Jr., and C. W. Gould, New York, N. Y., executors. Valve-gear	431,880	July 8	1338	337	52	270
Dickerson, Edward N., Jr., <i>et al.</i> , executors. (See Dickerson, Edward N.)						
Dickerson, Edward N., Jr., New York, N. Y. Electrical lock-switch	420,622	Feb. 4	281	74	50	619
Dickerson, Edward N., Jr., New York, N. Y. Apparatus for electrical conversion	431,879	July 8	1337	336	52	269
Dickerson, Edward N., Jr., assignor to Western Union Telegraph Company, New York, N. Y. Multiple telegraphy	429,233	June 3	187	45, 46	51	1507
Dickerson, Lemuel F. (See Tindell and Dickerson.)						
Dickerson, Samuel H., assignor of one-half to E. A. Stimson & Co., Dayton, Ohio. Strainer for tube-wells	420,553	Feb. 4	174	43	50	598
Dickey, Aaron F., assignor of one-half to H. Stahl, O. P. Shaver, and E. C. Welch, Friedens, Pa. Fence	442,769	Dec. 16	1815	470	53	1633
Dickey, George H., and W. Duster, Tarentum, Pa. Handling and laying glass	429,846	June 10	1118	276	51	1697
Dickey, George H., and W. Duster, Tarentum, Pa. Glass-carrier	429,847	June 10	1119	276	51	1697
Dickey, George W., Des Moines, assignor of one-half to S. S. Wilson, Colfax, Iowa. Car-coupling	440,250	Nov. 11	951	244	53	806
Dickey, J. L., <i>et al.</i> (See Taliaferro, Eilbeck H., assignor.)						
Dickey, John S., Blanket, Tex. Churn-power	437,100	Sept. 23	2744	717	52	1922
Dickey, Morell W., Big Timber, Mont. Hay-fork	435,289	Aug. 26	2850	754	52	1336
Dickie, Albert A., Suisun, Cal. Nut-lock	440,769	Nov. 18	1823	470	53	976
Dickins, Sam., Wolfe City, assignor of one-half to G. D. McCord, Dallas, Tex. Rule-gage	429,087	May 27	3131	807	51	1458
Dickinson, Abram C., Nevada, Mo. Hair-braid and ribbon fastener	421,682	Feb. 18	1844	482	50	931
Dickinson, Charles. (See Beach, George A., assignor.)						
Dickinson, Charles, Washington, D. C. Paper-weight	434,705	Aug. 19	1966	510	52	1158
Dickinson, Charles A., assignor to Golden Rule Company, Boston, Mass. Calendar	442,023	Dec. 2	617	166	53	1383
Dickinson, Charles P., <i>et al.</i> (See Kuhn, Frederick L., assignor.)						
Dickinson, Daniel A., St. Paul, Minn. Steam and hot-water generator	431,037	July 1	13	4	52	5
Dickinson, E., Haring, <i>et al.</i> (See Egerly, Jason H., assignor.)						
Dickinson, Elbridge, Emporia, Kans. Cultivator	434,433	Aug. 19	1519	396	52	1071
Dickinson, Elijah M., <i>et al.</i> (See Kuhn, Frederick L., assignor.)						
Dickinson, George W., Butte City, Mont. Dumping-car	432,073	July 29	3188	820	52	644
Dickinson, James W., Milwaukee, Wis. Ash-sifter	419,648	Jan. 21	1491	399	50	318
Dickinson, Matthew S., Los Angeles, Cal. Driving-rein	422,124	Feb. 25	2477	654	50	1057
Dickinson, Williams, West Northfield, Mass. Brush and broom	431,183	July 1	226	57	52	47
Dicks, William, Sr., Toronto, Ontario, Canada, assignor, by mesne assignments, of one-half to R. N. Morton, Brooklyn, N. Y. Chromatic-printing apparatus	429,848	June 10	1120	277	51	1697
Dickson, Charles H., Portland, Me. Coasting-sled	424,469	Apr. 1	40	11	51	10
Dickson, Gilbert J., Albany, N. Y. Transom-lifter	428,165	May 30	1718	435	51	1166
Dickson, Jonathan, Agosta, Ohio. Nut-lock	421,910	Feb. 25	2169	569	50	1001
Dickson, Thomas W., <i>et al.</i> (See Harrison, George W., assignor.)						
Dickson, William K. L. (See Edison and Dickson.)						
Diebel, Henry, Sank Centre, Minn. Rod or pipe cutter	443,431	Dec. 23	2944	758	53	1861
Diebel, William. (See Harley and Diebel.)						
Diebold Safe and Lock Company. (See Kirks, Albert, assignor.)						
Diebold Safe and Lock Company. (See Schoenfeld, Charles, assignor.)						
Diederichs, Jean C., Bourgoin, France. Vapor-engine	439,813	Nov. 4	271	68	53	661
Dieffenderfer, William, Kelly Cross Roads, Pa. Sash-fastener	437,982	Oct. 7	471	133	53	90
Diehl, John F. (See Bates, Fred J., assignor.)						
Diehl, Philip, Elizabeth, N. J. Regulating apparatus for electric motors	421,911	Feb. 25	2170	570	50	1001
Diehl, Philip, Elizabeth, N. J. Commutator-brush	423,912	Mar. 25	2342	617	50	1605
Diehl, Philip, Elizabeth, N. J. Electric fan	423,995	Apr. 22	2401	635 636	51	490
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Shuttle and shuttle-carrier for sewing-machines	437,023	Sept. 23	2634	688	52	1900
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Feeding mechanism for sewing-machines	440,622	Nov. 18	1573	405	53	929
Diehl, Philip, and W. Brandt, Elizabeth, N. J., assignors to Singer Manufacturing Company of New Jersey. Shuttle for sewing-machines	435,924	Sept. 9	853	224	52	1546
Diehl, Samuel W. B., and J. Gibson, United States Navy. Ship's binnacle	432,962	July 22	3006	772	52	603
Dierdorff, Henry B., assignor to J. A. Jeffrey, Columbus, Ohio. Drive-chain	430,631	June 24	2376	580	51	1958
Diescher, Samuel, assignor of one-half to J. J. McGill, Pittsburg, Pa. Driving-drum	438,250	Oct. 14	883	240	53	175
Diesoldorff, William A., London, England. Coffee huller and polisher	439,485	Oct. 28	2824	752 753	53	555
Dieterich, Fred G., assignor to J. U. O'Meara, Washington, D. C. Vending-machine	423,033	Mar. 11	1018	266 267	50	1337
Dieterich, Fred G., assignor to J. U. O'Meara, Washington, D. C. Vending-machine	423,034	Mar. 11	1023	267 268	50	1338
Dieterich, Fred G., assignor to J. U. O'Meara, Washington, D. C. Vending-machine	425,996	Apr. 22	2402	636 637	51	491
Dieterich, Fred G., assignor to J. U. O'Meara, Washington, D. C. Vending-machine	434,127	Aug. 12	1033	267 268	52	968
Dieterich, Fred G., assignor to J. U. O'Meara, Washington, D. C. Vending-machine	439,030	Oct. 21	2092	560 561	53	412
Dieterich, Gustave H. (See Norton, James W., assignor.)						
Dieterichs, Emil F., Cleveland, Ohio. Faucet and bung	438,611	Oct. 21	1423	325	53	286
Diether, Charles F., <i>et al.</i> (See Beach, Ralph H., assignor.)						
Diother, Samuel B., <i>et al.</i> (See Beach, Ralph H., assignor.)						
Dietrich, Elias, Rochester, N. Y. Railway-spike	440,422	Nov. 11	1252	324	53	858
Dietrich, Joseph, Buffalo, N. Y. Washing-machine	429,428	June 3	499	119	51	1568
Dietrich, Tobias, Butler, Pa. Lamp-black machine	431,881	July 8	1339	337	52	270
Dietz Company, R. E. (See Dietz, Frederick, assignor.)						
Dietz Company, R. E., <i>et al.</i> (See Betts, Charles L., assignor.)						
Dietz Company, R. E., <i>et al.</i> (See Betts, Louis F., assignor.) (Reissue.)						
Dietz Company, R. E., <i>et al.</i> (See Erb, Charles F., assignor.)						
Dietz, Emil. (See Morris, William B., assignor.)						
Dietz, Emil, Indianapolis, Ind. Box-trimming machine	440,697	Nov. 18	1694	436	53	952

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Dietz, Frederick, assignor to R. E. Dietz Company, New York, N. Y. Lantern	441,358	Nov. 25	2804	724	53	1168
Dietz, Frederick, assignor to R. E. Dietz Company, New York, and Steam Gauge and Lantern Company, Syracuse, N. Y. Burner-fastening for lamps and lanterns	442,172	Dec. 9	856	229	53	1438
Dietz, George H., Louisville, Ky. Letter and bill file	428,805	May 27	2099	685	51	1373
Dietz, John G. (See Ward, Alexander F., assignor.)						
Dietz, Julius. (See Krost, Anthony, assignor.)						
Dietz, Oswald L. W., and F. Haaf, Cincinnati, Ohio. Car-coupling	437,582	Sept. 30	3531	921	52	2081
Diffenderfer, John K. E., assignor to G. D. Greenwood and J. G. Jory, Baltimore, Md. Automatic railway-signal	430,567	June 17	2261	555	51	1927
Diffey, Alexander A., assignor of one-half to A. G. Ryley, Brinkley, Ark. Horizontal telescopic press	424,543	Apr. 1	161	46	51	34
Dihlberg, John, Visalia, Cal. Water-closet indicator	437,101	Sept. 23	2745	717	52	1922
Dikeman, Charles S. (See Hayden and Dikeman.)						
Dill, George W., Bristol, R. I. Umbrella	435,735	Sept. 2	548	145	52	1181
Dillard, Walter E., Tappabannock, Va. Top-prop	427,559	May 13	808	203	51	982
Dille, Henry H., Richmond, Ind. Lawn-edge trimmer	427,406	May 6	574	143	51	925
Dille, Henry H., and E. W. McGuire, assignors to Dille & McGuire Manufacturing Company, Richmond, Ind. Pawl-and-ratchet mechanism	426,368	Apr. 22	2934	772	51	599
Dille & McGuire Manufacturing Company. (See Dille and McGuire, assignors.)						
Dillehay, Anthony R., Agenda, Kans. Draft-equalizer	442,960	Dec. 16	2140	550	53	1697
Dillenback, Alonzo, Palatine Bridge, N. Y. Thill-support	442,566	Dec. 16	1984	509	53	1667
Dillenback, Harrison B. (See Moss and Dillenback.)						
Diller, Abraham, and J. W. White, Brighton, Iowa. Car-coupling	426,975	Apr. 29	3845	1004	51	784
Dilley, Martin A., Wasepi, Mich. Railway-signal	424,051	Mar. 25	2554	661	50	1644
Dillin, Maurice R., and C. S. Ford, Jr., Philadelphia, Pa. Stamped letter	437,334	Sept. 30	3131	819	52	2000
Dillingham, William C., Los Angeles, Cal. Combined job and news galley	440,348	Nov. 11	1108	284	53	831
Dillon, Charles J. (See Liddell and Dillon.)						
Dillon, Louis W., North Attleborough, assignor of one-half to H. M. Daggett, Jr., Attleborough, Mass. Ceiling-block connector for incandescent lamps	431,038	July 1	15	4	52	5
Dillon, Peter. (See Smith and Dillon.)						
Dillon, William H., Elkton, Ky. Velocipede	432,381	July 15	2090	536	52	419
Dillon, William H., Elkton, Ky., assignor of one-half H. W. Barry, Palmyra, N. J. Spring-motor	422,336	Feb. 25	2815	742	50	1120
Dillon, William S. F., assignor of one-half to G. Hall, Lima, Ohio. Tap and die	425,372	Apr. 8	1433	383	51	287
Dillon, William S. F., assignor of one-half to G. Hall, Lima, Ohio. Car-axle-box lid	439,346	Oct. 28	2615	697	53	516
Dilts, William, assignor to F. Wulfers, Cincinnati, Ohio. Ladder	432,263	July 15	1917	491	52	386
Dilworth, John C., Pittsburg, Pa. Strainer for oil-tanks	439,486	Oct. 28	2825	753	53	555
Dilworth, Porter & Company. (See Hunter, James, assignor.)						
Dimick, Augustus D., Wakefield, Mass. Piano-action	432,516	July 22	2296	594	52	467
Dimond, George H., and A. Steward, Bridgeport, Conn. Sewing-machine	418,890	Jan. 7	374	90, 91	50	78
Dingens, Joseph A. (See Hempel, Henry A., assignor.)						
Dinn, Patrick J., Boston, Mass. Electric-light pole	438,773	Oct. 21	1692	454	53	335
Dinsmore, Robert, assignor of one-half to A. Greenstein, Westou, W. Va. Mechanism for loading and unloading mine-cages	438,612	Oct. 21	1424	385	53	286
Dinsmore, Willard E. (See Matthews and Dinsmore.)						
Dinsmore, William H., Connellsville, Pa. Device for removing coke from ovens	428,466	May 20	2184	550	51	1256
Dion, Jerry, North Bend, Nebr. End-gate fastening	430,798	June 24	2664	653	51	2014
Dirkes, August H. (See Holzmann, Ernest, assignor.)						
Dirmitt, Charles H., and G. W. Walters, Philadelphia, Pa. Water-filter	425,537	Apr. 15	1680	448	51	344
Diss, Albert B., assignor to A. B. Diss & Co., Brooklyn, N. Y. Furniture-caster	436,307	Sept. 9	1430	373	52	1656
Diss, Albert B., assignor to A. B. Diss & Co., Brooklyn, N. Y. Furniture-caster	436,308	Sept. 9	1431	373	52	1656
Diss, Charles J. (See Kennedy, Diss, and Rosenfield.)						
Diss & Co., A. B. (See Diss, Albert B., assignor.)						
Disston, Charles, Philadelphia, Pa. Plasterer's trowel	440,423	Nov. 11	1253	324	53	858
Disston & Sons, Henry. (See Disston, Thomas S., assignor.)						
Disston, Thomas S., assignor to H. Disston & Sons, Incorporated, Philadelphia, Pa. Saw-grinding machine	429,019	May 27	3017	774	51	1436
Distin, Henry J., Philadelphia, Pa. Mouth-piece for wind musical instruments	419,424	Jan. 14	1173	311	50	247
Dithridge, George W., New York, N. Y. Beam or sill	426,558	Apr. 29	3337	848	51	666
Dithridge, George W., New York, N. Y. Beam or girder	426,559	Apr. 29	3337	848	51	666
Dithridge, George W., New York, N. Y. Beam or sill	426,560	Apr. 29	3338	849	51	666
Dithridge, George W., New York, N. Y. Beam or sill	426,561	Apr. 29	3339	849	51	667
Dithridge, George W., New York, N. Y. Sill or beam	426,562	Apr. 29	3339	849	51	667
Dithridge, George W., New York, N. Y. Beam or girder	430,840	June 24	2734	670	51	2027
Dithridge, George W., New York, N. Y. Metal tube	431,203	July 1	259	65	52	53
Ditson, Allen, Larned, Kans. Printing-press attachment	418,944	Jan. 7	463	114	50	97
Dittert, Gustav, Neustadt, Saxony, Germany. Surgical knife	432,517	July 22	2299	594	52	468
Divine, Martin F., Sellersburg, Ind. Hay-frame	435,736	Sept. 2	548	145	52	1481
Divoll, James G., Oakland, Cal. Filter	419,843	Jan. 21	1792	473	50	374
Dixon, Charles W., Bloomfield, Ind. Wrench	437,102	Sept. 23	2746	718	52	1923
Dixon, Ellis W., Forest Grove, Oreg. Fire-escape	442,961	Dec. 16	2141	551	53	1697
Dixon, Ezra. (See Potter, Joseph H., Jr., assignor.)						
Dixon, George, Leeds, county of York, England. Mechanism for actuating the dabbing-brushes of combing machines	422,125	Feb. 25	2478	654	50	1057
Dixon, George E., Chicago, Ill. Hood for heat-radiators	435,290	Aug. 26	2851	754	52	1336
Dixon, Henry, and H. S. Kopp, Dayton, Ohio. Fountain scrubbing-brush	420,035	Jan. 28	2088	551	50	443
Dixon, Henry A. (See Wood, James F., assignor.)						
Dixon, James H. F., Philadelphia, Pa. Adjustable partition for sliding drawers	436,626	Sept. 16	1943	510	52	1759
Dixon, John G., assignor of one-half to H. Wilck, New York, N. Y. Collar and cuff drying apparatus	431,766	July 8	1155	287	52	234
Dixon, John H. (See Carney and Dixon.)						
Dixon, John H., Pittsburg, Pa. Tool attachment	421,391	Feb. 18	1425	369	50	850
Dixon, John H., Chicago, Ill. System of actuating mechanism	432,158	July 15	1764	453	52	358
Dixon, Joseph, New York, N. Y. Refrigerator	438,348	Oct. 14	1040	283	53	205
Dixon, Richard A. (See Davidson and Dixon.)						
Dixon, Robert H. (See Scofield, Seville, Wilson, and Dixon.)						
Dixon, Robert H., Canton, Ohio. Mowing-machine frame	426,248	Apr. 22	2768	725	51	564
Dixon, Robert H., Stillwater, Minn. Mowing-machine	436,825	Sept. 23	2299	605	52	1836
Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating and Lighting Company, New York, N. Y. Car-heater	435,484	Sept. 2	157	44, 45	52	1405
Dixon, Robert S., Sydney, New South Wales. Vacuum preserving apparatus	439,125	Oct. 28	2243	603	53	447

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Dixon, Theron S. E., Chicago, Ill. Secondary battery.....	431,447	July 1	639	160	52	129
Dixon, Theron S. E., Chicago, Ill. Filter.....	431,448	July 1	641	161	52	129
Dixon, Walter, North St. Paul, Minn. Sheet-metal-folding machine.....	422,744	Mar. 4	553	142	50	1242
Dixon, William E., Chicago, Ill. Sash-fastener.....	440,142	Nov. 11	777	204	53	770
Dixon, William M. (See Bristow and Dixon.)						
Dixon, William O., Nevada, Mo. Corn-dropping attachment for cultivators.....	431,882	July 8	1340	337	52	270
Doane, Azadore M., assignor of one-half to E. P. Higgins, Chicago, Ill. Exhaust-fan.....	435,602	Sept. 2	337	94	52	1440
Doane, P. A. (See Bryan, John M., assignor.)						
Doane, Seth C., Stevens Point, Wis. Sleigh-knee.....	420,407	Jan. 28	2661	705	50	550
Dobbs, Samuel B., Collingswood, N. J. Game or puzzle.....	434,658	Aug. 19	1883	492	52	1144
Dobinson, William J., Somerville, Mass. Decorating spherical and uneven surfaces of glass, earthenware, &c.....	441,086	Nov. 18	2337	605	53	1074
Dobney, John, Toronto, Ontario, Canada. Crutch.....	428,467	May 20	2185	550	51	1256
Dobson & Barlow. (See Dobson and Bromiley, assignors.)						
Dobson, Benjamin A., and W. I. Bromiley, assignors to Dobson & Barlow, Bolton, England. } Mechanism for stripping the traveling flats of carding-engines.....	439,126	Oct. 28	2244	{ 603 604 }	{ 53	447
Dobson & Crawford Manufacturing Company. (See Dobson, James B., assignor.)						
Dobson, James. (See Fyfe and Dobson.)						
Dobson, James B., Indianapolis, Ind. Bolting-reel.....	429,339	June 3	363	86	51	1540
Dobson, James B., assignor to Dobson & Crawford Manufacturing Company, Cleveland, Ohio. Bolting-reel.....	424,100	Mar. 25	2623	699	50	1657
Dobson, John R., and J. D. Peirson, Phoenixville, Pa. Nut-lock.....	422,337	Feb. 25	2816	743	50	1120
Dobson, William A., Marion, and J. M. St. John, Cedar Rapids, Iowa. Head-rest.....	430,731	June 24	2552	625	51	1992
Dobson, William J. M., assignor to W. C. Boone, Brooklyn, N. Y. Apparatus for transmitting motion.....	431,039	July 1	16	4	52	5
Dock, Herman, Philadelphia, Pa. Marine propeller.....	442,614	Dec. 16	1547	{ 399 400 }	{ 53	1581
Dock, Herman, Philadelphia, Pa. Marine propulsion.....	442,615	Dec. 16	1548	400	53	1581
Dockray, Peter J., Kearney, N. J. Car-coupling.....	433,522	Aug. 5	117	34	52	779
Dodd, Alvin H., Allentown, Pa. Shutter-worker.....	441,471	Nov. 25	2994	771	53	1205
Dodd, William T., Gates, Tenn. Plow.....	424,470	Apr. 1	41	11	51	11
Doddridge, Loyal M., assignor of one-half to F. H. French, Stanton, Mich. Vehicle-axle.....	427,466	May 6	665	167	51	944
Dodds, Alexander, Grand Rapids, Mich. Wood-carving machine.....	426,408	Apr. 22	3019	791	51	615
Dodé, Edouard, Paris, France. Separating gold and platinum from other metals in solution.....	440,143	Nov. 11	778	204	53	770
Dodge, Charles A., Boston, Mass. Staging.....	428,769	May 27	2647	671	51	1363
Dodge, Charles D., Lansing, Mich. Boiler appliance.....	435,214	Aug. 26	2741	{ 723 724 }	{ 52	1315
Dodge Coal Storage Company. (See Dodge, James M., assignor.)						
Dodge, Edwin N., Claremont, Minn. Cuff-holder.....	440,019	Nov. 4	598	158	53	725
Dodge, Frank H., assignor of one-half to C. S. Stone, Irving, Mass. Portable shelf.....	441,829	Dec. 2	317	85	53	1326
Dodge, James M., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Nantauk, Conn. Apparatus for removing piles of coal.....	439,487	Oct. 28	2826	753	53	555
Dodge, James M., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Nantauk, Conn. Coal piling and removing machinery.....	443,605	Dec. 30	3229	830	53	1925
Dodge, James N., Springfield, Mass. Thread-cutter.....	439,488	Oct. 28	2828	753	53	556
Dodge, L. B., et al. (See Gilfillan, Essington N., assignor.)						
Dodge Manufacturing Company. (See Collins, Charles M., assignor.)						
Dodge Manufacturing Company. (See Philion, George, assignor.)						
Dodge, Miles B., assignor to Parke & Lacy, San Francisco, Cal. Rock-breaker.....	419,246	Jan. 14	902	237	50	193
Dodge, Miles B., assignor to Parke & Lacy, San Francisco, Cal. Rock-breaker.....	419,247	Jan. 14	903	{ 237 238 }	{ 50	193
Dodge, Nathan D. (See Rich, Frederick D., assignor.)						
Dodge, Omer W. (See Van Ryzin, Dodge, and Patten.)						
Dodge, Peleg S., Stanton, Mich. Oscillating-cylinder printing-machine.....	432,518	July 22	2299	595	52	468
Dodge, Sara A., et al. (See Hann, George L., assignor.)						
Dodge, Thomas T. (See Andrews, Abram P., assignor.)						
Dodge, Virginia, et al. (See Hann, George L., assignor.)						
Dodge, W. H., et al. (See Gilfillan, Essington N., assignor.)						
Dodge, Wallace H., Mishawaka, Ind. Pulley.....	422,507	Mar. 4	207	56	50	1176
Dodge, Wallace H., Mishawaka, Ind. Pulley.....	424,101	Mar. 25	2625	700	50	1657
Dodge, William B., assignor of one-half to J. H. Rankin, Stuart's Draft, Va. Road-cart.....	439,056	Oct. 21	2133	572	53	419
Dodge, William H., Lenox, Mass. Scythe-handle.....	436,220	Sept. 9	1304	340	52	1629
Dodson, Darien W., Wilkes-Barré, Pa. Type-writing machine.....	438,724	Oct. 21	1602	{ 430 431 432 433 }	{ 53	318
Dodson, Roy, St. Louis, Mo. Wrench.....	420,867	Feb. 4	648	168	50	687
Doe, Charles V., New Market, N. H. Coat-hanger.....	428,166	May 20	1720	435	51	1166
Doe, George W., New Bedford, Mass. Crutch.....	437,024	Sept. 23	2637	688	52	1901
Doehne, George L., assignor of one-half to W. F. Weitmyer, Harrisburg, Pa. Hydrant.....	437,831	Oct. 7	244	75	53	48
Doepensmith, Phillip. (See Peck and Doepensmith.)						
Doerfler, Ignatz. (See Bergen and Doerfler.)						
Doerflinger, William, La Crosse, Wis. Exhibiting-stand for oil-cloths, &c.....	426,174	Apr. 22	2662	699	51	542
Doering, Elizabeth. (See Doering, John H. W., assignor.)						
Doering, J. H. (See Haslup, William, assignor.)						
Doering, John H. W., assignor to E. Doering, Kansas City, Mo. Rolling and adjustable window-screen.....	424,280	Mar. 25	2864	{ 765 766 }	{ 50	1705
Doersch, George M., Centreville, Wis. Bung and bushing.....	426,115	Apr. 22	2574	677	51	524
Dofflenyre, James A. (See Miller and Dofflenyre.)						
Doggett, Horace E. (See Tebbetts and Doggett.)						
Doherty, Daniel E. (See Brown, Perry, assignor.)						
Doherty, Patrick J., Chelsea, Mass. Embalming or laying-out table.....	438,146	Oct. 14	733	201	53	148
Doherty, William J., Des Moines, Iowa. Wire-stretcher.....	437,485	Sept. 30	3388	888	52	2053
Döhning, Carl F. W., Berlin, Germany. Producing fire-proof walls and ceilings.....	432,023	July 15	1550	394	52	318
Dohrmann, Samuel J., Louisville, Ky. Door-check.....	422,745	Mar. 4	555	142	50	1242
Dolby, George W., Fremont, N. Y. Brake for baby-carriages.....	420,230	Jan. 28	2406	640	50	503
Dold, Albert W. (See Conroy and Patnoe, assignors.)						
Dolose & Shepard. (See Marchant and Patnoe, assignors.)						
Dolse, Alfred. (See Horsey, George F., assignor.)						
Dollvo-Dobrowsky, Michael v., assignor to Allgemeine Elektrizitäts-Gesellschaft, Berlin, Germany. Electrical induction apparatus or transformer.....	422,746	Mar. 4	556	142	50	1242
Dollvo-Dobrowsky, Michael v., assignor to Allgemeine Elektrizitäts-Gesellschaft, Berlin, Germany. Alternating-current motor.....	427,978	May 13	1450	367	51	1104

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Doll, William F. (See Wareham and Doll.)						
Dollmer, Charles F. (See Fluck, William R. S., assignor.)						
Dolman, John H., Raynor, Tex. Protractor	430,005	June 10	1363	337	51	1745
Dom, Alexander, Mount Healthy, and C. H. Sheen, Cincinnati, Ohio. Photographic-plate holder and mechanism for operating the same	419,505	Jan. 14	1281	{ 341 342 }	{ 50	269
Dom, Alexander, Mount Healthy, assignor to Standard Carriage Iron Company, Cincinnati, Ohio. Shifting seat for vehicles	426,782	Apr. 29	3581	935	51	733
Dom, Alexander, Mount Healthy, assignor to Globe Company, Cincinnati, Ohio. Paper-file	428,555	May 20	2304	585	51	1279
Dom, Alexander, Mount Healthy, assignor to Globe Company, Cincinnati, Ohio. Temporary file	438,574	Oct. 14	1359	368	53	268
Dombrain, Henry A. A., Leeds, county of York, and O. Trumper, Stratford, county of Essex, England. Apparatus for extracting oil	431,937	July 8	1409	{ 357 358 }	{ 52	284
Domeier, Albert, <i>et al.</i> (See Domeier and Hagemann, assignors.)						
Domeier, Albert, <i>et al.</i> (See Hagemann, Otto C., assignor.)						
Domeier, Albert, <i>et al.</i> (See Mitting, Ebenezer K., assignor.)						
Domeier, Albert, and O. C. Hagemann, London, England, assignors to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Recovering glycerine from spent soap-lye	428,468	May 20	2186	551	51	1256
Domeier, Albert, and O. C. Hagemann, London, England, assignors to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Apparatus for concentrating spent soap-lye	428,469	May 20	2189	552	51	1257
Domeier, Albert, and O. C. Hagemann, London, England, assignors to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Apparatus for the distillation of concentrated soap-lye	428,470	May 20	2191	553	51	1257
Domeier, Albert, and O. C. Hagemann, London, England, assignors to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Distilling glycerine recovered from spent soap-lye	428,471	May 20	2194	554	51	1258
Doner, Daniel J., Shanesville, Ohio. Gate-latch	436,405	Sept. 16	1603	423	52	1696
Domestic Sewing Machine Company. (See Wass, Allen S., assignor.)						
Donhoff, John F. (See Bléha, William V., assignor.)						
Dominguez, Ricardo. (See Aramburn, Frederick, assignor.)						
Dominion Tubular Lamp Company. (See Lapiere, Clovis, assignor.)						
Dominy, Cyrenius, Englewood, Ill. Automatic grain-scales	421,912	Feb. 25	2172	570	50	1001
Donahoo, Peter B., Fresno, Cal. Watering-cart	426,664	Apr. 29	3392	891	51	696
Donald, David. (See Freeman and Donald.)						
Donald, William J. A., Castle Park House, Scotland. Making chromates	442,109	Dec. 9	760	.....	53	1419
Donaldson, George, Columbus, Ohio. Pavement-rammer	442,110	Dec. 9	761	204	53	1419
Donaldson, Heber, Hagerstown, Md. Cash-recorder and money-drawer protector	428,202	May 20	1768	447	51	1176
Donaldson, John E., Montezuma, Ind. Die for forming roofing-tiles	428,122	July 15	1704	437	52	347
Donaldson, John E., Montezuma, assignor to Clay Shingle Company, Indianapolis, Ind. Roofing tile	426,584	Apr. 29	3275	859	51	674
Donaldson, John H., Gore, Ohio. Game	421,913	Feb. 25	2174	571	50	1002
Donaldson, Robert B., <i>et al.</i> (See Stabler, James P., assignor.)						
Dondero, Charles. (See Benucci and Dondero.)						
Donkel, Lloyd H., Apopka, Fla. Vehicle-wheel	425,934	Apr. 15	2289	605	51	460
Donley, James F., Penn Yan, N. Y. Paper basket	427,753	May 13	1112	278	51	1040
Donley, James F., assignor of one-half to G. E. Ryckman, Brockton, N. Y. Basket-cover fastener	443,710	Dec. 30	3398	873	53	1956
Donlon, Thomas, Cortland, N. Y. Jaw-trap	419,188	Jan. 14	818	216	50	176
Donn, Wilton C., Brooklyn, and W. M. Cuthbert, New York, N. Y. Sewing-machine table	428,382	May 20	2066	{ 520 521 }	{ 51	1236
Donne, Leon, Chicago, Ill. Coin-controlled self-registering lifting-machine	423,035	Mar. 11	1028	268	50	1339
Donne, Lewis and M., London, county of Middlesex, England. Watch-winding mechanism	424,185	Mar. 25	2739	730	50	1680
Donne, Morgan. (See Donne, Lewis and M.)						
Donnell, Charles K., Webster, Me. Combined burglar-alarm and door-fastener	432,987	July 29	3055	785	52	619
Donnell, Edward P. (See Little, Robert H., assignor.)						
Donnell, Edward P., and J. Mills, Chicago, Ill. Machine for manufacturing backs for blank-books	433,235	July 29	3430	886	52	693
Donnell, John O., Lowville, N. Y. Telegraph-blank	443,505	Dec. 30	3072	{ 791 792 793 }	{ 53	1895
Donnelly, Alexander G., New York, N. Y., assignor of one-half to A. Solmans, South Norwalk, Conn. Marine electric light	424,544	Apr. 1	166	47	51	35
Donnelly, Alexander G., New York, N. Y., assignor of one-half to A. Solmans, South Norwalk, Conn. System of defending harbors by submarine torpedoes	431,565	July 8	823	{ 205 206 }	{ 52	172
Donnelly, John, <i>et al.</i> (See Guerra, Asterio, assignor.)						
Donnelly, John, Branford, Conn. Pliers	442,426	Dec. 9	1242	321	53	1512
Donnelly, John, Parliament Street, W. McLaren, Moorfields, county of Middlesex, and A. Trask, Brockley, county of Kent, England. Axle-box for railway-cars	420,778	Feb. 4	490	128	50	659
Donnersberger, Joseph. (See Dumais, Jean B. Z., assignor.)						
Donohue, Edward J. (See Boorman and Donohue.)						
Donohue, Patrick, Kansas City, Mo. Harness-saddle and attachment	428,167	May 20	1721	436	51	1166
Donohue, Thomas H., and M. Gore, Washington, D. C. Hose-bridge for railway-tracks	439,868	Nov. 4	358	92	53	677
Donovan, John T., and W. J., Springfield, Mass. Toilet-paper fixture	427,407	May 6	577	144	51	926
Donovan, Matthew, Paterson, N. J. Skid for vehicles	423,136	Mar. 11	1188	310	50	1369
Donovan, William F., Newark, N. J. Musical-key indicator	428,806	May 27	2700	685	51	1373
Donovan, William J. (See Donovan, John T. and W. J.)						
Dooley, Obadiah, Wahoo, Nebr. Tellurian	423,036	Mar. 11	1031	269	50	1340
Dooley, Thomas B., Malden, Mass. Covering wire with metal	432,196	July 15	1817	{ 467 468 }	{ 52	368
Doolittle, David E. (See Doolittle, William E. and D. E.)						
Doolittle, Emmet W., Garden Grove, Iowa. Road-cart	426,369	Apr. 22	2936	772	51	599
Doolittle, Emmet W., and J. D. Burns, Garden Grove, Iowa. Thill-coupling	431,449	July 1	643	161	52	130
Doolittle, George. (See Crowfoot and Doolittle.)						
Doolittle, George W., Kansas City, Mo. Plow	435,172	Aug. 26	2683	{ 708 709 }	{ 52	1304
Doolittle, Henry B., Doolittle's Mills, Ind. Stump-puller	424,281	Mar. 25	2867	766	50	1705
Doolittle, Henry B., Doolittle's Mills, Ind. Gate	434,326	Aug. 12	1335	348	52	1028
Doolittle, James E. (See Allen and Doolittle.)						
Doolittle, Merritt E. (See Brumwell and Doolittle.)						
Doolittle, William E. and D. E., New Britain, Conn. Machine for turning ribbed collars for umbrellas	420,045	Jan. 28	2098	554	50	445
Dooner, John, Chicago, Ill. Oil-filtering apparatus	429,340	June 3	365	86	51	1540
Doore, Allan J. (See Doore, George W. and A. J.)						
Doore, George W. and A. J., Greene, Iowa. Cow-tail holder	429,849	June 10	1122	277	51	1698

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Doppelmayer, Mayer, Sherman, Tex. Liniment.....	438,063	Oct. 7	698		53	117
Doran, Francis P., Brooklyn, N. Y. Copy-book.....	436,126	Sept. 9	1162	303	52	1603
Doran, James, Toronto, Ontario, Canada. Vinegar-tank.....	418,784	Jan. 7	189	46	50	42
Dorchester, Edward G., Geneva, N. Y. Cultivator shank and tooth attachment.....	430,841	June 24	2735	670	51	2037
Doré, John T., Bayou Sara, La. Revolving bucket-strainer.....	421,253	Feb. 11	1222	316	50	805
Doremus, Abram F., Chicago, Ill. Centrifugal drying-machine.....	430,632	June 24	2378	581	51	1958
Doremus, William T., Flatbush, N. Y. Bed-covering.....	429,894	June 10	1195	297	51	1712
Doring, Charles, Lamar, Mo. Bridle or balter attachment.....	437,181	Sept. 30	2905	756	52	1957
Döring, Emil, and F. A. Siegert, Weistropp, near Wildsruß, Saxony, Germany. Bicycle.....	424,864	Apr. 1	669	176 } 177 }	51	129
Dorman, John F. W., Baltimore, Md. Printing-press.....	432,382	July 15	2091	537	52	419
Dormer, Richard, Garston, county of Lancaster, England. Obtaining chlorine.....	427,467	May 6	666		51	944
Dornitzer, Anna, New York, N. Y. Step-ladder.....	421,914	Feb. 25	2175	571	50	1002
Dornon, Wiley M., Saline, La. Fertilizer-distributor.....	430,248	June 17	1756	437	51	1830
Dorn, Christian, and J. Carey, Philadelphia, Pa. Apparatus for refining oils.....	437,421	Sept. 30	3289	850	52	2032
Dorn, John, Chicago, Ill. Curtain-fixture.....	443,188	Dec. 23	2557	657	53	1786
Dorman, Thomas B., Philadelphia, Pa. Two-ply-ingrain carpet fabric.....	438,064	Oct. 7	609	166	53	117
Dorman, Thomas B., Philadelphia, Pa. Making two-ply fabrics.....	438,065	Oct. 7	611	166	53	117
Dorr, Edgar S., Cambridge, Mass. Road-skate.....	430,006	June 10	1364	337	51	1746
Dorsch, John, Tacoma, Wash. Cover-holder for dinner-pails.....	433,452	Aug. 5	26	7	52	761
Dorton, Robert E., assignor to C. A. Baker, Minneapolis, Minn. Band-cutter and feeder.....	439,490	Oct. 28	2832	754 } 755 }	53	556
Dorton, Robert E., Minneapolis, Minn., and H. L. Earle, New York, N. Y., assignors to R. J. Anderson, Minneapolis, Minn. Band-cutting and feeding mechanism.....	439,489	Oct. 28	2829	754	53	556
Doscher, John H. (See Averell, John D., assignor.)						
Dossert, John J., New York, N. Y. Shutter for photographic cameras.....	423,913	Mar. 25	2344	617	50	1605
Dossett, Wallace L., Toronto, Ontario, Canada. Invalid-lounge.....	421,392	Feb. 18	1426	369	50	850
Dotson, John W., assignor of two-thirds to J. M. Roach and O. H. Burbridge, Chicago, Ill. Grip-shoe.....	424,644	Apr. 1	320	83	51	63
Doty, Albert J., New York, N. Y. Oyster-cooker.....	434,822	Apr. 19	2121	556	52	1191
Doty, Albert J., New York, N. Y. Gas-burner for stoves and other heaters.....	443,221	Dec. 23	2617	673	53	1798
Doty, Ellis A., Detroit, Mich. Garment-supporter.....	429,208	June 3	156	38	51	1501
Doty, Harry A., New Haven, Conn. Game apparatus.....	422,575	Mar. 4	306	78	50	1194
Doty, Henry H., assignor to Rhea-Doty Syndicate, Limited, London, England. Disintegrating fibrous plants.....	443,904	Dec. 30	3686	948	53	2013
Doty, Joseph, Wellsville, N. Y. Anti-rattler for thill-couplings.....	425,867	Apr. 15	2183	580	51	441
Doty, William, assignor of two-thirds to W. L. Miller, Chillicothe, Ohio. Steam flue-cleaner.....	425,105	Apr. 8	1137	300	51	229
Doty, William H., Paterson, N. J. Device for administering medicine to animals.....	430,928	June 24	2862	703	51	2052
Doubleday, Ebenezer S., Brooklyn, N. Y. Vending-machine.....	436,074	Sept. 9	1079	279 } 280 }	52	1588
Douds, Byron J., Kent, Ohio. Permutation-lock.....	431,450	July 1	645	161	52	130
Douds, Byron J., Kent, Ohio. Permutation-lock.....	431,451	July 1	646	161	52	130
Dougall, George H., Sr., New Orleans, La. Car-coupling.....	433,453	Aug. 5	27	7	52	762
Dougan, John B. (See McCullough, George C., assignor.)						
Dougan, Kennedy, Missoula, Mont. Ballot-holder.....	440,545	Nov. 11	1439	371	53	894
Dougan, Kennedy, Missoula, Mont. Vote-registering machine.....	440,546	Nov. 11	1441	372	53	894
Dougan, Kennedy, Missoula, Mont. Mechanical ballot and ballot-holder.....	440,547	Nov. 11	1446	373	53	895
Dougherty, Edward. (See Kelly, James, assignor.)						
Dougherty, John B., Wyoming, assignor to A. Wadsworth, Warsaw, N. Y. Hoop-machine.....	420,902	Feb. 4	709	183	50	697
Dougherty, John B., Wyoming, assignor to A. Wadsworth, Warsaw, N. Y. Hoop-machine.....	420,903	Feb. 4	711	183 } 184 }	50	698
Dougherty, William L., Darlington, Wis. Fire-escape.....	433,575	Oct. 14	1360	368	53	268
Doughty, Charles W., Augusta, Ga. Absorbent for night-soil.....	429,190	June 3	128		51	1495
Douglas, Benjamin, Jr. (See Kingsland, Stephen A., assignor.)						
Douglas, Charles E., et al. (See Krutsch, Willis W. and A., assignors.)						
Douglas, Charles H., assignor of one-fourth to E. J. Smith, Washington, D. C. Saw.....	431,510	July 1	736	183	52	147
Douglas, Charles H., Chicago, Ill., assignor of part to M. F. Seely, Fremont, Nebr., and Dayton, Poole & Brown, Chicago, Ill. Driving-belt.....	441,359	Nov. 25	2805	724	53	1168
Douglas, Nathan, New York, N. Y. Dress-lifter.....	437,357	Sept. 30	3177	830	52	2009
Douglass, Arthur, Danes Inn, Strand, county of Middlesex, England. Electric lighting and advertising system.....	425,125	Apr. 8	1064	282 } 283 }	51	215
Douglass, J. Walter. (See Bormann, Hermann, assignor.)						
Douglass, J. Walter. (See Kerbaugh, Minor C., assignor.)						
Douglass, Leon F., Grand Island, Nebr. Automatic coin-controlled phonograph.....	431,883	July 8	1341	338	52	270
Douglass, Lizzie M., Springfield, Mo. Shoe-protector.....	419,506	Jan. 14	1283	342	50	269
Douglass, Samuel W., Fort Collins, Colo., assignor to M. C. Bullock Manufacturing Company, Chicago, Ill. Rock and earth drilling machine.....	443,750	Dec. 30	3462	887	53	1969
Douillet, Louis A., New York, N. Y. Button.....	440,020	Nov. 4	599	158	53	725
Dow, Alonzo. (See Warren and Dow.)						
Dow, Alonzo, assignor of one-half to R. N. Warren, Wooster, Ohio. Electro-galvanic belt.....	427,468	May 6	668	167	51	944
Dow, Alonzo, and R. N. Warren, Wooster, Ohio; said Warren assignor to said Dow. Inhaler.....	438,102	Oct. 7	667	181	53	129
Dow, Frank L., Rochester, N. Y., assignor to J. L. Branson, Philadelphia, Pa. Circular-knitting machine.....	421,915	Feb. 25	2176	571	50	1002
Dow, George B. N., Manchester, N. H. Filler-collar.....	419,142	Jan. 7	729	192	50	153
Dow, George E., San Francisco, Cal. Pump.....	419,248	Jan. 14	904	238 } 239 }	50	193
Dow, James M., Ogdensburg, N. Y. Photographic posing chair.....	435,056	Aug. 26	2513	664	52	1271
Dow, Joseph H., assignor of one-half to W. Chisholm, Sr., Cleveland, Ohio. Rotary steam-engine.....	430,568	June 17	2263	556 } 337 } 338 } 339 } 340 }	51	1927
Dow, Lorenzo, and D. Powers, Boston, Mass. Type-distributing machine.....	430,007	June 10	1365		51	1746
Dow, Peter, et al. (See McDonald, Gallaspie, assignor.)						
Dowd, Daniel L., New York, N. Y. Exercising-machine.....	434,771	Aug. 19	2054	537	52	1177
Dowd, James, Blackstone, Mass. Lock.....	430,072	June 10	1480	367	51	1767
Dowd, James, Blackstone, Mass. Sash-fastener.....	435,737	Sept. 2	549	145	52	1481
Dowd, John B., Chicago, Ill. Exercising-machine.....	426,249	Apr. 22	2769	726	51	564
Dowdell, James E. (See Shipway and Dowdell.)						
Dowden, Ashford T., Prairie City, Iowa. Potato-harvester.....	434,980	Aug. 26	2399	635	52	1251
Dowling, George E. (See Morden and Hoffman, assignors.)						
Dowling, Robert H., assignor of two-thirds to C. and C. H. Follett, Newark, Ohio. Car-coupling.....	424,409	Mar. 25	3112	825	50	1752

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Dowling, Robert H., assignor of two-thirds to C. and C. H. Follett, Newark, Ohio. Car-coupling	442,574	Dec. 9	1480	380	53	1559
Downend, Franklin L., assignor to C. F. Mott, Halifax, Nova Scotia, Canada. Combina-tion-tool	426,409	Apr. 22	3022	791	51	615
Downey, Maurice, Jr., Montague, Mich. Lumber-piler	435,738	Sept. 2	550	146	52	1481
Downham, A. W. (See Carroll, Michael F., assignor.)						
Downie, John G., assignor to Keystone Portable Driller Company, Limited, Beaver Falls, Pa. Portable drilling-machine	441,540	Nov. 25	3094	795	53	1225
Downing, Alvan H., Fort Atkinson, Wis. Casket-holder	443,317	Dec. 23	2778	712	53	1828
Downing, Pamealia, Bay City, Mich. Washing-machine	432,747	July 22	2666	682	52	539
Downing, Philip B., Boston, Mass. Street-railway switch	430,118	June 17	1559	388	51	1792
Downs, Ann M. (See McKinnon, James W., assignor.)						
Downs, Emery N. (See Thurston, Henry W., assignor.)						
Downs, George N., Chicago, Ill., assignor to Troy Laundry Machinery Company, Troy, N. Y. Trouing-machine	433,646	Aug. 5	301	79, 80	52	815
Downs, Theodore and T. J., Springfield, Ohio. Harvesting knife	426,783	Apr. 29	3583	935	51	733
Downs, Thomas J. (See Downs, Theodore and T. J.)						
Downs, William A., Rosecommon, Mich. Farm-gate	425,411	Apr. 15	1496	402	51	309
Dowrie, Thomas W., assignor of one-half to C. W. St. John, Pontiac, Ill. Heel-machine	443,162	Dec. 23	2500	640	53	1773
Dowse, W. B. H., trustee. (See Mead, Albert G., assignor.)						
Dowst, Charles O. (See Dowst, Samuel M. and C. O.)						
Dowst, Charles O. (See Dowst and Hosmer, assignors.)						
Dowst, Samuel M., assignor to Automatic Machine Company, Chicago, Ill. Coin-controlled opera-glass receptacle	439,127	Oct. 28	2245	604	53	447
Dowst, Samuel M. and C. O., assignors to Automatic Machine Company, Chicago, Ill. Coin-controlled stamp-delivery machine	440,698	Nov. 18	1696	{ 346 347 }	{ 53 53 }	{ 953 953 }
Dowst, Samuel M., and F. H. Hosmer, Chicago, assignors to said S. M. Dowst and C. O. Dowst, Evanston, Ill. Coin-controlled telephone-guard	430,569	June 17	2266	557	51	1928
Dox, Andrew J., and E. S. Lorimer, Brookings, S. D.; said Lorimer assignor to said Dox. Heating and cooking stove	442,111	Dec. 9	762	205	53	1419
Doyle, Anne. (See Doyle, William, assignor.)						
Doyle, Charles B., Maywood, Ill. Automatic electric switch and cut-off	432,988	July 29	3056	785	52	619
Doyle, George, Watertown, Mass. Electro-mechanical gong	436,560	Sept. 16	1848	487	52	1741
Doyle, James H. (See Louny and Doyle.)						
Doyle, John, Hoboken, N. J., assignor to North American Electric Company, New York, N. Y. Rheostat	441,293	Nov. 25	2709	{ 702 703 310 311 }	{ 53 50 }	{ 1150 1369 }
Doyle, William, assignor of one-half to A. Doyle, Albany, N. Y. Stove or range	423,137	Mar. 11	1189	368	51	1767
Doyle, William J. C., Aspen, Colo. Gravity-hoist	430,073	June 10	1481	368	51	1767
Dozier, Lewis D. (See Goldman, Samuel S., assignor.)						
Dracup, Fred. (See Hodgson, Bedford, and Dracup.)						
Drainage Construction Company. (See Waring, George E., Jr., assignor.)						
Drake, A. Richards, Waltham, Mass. Car-brake	439,837	Nov. 4	309	77, 78	53	668
Drake, Bernard M., et al. (See Cardow, Philip, assignor.)						
Drake, Charles C., Trenton, N. J. District police and fire telegraph	430,992	June 24	2961	727	51	2070
Drake, Charles S. (See Burgess, Edward A., assignor.)						
Drake, Edward F., Miller's Falls, Mass. Cuspidor or cuspidor-holder	425,497	Apr. 15	1624	433	51	333
Drake, Edwin L., Winchester, Tenn. Ice-cream freezer	438,103	Oct. 7	669	{ 181 182 }	{ 53 53 }	{ 129 129 }
Drake, Edwin S., Portland, Me. Clamp	426,665	Apr. 29	3393	891	51	697
Drake, Edwin S., Cambridge, Mass. Pencil-sharpener	426,716	Apr. 29	3488	912	51	713
Drake, Francis E. (See Heiskell and Drake.)						
Drake, Francis E., Columbus, Ohio. Sash-fastener	437,103	Sept. 23	2747	718	52	1923
Drake, Franklin J., Providence, R. I. Locomotive spark-arrester	433,647	Aug. 5	309	80	52	816
Drake, Lewis B., assignor to M. H. Neil and W. J. Cannitz, Columbus, Ohio. Preserva-tive compound for brick, stone, &c	442,867	Dec. 16	1986	.....	53	1667
Drake, Thomas F. (See Martin, Drake, and Johnson.)						
Drake, Walter H. (See Hovey and Drake.)						
Drake, Wear L., assignor of one-half to F. Lane, Chicago, Ill. Smoke-consuming furnace	420,534	Feb. 4	152	37, 38	50	593
Drake, William B., et al. (See Bristow, Thomas A., assignor.)						
Draper, Elisha, New Castle, Nebr. Washing-machine	422,192	Feb. 25	2576	682	50	1077
Draper, George A., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-support for cap-spinning machines	443,659	Dec. 30	3312	854	53	1940
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Support for spinning-spindles	431,511	July 1	737	183	52	147
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Support for spinning-spindles	434,981	Aug. 26	2401	636	52	1251
Draper, George O., assignor to G. Draper & Sons, Hopedale, Mass. Support for spinning-spindles	436,754	Sept. 16	2164	568	52	1801
Draper, James O., Pawtucket, R. I. Tea-pot strainer and drip-retainer	440,842	Nov. 18	1946	499	53	998
Draper, John F., assignor of one-half to J. G. Linstrom, Platteville, Wis. Broom-hanger	421,683	Feb. 18	1845	482	50	931
Draper & Sons, George. (See Draper, George A., assignor.)						
Draper & Sons, George. (See Draper, George O., assignor.)						
Draper & Sons, George. (See Draper, William F., assignor.)						
Draper & Sons, George. (See Emery, Charles L. L., assignor.)						
Draper & Sons, George. (See Gray, James R., assignor.)						
Draper & Sons, George. (See Hinchliffe, William, assignor.)						
Draper & Sons, George. (See Knight, George W., assignor.)						
Draper & Sons, George. (See Robinson, Charles D., assignor.)						
Draper, William F. (See White, Rollin, assignor.)						
Draper, William F., Hopedale, Mass. Support for spinning-spindles	428,897	May 27	2837	721	51	1401
Draper, William F., Hopedale, Mass. Support for spinning-spindles	441,144	Nov. 25	2444	633	53	1104
Draper, William F., Hopedale, Mass. Support for spinning-spindles	442,427	Dec. 9	1243	321	53	1512
Draper, William F., assignor to G. Draper & Sons, Hopedale, Mass. Support for spinning-spindles	428,556	May 20	2305	585	51	1279
Draper, William F., assignor to G. Draper & Sons, Hopedale, Mass. Bearing for spindles	428,557	May 20	2306	587	51	1279
Draper, William P., et al. (See Moore, Morris W., assignor.)	421,167	Feb. 11	1106	284	50	784
Draper, William R. (See Hutt, James W., assignor.)						
Drautz, August B., Stuttgart, Württemberg, Germany. Compound engine	422,051	Feb. 25	2379	623	50	1036
Drautz, August B., Stuttgart, Württemberg, Germany. Compound gas and steam engine	423,224	Mar. 11	1307	340	50	1393
Drautz, August B., Stuttgart, Württemberg, Germany. Shoe-fastening	425,567	Apr. 15	1723	462	51	353
Drautz, August B., Stuttgart, Germany. Silvering mirrors	433,074	July 29	3190	52	645

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Dredge, Edgar, Stoke Newington, county of Middlesex, England. Car brake and starter ..	423,225	Mar. 11	1310	{ 340 341 }	{ 50 50 }	1393
Drees, Frank B., and H. R. Swan, Xenia, Ohio. Spinning-machine.....	419,649	Jan. 21	1492	399	50	319
Dreibelbis, Frank M., Los Angeles, Cal. Detachable horse foot-pad.....	431,717	July 8	1086	271	52	221
Dreifoos, Bernard, <i>et al.</i> (See Baumgard, Charles, assignor.)						
Dreifoos, Emanuel B., assignor of one-half to M. Kanter, Chicago, Ill. Clothes-pounder...	424,865	Apr. 1	671	177	51	130
Drendul, Paul. (See Beers and Drendul.)						
Drendul, Paul. (See Gilbert and Drendul.)						
Drendul, Paul, assignor to L. G. Beers, Chicago, Ill. Sand-screen.....	437,025	Sept. 23	2638	689	52	1901
Dressler, Charles E., New York, N. Y. Electric motor.....	440,699	Nov. 18	1701	437	53	953
Dressler, Charles E., New York, N. Y. Electric motor and generator.....	440,700	Nov. 18	1704	437	53	954
Dressler, Charles E., New York, N. Y. Electric motor or dynamo-electric machine.....	442,173	Dec. 9	857	230	53	1438
Dressler, Henry W., Cincinnati, Ohio. Joint for metal plates.....	428,807	May 27	2701	685	51	1373
Drew, Charles W., and E. R. Francis, Minneapolis, Minn. Electric heater.....	426,437	Apr. 29	3061	801	51	632
Drew, Charles W., and E. R. Francis, Minneapolis, Minn. Electric heater.....	429,724	Nov. 4	145	38	53	636
Drew, Edward C., Ansonia, Conn. Cuff-holder.....	438,473	Oct. 14	1215	329	53	239
Drew, Manning A., Boston, Mass. Combined cash-registering and advertisement-displaying apparatus.....	434,255	Aug. 12	1235	320	52	1007
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	422,508	Mar. 4	209	56	50	1176
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	424,672	Apr. 1	361	95, 96	51	70
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	426,116	Apr. 22	2575	677	51	525
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	443,163	Dec. 23	2501	640	53	1773
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	443,164	Dec. 23	2502	{ 640 641 }	{ 53 53 }	1774
Drew, William W., Somerville, Mass., assignor to Boston Cash Indicator and Recorder Company, Bangor, Me. Cash indicator and register.....	434,584	Aug. 19	1740	456	52	1117
Dreys, H. (See Senner, Rudolf, assignor.)						
Drexler, John, Osceola, Mo. Clasp.....	433,454	Aug. 5	28	7	52	762
Drexler, Michael, St. George, Wis. Thistle-puller.....	418,913	Jan. 7	419	103	50	87
Dreyer, Charles M., assignor to J. H. Brookmire, St. Louis, Mo. Hydraulic-cylinder lubricator.....	424,186	Mar. 25	2742	731	50	1680
Dreyfus, Charles, assignor to Clayton Aniline Company, Limited, Clayton, England. Red dye.....	441,945	Dec. 2	491		53	1360
Driesbach, Victor C., Philadelphia, Pa. Support for kettles, &c.....	437,486	Sept. 30	3389	888	52	2053
Driggs, Elizabeth H., <i>et al.</i> (See Driggs, William H., assignor.)						
Driggs, George R., San Francisco, Cal. Water-current motor.....	433,165	July 29	3332	862	52	673
Driggs, Mary E., <i>et al.</i> (See Driggs, William H., assignor.)						
Driggs, William H., assignor of one-half to M. E. and E. H. Driggs, Washington, D. C. Percussion-fuse for projectiles.....	419,143	Jan. 7	730	192	50	153
Drinkhouse, Frank F., Easton, Pa. Feed-cutter.....	440,021	Nov. 4	600	159	53	725
Driscoll, John. (See Field and Driscoll.)						
Driscoll, William, assignor of one-half to J. Hall, Brockville, Ontario, Canada. Danger-guard for railway-frogs.....	421,096	Feb. 11	1006	257	50	763
Driver, Charles H., Racine, Wis. File for drawings, plans, and heavy documents.....	431,110	July 1	119	30	52	26
Driver, William R. (See Meacom, George, assignor.)						
Drodzowski, Julius R., assignor of two-thirds to J. McCarter and J. M. Ormsbee, Erie, Pa. Coupling for steam-pipes between railway-cars. (Reissue).....	11,057	Jan. 21	2073	547	50	432
Drolet, Mederic, St. Anne, Ill. Washing-machine.....	419,425	Jan. 14	1174	312	50	247
Dromery, Albert F. (See Dejeu, Agathe J., assignor.)						
Dromgold, Walker A. (See Hensch and Dromgold.)						
Dronoy, John R., Kane, Pa. Inkstand.....	421,126	Feb. 11	1045	268	50	771
Drosten, Frederick W., St. Louis, Mo. Roll-paper holder and cutter.....	434,256	Aug. 12	1237	320	52	1007
Drown, Frederick E., Pawtucket, R. I. Suspended electric railway and car.....	431,256	July 1	336	83, 84	52	68
Drown, Frederick E., Pawtucket, R. I. Apparatus for bleaching.....	441,946	Dec. 2	492	{ 131 132 }	{ 53 53 }	1360
Drummond, Alexander, Glasgow, Scotland. Glazed structure.....	443,506	Dec. 30	3073	792	53	1895
Drummond, David D., assignor of one-half to L. I. Larsen, Chicago, Ill. Stone-sawing machine.....	423,378	Mar. 11	1537	{ 403 404 }	{ 50 50 }	1436
Drummond, James T. (See Bell, Lee, and Drummond.)						
Drury, Clinton H. (See Creighton, John, assignor.)						
Drury, F. E., <i>et al.</i> (See Burmeister, Frederick, assignor.)						
Dryden, George W., Port Perry, Canada. Pulley.....	439,491	Oct. 28	2834	755	53	556
Drynan, Archibald, Sewickley, Pa. Weather-strip.....	426,175	Apr. 22	2664	699	51	542
Drysdale, Hugh, Cleveland, Ohio. Turret-head lathe.....	437,292	Sept. 30	3071	805	52	1990
Drysdale, Knowlton P., assignor of one-half to M. Rehfsuss, Jr., Peoria, Ill. Checking and unchecking device.....	426,250	Apr. 22	2771	726	51	564
Du Bois, Adolph, assignor of one-half to F. Tuchfarber, Cincinnati, Ohio. Slot-brake.....	422,923	Mar. 11	855	222	50	1307
Du Bois, Casper C., Noblesville, Ind. Mirror or picture hanger.....	438,066	Oct. 7	613	166	53	117
Du Bois, Cernelius H. (See Speirs, John, assignor.)						
Du Bois, Howard M., Philadelphia, Pa. Tire for vehicle-wheels.....	419,005	Jan. 7	539	135	50	114
Du Bois, Howard M., Philadelphia, Pa. Rim for vehicle-wheels.....	424,766	Apr. 1	514	139	51	100
Du Bois, Howard M., Philadelphia, Pa. assignor to Du Bois Manufacturing Company, of Pennsylvania. Tire for vehicle-wheels.....	431,512	July 1	738	184	52	147
Du Bois, Josiah S., Camden, N. J. Underground conduit for electric conductors.....	442,868	Dec. 16	1986	509	53	1667
Du Bois Manufacturing Company. (See Du Bois, Howard M., assignor.)						
Du Charne, C. A., <i>et al.</i> (See Soper, Robert W., assignor.)						
Du Pont, Alfred V., Louisville, Ky. Street-car running-gear.....	423,470	Mar. 18	1674	442	50	1471
Du Pont, Alfred V., Louisville, Ky., assignor to Johnson Steel Street Rail Company, of Kentucky. Switch-rail and blank therefor.....	435,408	Sept. 2	47	15, 16	52	1384
Du Shane, James, South Bend, Ind. Curry-comb.....	440,022	Nov. 4	600	159	53	725
Du Shane, James, South Bend, Ind. Curry-comb.....	441,472	Nov. 25	2993	771	53	1205
Du Vivier, Jules H., Paris, France. Apparatus for charging retorts.....	425,538	Apr. 15	1681	449	51	345
Dubé, Louis, and L. Messier, assignors to American Rail-Joint Lock Company, Albany, N. Y. Rail-joint.....	440,623	Nov. 18	1574	405	53	929
Dubelle, Gustave H., New York, assignor to G. A. Edler, Woodside, N. Y. Solidified perfume.....	433,455	Aug. 5	29		52	762
Dubéy, Edward A., assignor of one-half to J. Langan, Brooklyn, N. Y. Envelope.....	443,611	Dec. 30	3238	832	53	1927
Dubinski, Benjamin. (See Kletzker and Dubinski.)						
Dubinski, Benjamin, St. Louis, Mo. Street-car and other advertising device.....	419,602	Jan. 14	1417	{ 379 380 }	{ 50 50 }	297

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Dubois, Charles, Marseilles, France. Apparatus for subliming sulphur.....	420,719	Feb. 4	405	108	50	644
Dubois, Henry. (See Tushington and Dubois.)						
Dubois, Olivier F., assignor of one-half to J. H. Bunker, Turtle Lake, Wis. Hay-press ..	437,146	Sept. 23	2846	739	52	1939
Dubois, Otto, Fall River, Mass. Photo-mechanical printing-plate.....	428,472	May 20	2197	554	51	1258
Duc, Henry A., Jr., Charleston, S. C. Attrition-mill.....	429,679	June 10	869	211	51	1649
Duc, Henry A., Jr., Charleston, S. C. Roller-mill.....	429,680	June 10	871	211	51	1649
Duchemin, George W., Newark, N. J. Gage-knife	425,965	Apr. 8	975	262	51	197
Ducros, Louis. (See Tymeson and Ducros.)						
Ducros, Louis, and E. Tymeson, assignors to A. Smith & Sons Carpet Company, Yonkers } N. Y. Dyeing apparatus.....	434,864	Aug. 19	2180	571	52	1202
Dudley, Chandler W., Whiting, Iowa. Saw-sharpening device.....	428,832	May 27	2743	697	51	1382
Dudley, Charles B., Altoona, Pa. Valve	422,924	Mar. 11	856	223	50	1308
Dudley, Charles J., Mobile, Ala. Elevator.....	430,339	June 17	1934	473	51	1864
Dudley, Plimmon H., New York, N. Y. Railway-track	432,159	July 15	1766	453	52	359
Dudley, Plimmon H., New York, N. Y. Rail-section	442,366	Dec. 9	1148	299	53	1492
Dudley, William W., <i>et al.</i> (See Evelyn, John T., assignor.)						
Duechting, William, Chicago, Ill. Refrigerator-car	425,599	Apr. 15	1775	475	51	362
Duerden, Edward, and J. Cheetham, Ismailovo, near Moscow, Russia. Metallic plate for boots or shoes.....	425,758	Apr. 15	2022	538	51	411
Duerk, John, Philadelphia, Pa. Boot or shoe heel fastening	421,168	Feb. 11	1108	285	50	784
Ducz, Baptis, Cameron, La. Lifting-jack	437,182	Sept. 30	2905	756	52	1958
Dufau, John T. (See Davy and Dufau.)						
Duff, Edward J., Glasgow, Scotland. Steam-boiler and its furnace	439,814	Nov. 4	273	69	53	661
Duff, John, assignor of one-half to E. F. Wright, Greenbush, N. Y. Trace-fastener	425,868	Apr. 15	2184	580	51	411
Duff, John T., Pittsburg, Pa. Machine for trimming the edges of hollow ware	419,755	Jan. 21	1648	437	50	347
Duffey, Hagb, Cortland, N. Y. Road-cart	443,222	Dec. 23	2619	673	53	1799
Duffield, W. G., <i>et al.</i> (See Crawford, John, assignor.)						
Duffy, James F., Chicago, Ill. Cork-extractor	438,410	Oct. 14	1133	305	53	222
Dufresne, Henry, Northampton, Mass. Draft attachment for vehicles	435,739	Sept. 2	552	147	52	1482
Dugal, Louis. (See Lerchen, William, assignor.)						
Dugan, Andrew C., and H. W. Schoff, Lowden, Iowa. Barber's appliance	428,203	May 20	1769	447	51	1176
Dugan, Herbert F., San Francisco, Cal. Coin-operated telephone attachment	437,293	Sept. 30	3073	805	52	1990
Dugdale, Thomas, assignor to South Bend Iron Works, South Bend, Ind. Draft-equalizer ..	438,725	Oct. 21	1613	433	53	320
Dugdale, William, <i>et al.</i> (See Ramsay, Henry A., assignor.)						
Duggan, John A., Quincy, Mass. Bracket for supporting electric conductors	418,704	Jan. 7	80	18	50	18
Duggan, John A., Quincy, Mass., assignor to Burnham & Duggan Railway Appliance Com- pany, Portland, Me. Railway-switch	433,934	Aug. 12	737	191	52	911
Duggan, John A., Quincy, Mass., assignor to Burnham & Duggan Railway Appliance Com- pany. Upward-pressure contact for electric railways	435,559	Sept. 2	275	76	52	1428
Dugot, Betsey A., Mallet Creek, Ohio. Bed-pan	443,593	Dec. 30	3210	826	53	1921
Duisberg, Carl, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Prussia, Germany. Making blue dyes	423,550	Mar. 18	1791		50	1492
Duisberg, Carl, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue dye	432,989	July 29	3058		52	620
Duke, George H., Hotchkiss, Colo. Car-coupling	443,958	Dec. 30	3776	964	53	2029
Dulait, Julien, Charleroi, Belgium. Arc light	424,866	Apr. 1	672	177	51	130
Dull, A. J., <i>et al.</i> (See Miller, Charles F., assignor.)						
Dullam, Frank. (See McQuigg, George L., assignor.)						
Dulenty, John, Waverly, Neb. Cultivator	429,020	May 27	3019	775	51	1437
Dumais, Jean B. Z., assignor of one-half to J. Donnersberger, Chicago, Ill. Cutter for brick or tile machines	436,341	Sept. 16	1491	399	52	1675
Dumais, Jean B. Z., assignor of one-half to J. Donnersberger, Chicago, Ill. Cutter for brick or tile machines	436,342	Sept. 16	1494	390	52	1676
Dumas, Frank C., New York, N. Y. Socket for fastening wire rope	427,302	May 6	420	169	51	893
Dumas, George E., Waterbury, Conn. Butter-box	443,271	Dec. 23	2693	690	53	1812
Dumke, Charles, Portland, Wis. Vehicle	437,335	Sept. 30	3132	819	52	2000
Dummer, Edward, Boston, Mass. Draftsman's easel	418,866	Jan. 7	326	79	50	68
Dummer, Edward, Newton, Mass. Electric locomotive	428,669	May 27	2488	633	51	1332
Dunbar, Alexander, Liverpool, county of Lancaster, England. Machine for making casks or barrels	423,418	Mar. 18	1597	419	50	1456
Dunbar, Alexander, Liverpool, England. Apparatus for heating cask-staves	442,219	Dec. 9	927	245	53	1451
Dunbar, Charles W., Toronto, Ontario, Canada. Hinge	419,507	Jan. 14	1284	342	50	269
Dunbar, Henry D., Hartford, Vt., and W. L. Austin, Philadelphia, Pa. Steam-brake valve	419,508	Jan. 14	1285	343	50	269
Dunbar, Henry D., North Hartland, Vt., and W. L. Austin, Philadelphia, Pa. Steam-brake mechanism for locomotives	443,272	Dec. 23	2693	691	53	1812
Dunbar, John K., Austin, Tex. Electric insulator	434,144	Aug. 12	1057	273	52	972
Dunbar, William O., Altoona, Pa. Journal-box for car-axles	421,485	Feb. 18	1554	401	50	875
Dunbar, William O., Altoona, Pa. Journal-box for car-axles	427,303	May 6	421	109	51	894
Duncan, George T., assignor of one-half to P. O. Butts, Tacoma, Wash. Bridle or halter ..	428,898	May 27	2838	721	51	1401
Duncan, Hansford A., Gracewood, Ga. Sawyer's gage for saw-mills	425,373	Apr. 8	1434	384	51	287
Duncan, Henry, London, England. Apparatus for facilitating the microscopical examina- tion of photographic pictures	443,359	Dec. 23	2839	730	53	1841
Duncan, J. M., <i>et al.</i> (See Gowans, James A., assignor.)						
Duncan, James, Coshocton, Ohio. School seat and desk	432,662	July 22	2598	648	52	512
Duncan, John, Shedd's, Oreg. Clevis	443,650	Dec. 30	3302	851	53	1939
Duncan, John H., Syracuse, N. Y. Drier and conveyer	423,598	Mar. 18	1853	489	50	1503
Duncan, Joseph M., assignor to Duncan Salt Company, Silver Springs, N. Y. Evaporat- ing-pan. (Reissue)	11,061	Feb. 18	2133	559	50	985
Duncan, Louis. (See Rowland and Duncan.)						
Duncan, Louis, Baltimore, Md., assignor of one-half to H. H. Carpenter, New York, N. Y. } Electric motor	427,503	May 6	715	179	51	954
Duncan Salt Company. (See Duncan, Joseph M., assignor.) (Reissue.)						
Duncan, Sylvester F., and A. M. Willard, assignors to Wire Fence Improvement Company, } Chicago, Ill. Machine for making stay-pieces and guards for wire fences.....	432,123	July 15	1706	438	52	347
Duncan, William F., New York, N. Y., and G. A. Fullerton, Boston, Mass., assignors to } Facile Bottle Stopple Company, New York, N. Y. Lamp	425,498	Apr. 15	1625	433	51	334
Dundon, Patrick F., San Francisco, Cal. Discharge-door for steam digesters and retorts..	418,867	Jan. 7	328	80	50	69

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Duneka, Frederic A. (See Grozier and Anderson, assignors.)						
Dunham, Charles H., <i>et al.</i> (See McGlinchey, Charles E., assignor.)						
Dunham, Frank, <i>et al.</i> (See Toucey, Ferris D., assignor.)						
Dunham, George, Unionville, Conn. Machine for finishing nuts.....	420,931	Feb. 11	761	{ 197 198 }	50	717
Dunham, George, Unionville, Conn. Nut-making machine.....	436,172	Sept. 9	1231	{ 321 322 }	52	1615
Dunham, Jacob A., Roll, Ind. Flood-gate.....	425,869	Apr. 15	2185	581	51	441
Dunham Manufacturing Company. (See Churchward, James, assignor.)						
Dunkle, A. B. (See Durnbaugh, Joseph A., assignor.)						
Dunkle, Abraham B., Steelton, Pa. Window-shade fixture.....	428,332	May 20	1986	500	51	1218
Dunlap, Ella M., <i>et al.</i> , executors. (See Dunlap, William R.)						
Dunlap, Wilham A., Pittsburg, Pa. Railway-torpedo.....	441,830	Dec. 2	318	85	53	1326
Dunlap, William O., George's Creek, Tex. Cane-mill.....	420,147	Jan. 28	2267	{ 600 601 }	50	478
Dunlap, William O., George's Creek, Tex. Lemon-squeezer.....	420,868	Feb. 4	649	168	50	687
Dunlap, William O., George's Creek, Tex. Lemon-squeezer.....	434,327	Aug. 12	1337	348	52	1028
Dunlap, William R., deceased, Cincinnati, Ohio; E. M. Dunlap and J. L. Logan, executors. Centrifugal reel.....	432,519	July 22	2302	{ 595 596 }	52	409
Dunlop, John B., Belfast, Ireland. Wheel-tire for cycles.....	435,995	Sept. 9	954	250	52	1565
Dunlop, John B., Belfast, Ireland. Bicycle.....	421,649	Dec. 2	31	9	53	1268
Dunmore, Thomas, Norwalk, Ohio. Heating and ventilating apparatus.....	421,562	Feb. 18	1673	433	50	897
Dunn, Dennis, Philadelphia, Pa. Yarn-dyeing machine.....	433,393	July 29	3652	943	52	738
Dunn, Dennis, assignor of one-half to T. Gorman, Mahanoy City, Pa. Air-brake for railway-cars.....	431,938	July 8	1410	358	52	284
Dunn, Edwin E., Macomb, Ill. Padlock.....	427,754	May 13	1113	279	51	1040
Dunn, Franklin M., and J. F. Walters, assignors to Merchants Store Service Company, Baltimore, Md. Store-service apparatus.....	442,869	Dec. 16	1988	510	53	1668
Dunn, George F., assignor of one-half to L. H. Shaw, Brockton, Mass. Upper-skiving machine.....	426,251	Apr. 22	2772	{ 726 727 }	51	564
Dunn, George T., assignor to R. & T. A. Ennis Stationery Company, St. Louis, Mo. Book.....	438,067	Oct. 7	613	167	53	117
Dunn, J. D. (See Sutton, William H., assignor.)						
Dunn, James J., and C. J. Stricker, Philadelphia, Pa. Machine for collecting pulp.....	420,148	Jan. 28	2368	601	50	478
Dunn, James M., and A. A. Paschal, Holden, Mo. Weather-boarding machine.....	423,419	Mar. 18	1600	420	50	1456
Dunn, O. M. (See Slusser, John V., assignor.)						
Dunn, William, Philadelphia, Pa. Machine for making nut-locks.....	420,266	Jan. 28	2464	654	50	513
Dunn, William C., Brooklyn, N. Y. Game apparatus.....	432,160	July 15	1767	454	52	360
Dunn, William H., Chicago, Ill. Machine for dressing and sweetening tobacco.....	433,456	Aug. 5	29	8	52	762
Dunn, William J., Emsworth, Pa. Brace for excavations.....	431,689	July 8	1043	261	52	212
Dunne, Thomas P., New York, N. Y. Picture-rail.....	429,788	June 10	1028	252	51	1679
Dunnett, William W., assignor of one-half to N. M. Rittenhouse, Baltimore, Md. Piping for building walls.....	438,068	Oct. 7	614	167	53	117
Dunning, Edward C., <i>et al.</i> (See Sprague, Henry W., assignor.)						
Dunning, Pangborn Manufacturing Company. (See Pangborn, Henry and J. K., assignors.)						
Dunning, Theodore R., Middletown, N. Y. Metallic railway-tie.....	426,637	Apr. 29	3357	880	51	689
Dunning, William B., Geneva, N. Y. Steam-whistle.....	427,059	May 6	39	11	51	818
Dunscorn, Daniel, and A. M. Heffebower, Toledo, Ohio. Clothes-pin bag.....	426,494	Apr. 29	3144	825	51	648
Dunton, Alvaro F., Eagle Point, Wis. Sprinkling-machine.....	435,878	Sept. 2	779	207	52	1525
Dunworth, Frank, New York, N. Y. Pencil-sharpener.....	422,126	Feb. 25	2479	655	50	1058
Dupaquier, Emile, <i>et al.</i> (See Hamilton, Harvey R., assignor.)						
Dupece, Frank, Lawrenceville, N. Y. Spring-gear for vehicles.....	438,285	Oct. 14	944	255	53	186
Duplex Printing Press Company. (See Cox, Joseph L., assignor.)						
Dupont, Philippe D., St. Johnsbury, Vt. Power-hammer spring.....	429,807	June 10	1055	259	51	1684
Dupré, Joseph E. (See Dupré and Dupré.)						
Dupré, Victor, and J. E. Dupré, Taftville, Conn. Picker-stick check for looms.....	439,725	Nov. 4	146	38	53	636
Dupuis, Peter M. (See Frechette and Dupuis.)						
Durand, Arthur, Alexandria, Va., assignor to J. M. Tinker, Washington, D. C., and T. B. Edelin, Brooklyn, N. Y. Fire-extinguisher.....	432,481	July 15	2244	580	52	450
Durand, Arthur, assignor to J. M. Tinker, Washington, D. C., and T. B. Edelin, Brooklyn, N. Y. Chemical fire-extinguisher.....	432,482	July 15	2246	{ 580 581 }	52	451
Durand, Eugène A., Paris, France. Cigarette-machine.....	422,193	Feb. 25	2578	682	50	1077
Durand, Frank S., Peoria, Ill. Gas or oil burner.....	438,840	Oct. 21	1811	482	53	356
Durand, Jean P. (See Dévigne and Durand.)						
Durand, Louis, <i>et al.</i> (See Tonranghi, Ernest, assignor.)						
Durand, Wallace, Newark, N. J. Ring-gage.....	439,774	Nov. 4	216	57	53	650
Durant, Edward G., Racine, Wis. Building block.....	423,914	Mar. 25	2346	618	50	1605
Durant, Edward G., Racine, Wis. Machine for ornamenting blocks, tiles, &c.....	423,915	Mar. 25	2347	618	50	1605
Durell, George B., Chattanooga, Tenn. Tool.....	429,118	June 3	21	5	51	1476
Durfee, Bradford K., <i>et al.</i> (See Hartley, Charles J., assignor.)						
Durgy, Minnie T., Sherman, Conn. Skillet.....	429,169	June 3	96	23	51	1490
Durham, George H. (See Carmack, Henry C., assignor.)						
During, Harry P., Carthage, Mo., assignor to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus.....	425,026	Apr. 8	920	{ 244 245 }	51	186
During, Harry P., Carthage, Mo., assignor to Lamson Consolidated Store Service Company, of New Jersey. Cash-carrier.....	425,094	Apr. 8	1014	271	51	204
Durkee, George B., Chicago, Ill. Safety bicycle.....	439,128	Oct. 28	2249	605	53	448
Durkee, George B., Chicago, Ill. Bicycle.....	439,129	Oct. 28	2250	{ 605 606 }	53	448
Durkee, George B., assignor to Lyon & Healy, Chicago, Ill. Harp.....	437,917	Oct. 7	366	{ 105 106 }	53	71
Durkee, George B., assignor to Lyon & Healy, Chicago, Ill. Harp.....	437,918	Oct. 7	369	{ 106 107 }	53	71
Durkee, George B., assignor to Lyon & Healy, Chicago, Ill. Harp.....	437,919	Oct. 7	371	107	53	72
Durkee, John T., Portland, Oreg. Fire-proof paint.....	434,556	Aug. 19	1702		52	1109
Durkin, Daniel, Grafton, assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple.....	442,747	Dec. 16	1782	461	53	1626
Durler, Herman C., Oshkosh, Wis. Clothes-slide.....	423,743	Mar. 18	2084	550	50	1546
Durnbaugh, Joseph A., assignor to A. B. Dunkle, Steelton, Pa. Adjustable window-shade holder.....	443,173	Dec. 23	2519	644	53	1777
Durning, Thomas F., Newark, N. J. Harness-trimming.....	440,306	Nov. 11	1050	270	53	821
Durphy, Charles H. (See Holmquist, August, assignor.)						
Dürr, Fritz, Munich, Germany. Gas and petroleum motor.....	442,248	Dec. 9	962	254	53	1459
Durrant, Frederick, assignor of one-half to F. W. Durrant, Amy, Mich. Welding compound.....	440,946	Nov. 18	2116		53	1031

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Durrant, Frederick W. (See Durrant, Frederick, assignor.)						
Durrenbeck, Charles A., <i>et al.</i> (See Cronin, Daniel, assignor.)						
Durrenbeck, William E., <i>et al.</i> (See Cronin, Daniel, assignor.)						
Durrin, Reuben, and R. Sheldon, Streator, Ill.; said Durrin assignor to said Sheldon. Attachment for type-writing machines	424,187	Mar. 25	2743	731	50	1680
Duryea, Charles E., Washington, D. C., assignor to Rouse-Duryea Cycle Company, Peoria, Ill. Velocipede	432,124	July 15	1711	440 441	52	348
Duryea, Charles E., Washington, D. C., assignor to Rouse-Duryea Cycle Company, Peoria, Ill. Velocipede-saddle	432,125	July 15	1716	441 442	52	349
Duryea, Charles E., Washington, D. C., assignor to Rouse-Duryea Cycle Company, Peoria, Ill. Pedal for bicycles	432,126	July 15	1718	442	52	350
Duryea, Jacob W. and W. C., Blawenburg, N. J. Corn-planter and fertilizer-distributor.	436,649	Sept. 16	1990	521	52	1767
Duryea, Louis T. (See Grimm, Paul H., assignor.)						
Duryea, William C. (See Duryea, Jacob W. and W. C.)						
Duryea's Brothers. (See Grimm, Paul H., assignor.)						
Duryee, George, Orange, N. J. Revolving roasting-furnace	430,929	June 24	2863	703 704	51	2052
Duryee, Sacket. (See Duryee, Schuyler, assignor.)						
Duryee, Schuyler, Falls Church, Va., assignor to C. Cornelius and P. Berg, Neillsville, Wis. Wash-board	423,379	Mar. 11	1538	404	50	1436
Duryee, Schuyler, Falls Church, Va., assignor to S. Duryee, Washington, D. C. Envelope.	423,226	Mar. 11	1311	341	50	1393
Dusenberry, Charles, Jr., Tuckahoe, assignor to Hodgman Rubber Company, New York, N. Y. Fly-front garment	436,650	Sept. 16	1993	521	52	1768
Dusenberry, George S., Westerville, Ohio. Pegging-jack	430,732	June 24	2553	625	51	1992
Dusenbury, Richard H., assignor of one-half to T. D. Robinson, Brunswick, N. Y. Ironing-machine	427,469	May 6	669	168	51	944
Duster, William. (See Dickey and Duster.)						
Dutch, Julia A., administratrix. (See Surfleet, Francis R.)						
Dutcher Temple Company. (See Durkin, Daniel, assignor.)						
Dutcher Temple Company. (See Gifford, Alenza T., assignor.)						
Dutcher Temple Company. (See Irish, Rolon C., assignor.)						
Dutt, John E. (See Krall and Dutt.)						
Dutton, Charles S., Youngstown, Ohio. Steam-engine governor	426,585	Apr. 29	3276	860	51	674
Dutton, Chanccy N., assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Mechanism for recording volumetric values	441,094	Nov. 18	2350	609 610	53	1077
Dutton, Chanccy N., assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Register-casing for fluid-meters	441,095	Nov. 18	2355	610	53	1078
Dutton, Chanccy N., assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Fluid-meter	441,614	Nov. 25	3212	827 828	53	1249
Dutton, Chanccy N., assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Fluid	442,024	Dec. 2	618	166 167	53	1384
Dutton, Clarence E., Jr., Washington, D. C. Galvanic battery	442,516	Dec. 9	1383	354	53	1540
Dutton, Eben L. (See Carter and Dutton.)						
Dutton, John P. (See Chapline, Dutton, and Campbell.)						
Dutton, Samuel T., Worcester, county of Worcester, England. Railway-signal	431,652	July 8	968	242	52	200
Dutton, Walter H., East Bethany, N. Y. Plate-metal railway cross-tie	435,806	Sept. 2	663	174	52	1502
Dutton, William W. (See Smith and Dutton.)						
Duvall, Anthony P., Cleveland, Ohio. Hame-tug clip	441,473	Nov. 25	2996	771	53	1205
Duvall, Marius. (See Hershey, Benjamin, assignor.)						
Duvina, Gustav, Pasewalk, Germany. Slide-valve	440,349	Nov. 11	1109	224	53	832
Duvina, Gustav, Pasewalk, Germany. Slide-valve	441,541	Nov. 25	3098	795	53	1225
Duxbury, Robert W., assignor of one-half to G. M. Hewitt, Amsterdam, N. Y. Carding-machine for producing slivers of varying colors	421,823	Feb. 18	2027	536	50	965
Duxbury, Robert W., assignor of one-half to G. M. Hewitt, Amsterdam, N. Y. Making roving for the manufacture of spotted or party-colored or clouded yarn	421,824	Feb. 18	2030	537	50	966
Dwelle, Fred. M., Jackson, Mich. Reversing-lever	427,560	May 13	810	203	51	982
Dwight, Edward E., Toledo, Ohio. Dumping-car	434,257	Aug. 12	1238	320	52	1007
Dwinnell, David L., assignor of one-half to G. A. and C. H. Miller, Montreal, Quebec, Canada. Fitting for hot-water and steam pipes	431,452	July 1	647	162	52	130
Dwinnell, David L., assignor of one-half to G. A. and C. H. Miller, Montreal, Quebec, Canada. Hot-water boiler	431,453	July 1	647	162	52	131
Dwinnell, David L., assignor of one-half to G. A. and C. H. Miller, Montreal, Quebec, Canada. Closet-cistern	432,820	July 22	2787	712	52	562
Dwinnell, David L., assignor of one-half to G. A. and C. H. Miller, Montreal, Canada. Hot-water boiler	442,701	Dec. 16	1632	431	53	1608
Dwinnell, David L., assignor of one-half to Miller Bras & Toms, Montreal, Quebec, Canada. Hot-water boiler	443,432	Dec. 23	2945	758	53	1861
Dwyer, Edward F., Lynn, Mass. Pattern-grading device	438,147	Oct. 14	734	201 202	53	148
Dwyer, James, <i>et al.</i> (See Soper, Robert W., assignor.)						
Dwyer, Jeremiah, <i>et al.</i> (See Soper, Robert W., assignor.)						
Dwyer, John, East Pembroke, N. Y. Car-coupling	432,697	July 22	2593	664	52	524
Dwyer, John T., Montreal, Quebec, Canada. Combined knapsack and shoulder-strap bag.	432,697	July 22	2426	625	52	493
Dyar, John B., Detroit, Mich. Radiator	430,930	June 24	2867	704	51	2053
Dyblie, Julius A., Chicago, Ill. Rope-transmission	419,426	Jan. 14	1176	312	50	247
Dyckman, Louis L., Philadelphia, Pa. Cigar piercer or drill	423,138	Mar. 11	1190	311	50	1369
Dye, Earl M., Buffalo, N. Y. Hatchway-guard	442,310	Dec. 9	1061	278	53	1476
Dye, Nathaniel C., Rutland, Vt. Apparatus for washing gas	420,378	Jan. 25	2619	695	50	542
Dyer, Charles J., and J. Riick, Milwaukee, Wis. Horse-boot	424,767	Apr. 1	515	139	51	101
Dyer, Charles V., Conroe, Tex. Plow-cleaning attachment	427,408	May 6	578	144	51	926
Dyer, Eby, <i>et al.</i> (See Backus, Stephen, assignor.)						
Dyer, Frank E., Mount Desert, Me. Mechanical fog-horn	436,651	Sept. 16	1994	522	52	1768
Dyer, George F. (See Richardson and Dyer.)						
Dyer, Henry K., Brooklyn, assignor to Dennison Manufacturing Company, New York, N. Y. Exhibition-tray	430,842	June 24	2735	670	51	2027
Dyer, Isaac T., assignor of two-thirds to P. Fish and O. F. Clifford, Chicago, Ill. Composition for coating iron and wood	425,412	Apr. 15	1497	-----	51	309
Dyer, Isaac T., assignor of one-half to A. J. McDonald, Chicago, Ill. Means for generating power and reutilizing the exhaust of locomotives and engines	431,225	July 1	295	73	52	60
Dyer, Richard N., New York, N. Y. Manufacture of incandescent electric lamps	429,608	June 10	768	155	51	1630
Dyer, Richard N., East Orange, N. J. Electric meter	437,183	Sept. 30	2906	756	52	1958
Dyes Gustave. (See Stean and Dyes.)						
Dyke, Actaeon L., Akron, Ohio. Machine for manufacturing marbles	431,454	July 1	649	162 163	52	131

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Dyke, Actaeon L., Akron, Ohio. Coloring marbles	439,031	Oct. 21	2094	-----	53	412
Dyke, Samuel C., Akron, Ohio. Apparatus for rounding plastic clay slugs	432,127	July 15	1720	442	52	350
Dyott, Charles G., Philadelphia, Pa. Gas-regulator	427,979	May 13	1451	367	51	1104
Dyre, William E., Washington, D. C. Signal	439,492	Oct. 28	2835	755	53	557
Dysard, James T., Lakeport, Cal. Carriage-top lifter	425,126	Apr. 8	1066	283	51	215
Dysinger, George. (See Smith, John F., assignor.)						
Dyson, John H., assignor of one-half to H. O. Wetherell, Mazomanie, Wis. Electric actuating device for pendulum clocks	439,838	Nov. 4	311	78	53	669
Eads, Andrew J. (See Eads, Gerson, and Eads.)						
Eads, Richard, E. Gerson, and A. J. Eads, Pomona, Cal. Animal-trap	434,434	Aug. 19	1520	396	52	1071
Eagan, John, Richwood, Wis. Tool for tightening belts, girths, &c	427,304	May 6	425	110	51	894
Eager, Walter H., San Francisco, Cal. Knife-box rubber for printing-presses	422,576	Mar. 4	308	78	50	1195
Eagle Pencil Company. (See Adams, George B., assignor.)						
Eagle Pencil Company. (See Blakeslee, Edward E., assignor.)						
Eagle Pencil Company. (See Boman, Claes W., assignor.)						
Eagle Pencil Company. (See Sandell, Gustaf, assignor.)						
Eagle Pencil Company. (See Sandell, Gustaf R., assignor.)						
Eagle Pencil Company. (See Weireter, George, assignor.)						
Eagleton, William, Marseilles, assignor to D. D. Clayton, Upper Sandusky, Ohio. Earth-auger	431,455	July 1	651	163	52	131
Eames, Alfred W. (See Cary, Henry B., assignor.)						
Eames, Charles J., New York, N. Y. Bottom for reducing-furnaces	428,747	May 27	2618	-----	51	1357
Eames, Charles J., New York, N. Y. Reducing iron ore	432,383	July 15	2093	-----	52	419
Eames, Edmond C. (See Van Sant and Eames.)						
Eames, Gardner T., Racine, Wis., assignor to Eames Pulley Company, Kalamazoo, Mich. Split pulley	439,493	Oct. 28	2837	756	53	557
Eames Pulley Company. (See Eames, Gardner T., assignor.)						
Eames Vacuum Brake Company. (See Massey, Albert P., assignor.)						
Earlly, James W., Cascade, Mich. Land roller and pulverizer	427,161	May 6	217	55	51	854
Eareckson, Henry B., New York, N. Y. Trap	424,188	Mar. 25	2744	732	50	1681
Earl, Charles N., Los Angeles, Cal. Sand-box for water-conduits	429,191	June 3	129	32	51	1495
Earl, Spencer D., Philadelphia, Pa. Spring-actuated fire indicator or alarm	424,545	Apr. 1	169	47	51	36
Earle, Harry L. (See Dorton and Earle.)						
Earle, Henry, Cañon City, Colo. Automatic grain-scales	422,747	Mar. 4	557	142	50	1242
Earle, Henry H. (See Dean and Earle.)						
Earle, Newell K. (See Peterkin, Ansel A., assignor.)						
Earles, John H., Denver, Colo. Fire-escape	434,416	Aug. 12	1489	388	52	1059
Earles, John H., Denver, Colo. Fire-alarm	436,869	Sept. 23	2411	629	52	1856
Earley, William, Philadelphia, Pa. Combined steam and hot-air heater	430,993	June 24	2962	727	51	2070
Early, Daniel S., Harrisburg, Pa. Tide-power	418,705	Jan. 7	81	18	50	18
Early, David A., and J. W. Johnston, Staffordsville, Va. Liniment	425,499	Apr. 15	1626	-----	51	333
Early, Elbridge T., Geneva, Ohio. Window-sash stop	440,947	Nov. 18	2116	549	53	1031
Earnest, George H. (See Ilges and Earnest.)						
Earnest, George H., assignor of two-thirds to A. Hilschman and C. W. Morris, Springfield, Ohio. Tobacco-cutter	436,096	Sept. 9	1109	287	52	1594
Easby, Francis H., assignor of one-third to Betts Machine Company, Wilmington, Del. Mechanism for producing intermittent motion	436,755	Sept. 16	2165	569	52	1801
Easley, John L., New York, N. Y. Lemon-squeezer	438,069	Oct. 7	616	167	53	118
Easson, Wallace and W., Racine, Wis. Printing and vignetting frame	440,399	Nov. 11	1198	309	53	850
Easson, Walter. (See Easson, Wallace and W.)						
East, John F., assignor to Farmer's Manufacturing Company, Norfolk, Va. Ventilating-barrel	429,021	May 27	3020	776	51	1437
East, Thomas, Park Hill, Canada. Continuous brick-kiln	438,227	Oct. 14	850	230	53	169
Eastern Electric Company. (See Paca, William S., assignor.)						
Eastern Electrical Manufacturing Company. (See Gould, Claude C., assignor.)						
Easthope, Alfred, Wolverhampton, county of Stafford, England. Velocipede	423,471	Mar. 18	1675	{ 442 443 }	{ 50 51 }	{ 1471 1471 }
Eastin, John A., St. Louis, Mo. Roll-paper holder and cutter	432,384	July 15	2094	537	52	419
Eastland, Joseph G. (See Zwergern, Franz von und zu, assignor.)						
Eastman, Charles A., et al. (See Zachary, James F., assignor.)						
Eastman, Charles B., Andover, Mass. Shutter-worker	423,037	Mar. 11	1033	269	50	1340
Eastman, Charles L., Brooklyn, N. Y. Packing-ring and making the same	436,652	Sept. 16	1906	522	52	1768
Eastman Company. (See Brownell, Frank A., assignor.)						
Eastman Dry Plate and Film Company. (See Church, Joseph B., assignor.)						
Eastman Dry Plate and Film Company. (See Eastman, George, assignor.)						
Eastman Dry Plate and Film Company. (See Eastman and Yawman, assignors.)						
Eastman Dry Plate and Film Company. (See McKellen, Samuel D., assignor.)						
Eastman Dry Plate and Film Company. (See Walker and Eastman, assignors.)						
Eastman, George. (See Walker and Eastman.)						
Eastman, George, Rochester, N. Y. Photographic film	441,831	Dec. 2	319	85	53	1326
Eastman, George, assignor to Eastman Dry Plate and Film Company, Rochester, N. Y. Roller-holder for photographic films	433,775	Aug. 5	498	129	52	852
Eastman, George, and P. H. Yawman, assignors to Eastman Dry Plate and Film Company, Rochester, N. Y. Roller-holder for photographic films	432,990	July 29	3059	786	52	620
Eastman, George, and P. H. Yawman, assignors to Eastman Dry Plate and Film Company, Rochester, N. Y. Roller-holder for photographic films	433,774	Aug. 5	495	129	52	852
Eastman, George C., Lewiston, Me. Tobacco-pipe	418,974	Jan. 7	497	124	50	105
Eastman, George S., San Francisco, Cal. Wind-engine	443,641	Dec. 30	3287	{ 847 848 }	{ 53 53 }	{ 1935 1935 }
Eastman, John P., Chicago, Ill. Disk engine	425,213	Apr. 8	1204	319	51	244
Eastman, Roswell O. (See Clark, James H., assignor.)						
Eastman, Sylvester. (See Cook and Hinds, assignors.)						
Eastman, Sylvester. (See Currin, John, assignor.)						
Easton, Charles, Methuen, Mass. Hat pressing and finishing machine	426,784	Apr. 29	3584	{ 935 936 }	{ 51 51 }	{ 733 733 }
Easton, Daniel, Grafton, Nebr. Harrow	432,821	July 22	2788	713	52	562
Easton, James W., New York, N. Y., assignor to P. M. Smith, Plainfield, N. J., and W. D. Perry, Brooklyn, N. Y. Commutator for dynamos	433,523	Aug. 5	118	34	52	780
Easton, James W., New York, N. Y., assignor to P. M. Smith, Plainfield, N. J., and W. D. Perry, Brooklyn, N. Y. Insulating material	436,733	Sept. 16	2113	-----	52	1793
Easton, Lucien F., La Crosse, Wis. Temperature-regulator	430,226	June 17	1720	428	51	1823
Easton, Lucien F., La Crosse, Wis. Electric temperature-regulator	430,633	June 24	2382	581	51	1959
Easton, Lucien F., La Crosse, Wis. Temperature-regulator	432,866	July 22	2848	729	52	575
Easton, Lucy J. B., Rochester, Minn. Flaxseed-separating machine	422,748	Mar. 4	558	143	50	1243

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Easton, Orlando W., Chester, Ark. Combined metallic shank and counter for boots or shoes.	430,733	June 24	2554	625	51	1992
Eastwick, Edward P., Jr., New York, N. Y. Car-coupling.	440,586	Nov. 11	1509	388 389	53	907
Eaton, Asahel K., assignor of one-half to K. A. Vanderbilt, Brooklyn, N. Y. Obtaining chromium and chromium alloys.	422,509	Mar. 4	210	-----	50	1176
Eaton, Charles H. (See Spaulding and Eaton.)						
Eaton, Cole & Burnham Company. (See Rice, David H., assignor.)						
Eaton, Elias S., Gladstone, Mich., assignor to W. W. Rich., Minneapolis, Minn. Counter-balance for the discharge-chutes of coal or ore bins.	435,356	Aug. 26	2978	789	52	1358
Eaton, Isaac, New Sharon, Iowa. Brake-lever.	436,221	Sept. 9	1305	340	52	1630
Eaton, John H., Woburn, and G. B. Seaman, Boston, assignors to W. G. Bell, Newton, Mass. Meat-cutting machine.	429,850	June 10	1123	277 278	51	1698
Eaton, John R., Cairo, Ky. Trace-carrier.	420,991	Feb. 11	852	220	50	734
Eaton, John W., Placerville, Cal. Handle for hammers, mallets, or other striking tools.	434,772	Aug. 19	2056	537	52	1177
Eaton, Walter R. (See Nelson and Eaton.)						
Eaton, William S., Sag Harbor, N. Y. Applying lines and characters to watch-dials.	430,424	June 17	2051	-----	51	1888
Eavenson, James L., Dugdale, Pa. Mower.	423,314	Mar. 11	1448	379	50	1418
Eaves, Albert G., New York, N. Y. Mask.	434,435	Aug. 19	1521	397	52	1072
Eaves, G. W. (See Smith, Frank P., assignor.)						
Ebenhack, George A., et al. (See Hart, Marshall W., assignor.)						
Eberhard Manufacturing Company. (See Howe, Eugene L., assignor.)						
Eberhardt, Eldors, Denver, Colo. Wagon-wrench.	424,471	Apr. 1	42	12	51	11
Eberhardt, Fred L. (See Eberhardt, Ulrich, H. E. and F. L.)						
Eberhardt, Henry E. (See Eberhardt, Ulrich and H. E.)						
Eberhardt, Henry E. (See Eberhardt, Ulrich, H. E., and F. L.)						
Eberhardt, Theophilus C., Cuero, Tex. Printing-plate.	432,822	July 22	2789	713	52	562
Eberhardt, Ulrich, Newark, N. J. Shaping-machine.	438,613	Oct. 21	1428	386	53	287
Eberhardt, Ulrich and H. E., Newark, N. J. Milling-cutter.	433,458	Aug. 5	33	9	52	763
Eberhardt, Ulrich and H. E., Newark, N. J. Barrel-washing machine.	443,751	Dec. 30	3465	887 888	53	1970
Eberhardt, Ulrich, H. E., and F. L., Newark, N. J. Plate-printing machine.	433,457	Aug. 5	31	8, 9	52	762
Eberhart, Henry. (See Ormsby, Alexander, assignor.)						
Eberle, Adam, assignor of one-half to G. M. Illingworth, Chicago, Ill. Gate for elevators or bridges.	438,991	Oct. 21	2041	545 546	53	402
Eberle, Charles R., et al. (See Richards, Philip, assignor.)						
Eberman, Albert S., Baltimore, Md. Injector.	440,624	Nov. 18	1576	406	53	929
Ebersole, William G., et al. (See Graham, Robert A., assignor.)						
Ebert, James J. (See Brooke, William M., assignor.)						
Ebert, John S., Brooklyn, N. Y. Pulley.	426,117	Apr. 22	2576	677 678	51	525
Eberts, Herman F., Detroit, Mich., assignor to J. Rocheleau, Windsor, Ontario, Canada. Push-button for door-bells.	425,870	Apr. 15	2186	581	51	442
Eburt, Johann. (See Krenig and Eburt.)						
Eby, Amariah B., Leacock, Pa. Double force-pump.	441,402	Nov. 25	2880	743	53	1183
Ecaubert, Frederic, Brooklyn, N. Y. Ornamenting watch-case centers.	434,539	Aug. 19	1673	438	52	1103
Ecaubert, Frederic, Brooklyn, N. Y. Ornamenting circular dies or articles.	434,540	Aug. 19	1675	438	52	1103
Ecaubert, Frederic, assignor to W. H. Fitz Gerald, Brooklyn, N. Y. Mechanism for making watch-case centers.	420,337	Jan. 28	2561	679 680	50	531
Ecaubert, Frederic, Brooklyn, N. Y., and T. B. Hagstoz, Newark, N. J., assignors to said Ecaubert. Mechanism for making watch-cases.	426,118	Apr. 22	2578	678	51	525
Eccentric Pulley and Stop Motion Company. (See Westgate, Joseph D., assignor.)						
Eccles, William M., St. Louis, Mo. Water-sprinkler.	436,406	Sept. 16	1604	424	52	1696
Eccleston, Charles H., Oxford, and G. H. Hebbard, Sherburne, N. Y. Spring-holder.	425,997	Dec. 22	2405	637	51	498
Echlin, Frank B., Janesville, Wis. Buckle.	422,510	Mar. 4	211	57	50	1177
Echols, Christopher C., Granger, Tex. Plow.	437,775	Oct. 7	157	48	53	33
Eckerson, David I., Worcester, N. Y. Printing-press.	432,385	July 15	2095	538 539	52	420
Eckerson, David I., Worcester, N. Y. Printing-press.	433,776	Aug. 5	500	129 130 131	52	853
Eckerson, Homer, assignor of one-half to C. H. Graham, Schenectady, N. Y. Wire straightening and cutting machine.	437,413	Sept. 30	3277	855	52	2028
Eckert, Daniel E., Indianapolis, Ind. Staple.	434,436	Aug. 19	1523	397	52	1072
Eckert, Isaac, Reading, Pa. Oil-feeding device for blast-furnaces.	434,706	Aug. 19	1966	510	52	1158
Eckert, William H., New York, and W. H. Gregory, Brooklyn, N. Y. Electric-wire-distribution box.	438,592	Oct. 14	1384	375 376	53	273
Eckert, William H., New York, and W. H. Gregory, Brooklyn, N. Y. Conductor for house-lighting.	442,575	Dec. 9	1481	380 381	53	1559
Eckhard, Conrad, Friend, Nebr. Hose-coupling.	427,305	May 6	425	110	51	895
Eckhardt, George B., Toledo, Ohio. Stone-grinding wheel.	442,801	Dec. 16	1865	482	53	1643
Eckhardt, Louis, Homburg-vor-der-Höhe, Germany. Shoe.	429,429	June 3	500	119	51	1568
Ecklin, William P. (See Stadler, Peter C., assignor.)						
Eckstein, Fred, Jr., Cincinnati, Ohio. Drive-chain.	423,038	Mar. 11	1035	269	50	1340
Economist Plow Company. (See Tower, Caleb E., assignor.)						
Eddington, Edwin E., Janesville, Wis. Cultivator.	420,046	Jan. 28	2100	555	50	445
Edds, William T., assignor to F. E. Van Atta, Pekin, Ill. Barrel-washer.	424,102	Mar. 25	2627	700	50	1658
Eddy, Albert. (See Lewis, Russell H., assignor.)						
Eddy, Arthur H., Hartford, Conn. Compound engine.	426,252	Apr. 22	2774	727	51	565
Eddy, Charles F. A., Greenfield, assignor to Gardner Egg Carrier Company, West Gardner, Mass. Egg-case.	430,227	June 17	1722	498	51	1824
Eddy, Daniel M., Pueblo, Colo. Suspension-bridge.	438,070	Oct. 7	618	168	53	118
Eddy, George, Byron, Ill. Guard for barb-wire fences.	430,931	June 24	2868	704	51	2053
Eddy, Pembroke S. (See Esler, George, assignor.)						
Eddy, Robert H., Chicago, Ill. Carpet-sweeper.	433,723	Aug. 5	415	106	52	836
Eddy, Walton A., Randolph, N. Y. Hand-cart.	430,205	June 17	1668	415	51	1813
Eddy, Wilbur, et al. (See Day, Albert H., assignor.)						
Ede, Joseph, assignor to G. H. Sherman, Cresskill, N. J. Padlock.	427,755	May 13	1114	279	51	1040
Edelheim, Carl. (See Osborne, John W., assignor.)						
Edelin, Thomas B. (See Bayley, William, assignor.)						
Edelin, Thomas B., et al. (See Durand, Arthur, assignor.)						
Edelin, William M., Fallston, Md. Thill-coupling.	423,675	Mar. 18	1988	524	50	1530
Edelkamp, John, New York, N. Y. Thermo-electric battery.	425,568	Apr. 15	1724	462	51	353
Edelston, George J. (See Williams and Edelston.)						
Edenborn, William, St. Louis, Mo. Machine for coiling wire.	429,511	June 3	620	152	51	1590

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Edenborn, William, St. Louis, Mo. Machine for coiling wire	429,512	June 3	621	152	51	1590
Eder, Thomas. (See Hanse and Eder.)						
Edes, John A., Lawrence, Mass. Bottle-stopper	418,706	Jan. 7	82	19	50	18
Edgar, Butler, Sunbury, Pa. Mail-pouch	427,676	May 13	972	245 246	51	1013
Edgar, Charles L., trustee. (See MacQuesten, William D., assignor.)						
Edgar, Ellis F., Woodbridge, N. J. Furnace	425,759	Apr. 15	2023	538 539	51	411
Edgar, Ellis F., Woodbridge, N. J. Furnace	436,494	Sept. 16	1738	459	52	1722
Edgecomb, John S., assignor to Standard Machinery Company, Mystic River, Conn. Cotton-gin	429,119	June 3	22	5	51	1476
Edge and Heel Blacking Machine Company. (See Leighton, Carleton F., assignor.)						
Edge, Charles. (See Edge, William C. and C.)						
Edge Moor Iron Company. (See Sellers, George H., assignor.)						
Edge Moor Iron Company. (See Sellers, William, assignor.)						
Edge, William C., Newark, N. J. Chain	419,189	Jan. 14	819	216	50	176
Edge, William C., Newark, N. J. Chain	431,804	July 8	1220	705	52	247
Edge, William C. and C., Newark, N. J. Compound belting	419,650	Jan. 21	1494	400	50	319
Edgecomb, Edward F., Minot, assignor of one-half to C. H. Milliken, Poland, Mo. Printing-press	437,184	Sept. 30	2908	757 758	52	1958
Edgerly, Jason H., assignor of two-thirds to E. H. Dickinson and T. B. Eldridge, Chicago, Ill. Shoe-turning machine	442,770	Dec. 16	1816	470	53	1634
Edgerton, Herbert O. (See Kilbourn, Washington H., assignor.)						
Edgerton, Nathan H., Philadelphia, Pa. Armature for dynamo-electric machines	432,748	July 22	2667	682	52	539
Edgerton, Nathan H., Philadelphia, Pa. Dynamo-electric machine or motor	442,870	Dec. 16	1989	510	53	1668
Edgington, William K., Olathe, Kans. Harness-pad	443,836	Dec. 30	3591	923	53	1994
Edie, Alexander, assignor of one-half to J. A. Murray, Butte City, Mont. Corkscrew	420,572	Feb. 4	203	52	50	604
Edie, Thomas G. (See Burger, Samuel K., assignor.)						
Edison Electric Light Company. (See Edison, Thomas A., assignor.)						
Edison Electric Light Company. (See Goddard, Calvin, assignor.)						
Edison General Electric Company. (See Robb, James T., assignor.)						
Edison Lamp Company. (See Bradley, James J., assignor.)						
Edison Lamp Company. (See Howell, John W., assignor.)						
Edison Machine Works. (See Johnson, Frederick, assignor.)						
Edison Machine Works. (See Phillips, William A., assignor.)						
Edison Machine Works. (See Seubel, Philip, assignor.)						
Edison Phonograph Company. (See Edison, Thomas A., assignor.)						
Edison, Thomas A. (See Eutiz, Justus B., assignor.)						
Edison, Thomas A. (See Kennelly, Arthur E., assignor.)						
Edison, Thomas A., Menlo Park, N. J. Telegraphy	422,072	Feb. 25	2388	631 632	50	1041
Edison, Thomas A., Menlo Park, N. J. Telegraphy	422,073	Feb. 25	2389	632	50	1041
Edison, Thomas A., Menlo Park, N. J. Telegraphy	422,074	Feb. 25	2391	632	50	1042
Edison, Thomas A., Menlo Park, N. J. Telephone-repeater	422,578	Mar. 4	310	79	50	1195
Edison, Thomas A., Menlo Park, N. J. Telephone-repeater	422,579	Mar. 4	311	79	50	1195
Edison, Thomas A., Menlo Park, N. J. Incandescent lamp	425,761	Apr. 15	2026	539	51	412
Edison, Thomas A., Menlo Park, N. J. Electric-lighting system	430,934	June 24	2870	705	51	2054
Edison, Thomas A., Menlo Park, N. J. Telegraph-relay	434,585	Aug. 19	1745	457	52	1118
Edison, Thomas A., Menlo Park, N. J. Process of and apparatus for generating electricity	435,688	Sept. 2	487	129	52	1468
Edison, Thomas A., Menlo Park, N. J. Telegraphy	435,689	Sept. 2	489	129 130	52	1469
Edison, Thomas A., Menlo Park, N. J. Method of and apparatus for drawing wire	436,968	Sept. 23	2561	669	52	1885
Edison, Thomas A., Menlo Park, N. J. Method of and apparatus for drawing wire	436,969	Sept. 23	2562	670	52	1885
Edison, Thomas A., Menlo Park, N. J. Telegraphy	437,422	Sept. 30	3292	859 860	52	2032
Edison, Thomas A., Menlo Park, N. J. Gage for testing fibers for incandescent-lamp carbons	438,300	Oct. 14	969	262	53	190
Edison, Thomas A., Menlo Park, N. J. System of electric lighting	438,301	Oct. 14	970	263	53	191
Edison, Thomas A., Menlo Park, N. J. Commutator for dynamo-electric machines	438,302	Oct. 14	971	263	53	191
Edison, Thomas A., Menlo Park, N. J. Arc lamp	438,303	Oct. 14	972	263	53	191
Edison, Thomas A., Menlo Park, N. J. Electric signaling apparatus	438,304	Oct. 14	973	264	53	191
Edison, Thomas A., Menlo Park, N. J. Fuse-block	438,305	Oct. 14	975	264	53	192
Edison, Thomas A., Llewellyn Park, N. J. Phonograph for dolls or other toys	423,039	Mar. 11	1036	270	50	1340
Edison, Thomas A., Llewellyn Park, N. J. Cut-out for incandescent electric lamps	425,762	Apr. 15	2027	540	51	412
Edison, Thomas A., Llewellyn Park, N. J. Automatic determining device for phonographs	426,527	Apr. 29	3191	837	51	657
Edison, Thomas A., Llewellyn Park, N. J. Phonogram-blank	430,274	June 17	1829		51	1843
Edison, Thomas A., Llewellyn Park, N. J. Magnetic separator	430,275	June 17	1830	448	51	1843
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	430,276	June 17	1831	449	51	1844
Edison, Thomas A., Llewellyn Park, N. J. Automatic determining device for phonographs	430,277	June 17	1835	450	51	1844
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	430,278	June 17	1837	450	51	1845
Edison, Thomas A., Llewellyn Park, N. J. Voltaic battery	430,279	June 17	1840	450	51	1846
Edison, Thomas A., Llewellyn Park, N. J. Magnetic separator	430,280	June 17	1841	451	51	1846
Edison, Thomas A., Llewellyn Park, N. J. Electric generator	434,586	Aug. 19	1746	457	52	1118
Edison, Thomas A., Llewellyn Park, N. J. Thermo-electric battery	434,587	Aug. 19	1748	457	52	1118
Edison, Thomas A., Llewellyn Park, N. J. Propelling mechanism for electric vehicles	434,589	Aug. 19	1752	458 459	52	1119
Edison, Thomas A., Llewellyn Park, N. J. Making armatures for dynamo-electric machines	435,690	Sept. 2	490	130	52	1469
Edison, Thomas A., Llewellyn Park, N. J. Electric motor	436,127	Sept. 9	1163	303 304	52	1603
Edison, Thomas A., Llewellyn Park, N. J. Apparatus for transmitting power	436,970	Sept. 23	2563	670	52	1885
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	437,423	Sept. 30	3294	860	52	2032
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	437,424	Sept. 30	3295	860	52	2033
Edison, Thomas A., Llewellyn Park, N. J. Phonograph-recorder	437,425	Sept. 30	3296	860	52	2033
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	437,426	Sept. 30	3297	861	52	2033
Edison, Thomas A., Llewellyn Park, N. J. Propelling device for electric cars	437,428	Sept. 30	3300	861 862	52	2034
Edison, Thomas A., Llewellyn Park, N. J. Phonogram-blank	437,429	Sept. 30	3301	862	52	2034
Edison, Thomas A., Llewellyn Park, N. J. Manufacture of incandescent electric lamps	438,307	Oct. 14	976	264	53	192
Edison, Thomas A., Llewellyn Park, N. J. System of electrical distribution	438,308	Oct. 14	978	265	53	192
Edison, Thomas A., Llewellyn Park, N. J. Insulating electrical conductors	438,309	Oct. 14	979	265	53	193
Edison, Thomas A., Llewellyn Park, N. J. Phonograph	443,507	Dec. 30	3074	792	53	1895
Edison, Thomas A., Orange, N. J. Making phonogram-blanks	437,427	Sept. 30	3298	861	52	2033

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Edison, Thomas A., Orange, N. J. Lamp-base	438,310	Oct. 14	981	265	53	193
Edison, Thomas A., Menlo Park, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Quadruplex telegraph	420,594	Feb. 4	236	62, 63	50	611
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Measurement of electricity in distribution system	425,760	Apr. 15	2025	539	51	412
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Commutator for dynamo-electric machines	425,763	Apr. 15	2028	540	51	412
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Manufacture of incandescent lamps	430,932	June 24	2869	-----	51	2053
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Filament for incandescent lamps	430,933	June 24	2869	705	51	2053
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Dynamo or magneto electric machine	431,018	June 24	3006	737	51	2078
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Means for charging and using secondary batteries	435,687	Sept. 2	486	129	52	1468
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Manufacture of incandescent electric lamps	438,298	Oct. 14	967	262	53	190
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Manufacture of carbon filaments	438,299	Oct. 14	968	262	53	190
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electric-lighting system	439,389	Oct. 28	2684	714	53	528
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. System of electric lighting	439,390	Oct. 28	2685	714 715	53	528
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Junction-box for electric wires	439,391	Oct. 28	2688	716 716	53	529
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electric-lighting system	439,392	Oct. 28	2691	716	53	529
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Carbonizing-chamber	439,393	Oct. 28	2691	716	53	529
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Phonograph Company, of New Jersey. Phonogram-blank	430,570	June 17	2269	558	51	1928
Edison, Thomas A., Menlo Park, N. J., and E. T. Gilliland, Boston, Mass. Apparatus for speaking-telephones	422,577	Mar. 4	309	79	50	1195
Edison, Thomas A., Menlo Park, N. J., and E. T. Gilliland, New York, N. Y. Telephone	438,306	Oct. 14	975	264	53	192
Edison, Thomas A., Llewellyn Park, and W. K. L. Dickson, Orange, N. J. Magnetic ore-separator	434,588	Aug. 19	1750	458	52	1119
Edison United Phonograph Company. (See Daniels, Joseph, assignor.)						
Edler, Gustav A. (See Dubelle, Gustave H., assignor.)						
Edmonds, Isaac P. T. (See Fuller and Plummer, assignors.)						
Edmonds, Isaac P. T., trustee. (See Plummer, John W., assignor.)						
Edmonds, John. (See Getchell, Charles E., assignor.)						
Edmonds, Charles J., Chicago, Ill. Burner for gas or vapor stoves	434,258	Aug. 12	1239	321	52	1007
Edmonds, Charles J., Grand Crossing, Ill. Liquid-fuel burner	443,670	Dec. 30	3331	858	53	1944
Edmonds, John J. (See Butts and Edmonds.)						
Edmondson, Charles, <i>et al.</i> (See Shaw, Oliver H., assignor.)						
Edmondson, Edwin L., Staunton, assignor to Edmondson Railway Gate Company, Richmond, Va. Railway-gate	419,144	Jan. 7	734	192	50	154
Edmondson, John, Dayton, Ohio. Wire-and-slat-fence-making machine	422,749	Mar. 4	559	143	50	1243
Edmondson, Joseph. (See Oulton and Edmondson.)						
Edmondson Railway Gate Company. (See Edmondson, Edwin L., assignor.)						
Edmonds, George C., Bradford, Pa. Horseshoe	424,546	Apr. 1	170	47	51	36
Edmonds, Percy J., Sydney, New South Wales. Prismatic magnifying-spectacles	439,130	Oct. 28	2253	606	53	448
Edney, Samuel R., assignor of one-half to J. K. Abbott, South Mills, N. C. Clamp for broom-heads	423,744	Mar. 18	2085	550	50	1547
Edson, Jarvis B., New York, N. Y. Recording pressure-gage	443,360	Dec. 23	2841	731	53	1842
Edson, John M., Towanda, Pa. Nail-plate feeder	420,492	Feb. 4	93	22, 23	50	582
Edson, Nathaniel T., New Orleans, La. Engine-valve	419,509	Jan. 14	1286	343	50	270
Edson, Starks. (See Hall, William A., assignor.)						
Edwards, Albert, Lanesville, Va. Automatic gate	440,996	Nov. 18	2188	565	53	1045
Edwards, Burton B., Barnard, N. C. Tobacco hanger or stick	421,127	Feb. 11	1046	268	50	772
Edwards, Charles L., assignor of one-half to J. O'Connell, Collinsville, Ill. Bolt-holder	438,992	Oct. 21	2043	546	53	402
Edwards, Charles W., Alliance, Ohio. Whiffletree	426,176	Apr. 22	2065	700	51	542
Edwards, Daniel, R. Lewis, and P. Jones, Morriston, Swansea, England. Apparatus for tinning plates	428,080	May 20	1598	406	51	1142
Edwards, Daniel, R. Lewis, and P. Jones, Morriston, Swansea, England. Apparatus for coating plates with tin	432,520	July 22	2304	596	52	469
Edwards, Eustis W., Central Valley, N. Y. Fishing-rod	427,162	May 6	218	55	51	854
Edwards, Evan A., Toledo, Ohio. Apparatus for distilling oils	439,745	Nov. 4	170	44	53	641
Edwards, Frederick A., Lincoln, Me. Window-screen	436,173	Sept. 9	1235	322	52	1615
Edwards, George, London, England. Expanding and contracting bridge	430,935	June 24	2872	705 706 707	51	2054
Edwards, George H., Chicago, Ill. Tractor	425,600	Apr. 15	1777	476 477	51	362
Edwards, George H., Chicago, Ill. Tractor	425,662	Apr. 15	1885	503	51	384
Edwards, George H., Chicago, Ill. Tractor	425,663	Apr. 15	1886	504	51	384
Edwards, George H., Chicago, Ill. Tractor	425,664	Apr. 15	1887	504	51	384
Edwards, Henry E. (See Aiken, James A., assignor.)	425,665	Apr. 15	1888	504	51	385
Edwards, Henry F. (See Mesker and Edwards.)						
Edwards, Henry F., St. Louis, Mo. Shutter-fastener	422,338	Feb. 25	2817	743	50	1120
Edwards, Hiram, assignor of one-half to W. Hoover, Aurora, Ill. Machine for beading the ends of boiler-tubes	429,263	June 3	225	96	51	1515
Edwards, Job D., Xenia, Ohio. Roller book-shelf	439,869	Nov. 4	360	92	53	677
Edwards, John C. (See Coyle, Andrew M., assignor.)						
Edwards, Joseph, and J. R. F. Kelly, Brooklyn, N. Y. Centrifugal pump	427,060	May 6	41	11, 12	51	818
Edwards, Mills, Jersey City, N. J. Life-raft	428,833	May 27	2745	698	51	1382
Edwards, Oliver M., Johnstown, N. Y. Window	421,563	Feb. 18	1674	433 434	50	897
Edwards, Richard J., Galena, Ill. Car-coupling	426,786	Apr. 29	3588	937	51	734
Edwards, William H. (See Canedy, William E., assignor.)						
Edwards, William J., Chicago, Ill. Safety bicycle	442,871	Dec. 16	1990	510 511	53	1668

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Edwards, William J., assignor to F. C. Austin, Chicago, Ill. Wagon-loader	442,517	Dec. 9	1386	{ 354 355 }	53	1540
Eells, Dan. P. (See Morrison, Robert T., Jr., assignor.)						
Eells, Emma P., San Francisco, Cal. Polishing-powder	422,750	Mar. 4	563		50	1243
Egan, Charles E., and H. F. Gray, Columbus, Ohio. Watchman's time-recorder	428,583	May 20	2351	{ 597 598 }	51	1289
Egan, Charles E., and H. F. Gray, assignors of part to H. D. Bennett and A. G. Gault, Columbus, Ohio. Watchman's time-recorder	426,438	Apr. 29	3061	802	51	632
Egan, Henry A., Montreal, Quebec, Canada. Water-closet cistern	431,023	June 24	3012	739	51	2079
Egan, William J., and J. J. O'Brien, St. Louis, Mo. Cable-grip	427,756	May 13	1116	279	51	1041
Egbers, Henry, San Francisco, Cal. Harness-tool	437,888	Oct. 7	324	96	53	64
Egbert, Peter V., South Lansing, N. Y. Thill-coupling	423,420	Mar. 18	1601	420	50	1456
Egbertson, Ellen, Brooklyn, N. Y. Pie-dish	429,513	June 3	622	152	51	1591
EGGE, Frederick, assignor to Smith & Egge Manufacturing Company, Bridgeport, Conn. Padlock	427,843	May 13	1235	312	51	1063
Eggers, Anton C., Brooklyn, N. Y. Fountain-syringe or water-bottle	427,256	May 6	357	92	51	880
Eggers, Anton C., assignor to Ideal Rubber Company, Brooklyn, N. Y. Nursing-bottle nipple. (Reissue)	11,086	June 17	2333	572	51	1942
Eggers, Anton C., assignor to Ideal Rubber Company, Brooklyn, N. Y. Nursing-bottle nipple. (Reissue)	11,087	June 17	2334	572	51	1942
Eggers, John H. (See Tully, Andrew R., assignor.)						
Egert, George E., Argo, N. C. Door-mat	424,867	Apr. 1	676	178	51	130
Egleston, Charles H., Marshall, Mich., assignor, by mesne assignments, to Heaton-Peninsular Button Fastener Company, of Rhode Island. Button-fastener	435,409	Sept. 2	48	16	52	1384
Egleston, Clarence E., and J. H. La Fave, Meriden, Conn. Handle for cutlery	432,991	July 29	3051	786	52	620
Egleston, Edward, Queensbury, N. Y. Map	421,684	Feb. 18	1846	492	50	931
Egleston, Edward, Queensbury, N. Y. Book-cover for educational purposes	428,899	May 27	2839	722	51	1401
Egely, John C., assignor to T. A. Pearce and R. E. Egly, Philadelphia, Pa. Circular-knitting machine	420,190	Jan. 28	2339	618	50	490
Egely, John C., assignor, by mesne assignments, to T. A. Pearce and R. E. Egly, Philadelphia, Pa. Needle-cylinder for knitting-machines	422,751	Mar. 4	563	143	50	1243
Egely, Rose E., et al. (See Egly, John C., assignor.)						
Ehle, Eleanor, et al. (See Van Slyke, Alexander, assignor.)						
Ehlers, Johann H. (See Nilsson, Per A., assignor.)						
Ehmke, Paul. (See Schleiff and Ehmke.)						
Ehrlich, Friedrich E. P., Gohlis, near Leipsic, Saxony, Germany. Music-sheet for mechanical musical instruments	425,935	Apr. 15	2290	606	51	460
Ehrlich, Friedrich E. P., Gohlis, Germany. Mechanical musical instrument	433,935	Aug. 12	739	193	52	911
Ehrlich, Leo, St. Louis, Mo. Register for gas-meters	428,900	May 27	2840	792	51	1402
Ehrlich, Leo, St. Louis, Mo. Cash-register	442,249	Dec. 9	963	{ 254 255 }	53	1459
Ehrlich, Leo, assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	423,745	Mar. 18	2086	550	50	1547
Ehrlich, Leo, assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	428,473	May 20	2199	555	51	1258
Ehrlich, Leo, assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	428,474	May 20	2200	555	51	1258
Ehrlich, Paul, assignor to Fabrik Leipziger Musikwerke, vormals Paul Ehrlich & Cie., Gohlis, near Leipsic, Saxony, Germany. Apparatus for playing key instruments	428,244	May 20	1841	{ 462 463 }	51	1191
Ehrmann, Emil E., Terre Haute, Ind. Trousers	426,717	Apr. 29	3489	913	51	714
Ehrmann, John D., assignor to Atlas Iron and Brass Works, Kaukauna, Wis. Friction-clutch	427,257	May 6	357	92	51	881
Ehrmann, John D., assignor to Atlas Iron and Brass Works, Kaukauna, Wis. Friction-clutch	438,614	Oct. 21	1429	386	53	287
Ehrmanntraut, William A., Washington, D. C. Device for preventing the escape of cold air from beer-coolers	437,583	Sept. 30	3532	921	52	2081
Ehst, Irwin T., Boyertown, Pa. Envelope-machine	437,813	Oct. 7	216	66	53	43
Elbee, Carl, Brooklyn, N. Y. Coal or dredge bucket	427,980	May 13	1452	367	51	1104
Eichbaum, Henry, London, England. Delaying the movement of projectiles in pneumatic guns	433,648	Aug. 5	311	81	52	816
Eiche, Friedrich, Dresden, Germany. Key-hole guard	438,534	Oct. 14	1302	352	53	257
Eichhorn, August, assignor to himself and R. Faspert, Dresden, Germany. Hydrometer	442,962	Dec. 16	2143	551	53	1698
Eichler, John H., San Francisco, Cal. Rotary gas-engine	442,963	Dec. 16	2144	551	53	1698
Eichner, John A., Jr., Philadelphia, Pa. Clothes-line and clothes-pin box	419,427	Jan. 14	1176	{ 312 313 }	50	248
Eiek, Otto, Philadelphia, Pa. Bottle-stopper	431,767	July 8	1157	288	52	235
Eickemeyer, Rudolf, Yonkers, N. Y. Dynamo-electric machine	422,511	Mar. 4	212	57	50	1177
Eickemeyer, Rudolf, Yonkers, N. Y. Electro-magnet	422,512	Mar. 4	214	57	50	1177
Eickemeyer, Rudolf, Yonkers, N. Y. Volt or ampere meter	434,557	Aug. 19	1702	446	52	1109
Eickemeyer, Rudolf, Yonkers, N. Y. Device for measuring the intensity of magnetic currents	434,558	Aug. 19	1703	446	52	1109
Eickemeyer, Rudolf, Yonkers, N. Y. Electric locomotive	423,671	Dec. 30	3332	858	53	1944
Eickershoff, John H., assignor to Triumph Compound Engine Company, Cincinnati, Ohio. Compound engine	441,947	Dec. 2	494	{ 132 133 }	53	1361
Eiffert, Henry A. and J. W. Rural Retreat, Va. Fertilizer-distributor	419,756	Jan. 21	1649	438	50	348
Eiffert, John W. (See Eiffert, Henry A. and J. W.)						
Eigen, Benno v., Newark, N. J. Pocket-book frame and catch	425,475	Apr. 15	1595	426	51	327
Eigen, Benno v., Newark, N. J., assignor to E. R. and O. Kampfe, Brooklyn, N. Y. Safety-razor	424,601	Apr. 1	251	67	51	51
Eikenbary, Ira W., Warren, Ind. Automatic sliding gate	426,787	Apr. 29	3589	937	51	734
Eikenbary, Ira W., Warren, Ind. Automatic sliding gate	438,914	Oct. 21	1921	511	53	377
Einstein, Jacob, and S. Kornprobst, Munich, Germany. Electric meter	437,754	Oct. 7	121	36	53	26
Einstein, Reuben, Meadville, Pa. Plumb-level	431,184	July 1	227	57	52	47
Eisen, Arthur, Pentonville, county of Middlesex, England. Separable button	441,294	Nov. 25	2711	703	53	1151
Eisen, Herman J., Brooklyn, N. Y. Stop-watch	437,683	Oct. 7	11	4	53	5
Eisenhart, John H., Denver, Colo. Baker's oven	425,307	Apr. 8	1345	359	51	270
Eisenhutb, John W., San Francisco, Cal. Clipping-machine	419,323	Jan. 14	1018	{ 269 270 }	50	215
Eisenhutb, John W., San Francisco, Cal. Device for transmitting motion	420,678	Feb. 4	352	93	50	632
Eisenhutb, John W., assignor to Electric Vapor Engine Company, San Francisco, Cal. Double-acting explosive engine	430,310	June 17	1882	462	51	1855
Eisenhutb, John W., assignor to Electric Vapor Engine Company, San Francisco, Cal. Cut-off for compound engines	430,311	June 17	1884	{ 462 463 }	51	1855

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Eisenhuth, John W., assignor to Electric Vapor Engine Company, San Francisco, Cal. Single-acting explosive engine.....	430,312	June 17	1887	463	51	1856
Eisenhuth, John W., assignor to Electric Vapor Engine Company, San Francisco, Cal. Explosive engine.....	436,936	Sept. 23	2518	{ 659 660	{ 52	1876
Eisenstein, Siegfried. (See Preiss, Carl, assignor.)						
Ekstrom, Harry R., Santa Rosa, assignor of one-half to A. F. Guiol, Los Angeles, Cal. Cannon-wheel remover.....	422,013	Feb. 25	2307	609	50	1027
Ekstrom, Israel A., Long Lake, Minn. Combined truck and barrel-hoister.....	423,227	Mar. 11	1312	341	50	1394
Elam, William E., Dallas, Tex., assignor of two-thirds to R. S. Thomas and S. W. Hardwick. Cotton conveying and cleaning apparatus.....	423,040	Mar. 11	1039	270	50	1341
Elbreg, Henry H., assignor to Miner & Elbreg, Indianapolis, Ind. Support for leg-rests in chairs.....	440,610	Nov. 11	1556	400	53	916
Elder, Lawrence V., New Orleans, La. Well-boring apparatus.....	419,757	Jan. 21	1650	438	50	348
Elder, Lawrence V., New Orleans, La. Well-boring apparatus.....	421,486	Feb. 18	1557	402	50	875
Eldredge, Curtis B. (See Eldredge, John V. D., assignor.)						
Eldredge, E. Francis. (See Leggett, William, assignor.)						
Eldredge, John V. D., assignor of one-half to C. B. Eldredge, Detroit, Mich. Oar.....	435,410	Sept. 2	48	16	52	1384
Eldridge, Andrew H., assignor of three-fourths to A. H. Matson and J. Vaeth, Syracuse, N. Y. Cuff-holder.....	423,861	Mar. 18	2250	594	50	1579
Eldridge, Thomas B., et al. (See Edgerly, Jason H., assignor.)						
Electric Cable Construction and Maintenance Company. (See Brooks, David, Jr., assignor.)						
Electric Car Company of America. (See Henderson, John W., assignor.)						
Electric Car Company of America. (See Hunter, Rudolph M., assignor.)						
Electric Car Company of America. (See Lyte, Farnham M., assignor.)						
Electric Car Company of America. (See Reckenzann, Anthony, assignor.)						
Electric Construction Company. (See Richter, Charles, assignor.)						
Electric Cutlery Company. (See Fuller, James E., assignor.)						
Electric Cutting Machine Company. (See Salisbury, Wilber S., assignor.)						
Electric Date and Time Stamp Company. (See Randall, Charles A., assignor.)						
Electric Gas Lighting Company. (See Goodwin, Charles K., assignor.)						
Electric Generator Company. (See Cox, Harry B., assignor.)						
Electric Rapid Transit Company. (See Smith, Oliver C., assignor.)						
Electric Signal Manufacturing Company. (See Holcombe, Alfred G., assignor.)						
Electric Storage Battery Company. (See Lloyd, Henry H., assignor.)						
Electric Storage Battery Company. (See Payen, Clément, assignor.)						
Electric Storage Battery Company. (See Shapleigh, Waldron, assignor.)						
Electric Vapor Engine Company. (See Eisenhuth, John W., assignor.)						
Electrical Accumulator Company. (See Plätischer, Mathias, assignor.)						
Electrical Accumulator Company. (See Prescott, George B., Jr., assignor.)						
Electrical Appliance Manufacturing Company. (See White, Le Roy S., assignor.)						
Electrical Invention Company. (See Hicks, Thomas H., assignor.)						
Electrical Safety Company. (See Cartwright, David J., assignor.)						
Electrical Safety Railway Switch Company. (See Berne, Arthur W., assignor.)						
Electrical Supply Company. (See Sperry, Elmer A., assignor.)						
Electro-Automatic Transit Company. (See Weems, David G., assignor.)						
Electro-Carbon Motor Company. (See Baker, Harrison J., assignor.)						
Electro-Pneumatic Time Company. (See Mayrhofer, Carl A., assignor.)						
Elektron Manufacturing Company. (See Perret, Frank A., assignor.)						
Eley, Philip, Bayonne, N. J. Method of and machine for tapping or connecting branches to pipes.....	438,740	Oct. 21	1647	440	53	326
Elgin National Watch Company. (See Buchanan, David R., assignor.)						
Elgin National Watch Company. (See Hunter and Corthell, assignors.)						
Elias, Jacob J., Chicago, Ill. Combined child's chair and chair.....	433,649	Aug. 5	312	81	52	817
Elias, Jacob J., assignor to Pick Sisters, Chicago, Ill. Attachment for piano-cases.....	430,571	June 17	2270	558	51	1928
Eliel, Albert L., La Salle, Ill. Hat-ventilator.....	432,728	July 22	2635	674	52	533
Elieson, Chaimsonovitz P., London, England. Electric meter.....	443,642	Dec. 30	3289	848	53	1936
Elkerton, James E., Grand Junction, Mich. Horseshoe.....	428,594	May 27	2376	604	51	1313
Elkins, Charles W., Palermo, W. C. and S. Foreman, Bidwell's Bar, Cal. Fruit-pitting machine.....	429,209	June 3	157	38	51	1501
Elkins, I. S., et al. (See Lawton, Charles H., assignor.)						
Elkins, William H., Boston, Mass. Regulator for dynamos.....	430,634	June 24	2384	582	51	1959
Elkins, William H., Cambridge, assignor to A. D. Tingley, Boston, Mass., and H. E. Irvine, New York, N. Y. Regulator for dynamos.....	427,163	May 6	219	56	51	854
Elkins, William H., Cambridge, assignor to A. D. Tingley, Boston, Mass., and H. E. Irvine, New York, N. Y. Regulator for dynamos.....	427,164	May 6	220	56	51	855
Ejler, James E., and J. S. Jordan, Indianapolis, Ind. Whiffletree-hook.....	435,807	Sept. 2	664	174	52	1503
Eller, James H., Canton, Ohio. Sheet-metal notcher.....	436,826	Sept. 23	2301	606	52	1836
Ellerman, Karl, Cincinnati, Ohio. Roll-paper holder and cutter.....	423,228	Mar. 11	1313	341	50	1394
Ellicott, Henry B., and C. A. Higinbottom, assignors of one-half to T. W. Hart, Vandalia, Ill. Office-indicator.....	435,808	Sept. 2	665	175	52	1503
Ellinger, Julian O., New York, N. Y. Coupling for shafts and like purposes.....	428,808	May 27	2702	685	51	1373
Ellinwood, Augustus E. (See Miller and Ellinwood.)						
Ellinwood, Augustus E., Akron, Ohio. Belt-stretching machine.....	438,286	Oct. 14	945	{ 255 256 836	{ 53	186
Ellinwood, Augustus E., Akron, Ohio. Match-making machine.....	443,623	Dec. 30	3255	{ 837 838	{ 53	1929
Ellinwood, Augustus E., Akron, Ohio. Match-making machine.....	443,624	Dec. 30	3258	{ 838 839	{ 53	1930
Ellinwood, Augustus E., assignor to L. Miller, Akron, Ohio. Tension device.....	438,615	Oct. 21	1431	386	53	288
Elliot, Charles, San Francisco, Cal. Method of and apparatus for purifying water for boilers.....	426,718	Apr. 29	3490	913	51	714
Elliot, H. C. (See Hardie, Robert, assignor.)						
Elliot, H. C. (See Hardie, Robert, assignor.) (Reissue.)						
Elliot, Alvin D. (See Glidden and Elliott.)						
Elliot, Charles B., Chicago, Ill. Filter.....	425,374	Apr. 8	1435	384	51	287
Elliot, Eugene T., and W. O. Lyles, Danville, Va. Button-holder.....	431,257	July 1	338	84	52	68
Elliot, George C., assignor to L. M. Elliott, Chicago, R. and I. B. Blackstock, Paxton, Ill., and W. M. Blackstock, Lafayette, Ind. Type-writing machine.....	440,307	Nov. 11	1051	{ 270 271	{ 53	821
Elliott, George E., Calais, Me. Gang of circular saws.....	429,514	June 3	623	153	51	1591
Elliott, George E., Thompson, Conn. Wagon-track.....	433,118	July 29	3264	840	52	659
Elliott, George S., Mobile, Ala. Shutter-worker.....	438,616	Oct. 21	1432	387	53	288
Elliott, Gilbert R., New York, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, Newark, N. J. Store-service apparatus.....	439,726	Nov. 4	146	38	53	636

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Elliott, Isaac N., J. W. Collins, and P. A. Reid, Richmond, Ind. Fence-link	430,177	June 17	1632	408	51	1807
Elliott, Jacob, Hastings, England. Composition of matter for artificial stone	435,485	Sept. 2	159		52	1405
Elliott, James H., Brockville, Ontario, Canada. Car-truck	424,282	Mar. 25	2869	766	50	1706
Elliott, James H., Montreal, Quebec, Canada. Draw-bar	425,308	Apr. 8	1346	360	51	270
Elliott, James H., Montreal, Canada. Car-truck	441,650	Dec. 2	32	9	53	1268
Elliott, John F., Cincinnati, Ohio, assignor to Singer Manufacturing Company of New Jersey. Blower attachment for sewing-machines	423,916	Mar. 25	2349	618	50	1606
Elliott, John F., Cincinnati, Ohio, assignor to Singer Manufacturing Company of New Jersey. Presser-foot for two-needle sewing-machines	427,561	May 13	811	203	51	982
Elliott, John R., Clinton, Mo. Hand-sprinkler	429,609	June 10	769	185	51	1630
Elliott, Leigh H. (See Waggoner and Elliott.)						
Elliott, Luella M., et al. (See Elliott, George C., assignor.)						
Elliott, Otis C., assignor to F. W. Grout, Worcester, Mass. Horseshoe	431,805	July 8	1221	{ 305 306 }	{ 52	247
Elliott, Richard P., Somerville, Mass., assignor to C. H. French, Nashua, and D. Heald, Milford, Mass. Mirror-supporting device	426,785	Apr. 29	3586	936	51	733
Elliott, Richard P., Somerville, Mass., assignor to C. H. French, Nashua, and D. Heald, Milford, N. H. Mirror supporting and adjusting device	429,430	June 3	501	119	51	1568
Elliott, Richard P., Somerville, Mass., assignor to C. H. French, Nashua, and D. Heald, Milford, N. H. Adjustable mirror-support	434,659	Aug. 19	1884	492	52	1144
Elliott, Richard P., Somerville, Mass., assignor to C. H. French, Nashua, and D. Heald, Milford, N. H. Mirror-support	439,839	Nov. 4	313	79	53	669
Elliott, Samuel, Newbury, England. Apparatus for purifying smoke	442,112	Dec. 9	764	{ 205 206 }	{ 53	1419
Elliott, Sterling, Newton, Mass. Wheel tire and rim	440,701	Nov. 18	1706	438	53	954
Elliott, Sterling, Newton, Mass. Wheel tire and rim	440,702	Nov. 18	1707	438	53	954
Elliott, Sterling, Newton, Mass. Tandem velocipede	442,174	Dec. 9	859	230	53	1438
Elliott, Sterling, Newton, Mass. Velocipede	442,663	Dec. 16	1611	416	53	1595
Elliott, Sterling, Newton, assignor of one-half to Overman Wheel Company, Chicopee Falls, Mass. Brake for velocipedes	428,383	May 20	2073	521	51	1236
Elliott, Sterling, and H. P. Richards, Newton, Mass. Wheel-tire	442,730	Dec. 16	1758	455	53	1621
Elliott, Thomas M. (See Adams, William B., assignor.)						
Elliott, Walter S., Hartford, Conn., assignor of one-half to J. W. Ivory, Philadelphia, Pa. Tooth-separator	426,253	Apr. 22	2775	728	51	565
Elliott, William E., Chicago, Ill. Anti-friction journal-bearing	420,047	Jan. 28	2102	555	50	446
Elliott, William E., Chicago, Ill. Anti-friction journal-bearing	438,576	Oct. 14	1361	369	53	269
Elliott, William E., Chicago, Ill. Railway-car	443,075	Dec. 16	2325	594	53	1734
Elliott, William P., Chicago, Ill. Signal-lantern for railway-gates	438,228	Oct. 14	851	{ 230 231 }	{ 53	169
Elliott, William R., Kansas City, Mo. Conduit for electric railways	435,486	Sept. 2	160	45	52	1406
Elliott, William R., Kansas City, Mo. Electric conduit	435,487	Sept. 2	162	45, 46	52	1406
Ellis, Augustin, Bedford, Ind. Cultivator	432,128	July 15	1721	{ 442 443 }	{ 52	350
Ellis, Charles O., et al. (See Smallman, James W., assignor.)						
Ellis, Charles S., and T. Langbein, Chicago, Ill. Sash-balance	422,580	Mar. 4	314	80	50	1196
Ellis, David D., Will's Point, Tex. Cotton chopper, scraper, and cultivator	427,061	May 6	45	13	51	819
Ellis, Ferrand E., Oneida, assignor to Oneida Community, (limited,) Kenwood, N. Y. Swivel	422,194	Feb. 25	2580	683	50	1077
Ellis, Frank O., Swampscott, Mass. Machine for cutting cloth into strips	438,915	Oct. 21	1922	511	53	377
Ellis, George A., assignor to Automatic Cigar Seller Company, Detroit, Mich. Coin-controlled vending device	437,584	Sept. 30	3534	922	52	2081
Ellis, George A., assignor to Automatic Cigar Seller Company, Detroit, Mich. Coin-chute	437,585	Sept. 30	3535	922	52	2082
Ellis, George E., New York, N. Y. Hand-rest for penmen	431,258	July 1	339	84	52	69
Ellis, George H., Sank Centre, Minn., assignor of one-half to H. Keller. Manufacturing twine from straw	433,855	Aug. 5	616	161	52	877
Ellis, George H., Sank Centre, Minn., assignor of one-half to H. Keller. Machine for making twine from straw, flax, hemp, &c.	433,856	Aug. 5	617	161	52	877
Ellis, Harvey, assignor to Whitin Machine Works, Whitinsville, Mass. Top-flat-stripping mechanism for carding-engines	422,752	Mar. 4	564	144	50	1244
Ellis & Helfenberger. (See Helfenberger, William, assignor.)						
Ellis, John, Keynsham, Sandown, Isle of Wight, England. Steam-engine	425,764	Apr. 15	2029	540	51	412
Ellis, John, Stockton, Cal. Vise pipe-tongs	411,145	Nov. 25	2445	634	53	1105
Ellis, John, Jersey City, assignor of one-half to W. T. Wallis, East Orange, N. J. Rattan construction	429,264	June 3	226	57	51	1516
Ellis, John F., assignor to Coe Brass Manufacturing Company, Torrington, Conn. Wire-drawing machine	443,752	Dec. 30	3467	{ 888 889 }	{ 53	1970
Ellis, John L. (See Sampson, Herbert F., assignor.)						
Ellison, Alphonso L., assignor of one-half to H. C. Thomas, Thomasville, N. C. Tobacco-hanger	423,315	Mar. 11	1451	379	50	1419
Ellison, Christopher J., New York, N. Y. Portable percolating-table	435,411	Sept. 2	49	17	52	1384
Ellison, Christopher O., Liverpool, England. Camera	442,616	Dec. 16	1549	{ 400 401 }	{ 53	1581
Ellison, James A., assignor to Davis & Furber Machine Company, North Andover, Mass. Cutter for card-setting machines	439,057	Oct. 21	2134	573	53	420
Ellison, Thomas, Abingdon, Ill. Fire-escape	431,566	July 8	826	206	52	173
Ellithorp, Solomon B., Washington, D. C., assignor to Ellithorp Manufacturing Company, Providence, R. I. Clamp	435,887	Sept. 2	789	210	52	1527
Ellithorp, Solomon B., Washington, D. C., assignor to Ellithorp Manufacturing Company, Providence, R. I. Lasting-machine	435,888	Sept. 2	790	{ 210 211 }	{ 52	1527
Ellich, Robert C., Plantsville, Conn. Rotary meat-cutter	419,190	Jan. 14	820	216	50	176
Ellich, Robert C., Plantsville, Conn. Ratchet screw-driver	425,998	Apr. 22	2406	637	51	491
Ells, Josiah W., assignor to O. and H. Kleber and H. Brann, Pittsburg, Pa. Manufacture of nails	438,371	Oct. 14	1068	291	53	210
Ellsworth, Charles J., and A. C. Alexander, Penacook, N. H. Inhaler	425,765	Apr. 15	2031	540	51	413
Ellsworth, Edwin R., Brooklyn, N. Y. Apparatus for making gas from oil and steam	438,071	Oct. 7	620	169	53	119
Ellsworth, George A., York, Ohio. Potato digger and picker	432,992	July 29	3062	766	52	620
Ellsworth, Isaac H. J., Jackson, Mich. Holdback	437,294	Sept. 30	3074	805	52	1990
Ellsworth, Rufus G., Northcott, Kans. Baling-press for hay, &c.	433,857	Aug. 5	619	162	52	878
Elmendorf, Albert, New London, Conn., assignor to Elmendorf Water Closet Apparatus Company, of Connecticut. Flushing attachment for water-closets	443,625	Dec. 30	3260	839	53	1930
Elmendorf Water Closet Apparatus Company. (See Elmendorf, Albert, assignor.)						
Elmer, William H., Berlin, Wis. Turbine	443,905	Dec. 30	3687	944	53	2013

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Elmes, Charles F. (See Harden, John J., assignor.)						
Elmore, Alexander S. (See Elmore, Francis E. and A. S.)						
Elmore, Francis E., Cockermonth, county of Cumberland, England. Making metal tubes, &c., by electro-deposition.	442,428	Dec. 9	1244	321	53	1512
Elmore, Francis E. and A. S., Rothwell, near Leeds, England. Manufacture of wire, bands, &c.	440,548	Nov. 11	1450	{ 373 374 }	53	896
Eloheimo, John W., Red Jacket, Mich. Automatic air-compressor	435,034	Aug. 26	2480	656	52	1265
Elrick, Conrad F., Omaha, Nebr. Vehicle-pole tip	439,640	Nov. 4	30	9	53	612
Elsner, Adolph W., assignor to Elsner's Patent Folding Voting Booth Company, Jefferson City, Mo. Folding voting-booth	442,664	Dec. 16	1614	416	53	1595
Elsner's Patent Folding Voting Booth Company. (See Elsner, Adolph W., assignor.)						
Elson, James, Brooklyn, assignor to McLoughlin Bros., New York, N. Y. Game apparatus	420,149	Jan. 28	2269	601	50	478
Elster, Lester A., E. Young, Jeffersonville, and J. E. Knapp, West Lancaster, Ohio. Nut-lock	419,844	Jan. 21	1793	474	50	375
Elsworth, Edward, New York, N. Y., and A. Faber du Faur, Newark, N. J.; said Faber du Faur assignor to said Elsworth. Steam-cooker	433,399	July 29	3653	943	52	738
Elterich Art Tile Stove Works. (See Elterich, Otto P., assignor.)						
Elterich, Otto P., assignor to Elterich Art Tile Stove Works, Newark, N. J. Fire-parting fork for stoves or furnaces	429,120	June 3	23	6	51	1476
Elterich, Otto P., assignor to Elterich Art Tile Stove Works, Newark, N. J. Tiling	438,229	Oct. 14	852	231	53	169
Elton, George, Youngstown, Ohio. Gage-cock	435,488	Sept. 2	164	46	52	1406
Elwell, Fred S., Detroit, Mich. Knockdown paper box or basket	426,928	Apr. 29	3780	987	51	772
Elwell, William D., Marysville, Kans. Cuff-holder	436,222	Sept. 9	1306	340	52	1630
Elwell, William H., et al. (See Chamberlin, John V., assignor.)						
Elwood, Campbell G., Allegheny, assignor to two-thirds to S. J. Adams and M. R. Haymaker, Pittsburg, Pa. Grate for gaseous fuel	438,749	Oct. 21	1659	445	53	328
Ely, Alfred, et al. (See Keavy, Thomas E., assignor.)						
Ely, Alfred G., et al. (See Peer, John A., assignor.)						
Ely, Charles C., et al. (See Peer, John A., assignor.)						
Ely, Edward O. (See Dearborn, Richard J., assignor.)						
Ely, Edward O., Boston, Mass., assignor to Trimont Manufacturing Company, Portland, Me. Pipe-wrench	429,088	May 27	3132	807	51	1458
Ely, Edward O., Boston, Mass., assignor to Trimont Manufacturing Company, Portland, Me. Pipe-wrench	430,994	June 24	2964	727	51	2070
Ely, Erastus U. (See Brown, Klippert, and Vogt, assignors.)						
Ely, Ezra B., Bergen Point, N. J., and S. Salmon, Drifton, Pa. Mechanism for loading coal	419,145	Jan. 7	735	{ 193 194 195 }	50	154
Ely, Frederick, et al. (See Peer, John A., assignor.)						
Ely, William H., Middletown, Conn. Glass-polisher	418,707	Jan. 7	83	19	50	18
Emaus, Theodore F., Mendon, Ohio. Bag-fastener	443,040	Dec. 16	2265	581	53	1723
Emblème, Adolph, Duluth, Minn. Metallic flower-pot	435,645	Sept. 2	420	112	52	1454
Embley, William. (See Shobe and Embley.)						
Emeis, Charles M., Davenport, Iowa. Band-cutter and feeder	442,964	Dec. 16	2146	551	53	1698
Emerick, Garrett M., Brooklyn, N. Y. Dumb-waiter	434,437	Aug. 19	1523	{ 397 398 }	52	1072
Emerson, Charles H. (See Mackintosh, John S. W., assignor.)						
Emerson, Charles P., Yates Centre, Kans. Lifting-jack	422,014	Feb. 25	2308	609	50	1027
Emerson Electric Manufacturing Company. (See Meston, Alexander W., assignor.)						
Emerson, James, Williamansett, Mass. Pipe-coupling for railway-cars	443,934	Dec. 30	3738	957	53	2023
Emerson, James, Williamansett, Mass. Apparatus for heating cars	443,935	Dec. 30	3741	957	53	2023
Emerson, James, Williamansett, Mass. Steam and air pipe coupling for railway-cars	443,936	Dec. 30	3742	957	53	2023
Emerson, James, Williamansett, assignor to Emerson Power Scale Company, Florence, Mass. Dynamometer or power-scale	423,862	Mar. 18	2251	595	50	1579
Emerson, James, Williamansett, assignor to Emerson Power Scale Company, Florence, Mass. Dynamometer	423,863	Mar. 18	2254	{ 595 596 }	50	1580
Emerson, James E., Beaver Falls, Pa. Metal picket for fences	421,685	Feb. 18	1847	483	50	931
Emerson, James E., Beaver Falls, and J. S. Kurtz, Allegheny, Pa. Die for shearing fence-pickets	422,929	Mar. 11	864	225	50	1309
Emerson, John H., St. Joseph, Mo. Horse-collar fastener	423,676	Mar. 18	1989	524	50	1530
Emerson, John W. (See Bosdeveux, Edmond F., assignor.)						
Emerson, John W., and A. C. Starbird, Apopka, Fla., assignors of one-third to C. A. Hege, Salem, N. C. Fruit-gatherer	442,702	Dec. 16	1683	432	53	1608
Emerson, Loender C., assignor of one-half to C. H. Nelson, North Grafton, Mass. Eyelet-machine	423,599	Mar. 18	1854	489	50	1503
Emerson, Low & Barber Company. (See Low, Everett M., assignor.)						
Emerson Power Scale Company. (See Emerson, James, assignor.)						
Emerson, Ralph, et al. (See Young, Charles H., assignor.)						
Emerson, Ralph, assignor to Emerson, Talcott & Company, Rockford, Ill. Finger-bar	436,734	Sept. 16	2114	557	52	1793
Emerson, Richard B. (See Horner, Oscar A., assignor.)						
Emerson, Talcott & Company. (See Emerson, Ralph, assignor.)						
Emerson, Talcott & Company. (See Jones, James H., assignor.)						
Emerson, William, Davenport, N. Y. Ironing-table	433,936	Aug. 12	741	193	52	911
Emerson, William H., and J. Skinner, Dunfermline, Ill. Bituminous-coal breaker	433,777	Aug. 5	506	131	52	854
Emery, Abram D., Taunton, Mass. Weaving double-weight goods	441,230	Nov. 25	2584	{ 669 670 671 }	53	1130
Emery, Abram D., Taunton, Mass. Weaving two-ply figured fabrics	441,231	Nov. 25	2592	{ 671 672 673 }	53	1131
Emery, Abram D., Taunton, Mass. Loom-shuttle	441,295	Nov. 25	2712	703	53	1151
Emery, Abram D., Taunton, Mass. Warp-tension-regulating device for looms	443,612	Dec. 30	3239	833	53	1927
Emery, Ard G., Salina, Kans. Revolving horse-hoe	421,128	Feb. 11	1047	{ 268 269 }	50	772
Emery, Avar S., deceased, New York, N. Y.; F. O. Emery administratrix. Steam-boiler	425,766	Apr. 15	2032	541	51	413
Emery, Benjamin B. (See McIndoe and Emery.)						
Emery, Charles B., Boston, and C. Brigham, Watertown, Mass. Anti-friction device for car-axles	419,428	Jan. 14	1177	313	50	248
Emery, Charles E., Brooklyn, N. Y. Cable suburban railway	428,384	May 20	2074	521	51	1237
Emery, Charles E., Brooklyn, N. Y. Terminal facility for suburban railways	428,385	May 20	2076	522	51	1237
Emery, Charles E., Brooklyn, N. Y. Cable suburban railway	428,386	May 20	2079	522	51	1237
Emery, Charles E., Brooklyn, N. Y. Cable suburban railway	430,178	June 17	1633	408	51	1807
Emery, Charles E., Brooklyn, N. Y. Cable suburban railway	430,179	June 17	1636	408	51	1808

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Emery, Charles E., Brooklyn, N. Y. Cable suburban railway	430,180	June 17	1637	408	51	1808
Emery, Charles E., Brooklyn, N. Y. Compensation-pendulum	436,343	Sept. 16	1496	{ 390 391	{ 52	1676
Emery, Charles E., Brooklyn, N. Y. Balance-escapement	443,165	Dec. 23	2504	641	53	1774
Emery, Charles G. (See Shortt, Edward G., assignor.)						
Emery, Charles G. and W. H., Brooklyn, N. Y., assignors, by mesne assignments, to Bon- sack Machine Company, Salem, Va. Cigarette-machine	430,869	Feb. 4	651	{ 168 169 170	{ 50	687
Emery, Charles H., Chicago, Ill. Grain-car door	437,147	Sept. 23	2847	740	52	1939
Emery, Charles H. and J. P., assignors of one-third to D. B. Carmichael, Chicago, Ill. Grain-car door	422,898	Mar. 4	807	206	50	1290
Emery, Charles H. and J. P., Hyde Park, assignors of one-third to D. B. Carmichael, Lake, Ill. Grain-car door	423,041	Mar. 11	1040	270	50	1341
Emery, Charles L. L., Biddeford, Me., assignor of one-half to G. Draper & Sons, Hopedale, Mass. Whirl for spinning-spindles	436,756	Sept. 16	2166	569	52	1802
Emery, David H., Owego, N. Y. Running-gear for vehicles	421,254	Feb. 11	1223	317	50	895
Emery, Frances O., administratrix. (See Emery, Avarð S.)						
Emery, Harriet A., Washington, D. C. Puff-winder	440,549	Nov. 11	1452	374	53	896
Emery, Hernando H., Merlin, Pa. Car-coupling	426,929	Apr. 29	3780	988	51	772
Emery, James P. (See Emery, Charles H. and J. P.)						
Emery, John G., Jr., assignor of one-fourth to Wilkin Manufacturing Company, Milwau- kee, Wis. Saw-mill carriage	440,144	Nov. 11	779	204	53	770
Emery, Jonathan, assignor of one-eighth to M. Cleary, St. Louis, Mo. Lasting-machine	436,700	Sept. 16	2065	{ 542 543 544	{ 52	1782
Emery, Louis N., assignor of one-half to L. H. Webber, Biddeford, Me. Grate	431,806	July 8	1922	306	52	247
Emery, Sidney S., Newton Centre, Mass. Telegraphic repeater	423,229	Mar. 11	1314	342	50	1394
Emery, Thomas W., Minneapolis, Minn. Belting	420,779	Feb. 4	492	129	50	659
Emery, William H. (See Emery, Charles G. and W. H.)						
Emig, Charles, <i>et al.</i> (See Reel, Jacob, Jr., assignor.)						
Emig, Edward K., Emigsville, Pa. Automatic wagon-brake	426,930	Apr. 29	3781	988	51	772
Emken, Henry, Fort Lowell, Ariz. Ter. Device for measuring distances	427,306	May 6	427	110	51	895
Emlaw, Andrew J., Grand Haven, Mich. Magazine spring-gun	429,106	May 27	3158	814	51	1463
Emlaw, Andrew J., Grand Haven, Mich. Magazine spring air-gun	430,572	June 17	2271	558	51	1928
Emme, Charles A., Washington, D. C. Door-bell	418,975	Jan. 7	498	124	50	105
Emme, Charles A., assignor of one-half to A. Archer, Washington, D. C. Door-bell	433,724	Aug. 5	416	106	52	836
Emme, Michael, Atlanta, Ga. Welding aluminium	428,834	May 27	2746	.....	51	1382
Emmens, Stephen H., London, England. Gun-carriage	422,513	Mar. 4	216	58	50	1177
Emmens, Stephen H., London, England. Manufacture of explosives	422,514	Mar. 4	218	.....	50	1177
Emmens, Stephen H., London, England. Manufacture of explosives	422,515	Mar. 4	219	.....	50	1178
Emmens, Stephen H., London, England. Ordnance and projectile for throwing high explo- sives	424,283	Mar. 25	2870	766	50	1706
Emmens, Stephen H., London, England. Breech mechanism and attachment for ordnance	440,625	Nov. 18	1578	{ 406 407	{ 53	929
Emmens, Stephen H., Harrison, N. Y. Explosive	423,230	Mar. 11	1315	.....	50	1394
Emmens, Stephen H., Harrison, N. Y. Apparatus for the solution of gold, &c	430,379	June 17	1990	491	51	1876
Emmert, A. C., <i>et al.</i> (See Stewart, Joseph H., assignor.)						
Emmert, Clinton B. (See Cowan, Samuel L., assignor.)						
Emmert, Joseph S. (See Giffillan and Emmert.)						
Emmert, Joseph S., assignor to Johnston Car Seat Company, Chicago, Ill. Reclining- chair	421,353	Feb. 11	1365	354	50	831
Emmert, William P. (See Lamb and Emmert.)						
Emmet, William L., East Rockaway, N. Y. Trolley-line switch for overhead electrical conductors	439,746	Nov. 4	172	45	53	641
Emmet, William L., East Rockaway, N. Y. Trolley-stand	441,753	Dec. 2	198	52	53	1302
Emmet, William L., East Rockaway, N. Y. Insulator	443,174	Dec. 23	2520	645	53	1774
Emmet, William L., East Rockaway, N. Y. Pole-top for trolley-wire supports	443,508	Dec. 30	3076	792	53	1895
Emmett, George R. (See Jacques and Emmett.)						
Emmmer, Julius, Jr., Washington, D. C. Electric motor	437,832	Oct. 7	245	75	53	49
Emmons, Alma, assignor to himself and R. B. Emmons, Galena, Kans. Ore-separator	440,587	Nov. 11	1510	389	53	907
Emmons, Charles C., Pittsburg, Pa. Mechanical movement	432,366	July 15	2099	539	52	420
Emmons, Charles C., Pittsburg, Pa. Plaiting-machine	442,872	Dec. 16	1992	511	53	1669
Emmons, R. B. (See Emmons, Alma, assignor.)						
Emmott, Walter. (See Crossley, Emmott, and Harrison.)						
Emons, Fowler W., and C. B. Bishop, assignor to H. N. Fitzgerald, Philadelphia, Pa. Eye- glasses	436,971	Sept. 23	2565	670	52	1886
Empie, Lawrence, Birnamwood, Wis. Traction-wheel	438,411	Oct. 14	1134	305	53	223
Empire Portable Forge Company. (See Kollogg, Warren T., assignor.)						
Empire State Manufacturing Company. (See Coles, John L. and D. H., assignors.)						
Empire Wringer Company. (See White, Henry J., assignor.)						
Emrich, Samuel, Reno, Nev. Railway-spike	431,259	July 1	340	84	52	69
Endemann, Hermann, Brooklyn, N. Y. Extract of tobacco	438,993	Oct. 21	2043	546	53	402
Endemann, Hermann, Brooklyn, assignor to L. Wallach, New York, N. Y. Producing paper-pulp from tobacco	430,516	June 17	2191	.....	51	1915
Enoix, John. (See Worthing and Enoix.)						
Engard, Abraham, <i>et al.</i> (See Brewer, Russell, assignor.)						
Engel, Albert W., Chicago, Ill. Gage for rings	436,972	Sept. 23	2566	671	52	1886
Engel, Godfrey, assignor of one-half to T. H. Kraft, Baltimore, Md. Apparatus for drying bone-black	438,577	Oct. 14	1362	369	53	269
Engelbach, Augustus L., Leadville, Colo. Reversing-valve	434,328	Aug. 12	1338	349	52	1028
Engelberg, Evaristo C., Piracicaba, São Paulo, Brazil, assignor to Engelberg Huller Com- pany, Syracuse, N. Y. Machine for hulling, cleaning, and polishing rice	424,602	Apr. 1	253	67, 68	51	52
Engelberg Huller Company. (See Engelberg, Evaristo C., assignor.)						
Engelke, H. O., <i>et al.</i> (See Bohn, Emil, assignor.)						
Engelke, Oscar, <i>et al.</i> (See Bohn, Emil, assignor.)						
Engelman, George H. (See Weinhold, Paul P., assignor.)						
Enggren, Gustav L., Brooklyn, N. Y. Device for suspending boats in davits on vessels	431,741	July 8	1124	280	52	229
Enggren, Gustav L., Brooklyn, N. Y. Screw-cutting die	433,334	July 29	3571	921	52	722
Engl, Casper, assignor to La Manufacture Liegeoise D'Armes à Feu Société Anonyme, Liege, Belgium. Magazine-gun	430,936	June 24	2876	{ 707 708	{ 51	2054
England, Edward, Duluth, Minn. Saw-handle	426,528	Apr. 29	3192	838	51	657
Engle Spring Gun Company. (See Yäkel, Carl, assignor.)						
Engle, Stephen D., Hazleton, Pa. Air-gun	442,025	Dec. 2	620	167	53	1384
Engle, Washington J., Marshall, Ind. Thill-ting	435,740	Sept. 2	553	147	52	1482

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Englehardt, Louis, <i>et al.</i> (See Colby, John N., assignor.)						
Engleman, Harry H., Defiance, Ohio. Apparatus for manufacturing oil-gas	423,516	Mar. 18	1741	459	50	1484
English, Albert R., assignor to Otis & Gorsline, Rochester, N. Y. Die for manufacturing earthenware pipes	427,562	May 13	813	204	51	983
English, Analdo M., Boston, Mass., assignor to G. Becker, New York, N. Y. Machine for the manufacture of plaited braid	433,075	July 29	3191	820 821	52	645
English, Andrew J., Cincinnati, Ohio. Hydrocarbon-burner	443,509	Dec. 30	3077	793	53	1896
English, James G., assignor to English & Mersick, New Haven, Conn. Trace-post for carriages	440,400	Nov. 11	1200	309	53	850
English, John C. (See Lewis, Frederick, assignor.)						
English, John C. (See Norton, John A., assignor.)						
English & Mersick. (See English, James G., assignor.)						
English & Mersick. (See Mersick, Edwin F., assignor.)						
English, Shirley M., assignor of one-half to A. F. Wark, New Orleans, La. Telegraphy	429,377	June 3	425	100	51	1552
Engquist, Nicholas, assignor of one-half to L. Kopf, Philadelphia, Pa. Folding step-ladder	420,720	Feb. 4	406	108	50	644
Engquist, Nicholas, assignor of two-thirds to E. G. and G. C. Whitesides, Philadelphia, Pa. Spigot for refrigerators or water-coolers	429,121	June 3	24	6	51	1477
Enholm, Axel H., New York, N. Y. Mail-bag and fastener therefor	428,387	May 20	2080	522	51	1237
Enholm Electrical Construction Company. (See Enholm, Oscar A., assignor.)						
Enholm, Oscar A., assignor to Enholm Electrical Construction Company, New York, N. Y. Composition of matter for making cells or retaining-vessels	438,311	Oct. 14	982	265	53	193
Enholm, Oscar A., assignor to Enholm Electrical Construction Company, New York, N. Y. Acid-proof retaining-vessel	438,312	Oct. 14	983	266	53	193
Enholm, Oscar A., assignor to Enholm Electrical Construction Company, New York, N. Y. Composition for cells or retaining-vessels	438,313	Oct. 14	984	-----	53	193
Enholm, Oscar A., assignor to Enholm Electrical Construction Company, New York, N. Y. Galvanic battery	441,403	Nov. 25	2881	743	53	1184
Enholm, Oscar A., assignor of one-half to J. M. Heyman, New York, N. Y. Arc lamp	441,543	Nov. 25	3100	796	53	1226
Enholm, Oscar A., assignor of one-half to J. M. Heyman, New York, N. Y., and E. D de Brie, Cognac, France. Armature for dynamo-electric machines	432,387	July 15	2100	540	52	420
Enholm, Oscar A., assignor of sixth-tenths to J. M. Heyman, G. W. Venable, and M. J. Heyman, New York, N. Y. Device for transferring and controlling electric currents	441,542	Nov. 25	3099	796	53	1226
Enjalbert, Theophile E., Paris, France. Apparatus for automatic photography	436,627	Sept. 16	1945	510 512	52	1759
Ennes, Homer L., Sandusky, Ohio. Mop-wringer	440,550	Nov. 11	1453	374	53	896
Ennes, John D., Norfolk, Va. Necktie-fastener	436,123	Sept. 9	1166	304	52	1603
Ennis, George H., assignor to J. D. Ennis, Troy, N. Y. Dust-pan	419,115	Jan. 7	695	183	50	146
Ennis, Henry J., Washington, D. C., assignor to W. H. Ottman, New York, N. Y., and A. B. Williams, Washington, D. C. Corkscrew	442,691	Dec. 16	1658	426	53	1604
Ennis, Jessie D. (See Ennis, George H., assignor.)						
Ennis Stationary Company, R. & T. A. (See Dunn, George T., assignor.)						
Eno, Joseph A., Newark, N. J. Steam-generator	424,103	Mar. 25	2628	700	50	1658
Ensign, Charles H., Temescal, and P. B. Wright, Berkeley, Cal. Packing for stuffing-boxes	430,313	June 17	1889	464	51	1856
Ensign, Luther, Rochester, N. Y. Guide for paper-machine felts	432,993	July 29	3064	787	52	621
Ensinger, George W., Elm Station, Pa. Furnace	443,753	Dec. 30	3470	890	53	1970
Enterprise Manufacturing Company of Pennsylvania. (See Baker and Asbury, assignors.)						
Enterprise Manufacturing Company of Pennsylvania. (See Brown, John W., Jr., assignor.)						
Entekin, William G., Philadelphia, Pa. Photograph-burnishing machine	424,768	Apr. 1	515	139	51	101
Entwisle, Edward B., assignor to Johnson Company, Johnstown, Pa. Box-chair for railway-rails	442,175	Dec. 9	860	230	53	1438
Entz, Justus B., New York, N. Y., assignor to T. A. Edison, Llewellyn Park, N. J. Dynamo-electric machine	434,590	Aug. 19	1754	459	52	1120
Entz, Justus B., and W. A. Phillips, Schenectady, assignors to said J. B. Entz and M. Waddell, New York, N. Y. Secondary-battery plate	421,916	Feb. 25	2177	571	50	1093
Entz, Justus B., New York, and W. A. Phillips, Schenectady, assignors to Waddell-Entz Electric Company, New York, N. Y. Electrode for secondary batteries	440,023	Nov. 4	601	159	53	725
Entz, Justus B., New York, and W. A. Phillips, Brooklyn, assignors to Waddell-Entz Electric Company, New York, N. Y. Making electrodes for secondary batteries	440,024	Nov. 4	602	159	53	726
Enyeart, George M., Orbisonia, Pa. Cash-recording device	432,388	July 15	2162	540 541	52	421
Epperson, Alexander, Detroit, Tex. Car-coupling	440,626	Nov. 18	1582	407	53	930
Epple, Albert, Providence, R. I. Fastening device	433,891	Aug. 5	674	175	52	888
Eppler, Andrew, Jr., Newtonville, assignor, by mesne assignments, to Champiou Nailing Machine Company, Boston, Mass. Machine for making slug-strips	431,339	July 1	461	114	52	94
Eppler, John, <i>et al.</i> (See Hottman, Charles W., assignor.)						
Eppstein, Ludwig, Berlin, Germany. Manufacturing electrodes for secondary batteries	425,999	Apr. 22	2407	-----	51	492
Erb, Charles F., assignor to R. E. Dietz Company, New York, and Steam Gauge and Lantern Company, Syracuse, N. Y. Metallic tube	426,000	Apr. 22	2408	638	51	492
Erb, Paris, Newport, assignor, by mesne assignments, of one-half to W. H. Sponsler and J. L. Markel, New Bloomfield, Pa. Vehicle-gearing	428,835	May 27	2746	698	51	1383
Erd, John G., Saginaw, Mich. Flue-hole cutter	438,230	Oct. 14	853	231	53	170
Erdman, Charles A., Philadelphia, Pa. Boot or shoe heel	435,136	Aug. 26	2632	696	52	1294
Erdman, Daniel H., Camden, N. J. Range	428,245	May 20	1844	463	51	1191
Erickson, Carl W. O., Hamburg, Germany. Barrel-making machine	427,504	May 6	718	180	51	954
Erickson, Charles E., Chicago, Ill. Clamp for tailors' tables	430,573	June 17	2272	558	51	1929
Erickson, Erick E., Boston, Mass. Ceiling fuse-block	427,062	May 6	47	13	51	819
Erickson, Johan E., St. Paul, Minn. Molding-cutter-head knife	435,996	Sept. 9	954	250	52	1565
Erickson, Paul E., Scandia, Kans. Stalk-cutter	434,773	Aug. 19	2057	537	52	1177
Ericson, John, Sabine Pass, Tex. Screw	429,851	June 10	1124	278	51	1698
Ericsson Coast Defence Company. (See Lassepe, Valdemar F., assignor.)						
Ericsson, John, deceased; E. Sprout, Rockville Center, G. H. Robinson, and C. S. Bushnell, New York, N. Y., executors. Air-engine	431,729	July 8	1103	275	52	225
Erie City Iron Works. (See Scheffler, Theodore, and F. A., assignors.)						
Erlanger, Charles, Baltimore, Md. Overalls	422,386	Mar. 4	36	11	50	1143
Erlanger, Charles, Baltimore, Md. Manufacture of overalls	423,139	Mar. 11	1191	311	50	1369
Ernold, Edward, New York, N. Y. Treadle-action	427,227	May 6	309	79	51	872
Ernold, Edward, New York, N. Y. Bottle-corking machine	427,258	May 6	359	92 93 94	51	881
Ernecke, Ferdinand. (See Marcher, Thomas, assignor.)						
Ernest, John L. (See Scott, Archibald, assignor.)						
Ernsberger, Charles E., Akron, Ohio. Cistern	438,994	Oct. 21	2045	547	53	403

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Ernst, Henry, Ponca, Nebr. Washing-machine	419,932	Jan. 21	1925	507	50	404
Ernst, John, Bay City, Mich. Vise	434,541	Aug. 19	1677	438	52	1104
Ernst, John L., <i>et al.</i> (See Bobemerith, Lewis E., assignor.)						
Ernst, Louis. (See Bowers, George W., assignor.)						
Erny, Jacob, Z. T. Subers, and W. L. Hoos, Philadelphia, assignors of one-fourth to W. D. Hughes, Delaware County, Pa. Refrigerating or freezing system	441,544	Nov. 25	3101	796	53	1236
Ersland, A. K., <i>et al.</i> (See Samuelson, Andrew G., assignor.)						
Ertel, George, Quincy, Ill. Baling-press	433,278	July 29	3492	901	52	707
Ertel, John C. (See Morrison, George R., assignor.)						
Erway, Benjamin F., Mapleton, Iowa. Lister-cultivator	435,291	Aug. 26	2853	754	52	1337
Erwin, James B., Milwaukee, Wis. Motor	431,567	July 8	827	206	52	173
Erwin, John S., Kirksville, Mo. Crayon-rack for blackboards	419,510	Jan. 14	1247	344	50	270
Erwin, Lewis C., York, Pa. Harness	434,259	Aug. 12	1240	321	52	1008
Erwin, Sanford W., Mount Meridian, Ind. Cleaner for fruit-jars, &c.	434,982	Aug. 26	2402	636	52	1251
Erwin, William, Philadelphia, Pa. Making hydrogen peroxide	440,792	Nov. 18	1858	479	53	982
Eschenbek, Max. (See Mohs, Julius, assignor.)						
Eschenbrenner, Charles A. (See Kuntz and Eschenbrenner.)						
Eschenbrenner, William. (See Hayes, Ansley, and Eschenbrenner.)						
Eskew, Samuel T., Sugar Valley, Ga. Harrow	440,551	Nov. 11	1453	374	53	896
Espinosa, Manuel, Matanzas, Cuba. Bagasse-drier	423,140	Mar. 11	1192	311 } 312 }	50	1369
Esquinaldo, José, Key West, Fla. Liniment	429,720	June 10	931		51	1662
Esser, George, assignor to P. S. Eddy, Providence, R. I. Separable stud.	429,089	May 27	3133	807	51	1458
Esser, Hermann, <i>et al.</i> (See Paoli, John, assignor.)						
Esser, Hermann, Hoboken, N. J. Measuring-scale	431,568	July 8	828	206	52	173
Essex, George B. (See Hart, Thomas J., assignor.)						
Essex, George B., assignor of one-half to T. J. Hart, Buffalo, N. Y. Lubricator	425,936	Apr. 15	2292	606	51	460
Essex Typewriter Company. (See Schnuckers, Jacobs W., assignor.)						
Essex Typewriter Company. (See Schuckers and Refuss, assignors.)						
Essick, Samuel V., Brooklyn, N. Y. Printing-telegraph	443,134	Dec. 23	2411	624 } 625 } 626 }	53	1763
Essick, Samuel V., Brooklyn, N. Y. Printing-telegraph	443,135	Dec. 23	2448	626 } 627 }	53	1763
Essick, Samuel V., Brooklyn, N. Y. Printing-telegraph	443,136	Dec. 23	2452	627 } 628 }	53	1764
Essick, William S., Royer's Ford, Pa. Open grate and heater	423,141	Mar. 11	1193	312	50	1370
Essington, Albert. (See Crampton, Thomas P. C., assignor.)						
Essington Button Hole Finishing and Machine Company. (See Essington, Harry M., assignor.)						
Essington, Harry M., Camden, N. J., assignor to Essington Button Hole Finishing and Machine Company, of New Jersey. Button-hole-barring machine	432,795	July 22	2754	704 } 705 }	52	555
Estelle, John C., Norfolk, Va. Vending apparatus	443,906	Dec. 30	3689	944	53	2014
Estep, Ezra. (See Gray and Estep.)						
Estes, John W., Louell, Ark. Cotton-planter	428,995	Oct. 21	2045	547	53	403
Estes, Lamont W., Sacramento, Cal. Spike-making machine	430,603	June 17	2320	570	51	1939
Estes, William A., Vassalborough, Me., assignor of one-half to F. W. Watson, Toronto, Canada. Apparatus for transplanting trees	423,746	Mar. 18	2087	551	50	1547
Estey, David M. (See Lingle, William H., assignor.)						
Estey, David M., <i>et al.</i> (See Clapp, Dwight C., assignor.)						
Estey, David M., <i>et al.</i> (See Henderson, Charles F., assignor.)						
Estey, David M., Owosso, Mich. Furniture-drawer	434,044	Aug. 12	885	233	52	938
Estey Manufacturing Company, <i>et al.</i> (See Clapp, Dwight C., assignor.)						
Estey Organ Company. (See Fuller, Levi K., assignor.)						
Estill, Charles C., Grape Vine, Tex. Sash-balancer	429,610	June 10	770	186	51	1630
Esty, William, assignor to C. A. J. T., and F. E. Busiel, Laconia, N. H. Manufacturing widened tubular knit fabrics	419,191	Jan. 14	822	217	50	176
Etheridge, Carroll L. (See Whitlock and Etheridge.)						
Etheridge, Harry, Pittsburg, Pa., assignor to Writing Telegraph Company, New York, N. Y. Balanced pen for autographic telegraphs	425,066	Apr. 8	976	262	51	197
Etheridge, Harry, Pittsburg, Pa., assignor to Writing Telegraph Company, New York, N. Y. Balanced pen for autographic telegraphs	425,413	Apr. 15	1498	402	51	309
Etheridge, Harry, Pittsburg, Pa., assignor to Writing Telegraph Company, New York, N. Y. Autographic telegraph	435,292	Aug. 26	2854	755	52	1337
Ethridge, Frank N., Boston, Mass., assignor to American Postal Machines Company, of Maine. Machine for marking mail-matter	440,401	Nov. 11	1201	310	53	850
Ethridge, Frank N., Boston, Mass., assignor to American Postal Machines Company, of Maine. Machine for marking mail-matter	441,832	Dec. 2	321	86	53	1327
Ethridge, Martin V. B., Boston, Mass., assignor to American Postal Machines Company, Portland, Me. Machine for stamp-canceling and postmarking mail-matter	424,868	Apr. 1	677	178	51	130
Ethridge, Martin V. B., assignor of one-half to J. B. Kendall, Boston, Mass. Street sweeping or cleaning machine	434,178	Aug. 12	1110	287 } 288 }	52	984
Ethridge, Martin V. B., Boston, Mass., assignor of two-thirds to J. Swann, New York, N. Y., and H. E. Waite, West Newton, Mass. Spindle for time-piece dials	436,973	Sept. 23	2567	671	52	1886
Ette, Charles G., St. Louis, Mo. Hydrant and street-washer	440,552	Nov. 11	1454	375	53	896
Ettig, John, assignor to G. C. Wetherbee, Detroit, Mich. Brush-block	434,179	Aug. 12	1112	288	52	984
Etinger, Joseph H., assignor to himself and W. H. Waddell, Lexington, Va. Clover-harvester	435,809	Sept. 2	666	175	52	1503
Etzel, August C., Carrollton, Mo. Clothes-drier	429,022	May 27	3021	776	51	1437
Eubank, Thomas, Little Rock, Ark. Car-door	434,923	Aug. 26	2325	614	52	1236
Euchenhofer, Edward E. (See Weinmann and Euchenhofer.)						
Eudaly, William A., Cincinnati, Ohio. Brick-kiln	437,983	Oct. 7	472	133 } 134 }	53	90
Euler, Frederic J., <i>et al.</i> (See Guerra, Asterio, assignor.)						
Eureka Company. (See Cook, Ben C., assignor.)						
Eureka Electric Company. (See Loomis, Osborn P., assignor.)						
Eureka Horse and Mule Shoe Company, <i>et al.</i> (See Purdy, Zachariah V., assignor.)						
Eureka Manufacturing Company. (See Hicks, Walter S., assignor.)						
Eureka Oven Slide Works. (See Allyn, John H., assignor.)						
Eureka Spund Apparatus Company. (See Warren, Marion, assignor.)						
Eurich, Ernst F., Aurora, Ill. Blast-cupola-furnace	424,104	Mar. 25	2629	701	50	1658
Eurich, Heinrich, Frankfurt-on-the-Main, Germany. Making potash soap	433,119	July 29	3265		52	659
Eurich, William, Baltimore, Md. Stove-pipe cowl attachment	439,494	Oct. 28	2837	756	53	557
Eva, James. (See Gerow, Edward S., assignor.)						
Evans, Alfred, Sedan, Kans. Folding coop	419,511	Jan. 14	1288	344	50	270

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Evans, Charles H., and C. Wilson, Rockport, Me. Dumping-car	418,785	Jan. 7	190	46	50	42
Evans, Charles T., assignor of one-half to H. F. Haley, Mountain View, Ark. Wagon-body	419,146	Jan. 7	739	195 196	50	155
Evans, Clark W. (See Case and Evans.)						
Evans, David, assignor to Boyts, Porter & Company, Connellsville, Pa. Mining-pump	442,311	Dec. 9	1063	278	53	1476
Evans, David, assignor to Boyts, Porter & Company, Connellsville, Pa. Device for driving in and withdrawing cylinder-linings	442,312	Dec. 9	1064	278 279	53	1476
Evans, David, assignor to Boyts, Porter & Company, Connellsville, Pa. Steam-engine	442,313	Dec. 9	1065	279	53	1477
Evans, David, and A. W. Adams, Pittsburg, Pa. Portable bottom for coke-ovens	427,307	May 6	423	111	51	895
Evans, Elijah. (See Mattox and Evans.)						
Evans, Fred W. (See Adams, Elmon A., assignor.)						
Evans, George, Clarksdale, Miss. Combined clevis and wrench-bolt	442,479	Dec. 9	1318	340	53	1526
Evans, George F., Somerville, Mass. Mechanism for transmitting power	426,370	Apr. 22	2939	773	51	599
Evans, Hampton W., Philadelphia, Pa. Combined square, level, and surface-gage	426,001	Apr. 22	2409	638	51	492
Evans, Harry C., Bristol, Pa. Pencil-clasp	429,789	June 10	1029	252	51	1680
Evans, Isaac J. (See Schaller, Michael D., assignor.)						
Evans, James F. (See Banlch, Steele, Lees, and Evans.)						
Evans, James M., Spring Valley, N. Y. Steam-boiler furnace	425,309	Apr. 8	1348	360	51	270
Evans, James M., Spring Valley, N. Y. Lubricator	429,431	June 3	502	120	51	1568
Evans, John, Philadelphia, Pa. Hot-air furnace	436,075	Sept. 9	1082	280	52	1589
Evans, John H., Philadelphia, Pa. Stake-pocket	436,076	Sept. 9	1084	280	52	1589
Evans, John H., Philadelphia, Pa. Stake-pocket for cars	436,077	Sept. 9	1085	281	52	1589
Evans, John R., and F. T. Levick, Duncan's Bridge, Mo.; said Levick assignor to said Evans, Cultivator	442,518	Dec. 9	1393	355	53	1541
Evans, John W., Cleveland, Ohio. Extracting oil	443,907	Dec. 30	3691	944	53	2014
Evans, Jonathan E., assignor of one-half to W. K. Evans, Philadelphia, Pa. Window-mirror	425,500	Apr. 15	1626	433	51	334
Evans, Joseph E., Bedford, Ind. Blasting-cartridge	437,646	Sept. 30	3615	945	52	2098
Evans, Joseph H. (See Perkins, Wimpenny and Evans.)						
Evans, Joseph W., Newburyport, Mass. Street-car	428,081	May 20	1599	406	51	1143
Evans, Lewis D. (See Ratchford and Evans.)						
Evans, Lewis J., Brooklyn, N. Y. Check-book	420,150	Jan. 28	2270	602	50	479
Evans, Louis H., Chicago, Ill. Making switch-tie-bar clamps	424,052	Mar. 25	2556	682	50	1644
Evans, Richard J. (See Brine, Henry J., assignor.)						
Evans, Samuel C., Cleveland, Ohio. Elevator	424,869	Apr. 1	679	179	51	131
Evans, Samuel W., Jr. (See Gaskill, William H., assignor.)						
Evans, Samuel W., Jr., Philadelphia, Pa. Ferrule for canes, umbrellas, &c	422,753	Mar. 4	565	144	50	1244
Evans, Samuel W., Jr., Philadelphia, Pa. Ferrule for canes, umbrellas, &c	435,213	Aug. 26	2744	724	52	1315
Evans, Samuel W., Jr., Philadelphia, Pa. Ferrule for canes, umbrellas, &c	435,216	Aug. 26	2744	724	52	1316
Evans, Samuel W., Jr., Philadelphia, Pa. Ferrule for canes, umbrellas, &c	435,217	Aug. 26	2744	724	52	1316
Evans, Samuel W., assignor of one-half to M. N. Wood, New Orleans, La. Grate-bar	428,595	May 27	2377	604	51	1313
Evans, Samuel W., Jr., E. L. Glenn, and W. H. Gaskill, Philadelphia, Pa.; said Glenn and Gaskill assignors to said Evans. Pocket-lamp	432,304	July 15	1988	508	52	399
Evans, Thomas, et al. (See Weaver, Isaac D., assignor.)						
Evans, Thomas, assignor to R. K. Owens, New York, N. Y. Apparatus for the pasteurization of beer	425,310	Apr. 8	1349	360	51	270
Evans, Thomas A., San Francisco, Cal. Electric railway	425,767	Apr. 15	2033	541	51	413
Evans, Thomas A., San Francisco, Cal. Machine for cleaning and polishing knives	440,948	Nov. 18	2117	550	53	1031
Evans, Thomas F., Lititz, Pa. Horseshoe	420,151	Jan. 28	2272	602	50	479
Evans, Thomas W., New York, N. Y. Stylographic pen	421,069	Feb. 11	965	243	50	755
Evans, Warren C. (See Fowler, Warren, and Evans.)						
Evans, William. (See Banzett, William E., assignor.)						
Evans, William, Galveston, Tex. Channel-cleaner	426,254	Apr. 22	2776	728	51	566
Evans, William, Philadelphia, Pa. Screw-cutting attachment	436,078	Sept. 9	1086	281	52	1589
Evans, William R. (See Evans, Jonathan E., assignor.)						
Evarts, Charles A., assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Central-draft lamp	430,380	June 17	1991	491	51	1876
Evarts, Charles A., assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Central-draft lamp	432,264	July 15	1919	491	52	387
Evly, John T., assignor of one-half to W. W. Dudley and F. L. Browne, Washington, D. C. Expanding mandrel	436,223	Sept. 9	1307	341	52	1630
Evenden, Albert B., Watertown, N. Y. Car-coupling	429,122	June 3	25	6	51	1477
Evens, Platt, and L. A. Waters, Cincinnati, Ohio. Laundry-mark stamp	438,578	Oct. 14	1364	370	53	269
Evens, Platt, and L. A. Waters, Cincinnati, Ohio, assignors to said Waters. Laundry-tag	435,741	Sept. 2	554	147	52	1482
Everest, David O., Pine Grove, Mich. Harrow	426,666	Apr. 29	3395	891	51	697
Everett, Azariah. (See Robertson, Soren, assignor.)						
Everett, Edward, et al. (See Walker, William H., assignor.)						
Everett, John H. D., Sault Ste. Marie, Mich. Hame-fastener	424,769	Apr. 1	517	140	51	101
Everett, Samuel H., assignor to H. M. Kirkpatrick, Macedon, N. Y. Fertilizer-distributor	429,495	Oct. 28	2838	756	53	557
Everett, Samuel H., and G. W. Kirkpatrick, assignors to H. M. Kirkpatrick, Macedon, N. Y. Changeable-speed gearing	438,231	Oct. 14	854	231 232	53	170
Everett, Thomas I., et al. See Courtright, Edgar, assignor.)						
Everhart, John W., Allendale, Mich. Vehicle-heater	432,389	July 15	2105	541	52	421
Everiss, Alfred, New York, N. Y. Folding table	437,185	Sept. 30	2911	758	52	1959
Everit, William L., Jr., assignor of one-half to A. F. Waltzinger, Jr., New Haven, Conn. Refrigerator	423,677	Mar. 18	1990	524	50	1530
Everitt, D. E., et al. (See House, John, assignor.)						
Everitt, Robert, Brooklyn, N. Y. Steam-pump	426,002	Apr. 22	2412	638	51	492
Evors, John W., Rahway, N. J. Portable stall	434,329	Aug. 12	1341	349	52	1029
Eversman, Ernst A., and D. Wagner, Toledo, Ohio. Hot-air pipe	425,601	Apr. 15	1780	477	51	363
Everson, Barclay M., Pittsburg, Pa. Attachment for inkbands	443,937	Dec. 30	3745	958	53	2024
Everson, George H., Pittsburg, Pa. Machine for drilling holes in the flanges of metallic wheels	420,338	Jan. 28	2563	680	50	531
Everson, George H., Pittsburg, Pa. Machine for boring metallic hubs	420,339	Jan. 28	2563	680 681	50	532
Everson, George H., Pittsburg, Pa. Machine for drilling holes in metallic wheels	420,379	Jan. 28	2621	696	50	542
Everson, George H., Pittsburg, Pa. Metallic vehicle-wheel	425,311	Apr. 8	1350	360	51	270
Everson, George H., Pittsburg, Pa. Cold-rolling tubes	430,008	June 10	1371	340	51	1746
Everson, George H., Pittsburg, Pa. Making compound-metal tubes	438,072	Oct. 7	622	169	53	119
Everson, John Q., et al. (See Dain, Albert E., assignor.)						
Ewald, Leo, Minneapolis, Minn. Adjustable supporting-rest	443,847	Dec. 30	3610	929	53	1999
Ewart, William D., assignor to Link-Belt Machinery Company, Chicago, Ill. Friction-clutch	427,563	May 13	814	204	51	983

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Ewell, Herbert P. (See Wells and Ewell.)						
Ewen, Eric D., Tobago, Trinidad and Tobago, British West Indies. Cigarette-holder.....	433,335	July 29	3572	921	52	722
Ewer, Warren B. (See Swan, George W., assignor.)						
Ewers, Ammon M., Edison, Ohio. Weather-strip.....	419,249	Jan. 14	906	239	50	194
Ewert, Otto, and J. A. Mehling, Cleveland, Ohio. Hydrocarbon-burner for heaters.....	424,105	Mar. 25	2632	701	50	1659
Ewig, John, Philadelphia, Pa., assignor to I. Blum, Baltimore, Md. Waist-band fastener.....	438,474	Oct. 14	1217	330	53	239
Ewing, Charles H., and C. G. Bockus, Philadelphia, Pa. Railway-sleeper.....	440,997	Nov. 18	2190	566	53	1946
Ewing, Horace, San Francisco, Cal. Safety-guard for railways.....	433,892	Aug. 5	675	175	52	889
Ewing, Rufus L., McCleary, Pa. Vehicle-wheel.....	425,095	Apr. 8	1016	273	51	205
Ewing, Thomas K., Milwaukee, Wis. Slate.....	433,725	Aug. 5	418	107	52	837
Excelsior Electric Company. (See Wessel, Ferdinand A., assignor.)						
Excelsior Elevator Guard and Hatch Cover Company. (See Fraser, Daniel, assignor.)						
Excelsior Needle Company. (See Dayton, William H., assignor.)						
Excelsior Reducing Company. (See Rickerson, Sherman B., assignor.)						
Eyelet Button Hole Scissor Company. (See Bartholomew, Ermon O., assignor.)						
Eyerly, Albert J. (See Patton, James N., assignor.)						
Eyles, John H., New York, N. Y. Rack for exhibiting cloaks, &c.....	430,340	June 17	1935	473	51	1865
Eyles, John H., New York, N. Y. Table.....	441,792	Dec. 2	257	68	53	1314
Eymer, Andrew, and G. W. Haight, Jr., East Saginaw, Mich. Seal-lock.....	437,920	Oct. 7	372	107	53	72
Eynon, Thomas J. (See Eynon, Thomas M. and T. J.)						
Eynon, Thomas M. and T. J., Philadelphia, Pa. Music-leaf turner.....	442,367	Dec. 9	1149	{ 299 300 }	{ 53 53 }	1492
Eynon, William, and W. Seaman, Wilmington, Del. Manufacture of blooms.....	441,474	Nov. 25	2997	772	53	1205
Eyre, Louisa L., Philadelphia, Pa. Spectacle-case.....	441,651	Dec. 2	33	10	53	1269
Ezell, Frank, Selma, Ala. Table-ware for ships.....	425,768	Apr. 15	2034	541	51	413
Faber, Alice. (See Faber, John P., assignor.)						
Faber du Faur, Adolph. (See Elsworth and Faber du Faur.)						
Faber, Eberhard. (See Mussinan, Oscar, Jr., assignor.)						
Faber, Eberhard. (See Osborn, Frederick G., assignor.)						
Faber, Eberhard, Livingston, N. Y. Pen-holder.....	426,119	Apr. 22	2579	678	51	525
Faber, John P., assignor to A. Faber, Rochester, N. Y. Top-prop for carriages.....	430,995	June 24	2965	727	51	2071
Faber, Lothar F. von, Stein, near Nuremberg, Germany. Holder for leads, crayons, &c.....	440,222	Nov. 11	913	234	53	798
Faber, William M., Jr. (See McCleane and Faber.)						
Fabrik Leipziger Musikwerke, vormals Paul Ehrlich & Cie. (See Ehrlich, Paul, assignor.)						
Facer Refrigerating and Ice Machine Company. (See Facer, Wilson E., assignor.)						
Facer, Wilson E., Cleveland, Ohio, assignor, by mesne assignments, to Facer Refrigerating and Ice Machine Company, New York, N. Y. Rod-packing.....	429,611	June 10	770	186	51	1631
Facer, Wilson E., Cleveland, Ohio, assignor, by mesne assignments, to Facer Refrigerating and Ice Machine Company, New York, N. Y. Refrigerating apparatus.....	442,026	Dec. 2	622	{ 167 168 }	{ 53 53 }	1384
Facile Bottle Stopples Company. (See Blake, Henry, assignor.)						
Facile Bottle Stopples Company. (See Duncan and Fullerton, assignors.)						
Facile Bottle Stopples Company. (See Fullerton, George A., assignor.)						
Fader, Martin, Bayside, Canada. Food-cutter.....	443,754	Dec. 30	3472	890	53	1971
Fagan, Tabor, and C. W. Hand, Port Norris, N. J. Buoy for oyster-beds.....	421,686	Feb. 18	1848	483	50	931
Fahnestock, James D., Cincinnati, Ohio. Toy.....	424,705	Apr. 1	414	109	51	82
Fahmley, William J., assignor of one-half to F. W. A. Bergengren, Lynn, Mass. Heel-nail- ing machine.....	422,044	May 13	1544	{ 390 391 }	{ 51 51 }	1122
Fahmley, William J., Lynn, assignor to J. Q. A. Whittemore, Boston, Mass. Heel-making machine.....	443,908	Dec. 30	3693	945	53	2014
Fahrney, Carlo, Polo, Ill. Road-cart.....	431,569	July 8	829	207	52	173
Fahrs Watch Case Company. (See Bates, Alfred C., assignor.)						
Fahrs Watch Case Company. (See Butts, Charles W., assignor.)						
Faifer, Tony, Denver, Colo. Temporary binder.....	443,985	Dec. 30	3832	976	53	2040
Fairall, E. J., et al. (See Pike and Huffman, assignors.)						
Fairand, Charles A., Watertown, N. Y. Price-indicating weighing-scale.....	442,873	Dec. 16	1993	511	53	1669
Fairbairn, William U., Hyde Park, Mass. Steam-boiler setting.....	426,255	Apr. 22	2777	{ 728 729 }	{ 51 51 }	566
Fairbanks, Albert C., Boston, Mass. Banjo.....	423,231	Mar. 11	1315	342	50	1394
Fairbanks, Albert C., Somerville, Mass. Banjo.....	443,510	Dec. 30	3078	793	53	1896
Fairbanks, Crawford M., Lincoln, R. I. Machine for cutting files.....	424,053	Mar. 25	2557	653	50	1644
Fairbanks, Henry. (See Parker, Howard, assignor.)						
Fairbanks, Horace S., Racine, Wis. Vehicle.....	439,936	Nov. 4	467	122	53	700
Fairchild, Adoniram, New York, N. Y. Apparatus for subaqueous excavations.....	433,279	July 29	3494	901	52	707
Fairchild, B. Homer. (See Chaffey, Elswood, assignor.)						
Fairchild, Benjamin. (See Foster and Fairchild.)						
Fairchild, Frank J., assignor of one-half to J. L. Kymer, Grand Rapids, Mich. Hand-truck.....	425,871	Apr. 15	2186	581	51	442
Fairchild, Frank J., assignor to C. E. Westlake and R. H. Stovens, Grand Rapids, Mich. Liquid-vending apparatus.....	441,615	Nov. 25	3216	828	53	1249
Fairchild, Frederick S., Bridgeport, Conn. Soap-powder canister.....	425,769	Apr. 15	2035	542	51	414
Fairchild, G. W., et al. (See Meisel, Francis, assignor.)						
Fairchild, Rebecca L., Buffalo, N. Y. Kitchen-sink.....	433,650	Aug. 5	314	81	52	817
Fairfield, Jason W., Pacific Beach, Cal. Quartz-mill.....	422,581	Mar. 4	315	80	50	1196
Fairfield, John M., and G. I. Francis, assignors to American Writing Machine Company, Hartford, Conn. Type-writing machine.....	420,870	Feb. 4	654	170	50	688
Fairgrieve, Archibald, Toronto, Canada. Stove-pipe thimble.....	442,965	Dec. 16	2147	552	53	1698
Falco, Aristide. (See Lusuardi and Falco.)						
Falconer, William F., assignor to C. F. Panknin, Charleston, S. C. Machine for cleaning and polishing vegetable fiber.....	436,870	Sept. 23	2413	629	52	1856
Falconer, William T. (See Merrill and Falconer.)						
Fales, Edward, Philadelphia, Pa. Device for generating steam.....	442,966	Dec. 16	2147	552	53	1699
Fales, Edward, Boston, Mass. Steam-boiler.....	442,967	Dec. 16	2148	{ 552 553 }	{ 53 53 }	1699
Falke, Henry G., Buffalo, N. Y. Removable cake-cover.....	422,015	Feb. 25	2309	610	50	1027
Falkenau, Arthur, Philadelphia, Pa. Duplex pump.....	419,147	Jan. 7	740	196	50	155
Falkner, Henry, Cambridge, Mass. Ventilated shoe.....	426,495	Apr. 29	3145	826	51	649
Falkenthal, Adolphus W. (See Shannon, James F., assignor.)						
Falkner, William, assignor of one-half to C. A. McDermott, Connellsville, Pa. Car-coup- ling.....	421,255	Feb. 11	1224	317	50	805
Fallon, Thomas F., New York, N. Y. Pipe-testing device.....	431,939	July 8	1411	{ 358 359 }	{ 52 52 }	284
Falls, Alonzo, Lowell, Mass. Evening mechanism for cotton-openers, &c.....	436,577	Sept. 16	1878	493	52	1746
Falls, Jesse G., Memphis, Tenn. Gin-saw gummer.....	419,989	Jan. 21	2013	531	50	420
Falls, Jesse G., Memphis, Tenn. Ice-cream freezer.....	438,309	Sept. 9	1432	373	52	1656

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Falls Rivet and Machine Company. (See Schmitt, Edward D., assignor.)						
Falls Rivet and Machine Company. (See Schmitt and Mason, assignors.)						
Fancher, Alton H., Brooklyn, N. Y. Coin-released weighing-scales or other coin-actuated mechanism	424,770	Apr. 1	518	{ 140 141 }	51	101
Fancher, Alton H., Canton, Conn., assignor of one-half to W. H. Goodwin, New York, N. Y. Vending device	428,388	May 20	2082	523	51	1238
Fancher, Freeman N., Chicago, Ill. Lip-protector for horses	420,721	Feb. 4	407	109	50	644
Fancher, Salathiel C., Kansas City, Mo. Heating-stove	423,142	Mar. 11	1194	312	50	1370
Fancourt, Henry, Opooho, Dunedin, New Zealand. Combined pencil-sharpener and pencil-holder	423,678	Mar. 18	1991	525	50	1530
Fankhauser, Ernst O., Burgdorf, Switzerland. Mordant	437,295	Sept. 30	3075		52	1991
Fanning, David H. (See Bray, Morris P., assignor.)						
Fanning, Frank, Newton, Mass., assignor to himself, and A. B. Guilford, Jersey City, N. J. Blackboard-eraser	428,585	May 20	2357	599	51	1290
Fannon, Robert D., Chicago, Ill. Boot-blackening stand	425,027	Apr. 8	922	245	51	187
Fant, Enoch W., and W. B. Anderson, Franklin, W. Va. Convertible chair	436,953	Sept. 23	2538	665	52	1881
Farbenfabriken, vormals Fr. Bayer & Co. (See Baumann, Eugen A., assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Duisberg, Carl, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Lauch and Kahn, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Lauch and Krekeler, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Messinger and Vortmann, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ott, Philipp, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Pitzinger, William, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ulrich, Moritz, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Boedeker, Hermann, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Hermann, Albert, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Hermann, Albert, assignor.) (Re-issue.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Homolka, Benno, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Nietzki, Rudolf, assignor.)						
Farciot, Charles O., San Francisco, Cal. Burglar-alarm attachment for alarm-clocks	437,984	Oct. 7	474	134	53	91
Faries, Robert, Decatur, Ill. Knot for check-row wires	420,992	Feb. 11	852	220	50	734
Farish, Edward A., St. Joseph, Mo. Hitching-post	429,123	June 3	27	6	51	1477
Farlander, Michael. (See Bennett and Farlander.)						
Farley, Henry W., Urbana, Ill. Boot-jack	418,976	Jan. 7	500	125	50	105
Farley, John P., Kansas City, Mo. Self-closing faucet	434,823	Aug. 19	2122	556	52	1191
Farley, Robert H., et al. (See Lefebvre, Henry, assignor.)						
Farlow, James N., Lander, Wyo. Friction-wrench	440,473	Nov. 11	1325	342	53	873
Farmer, Charles D., Cheboygan, Mich. Rotary engine	435,293	Aug. 26	2857	{ 755 756 }	52	1337
Farmer, Charles H., New York, N. Y. Buckle	430,470	June 17	2124	522	51	1901
Farmer, Coleman G. (See Headen and Farmer.)						
Farmer, Henry, assignor of one-half to F. Newlin, Richmond, Ind. Pawl-and-ratchet mechanism	423,232	Mar. 11	1317	342	50	1394
Farmer, James M., Hampton, England. Automatic musical instrument	423,909	Dec. 30	3696	946	53	2015
Farmer, Julius M., assignor, by mesne assignments, to Milwaukee Rotating Engine Company, Milwaukee, Wis. Rotary engine	426,003	Apr. 22	2413	{ 638 639 }	51	493
Farmer, Julius M., assignor of two-thirds to C. K. Pier and I. Leiser, Milwaukee, Wis. Rotary engine	440,145	Nov. 11	782	205	53	771
Farmer, Leslie P., South Orange, N. J. Railway-car	432,265	July 15	1920	{ 491 492 }	52	387
Farmer, Moses G., Eliot, Me. Apparatus for producing sheets of metal by electro-deposition	426,788	Apr. 29	3591	937	51	733
Farmer, Moses G., Eliot, Me. Electrolytic apparatus for forming copper ingots	426,789	Apr. 29	3592	937	51	734
Farmer, Thomas. (See Hazen, Lydton, and Farmer.)						
Farmer, Thomas, Jr., Bloomington, assignor to W. F. & J. Barnes Company, Rockford, Ill. Drilling-machine	423,864	Mar. 18	2258	596	50	1581
Farmer, Willy A., Nebo, Ill. Dehorning-shears	441,146	Nov. 25	2446	634	53	1105
Farmer's Manufacturing Company. (See East, John F., assignor.)						
Farmwald, Jonas, Goshen, Ind. Picket-sawing machine	430,381	June 17	1992	491	51	1876
Farnes, Matthew E., et al. (See Leonard, James E., assignor.)						
Farnham, Isaiah H., Malden, assignor of two-thirds to G. W. Pierce, Boston, and A. P. Sawyer, Newburyport, Mass. Electric-motor car	422,339	Feb. 25	2819	744	50	1121
Farnham, Isaiah H., Wellesley, assignor of two-thirds to G. W. Pierce, Boston, and A. P. Sawyer, Newburyport, Mass. Railway-track sweeper	422,926	Mar. 11	860	224	50	1308
Farnham, John. (See Keithly, Willie C., assignor.)						
Farnham, John, San Francisco, Cal. Sea-water storage-tank	443,827	Dec. 30	3591	923	53	1994
Farnham, Joshua G. C., Richmond, Me. Glass-cutting box	425,770	Apr. 15	2036	542	51	414
Farnham, William H., Stonham, Mass. Boot-tree	436,079	Sept. 9	1088	281	52	1590
Farnsworth, Enoch, Utahville, Pa. Sash-balance	431,653	July 8	969	242	52	200
Farnsworth, Guilford M., West Sullivan, Mo. Axle-skein	436,827	Sept. 23	2302	606	52	1836
Farnsworth, Henry T., Manchester, assignor of two-thirds to J. T. Brown and J. W. Blanton, Richmond, Va. Reversing mechanism for steam-engines	440,553	Nov. 11	1456	{ 375 376 }	53	897
Farr, George C., Brighton, county of Sussex, England. Device for the inspection of rooms from a distant point	421,687	Feb. 18	1849	{ 483 484 }	50	932
Farra, Frank L. (See Valentine, George, assignor.)						
Farrall, Theophilus D., Michigan City, Ind. Apparatus for producing steam, heat, and light by electricity	423,421	Mar. 18	1602	{ 420 421 }	50	1457
Farrar, Chilion M., Buffalo, N. Y. Steam-boiler stay-bolt	430,181	June 17	1640	409	51	1808
Farrar, Henry, Buffalo, N. Y. Dust-collector	435,057	Aug. 26	2516	665	52	1272
Farrar, Horace O. (See Winegar and Farrar.)						
Farrar, John M., Canton, Ohio. Building-block	439,641	Nov. 4	31	9	53	612
Farrar, John N., New York, N. Y. Mechanism for separating teeth	425,067	Apr. 8	978	263	51	197
Farrar, Lucius A., Shelbyville, Tenn. Car-coupling	421,825	Feb. 18	2032	537	50	966
Farral Foundry and Machine Company. (See Brown, Horatio M., assignor.)						
Farral, John H., Camden, N. J., assignor of three-fourths to H. W. Maybaum, Philadelphia, Pa. Continuous self-consuming or ignitable strip for gas-lighting devices	431,917	Feb. 25	2179	572	50	1003
Farral, John H., Camden, N. J., assignor of three-fourths to H. W. Maybaum, Philadelphia, Pa. Gas-lighting device	431,918	Feb. 25	2180	572	50	1003
Farral, John H., Camden, N. J., assignor to H. W. Maybaum, Philadelphia, Pa. Pocket-lamp	439,578	Oct. 28	2958	785	53	581
Farrell, George, New York, N. Y. Thermal cut-out	420,444	Feb. 4	25	6	50	569
Farrell, Harrison W., Noah, Tenn. Stomach-bitters	440,998	Nov. 18	2191		53	1046
Farrell, John, Pittsburg, Pa. Whip	435,889	Sept. 2	793	211	52	1528

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Farrington, Orin G., Franklin Falls, N. H. Pulp-screen cleaner.....	432,024	July 15	1551	394	52	318
Farris, Benjamin B., Rocky Ford, Ga. Boiler-flue header.....	439,496	Oct. 28	2839	756	53	558
Farris, Benjamin B., Rocky Ford, Ga. Boiler-flue header.....	440,474	Nov. 11	1326	343	53	873
Farris, William H., Detroit, Mich. Steam-generating grate-bar.....	439,131	Oct. 28	2255	606	53	448
Farwell, Arthur G., St. Paul, Minn. Toy or puzzle.....	437,186	Sept. 30	2911	758	52	1959
Farwell, Charles F. (See McCloskey and Farwell.)						
Farwell, Charles H., Atchison, Kans. Steam-generator.....	422,754	Mar. 4	566	{ 144 145 }	{ 50	1244
Farwell, Edwin W. (See Turnbull and Farwell.)						
Farwell, Fay O., Dubuque, Iowa, assignor to G. C. Bentz, St. Joseph, Mo. Hammock or chair support.....	439,642	Nov. 4	32	9	53	612
Farwell, Frederick R., and F. P. Rhines, Watertown, N. Y. Insecticide.....	436,848	Sept. 23	2339	.....	52	1844
Farwell, Henry J., <i>et al.</i> (See Vining, Charles J., assignor.)						
Fasig, George M., <i>et al.</i> (See Myers, Phares S., assignor.)						
Fasoldt, Ernest C., assignor of one-half to J. B. Thacher, Albany, N. Y. Metallic piston-packing.....	441,866	Dec. 2	375	98	53	1338
Faspert, Richard. (See Eichhorn, August, assignor.)						
Fassett, George H., Louisville, Ky. Sash-fastener.....	432,390	July 15	2107	541	52	422
Fassold, George. (See Cleaver and Fassold.)						
Faubion, J. H., <i>et al.</i> (See Hutton, Milton C., assignor.)						
Faucett, Eugene V., Wilmington, Del. Calipers.....	433,199	July 29	3381	874	52	683
Faughender & Crusoe. (See Faughender, Jabe C., assignor.)						
Faughender, Jabe C., assignor to Faughender & Crusoe, Piedmont, Ala. Ice-plane.....	430,009	June 10	1372	340	51	1747
Faught, Luther A., assignor to Wilmington Dental Manufacturing Company, Philadelphia, Pa. Electro-dental heater.....	439,238	Oct. 28	2437	654	53	482
Faul, William J., Brooklyn, N. Y. Lubricator.....	419,429	Jan. 14	1179	313	50	248
Faul, William J., Brooklyn, N. Y. Axle-lubricator.....	419,430	Jan. 14	1179	314	50	248
Faulhaber, John L., Fostoria, Ohio. Roofing.....	419,512	Jan. 14	1289	340	50	270
Faulkner, Frank J., Lynn, Mass. Leather-dressing machine.....	443,433	Dec. 23	2946	758	53	1861
Faulkner, George S., deceased; H. Faulkner, Indianapolis, Ind., administratrix. Steam-actuated valve.....	434,080	Aug. 12	951	250	52	953
Faulkner, Hattie, administratrix. (See Faulkner, George S.)						
Faulkner, James J., Jackson, Mich., assignor to National Cotton Seed Oil and Huller Company, Memphis, Tenn. Machine for delinting cotton-seed.....	430,843	June 24	2736	670	51	2027
Faulkner, Oscar F. A., Mount Pleasant, Iowa. Fence-post.....	443,848	Dec. 30	3611	929	53	1999
Faunce, Albert B., Quincy, Ill., and S. G. Cabell, Washington, D. C., assignors of one-third to M. S. Cabell, Quincy, Ill. Electric means for preventing boiler incrustation.....	438,579	Oct. 14	1366	370	53	269
Faure, Camille A., assignor to E. C. Davidson, New York, N. Y. Apparatus for measuring and registering electric currents.....	443,636	Dec. 30	3220	846	53	1934
Faurie, Gabriel A., St. Denis, France. Manufacturing alloys of metal of the aluminium group.....	432,698	July 22	2595	.....	52	525
Fausel, Daniel, Boston, Mass. Drawing and shading pictures.....	432,994	July 29	3065	787	52	621
Faust, Adolph A., assignor of one-third to W. H. W. Pago, Harold, S. D. Corn-harvester.....	420,679	Feb. 4	355	93, 94	50	633
Faust, John A., New York, N. Y. Calendar attachment for pencils or pens.....	423,233	Mar. 11	1318	342	50	1394
Faust, John A., New York, N. Y. Calendar attachment for pencils or pens.....	423,234	Mar. 11	1320	343	50	1395
Favor, Irving P., assignor to J. Marsching & Co., New York, N. Y. Artist's kit.....	424,603	Apr. 1	257	68	51	52
Favor, Lorenzo B., Bridgeport, Conn., assignor to Thermal Electric Company, of Maine. Multiple fusible cut-out.....	431,185	July 1	228	57	52	47
Favor, Lorenzo B., Bridgeport, Conn., assignor to Thermal Electric Company, of Maine. Multiple thermal cut-out.....	431,186	July 1	229	57, 58	52	48
Favor, Lorenzo B., Bridgeport, Conn., assignor to Thermal Electric Company, of Maine. Thermal cut-out.....	431,718	July 8	1087	271	52	221
Faw, John A. (See Stewart and Faw.)						
Faw, John A., <i>et al.</i> (See Stewart, Joseph H., assignor.)						
Fawell, Joseph. (See Hemphill and Fawell.)						
Faxon, Frank G., Mount Morris, N. Y. Pendant-set watch.....	424,189	Mar. 25	2745	732	50	1681
Faxon, Frank G., Mount Morris, N. Y. Watch-case pendant.....	427,757	May 13	1117	280	51	1041
Fay, Benjamin F., Pacific, Mo. Cleaning and polishing brick.....	429,090	May 27	3133	.....	51	1458
Fay, Henry R., Boston, Mass. Hand-labeling apparatus.....	428,246	May 20	1845	463	51	1191
Fay, Stillman M., assignor of one-half to H. B. Sprout, Boston, Mass. Bicycle.....	424,870	Apr. 1	650	179	51	131
Fay, William, Oakland, Cal. Carpet-cleaning machine.....	440,223	Nov. 11	915	235	53	799
Fayod, Francis, Zurich, Switzerland, and H. Mestern, Manich, Germany. Cooling device.....	434,633	Aug. 19	1835	480	52	1135
Fazio, Francesco A., Venice, Italy. Steam-generator furnace.....	430,471	June 17	2125	522	51	1901
Fear, Frederick, <i>et al.</i> (See Barter, John, assignor.)						
Fearey, Frederick T. (See Speicher and Fearey.)						
Fearey, Frederick T., Newark, N. J., assignor to Continuous Rail Joint Company of America, of New Jersey. Railway-joint.....	427,505	May 6	721	180	51	954
Fearey, Frederick T., Newark, and J. Speicher, Jersey City, N. J., assignors to Newark District Telegraph Company, of New Jersey. Fire-alarm system.....	443,478	Dec. 23	3028	778	53	1878
Fearin, Benjamin, Mount Carmel, Ky. Churn-dasher.....	438,535	Oct. 14	1303	352	53	257
Fearon, James J., assignor to Quaker City Dye Works Company, Philadelphia, Pa. Yarn-dyeing machine.....	424,190	Mar. 25	2747	732	50	1681
Featherstone, Alfred. (See Bromley and Straus, assignors.)						
Fedeler, John H., New York, N. Y. Steam-motor.....	432,391	July 15	2108	542	52	422
Fee, Franklin W. (See Fee, William R., assignor.)						
Fee, William R., Cincinnati, Ohio. Wood pulley.....	420,367	Jan. 28	2466	654	50	513
Fee, William R., assignor of one-half to F. W. Fee, Cincinnati, Ohio. Belt-rest.....	426,638	Apr. 29	3359	881	51	690
Feed Water Heater Company. (See Goss, Edward, assignor.) (Reissue.)						
Feehey, William, <i>et al.</i> (See Sandford, Charles, assignor.)						
Fefel, Henry H., assignor of one-half to T. A. Pearce, Philadelphia, Pa. Overseaming sewing-machine.....	420,191	Jan. 28	2340	{ 618 619 }	{ 50	491
Fefel, Henry H., assignor to H. A. Blanchard, Philadelphia, Pa. Sewing-machine.....	426,256	Apr. 22	2778	729	51	566
Fegeley, William A., assignor of one-half to T. D. Horn, Philadelphia, Pa. Shaft-support.....	426,991	Apr. 29	3873	1012	51	789
Fehlberg, Herman L., La Crosse, Wis. Machine for packing shingles automatically.....	424,673	Apr. 1	363	96	51	70
Feighner, Len W. (See Shields, William E., assignor.)						
Feil, Christian, Now Utrecht, N. Y. Connecting-rod for brake-beams.....	428,333	May 20	1987	500	51	1218
Feiss, Carl. (See Abbe and Rudolph, assignors.)						
Feistner, William F., Cincinnati, Ohio. Permutation-lock.....	429,192	June 3	130	32	51	1495
Felbel, Jacob, New York, N. Y., and A. W. Steiger, Bridgeport, Conn., said Steiger assignor to said Felbel. Type-writing machine.....	441,948	Dec. 2	497	133	53	1361
Felch, Oren S. (See Hayes and Felch.)						
Felder, Charles, Newark, N. J. Comb.....	424,604	Apr. 1	258	68	51	52

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Feldhaus, Fred, Cincinnati, Ohio. Car-brake	432,129	July 15	1723	443	52	351
Feldheiser, Michael, Celina, Ohio. Pipe-fastener	429,721	June 10	932	229	51	1662
Fell, Thomas M. (See Berry and Fell.)						
Fell, Thomas M., <i>et al.</i> (See Wood, Charles F., assignor.)						
Felldin, Abraham, Auburn, N. Y. Piano-tuning pin	443,041	Dec. 16	2266	581	53	1723
Fellheimer, August. (See Bray, Morris P., assignor.)						
Fellheimer, Willey J., New York, N. Y. Ventilator	436,701	Sept. 16	2070	545	52	1783
Fellowes, Ernest T. (See Fellowes, Ernest W., assignor.)						
Fellowes, Ernest W., assignor to E. T. Fellowes, Englewood, N. J. Hydrocarbon-burner	425,872	Apr. 15	2187	581	51	442
				582		
Fellowes, James F., Troy, N. Y. Machine for folding and pressing the edges of fabrics	435,137	Aug. 26	2633	696	52	1294
				697		
Fellows, James F., Troy, N. Y. Cuff	443,696	Dec. 30	3380	868	53	1952
Fellows, Jerome B., Fryeburg, Me. Potato-digger	420,573	Feb. 4	205	52, 53	50	604
Fellows, John M., Burlington, Ind. Joint for wire fences	419,758	Jan. 21	1652	438	50	348
				439		
Fellows, John M., Burlington, Ind. Railway-tie and means for securing rails to the same	433,778	Aug. 5	508	132	52	855
Felmler, John H., Allegheny, Pa. Tenoning-machine	437,414	Sept. 30	3280	856	52	2028
Felt, Dorr E., Chicago, Ill. Adding and recording machine	441,233	Nov. 25	2611	676	53	1132
				677		
Felt, Dorr E., assignor to Felt & Tarrant Manufacturing Company, Chicago, Ill. Type-writing machine	441,232	Nov. 25	2604	673	53	1131
				674		
				675		
				676		
Felt Electrical Company. (See Felt, George H., assignor.)						
Felt, Frank, Aurora, Ill. Type-writing machine	432,025	July 15	1552	394	52	318
Felt, George H., assignor to Felt Electrical Company, New York, N. Y. Galvanic battery	429,895	June 10	1196	297	51	1712
Felt, George H., assignor to Felt Electrical Company, New York, N. Y. Electrode for galvanic batteries	429,896	June 10	1198		51	1712
Felt, George H., assignor to Felt Electrical Company, New York, N. Y. Porous cell for galvanic batteries	429,897	June 10	1199	297	51	1712
Felt, George H., assignor to Felt Electrical Company, New York, N. Y. Solution for galvanic batteries	429,898	June 10	1200		51	1713
Felt & Tarrant Manufacturing Company. (See Felt, Dorr E., assignor.)						
Felton, Charles, assignor of one-half to T. P. Hughes, Denver, Colo. Gas and electric-light fixture	443,487	Dec. 23	3041	782	53	1880
Felton, Clement, Toronto, Ontario, Canada. Lock	428,718	May 27	2577	653	51	1349
Felton, Clement, Toronto, Canada. Latch	431,843	July 8	1283	322	52	259
Felton, Clement, Toronto, Ontario, Canada. Machine for making keys	433,280	July 29	3496	902	52	707
Felton, Clement, Toronto, Canada. Lock	443,910	Dec. 30	3697	947	53	2015
Felts, Daniel M., Spartanburg, S. C. Washing-machine	425,127	Apr. 8	1067	283	51	215
Fenby, Joseph B., Sutton Coldfield, county of Warwick, England. Apparatus for supplying oil to lamps	425,666	Apr. 15	1888	504	51	385
Fenby, Joseph B., Sutton Coldfield, county of Warwick, England. Supplying oil to lamps	425,667	Apr. 15	1890	505	51	385
Fendel, Charles J., Butte City, Mont. Sled	429,265	June 3	227	57	51	1516
Fenner, Augustus M., Linesville, Pa. Treadle movement	439,727	Nov. 4	148	39	53	636
Fenner, George P., New London, Conn. Expandible piston	430,517	June 17	2192	538	51	1915
Fenner, Sullivan, and J. C. Taft, assignors to United States Twist Drill Company, Providence, R. I. Manufacture of twist-drills	437,187	Sept. 30	2912	758	52	1959
Fenner, William W., assignor of one-third to E. Rhodes, Kansas City, Mo. Magnetic lock	428,247	May 20	1846	463	51	1191
				464		
Fennerty, John M., Washington, D. C., assignor to Safety Spike and Rail Joint Company, Harper's Ferry, W. Va. Combination rail-joint and rail-tie	425,937	Apr. 15	2293	606	51	460
Fennessy, Frank R., New York, N. Y., assignor to Blue Flame Manufacturing Company, of New Jersey. Oil or gas burner	424,964	Apr. 8	822	219	51	167
				220		
Fenno, Isaac, <i>et al.</i> (See Howe, Patrick, assignor.)						
Fenska, John M., assignor to South Bend Iron Works, South Bend, Ind. Mold	436,561	Sept. 16	1849	487	52	1741
Fenton, Ephraim H., Kansas City, Mo. Grinding-machine	428,204	May 20	1770	447	51	1176
				448		
Fenton, Ephraim H., Kansas City, Mo. Broom	432,130	July 15	1724	443	52	351
Fenton, Joseph T., Newtown, Pa. Two-wheeled vehicle	436,407	Sept. 16	1607	424	52	1697
Fenton Metallic Manufacturing Company. (See Hoffman, Horace J., assignor.)						
Fenton, William H. (See Porritt and Fenton.)						
Fenzel, Casper. (See Maxon, Thomas, assignor.)						
Feorst, John, Bayonne, N. J. Hydrocarbon-burner	426,371	Apr. 22	2940	773	51	600
Fergen, John, Chicago, Ill. Surgical-needle holder	421,919	Feb. 25	2182	572	50	1003
Fergen, John, and J. T. Macwhinnie, assignors to Fergen Surgical Instrument Company, Chicago, Ill. Castration-ecrasen	437,148	Sept. 23	2848	740	52	1940
Fergen, John, and J. T. Macwhinnie, assignors to Fergen Surgical Instrument Company, Chicago, Ill. Hypodermic syringe	437,149	Sept. 23	2849	740	52	1940
Fergen Surgical Instrument Company. (See Fergen and Macwhinnie, assignors.)						
Fergus, Patrick W., Mincola, N. Y. Road-cart	423,143	Mar. 11	1195	312	50	1370
Ferguson, Archibald B., Fremont, Sanilac county, and J. B. McKellor, Speaker, Mich. Combined harrow and cultivator	438,880	Oct. 21	1874	497	53	368
Ferguson Brothers. (See Campbell, James W., assignor.)						
Ferguson, Fergus M., Hoboken, N. J., assignor to G. H. Clarke, Brooklyn, N. Y. Grate-bar	431,204	July 1	260	65	52	53
Ferguson, George, Moravia, N. Y. Embalming-table	421,393	Feb. 18	1427	370	50	850
Ferguson, George A., Havre, Iowa. Corn-planter	431,040	July 1	17	5	52	6
Ferguson, Henry, London, England. Apparatus for evaporating and condensing water	439,132	Oct. 28	2257	606	53	449
				607		
Ferguson, James R. and J., Chester, Conn. Broom-holder	426,529	Apr. 29	3193	838	51	657
Ferguson, John. (See Ferguson, James R. and J.)						
Ferguson, John H., assignor of one-half to G. F. Dickerman, Ashley, Ill. Weather-strip	421,256	Feb. 11	1225	317	50	806
Ferguson, Robert T., Pittsfield, Ill. Horse-boot	431,111	July 1	120	31	52	26
Ferguson, Samuel S., Allegheny, Pa. Water-closet	441,360	Nov. 25	2806	725	53	1168
Ferguson, Thomas, Albert Park, near Melbourne, assignor to E. Rowlands, Melbourne, Victoria. Apparatus for drawing aerated liquids from founts or reservoirs	435,489	Sept. 2	165	46	52	1406
Ferguson, W. P., <i>et al.</i> (See Carl, Reinhold A., assignor.)						
Ferguson, William H., Seattle, Wash. Butter-crate	423,144	Mar. 11	1197	313	50	1371
Ferkel, Frederick. (See Rheinecker and Ferkel.)						
Fernald, Edward S. M., Saco, Me. Tool-rest	440,146	Nov. 11	783	205	53	771
Fernander, August. (See Bärrubiel and Fernander.)						
Ferrall, Thomas R., Boston, Mass., assignor to Boston & Lockport Block Company, of New Jersey. Anti-friction bearing	430,119	June 17	1561	388	51	1793

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Ferrall, Thomas R., Boston, Mass., assignor to Boston & Lockport Block Company, of New Jersey. Snatch-block	430,518	June 17	2193	539	51	1915
Ferrall, Thomas R., Boston, Mass., assignor to Boston & Lockport Block Company, of New Jersey. Snatch-block	430,519	June 17	2193	539	51	1915
Ferranti, Sebastian Z. de, Hampstead, county of Middlesex, England. Electro-motor engine	422,755	Mar. 4	568	145	50	1245
Ferranti, Sebastian Z. de, Hampstead, county of Middlesex, England. Dynamo-electric machine	423,991	Mar. 25	2462	654 655	50	1626
Ferranti, Sebastian Z. de, Hampstead, county of Middlesex, England. Electrical converter	427,751	May 13	1109	277 278	51	1039
Ferranti, Sebastian Z. de, Hampstead, England. Distribution of electric energy	440,224	Nov. 11	915	235	53	799
Ferranti, Sebastian Z. de, Hampstead, England. Electric motor	440,627	Nov. 18	1583	407 408	53	931
Ferranti, Sebastian Z. de, London, England. Means for distributing electric energy	435,114	Aug. 26	2599	686 687	52	1288
Ferrari, Andrew, assignor to Whitney Glass Works, Glassborough, N. J. Glass-annal-ling oven	430,937	June 24	2881	708	51	2055
Ferrari, Andrew, assignor to Whitney Glass Works, Glassborough, N. J. Glass-leer	431,884	July 8	1343	338	52	271
Ferrari, Andrew, assignor to Whitney Glass Works, Glassborough, N. J. Glass-finishing machine	432,796	July 22	2757	705	52	556
Ferree, Jerome D., Ottumwa, Iowa. Sash-fastener	418,914	Jan. 7	419	103	50	87
Ferreira, Charles E., Morgan Park, Ill. Feed-water heater and purifier	434,591	Aug. 19	1755	460	52	1120
Ferreira, Charles E., Morgan Park, Ill. Heating and purifying water	434,592	Aug. 19	1757	460	52	1121
Ferrell, Frank J., New York, N. Y. Steam-trap	420,993	Feb. 11	853	220 221	50	734
Ferrell, Frank J., New York, N. Y. Apparatus for melting snow	428,670	May 27	2490	634	51	1332
Ferrell, Frank J., New York, N. Y. Valve	428,671	May 27	2492	634	51	1333
Ferrell, Isaac M., Stone Creek, Ohio. Lightning-rod tower	433,459	Aug. 5	34	9	52	763
Ferrell, Joseph L. (See Smith, James D., assignor.)						
Ferrell, Leonidas C. (See Hanson and Ferrell.)						
Ferren, George E., Plano, Iowa. Holder for stick-caustic	421,070	Feb. 11	966	248	50	756
Forres, Jeffery T. (See Sefton and Ferres.)						
Forris Brothers. (See Thompson, Emma, assignor.)						
Forris, Henry L., assignor to Hunt, Helm & Ferris, Harvard, Ill. Windmill-regulator	422,582	Mar. 4	316	80	50	1197
Forris, Henry L., assignor to Hunt, Helm & Ferris, Harvard, Ill. Ear for securing bails to pails, &c.	432,181	July 15	1792	461	52	364
Forris, Sherwood B., Lakewood, N. J. Corsot	442,968	Dec. 16	2150	554	53	1699
Ferriss, Elisha P., assignor to himself and E. Burr, Stevens' Point, Wis. Planter	436,224	Sept. 9	1309	341	52	1630
Ferry, Edwin R., assignor to one-half to M. Cameron, New Haven, Conn. Sash-fastener	442,576	Dec. 9	1482	381	53	1560
Ferson, James L., Pittsburg, Pa. Velocipede	424,965	Apr. 8	825	220	51	168
Fessler, John W. (See Gray, Isaac C., assignor.)						
Fetty, Charles M., Davis City, Iowa. Folding chair	419,116	Jan. 7	696	184	50	147
Fetzer, James J., Columbiana, Ohio. Running-gear for vehicles	436,344	Sept. 16	1500	391	52	1677
Fewins, Frank W., assignor to one-half to O. H. P. Grundon, St. Louis, Mo. Composition for coloring and tinting	443,361	Dec. 23	2845	.....	53	1842
Fey, Charles, Brooklyn, N. Y. Apparatus for the manufacture of malt	429,124	June 3	28	7	51	1477
Fey, Christian D., Chicago, Ill. Sliding door	431,570	July 8	831	207	52	174
Fiala, Andrew H., New York, N. Y., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine	439,058	Oct. 21	2136	573 574	53	420
Ficken, John H., Jersey City, N. J. Vehicle-roof	419,759	Jan. 21	1654	439	50	348
Fickett, William S., assignor to W. Castle & Co., Rochester, N. Y. Dredge	427,165	May 6	222	56	51	855
Fiddler, William. (See Godard and Fiddler.)						
Fiebigger, Edward M. (See Ratchford and Harper, assignors.)						
Fiedler, August E., Chemnitz, Saxony, Germany. Skate	429,266	June 3	229	57	51	1516
Field, Albert D., assignor to Globe Curtain Pole Company, Waterbury, Conn. Curtain-holder	424,410	Mar. 25	3113	825	50	1753
Field, Benjamin F., Chicago, Ill. Feed-water purifier	432,026	July 15	1553	395	52	318
Field, Charles H., Jr., Providence, R. I. Combined ladle and mold for lead hammers	428,558	May 20	2307	586	51	1280
Field, Charles H., Jr., Providence, R. I. Engraving-machine	428,770	May 27	2649	671	51	1363
Field, David W., et al. (See Hull, Eugene J. C. A., assignor.)						
Field, Dayton S., Mendon, Mich. Attachment for vehicle-shafts	436,945	Sept. 23	2528	662	52	1879
Field, Eldon M., J. Peggs, and S. Bassinger, Italy, Tex. Cotton-loading derrick	426,372	Apr. 22	2941	773 922	51	600
Field, Edward, London, England. Working motor-engines with hot gases and steam	437,586	Sept. 30	3536	923 924	52	2082
Field, Edward, London, England. Engine	442,027	Dec. 2	625	168 169	53	1385
Field, Edwin S., Springfield, Mass. Type-writing machine	442,028	Dec. 2	629	170	53	1385
Field, Fred C., Kiantone, N. Y. Cultivator	427,409	May 6	579	144 145	51	926
Field, Frederick F., and J. Driscoll, Providence, R. I. Railway-tie	433,651	Aug. 5	314	81	52	817
Field, Isaac F., Sandy Lake, Pa. Jar holder and filler	425,312	Apr. 8	1351	361	51	271
Field, Isaac F., Sandy Lake, Pa. Door-spring	438,802	Oct. 21	1731	464	53	342
Field, Isaac F., Sandy Lake, and S. Byers, Butler, Pa. Weather-strip	433,460	Aug. 5	35	10	52	763
Field, John A., Racine, Wis. Oil or gas stove	428,334	May 20	1988	500	51	1218
Field, John S., Chicago, Ill. Ice-elevator and snow-remover	424,706	Apr. 1	415	109	51	82
Field, Philena I., assignor to one-half to W. Lawrence, New York, N. Y. Hat-sweat	429,341	June 3	367	87	51	1540
Field, Samuel B., Plainfield, N. J. Lantern	437,587	Sept. 30	3540	924	52	2082
Field, Stephen D., Yonkers, N. Y. Telephone	433,120	July 29	3265	840 841	52	659
Field, Stephen D., Yonkers, N. Y. Dynamo-electric machine	436,408	Sept. 16	1608	425	52	1697
Field, Stephen D., Stockbridge, Mass., assignor to one-half to P. H. Alexander, New York, N. Y. Electric cut-out	432,521	July 22	2305	596	52	469
Field Tack Company, Albert. (See Packard, Henry R., assignor.)						
Field, Walter D., Springfield, N. J. Varnish	422,195	Feb. 25	2580	.....	50	1077
Field, Walter D., Springfield, N. J. Varnish	434,330	Aug. 12	1342	.....	52	1029
Fieldner, John S., Asbury Park, assignor to himself, T. E. Warman, Ocean Beach, G. A. Wedel, Asbury Park, and J. T. Martin, Newark, N. J. Paper-bag fastening	424,411	Mar. 25	3114	826	50	1753
Fielding, John S., Rochester, N. Y. Apparatus for handling letters and canceling stamps thereon	423,472	Mar. 18	1677	442 443	50	1471
Fields, C. C. (See Fields, John W., assignor.)						
Fields, John F., St. Ignace, Mich. Game	424,284	Mar. 25	2872	767	50	1706
Fields, John F., St. Ignace, Mich. Electric belt	439,347	Oct. 28	2616	697	53	516

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Fields, John W., Ezel, assignor of one-half to C. C. Fields, West Liberty, Ky. Plow	422,756	Mar. 4	569	145	50	1245
Fields, Tom, Lees Summit, Mo. Dehorning-shears	432,663	July 22	2530	649	52	512
Fiesse, Charles, New York, N. Y. Blower and exhaustor for air and other gases	431,571	July 8	833	207	52	174
Fiesse, Charles, New York, N. Y. Apparatus for oxygenating and carbureting air	433,336	July 29	3572	922	52	732
Fife, Frank F., and W. V. Bléha, St. Louis, Mo. Sash-balance	430,938	June 24	2882	709	51	2055
Fife, John F., Medford, Mass., assignor to Wainwright Manufacturing Company, of Massa- chusetts. Machine for corrugating tubing	426,439	Apr. 29	3063	802 803	51	633
Fife, John F., Medford, assignor, by mesne assignments, to Wainwright Manufacturing Com- pany of Massachusetts, Boston, Mass. Machine for corrugating wrought-metal tubing	432,232	July 15	1870	481	52	378
Fifield, Charles T., Revere, Mass. Splitting-machine	430,152	Jan. 28	2272	602 603	50	479
Fifield, George A., Dubuque, Iowa. Inkstand	427,063	May 6	48	14	51	819
Fike, Donophan M., and J. Huffman, assignors of three-fifths to J. A. T. Hull, R. B. Tay- lor, E. J. Fairall, R. M. Dewitt, W. W. Fink, and A. J. Baker, Des Moines, Iowa. De- vice for maintaining electrical connection between separate railway-trains	423,748	May 27	2619	663	51	1357
Filer & Stowell Company. (See Slocum, John C., assignor.)						
Filson, Charley F. and F. L., Point Pleasant, W. Va. Measuring-vessel	432,995	July 29	3070	787	52	621
Filson, Frank L. (See Filson, Charley F. and F. L.)						
Filstrup, Larsen, Chicago, Ill. Manufacturing polished metal cocks	421,257	Feb. 11	1226	317	50	806
Finch, Arthur L., assignor to P. Cassidy and I. R. Adler, New York, N. Y. Plug for clos- ing water-pipes, &c.	427,677	May 13	974	246	51	1013
Finch, Calc. and J. Hummel, Albany, N. Y. Automatic valve for gas-service pipes	432,583	Mar. 4	319	81	50	1197
Finch, Edward B., New York, N. Y. Oil-stove	422,757	Mar. 4	570	146	50	1245
Finch, Edward B., New York, N. Y. Oil-stove	422,758	Mar. 4	571	146	50	1245
Finch, James B., New York, N. Y. Knob attachment	419,431	Jan. 14	1180	314	50	248
Finch, Thomas F. N., Worcester, assignor to G. H. Williamson, Grants Lodge, Malvern, England. Carriage-axle box	434,824	Aug. 19	2123	556	52	1191
Finck, Julius, San Francisco, Cal. Annunciator	418,868	Jan. 7	329	80	50	69
Finckel, Martin L., et al. (See Stohr, Jodok, assignor.)						
Fine, Isaac, Philadelphia, Pa. Attaching hangers to books	439,643	Nov. 4	33	9	53	613
Finegan, Amos E., Meyersdale, Pa. Carpet-stretcher	442,874	Dec. 16	1995	512	53	1669
Finegold, Joseph, Denver, Colo. Trousers	442,597	Dec. 9	1513	389	53	1566
Fink, W. W., et al. (See Fike and Huffman, assignors.)						
Fink, William M., Elizabeth, assignor of two-thirds to S. Cooper and P. Hathaway, West- field, N. J. Galvanic battery	434,593	Aug. 19	1760	460	52	1121
Finkelstein, Shye, New York, N. Y. Triumphant	440,876	Nov. 18	1995	514	53	1008
Finlay, George D., et al. (See Harmon, Orville S., assignor.)						
Finlayson, Christopher T., Denver, Colo. Wire tramway and loader	434,900	Aug. 19	2262	593 594	52	1217
Finley, Frank J. (See Poole, Samuel, assignor.)						
Finley, George C. (See McGrath and Finley.)						
Finley, James D., Chicago, Ill. Flooring, &c.	422,584	Mar. 4	320	81	50	1197
Finley, John E., Memphis, Tenn. Churn-dasher	419,760	Jau. 21	1654	439	50	349
Finley, John E., Memphis, Tenn. Extension-handle	419,761	Jan. 21	1655	439	50	349
Finley, Leander F., Orient, assignor of one-half to C. W. Higgins, Derby, Ohio. Fence	435,294	Aug. 26	2860	756	52	1338
Finley, Robert L., and H. H. Harper, Bonham, Tex. Car-coupling	421,129	Feb. 11	1049	269	50	772
Finnegan, Andrew J., Minneapolis, Minn. Apparatus for flushing water-closets	424,871	Apr. 1	682	180	51	131
Finnegan, Andrew J., Minneapolis, Minn. Water-closet	424,872	Apr. 1	683	180	51	132
Finnegan, Peter, et al. (See Rafferty, Patrick, assignor.)						
Finney, George S., Chicago, Ill. Pulverizing-machine	427,228	May 6	310	79, 80	51	872
Finney, George S., Chicago, Ill. Magnetic separator	432,823	July 22	2791	713 714	52	562
Finney, George S., assignor to Rotary Magnetic Ore Separator Company, Chicago, Ill. Mag- netic ore-separator	443,042	Dec. 16	2267	582	53	1723
Finney, George S., assignor to Rotary Magnetic Ore Separator Company, Chicago, Ill. Mag- netic separator	443,043	Dec. 16	2268	582	53	1723
Finney, George S., assignor to Rotary Magnetic Ore Separator Company, Chicago, Ill. Mag- netic ore-separator	443,044	Dec. 16	2269	582	53	1723
Finney, Wesley T., Bentonville, Ind. Stove	441,147	Nov. 25	2447	634	53	1105
Finney, Winfield S., Medicine Lodge, Kans. Horse-collar fastener	428,205	May 20	1773	448	51	1177
Fire Extinguisher Company of America. (See Martin, Charles M., assignor.)						
Firman, Henry S., Chicago, Ill. Vacuum evaporating apparatus	438,266	Oct. 14	915	248	53	180
Firman, Leroy B., Chicago, Ill. Railway-signal system	429,899	June 10	1201	298	51	1713
Firmbach, John C. (See Schmalz and Firmbach.)						
Firth, Josiah C., Auckland, New Zealand. Insulator	436,225	Sept. 9	1312	.....	52	1631
Firth, Thomas J., La Grange, Tenn. Ironing-table	430,374	June 17	2274	559	51	1929
Fischbeck, Victor D. (See Wahra, Adolph, assignor.)						
Fischer, August G., Philadelphia, Pa. Wagon-spring buffer	430,770	June 24	2621	642	51	2006
Fischer, Charles H. (See Fischer, Henry B. and C. H.)						
Fischer, Charles H., Milwaukee, Wis. Window	443,755	Dec. 30	3472	891	53	1971
Fischer, Charles W., and A. J. Rollert, assignors to T. A. Kochs, Chicago, Ill. Barber's chair	437,487	Sept. 30	3390	888	52	2054
Fischer, Gustav, Griez, Germany. Harness-detaching device	436,226	Sept. 9	1312	342	52	1631
Fischer, Heinrich. (See Tobias and Fischer.)						
Fischer, Henry B. and C. H., Cincinnati, Ohio. Apparatus for filtering wine	430,120	June 17	1561	388	51	1793
Fischer, Hermann C., New York, N. Y. Key	424,412	Mar. 25	3114	826	50	1753
Fischer, Johann F., Worms, Germany. Apparatus for laying pipes	436,914	Sept. 23	2488	650 651	52	1871
Fischer, Johann F., Worms, Germany. Apparatus for jointing pipes	436,915	Sept. 23	2491	652	52	1871
Fischer, John, Louisville, Ky. Buckle	420,871	Feb. 4	657	171	50	689
Fischer, John, Louisville, Ky. Harness-saddle	427,470	May 6	671	168	51	945
Fischer, Moses. (See Flory, Elie H., assignor.)						
Fish, Charles H., Manchester, N. H. Feed-water heater for steam-generators	438,267	Oct. 14	918	248	53	180
Fish, Farman T. (See Barrett, James O., assignor.)						
Fish, Farman T. (See Jull, Samuel T., assignor.)						
Fish, Harry S. (See Fish, John E., assignor.)						
Fish, James M., Albuquerque, N. Mex. Ter. Portable arm-rest and table	434,559	Aug. 19	1705	446	52	1110
Fish, John E., Albuquerque, N. Mex. Ter., assignor of one-half to H. S. Fish, Beardstown, Ill. Key-hole escutcheon	419,324	Jan. 14	1021	270	50	216
Fish, Leander E., Los Angeles, Cal. Steam and gas generator	429,900	June 10	1202	298	51	1713
Fish, Peter. (See Converse, Lyman P., assignor.)						
Fish, Peter, et al. (See Dyer, Isaac T., assignor.)						
Fish, Philip F., et al. (See Julian and Guillaume, assignors.)						
Fish, Robert J., et al. (See Tanner, Jesse J., assignor.)						
Fish, Samuel H., Hinsdale, Ill. Bill and letter file	435,412	Sept. 2	50	17	52	1384

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Fish, Samuel H., Hinsdale, Ill. Bill and letter file	435,413	Sept. 2	52	18	52	1385
Fish, Samuel W. (See Fish, Thomas W., assignor.)						
Fish, Thomas W., assignor of one-half to S. W. Fish, Philadelphia, Pa. Suspender-trim- ming	421,354	Feb. 11	1367	354	50	831
Fish, Wallace B., Springfield, Mass. Composing-stick	441,475	Nov. 25	2098	772	53	1205
Fishel, Charles W., Carbondale, Colo. Toy	432,392	July 15	2109	542	52	422
Fishel, Charles W., and F. S. Hotchkiss, Carbondale, Colo. Door-check	432,867	July 22	2851	729	52	575
Fisher, Albert J., Pontiac, Mich. Window-dresser	440,554	Nov. 11	1460	376	53	897
Fisher, Alvan B., assignor of one-half to E. H. Brigham, Sterling, Mass. Saw-setting de- vice	419,192	Jan. 14	823	217	50	176
Fisher, Andrew S., Bedford, Pa. Padlock	422,759	Mar. 4	572	147	50	1246
Fisher, Benjamin. (See Westwood, John T., assignor.)						
Fisher, Charles H., Lowell, Mass. Bearing for spinning-spindles, &c.	434,924	Aug. 26	2326	614	52	1236
Fisher, Clark, Trenton, N. J. Combined anvil and vise	425,602	Apr. 15	1781	477	51	363
Fisher, Clark, Trenton, N. J. Rail-joint	439,497	Oct. 28	2841	757	53	553
Fisher, Ebenezer. (See McBride and Fisher.)						
Fisher, Edgar L. (See Lambdin, James T., assignor.)						
Fisher, Edward, London, England. Button-fastener for gloves	431,340	July 1	463	114	52	94
Fisher, Edwin C., Claremont, N. H. Camera-stand	419,006	Jan. 7	540	135	50	114
Fisher, Edwin C., Claremont, N. H. Camera-stand	423,551	Mar. 18	1792	470	50	1492
Fisher, Elmendorf C., Port Richmond, N. Y. Street-sweeping machine	436,520	Sept. 16	1771	467 468	52	1728
Fisher, Fabis E., Waco, Tex. Shuttle-operating mechanism for looms	438,996	Oct. 21	2046	547	53	403
Fisher, Francis H., Lynn, Mass. Link-lifter for car-couplings	440,350	Nov. 11	1110	285	53	832
Fisher, Frank A., South Deerfield, Mass. Harness-girth	435,537	Sept. 2	239	66	52	1421
Fisher, Frank E., Detroit, Mich. Annunciator	442,029	Dec. 2	631	170	53	1386
Fisher, Frank E., Detroit, Mich. Electric switch	442,030	Dec. 2	631	171	53	1386
Fisher, Frank R. (See Green and Fisher.)						
Fisher, Hart A. (See Waterhouse, Eugene R., assignor.)						
Fisher, Harvey L. (See Ballard and Fisher.)						
Fisher, Henry W., Pittsburg, Pa. Stripping-tool	435,414	Sept. 2	54	18	52	1385
Fisher, Henry W., Pittsburg, Pa. Tool for splicing wire	435,415	Sept. 2	55	18	52	1385
Fisher, Isaac, New York, N. Y. Nozzle	440,025	Nov. 4	602	160	53	726
Fisher, John E., Frankfort, Ohio. Fence-making machine	437,344	Sept. 30	3151	825	52	2005
Fisher, John E., Boston, Mass. Vehicle-wheel	442,113	Dec. 9	766	206	53	1420
Fisher, John J. (See Hand, Ekins, assignor.)						
Fisher, John W., and W. A. Kinney, Bridgetown, Nova Scotia, Canada. Shaft-hanger	433,779	Aug. 5	509	132	52	855
Fisher, Joseph H., assignor of three-fifths to W. H. Wilnot, Deerfield, and S. Coleman, Chicago, Ill. Railway-switch	427,166	May 6	223	57	51	855
Fisher, Lucius G., <i>et al.</i> (See Solano, Renaldo, assignor.)						
Fisher, Peter, Pomeroy, Ohio. Singletree	424,873	Apr. 1	634	180	51	132
Fisher, Robert C. (See Avis, Walter H., assignor.)						
Fisher, Thomas W., Helena, Mont. Pipe-wrench	421,688	Feb. 18	1850	484	50	932
Fisher, William, and G. H. Beebe, Marshalltown, Iowa. Regulator for pumping-engines	423,145	Mar. 11	1197	313	50	1371
Fisher, William B. (See McMurray and Fisher.)						
Fisher, William J., Newark, N. J. Grinding and polishing apparatus	421,487	Feb. 18	1559	402	50	876
Fishering, George W., Pittsburg, Pa. Bed-bottom spring	440,628	Nov. 18	1585	408	53	931
Fisk, Amos, <i>et al.</i> (See Hayden, Charles M., assignor.)						
Fisk, Ames, assignor of one-half to W. H. Cole, Lake Crystal, Minn. Car-coupling	440,588	Nov. 11	1511	389	53	908
Fisk, Cassius M., Napoleon, Ohio. Reel for awning-ropes	425,313	Apr. 8	1352	361	51	271
Fisk, Henry M., Pella, Iowa. Flexible carrier for file-laying machines	421,488	Feb. 18	1560	402	50	876
Fisk, Horace H., Florence, Oreg. Barrel-stand	439,815	Nov. 4	274	69	53	661
Fisk, Oliver J., Conterville, Cal. Whiffletree-connection	421,880	Feb. 18	2122	557	50	982
Fisk, Sam T., <i>et al.</i> (See Billingslea, Alvah M. F., assignor.)						
Fiske, Bradley A., U. S. Navy. Pointing guns at sea	435,925	Sept. 9	854	224	52	1546
Fiske, Coleman & Co. (See Cooper, Leslie A., assignor.)						
Fiske, John D., Hartford, Conn. Pegging-jack	436,974	Sept. 23	2568	671	52	1886
Fitch, Arden S., New York, N. Y. Rubber eraser	443,613	Dec. 30	3242	833	53	1927
Fitch, Calvin H., Middletown Springs, Vt. Prescription-scales	418,708	Jan. 7	84	19	50	19
Fitch, Calvin M., Chicago, Ill. Ore-pulverizer	441,867	Dec. 2	376	99	53	1338
Fitch, Charles B. (See O'Beirne and Fitch.)						
Fitch, E. T., <i>et al.</i> (See Hubbard, George M., assignor.)						
Fitch, Ezra C., Newton, Mass. Watch-case pendant	424,191	Mar. 25	2748	732	50	1681
Fitch, George, Lenox, Mass. Building	442,875	Dec. 16	1995	512	53	1669
Fitch, Horace A., New Bedford, Mass. Ceiling fuse-block	434,925	Aug. 26	2328	615	52	1236
Fitch, Thomas W., Pittsburg, Pa. Wire-rod mill	435,810	Sept. 2	668	175 176	52	1503
Fitch, Thomas W., Pittsburg, Pa. Wire-rod mill	435,811	Sept. 2	669	176	52	1504
Fitch, Thomas W., Pittsburg, Pa. Belgian wire-rod mill	435,812	Sept. 2	670	176	52	1504
Fitch, Thomas W., Edgewoodville, Pa. Belgian rod-mill	435,813	Sept. 2	671	176	52	1504
Fitch, Thomas W., Edgewoodville, Pa. Wire-rod mill	435,814	Sept. 2	671	177	52	1504
Fitch, Thomas W., Edgewoodville, Pa. Continuous wire-rod mill	435,815	Sept. 2	672	177	52	1505
Fitch Type Writer Company. (See Brady, James, assignor.)						
Fitch Type Writer Company. (See Brady and Vellacott, assignors.)						
Fitch, W., <i>et al.</i> (See Hubbard, George M., assignor.)						
Fitch, W. & E. T. (See Hubbard, George M., assignor.)						
Fithian, Richard B., and J. A. Wyman, New York, N. Y. Sewer or sewer-pipe	439,644	Nov. 4	34	10	53	613
Fidler, William H., Sayre, Pa. Game-puzzle	432,483	July 15	2247	581	52	451
Fitton, George A. (See Turck, Robert I., assignor.)						
Fitz, Adam. (See Hendricks, Adam C., assignor.)						
Fitz Gerald, Augustine, Brooklyn, N. Y. Seal for vessels and means for opening the same	439,133	Oct. 28	2259	607	53	449
Fitz Gerald, Desmond G., and A. H. Hough, assignors to Mining and General Electric Lamp Company, Limited, London, England. Portable electric lamp	442,969	Dec. 16	2151	554	53	1700
Fitz Gerald, Walter H. (See Ecaubert, Frederic, assignor.)						
Fitz Gerald, Walter H., Brooklyn, N. Y. Mechanism for the manufacture of watch-case centers	420,380	Jan. 28	2623	696 697	50	542
Fitz, John, G., J. G., and M. O. Rehffuss, assignors to said Fitz and E. Morris, Philadel- phia, Pa. Hat-brim-curling machine	434,438	Aug. 19	1525	398	52	1073
Fitzgerald, Adelbert E., Bellevue, Mich. Ruler	434,600	Aug. 19	1885	492	52	1144
Fitzgerald, Horatio N. (See Emons and Bishop, assignors.)						
Fitzgerald, J. C. (See Killingsworth, Wiley S., assignor.)						
Fitzgerald, James F., Ottawa, Kans. Binder for official documents	433,337	July 29	3574	992	52	723
Fitzgerald, Peter J., Hyde Park, Mass. Vapor-burner	423,747	Mar. 18	2088	552	50	1547
Fitzgerald, Richard T., Rufin, N. C. Tobacco-stick	439,498	Oct. 28	2843	757	53	558

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Fitzgerald, Walter S., Boston, Mass. Nailing-machine	419,762	Jan. 21	1655	440	50	349
Fitzgerald, Walter S., Boston, Mass. Boot or shoe nailing machine	433,281	July 29	3497	{ 902 } 903	52	708
Fitzpatrick, Matthew, Omaha, Nebr. Clothes-beater	422,387	Mar. 4	36	11	50	1144
Fitzpatrick, Michael E., Bridgeport, and W. Geddes, Waterbury, Conn. Machine for making tubes	431,041	July 1	19	5, 6	52	6
Fitzpatrick, William, Brazilton, Kans. Sliding weather-strip	425,414	Apr. 15	1499	402	51	309
Fitzsimmons, James. (See Hargrove, William, assignor.)						
Fitzwater, William M., White Forge, Va. Adding-machine	432,393	July 15	2111	542	52	422
Flach, Arthur B. (See Wollenweher, August, assignor.)						
Flachman, Henry, <i>et al.</i> (See Traber, Simon, assignor.)						
Flachs, Richard, Oberlössnitz-Radebeul, near Dresden, Germany. Velocipede	437,026	Sept. 23	2639	689	52	1901
Flad, Henry, St. Louis, Mo. Recording-velocimeter	424,547	Apr. 1	172	{ 47 } 48 49	51	36
Flad, Henry, St. Louis, Mo. Underground electric conduit	430,010	June 10	1374	{ 341 } 342	51	1747
Flagg, Eli W., assignor to Nichols & Shepard Company, Battle Creek, Mich. Thrashing-machine	427,471	May 6	672	168	51	945
Flagg, George H. P. (See Campbell, Louis M., assignor.)						
Flagg, George H. P. (See Fullerton, George A., assignor.)						
Flagg, Margaret R., Chicago, Ill. Hydrocarbon-furnace	422,927	Mar. 11	861	{ 224 } 225	50	1308
Flagler, Harvey K. (See Abbott, Warren M., assignor.)						
Flagler, Harvey K., assignor of one-half to W. M. Abbott, Boston, Mass. Artificial fuel	439,394	Oct. 28	2692	-----	53	530
Flam, William, Scranton, Pa. Combination walking-stick or cane	429,234	June 3	190	46	51	1508
Flammer, John D., New York, N. Y. Envelope-machine	435,816	Sept. 2	674	{ 177 } 178 179	52	1505
Flammer, John D., New York, N. Y. Machine for forming envelope-blanks having opening-threads	435,817	Sept. 2	677	{ 179 } 180 181	52	1506
Flanagan, James H., Boston, Mass. Puzzle	422,388	Mar. 4	37	11	50	1144
Flanagan, Thomas L., Vicksburg, Miss. Combined harrow and cutter	442,031	Dec. 2	632	171	53	1386
Flannery, William J., <i>et al.</i> (See Jones, Charles E., assignor.)						
Flanders, Anna. (See Flanders, Charles P., assignor.)						
Flanders, Charles P., assignor to A. Flanders, Parishville, N. Y. Attachment for matching-machines	429,170	June 3	96	23	51	1490
Flanders, Moses C., Merrimac, Mass. Carriage-top prop	435,818	Sept. 2	680	181	52	1506
Flanders, Timothy B. (See Buttrick and Flanders.)						
Flanigan, Robert, Baltimore, Md. Gear-cutting machine	439,134	Oct. 28	2261	{ 607 } 608	53	449
Flannery, John L. (See Yentzer, Enoch S., assignor.)						
Flannery, Joseph, New York, N. Y. Gas and liquid holder	419,845	Jan. 21	1795	474	50	375
Flannery, Joseph, New York, N. Y. Filling for man-holes	420,192	Jan. 23	2341	619	50	491
Flannery, Joseph, New York, N. Y. Gas and liquid holder	420,193	Jan. 23	2342	619	50	491
Flaunt, Jacob R., assignor of one-half to M. and H. F. Tallman, Lanark, Ill. Thill-support	434,260	Aug. 12	1241	321	52	1008
Fleck, Charles M., Oshkosh, and K. Knudson, Winneconne, Wis. Harvester-apron	435,623	Sept. 2	386	104	52	1447
Fleeman, William G. (See Coolahan and Fleeman.)						
Fleet, Joseph A., <i>et al.</i> (See Sanborn, George S., assignor.)						
Fleetwood, Caleb V., Cleves, Ohio. Automatic feeding device for petroleum-burners	421,826	Feb. 18	2034	537	50	966
Fleischer, Richard J., assignor of two-thirds to A. Langenkamp and C. Dederich, Tisch Mills, Wis. Velocipede	439,395	Oct. 28	2693	{ 716 } 717	53	530
Fleischman, Gustav, Buffalo, N. Y. Treating kitchen garbage	425,603	Apr. 15	1782	478	51	363
Fleischmann & Company. (See Sobotka, Gustav, assignor.)						
Fleischmann, John, Baltimore, Md. Machine for polishing or smoothing moldings	423,748	Mar. 18	2089	552	50	1547
Fleming, Cassius M. C., Maryville, Mo. Blind for bridges	435,115	Aug. 26	2602	688	52	1288
Fleming, Charles F. (See Fleming and McLaughlin.)						
Fleming, Edward, New York, N. Y. Combined shovel and sieve	426,719	Apr. 29	3490	913	51	714
Fleming, George, Lake, Ill. Combined refrigerator and water-filter	421,689	Feb. 18	1851	484	50	932
Fleming, George A. and C. F., and G. T. McLaughlin, San José, Cal. Fruit pitting and spreading machine	424,771	Apr. 1	525	142	51	103
Fleming, James H., Newark, N. J. Watch-case spring	420,348	Jan. 28	2104	556	50	446
Fleming, James H., Newark, N. J. Watch-case	440,308	Nov. 11	1055	272	53	822
Fleming, Jonathan, Decatur, Ind. Road-grader	433,780	Aug. 5	511	132	52	855
Fleming, Peter F., assignor of one-half to W. E. Wade and W. T. Damerson, Huntsville, Mo. Machine for cutting and carrying corn	433,121	July 29	3268	841	52	660
Fleming, Warren E., Smith Centre, Kans. Adding-machine	435,819	Sept. 2	680	{ 181 } 182	52	1506
Fleming, Will. A., assignor of one-half to J. Q. Moxley, Lewiston, Idaho. Bicycle	443,938	Dec. 30	3747	958	53	2024
Fleming, Otto. (See Massey, George B., assignor.)						
Flemming, Otto, Philadelphia, Pa. Current-regulator or rheostat	432,131	July 15	1725	444	52	351
Flesher, Thomas, Dunkirk, N. Y. Ball-and-socket joint for pipes	438,148	Oct. 14	736	202	53	148
Flesher, William H., Cincinnati, Ohio. Window-screen	429,210	June 3	160	38	51	1502
Fleshman, Benjamin F., Alvon, W. Va. Running-gear for vehicles	420,872	Feb. 4	658	171	50	689
Fleshman, Benjamin F., Alvon, W. Va. Steering-gear for vehicles	420,873	Feb. 4	659	171	50	689
Fletcher, Addison C., New York, N. Y. Bound volume of books	426,790	Apr. 29	3594	938	51	735
Fletcher, Addison C., New York, N. Y. Grate	432,394	July 15	2112	543	52	422
Fletcher, Addison C., New York, N. Y. Nut-lock	443,911	Dec. 30	3698	947	53	2015
Fletcher, Allen F., Athol, Mass. Tonges or pliers	432,933	July 22	2945	754	52	593
Fletcher, Edwin J., New York, N. Y. Means for joining wood	419,763	Jan. 21	1657	440	50	349
Fletcher, Frederick V., New York, N. Y. Inkstand	435,035	Aug. 26	2482	656	52	1265
Fletcher, George, Brooklyn, N. Y. Hoisting-gear	429,308	June 3	314	74	51	1530
Fletcher, George, Brooklyn, N. Y. Mortising-chisel	435,538	Sept. 2	240	66	52	1421
Fletcher, George N., <i>et al.</i> (See Moore, Charles E., assignor.)						
Fletcher, Horace B., <i>et al.</i> (See Surratt, George, assignor.)						
Fletcher, Horatio, Newcastle-upon-Tyne, county of Northumberland, England. Capstan	418,786	Jan. 7	191	46, 47	50	42
Fletcher, James H., Newark, N. J. Sowing-machine	443,756	Dec. 30	3474	{ 891 } 892	53	1971
Fletcher, James H., Newark, N. J., assignor to Wheeler and Wilson Manufacturing Company, Bridgeport, Conn. Spool-holder for sewing-machines	424,874	Apr. 1	685	181	51	132
Fletcher, James R., New Haven, assignor of one-half to F. H. Arnold, New Britain, Conn. Casket-handle	438,349	Oct. 14	1041	283	53	205

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Fletcher, James R., New Haven, assignor of one-half to F. H. Arnold, New Britain, Conn. Casket-handle	441,148	Nov. 25	2448	634	53	1105
Fletcher, John C., Adamsville, assignor of one-half to C. S. McCall, Bennettsville, S. C. Combined guano-distributor and pea-planter	436,598	Sept. 16	1907	501	52	1751
Fletcher, John J., Newark, S. D. Egg-beater	442,429	Dec. 9	1245	321	53	1512
Fletcher, John R., Baltimore, Md. Street or station indicator for railway-cars	433,858	Aug. 5	622	162	52	878
Fletcher, John W., Chelsea, Mass. Clothes-drier	429,023	May 27	3022	776	51	1437
Fletcher, Louis S., Blue Springs, Nebr. Windmill	427,064	May 6	50	14	51	819
Fletcher, Moore R., Boston, Mass. Tide-signal	422,928	Mar. 11	863	225	50	1309
Fletcher, William A., Beaumont, Tex. Lumber-kiln	421,690	Feb. 18	1853	485	50	932
Fleury, Frank, and A. G. Goodman, Chicago, Ill. Angle attachment for dental engines	435,138	Aug. 26	2634	697	52	1295
Fleuss, Henry A., London, England. Umbrella or parasol	423,422	Mar. 18	1607	421	50	1458
Flexible Engine and Threshing Machine Company. (See Sailer, John M., assignor.)						
Flick, Charles G., Toronto, Ontario, Canada. Glass-polisher	423,749	Mar. 18	2091	552	50	1548
Flickinger, William F., and G. J. Wiatt, Orchard Park, N. Y. Ice-velocipede	441,545	Nov. 25	3103	796	53	1227
Flihr, Daniel H., Coopersburg, Pa. Lid-lifter	433,726	Aug. 5	419	107	52	837
Flint, George H., assignor of one-half to O. H. Hinrichs, Jr., Lodi, Wis. Grain-adjuster	438,129	Oct. 7	701	190	53	135
Flint, James F., West Peabody, Mass. Folding umbrella	419,325	Jan. 14	1021	270	50	216
Flint, Levi B., Ashby, Mass. Making elongated tubs	426,720	Apr. 29	3491	913	51	715
Flint, Myron C., et al. (See McDannel, Abner J., assignor.)						
Flint Road Cart Company. (See McCrudden, James, assignor.)						
Flint Road Cart Company. (See Wheeler, Benjamin F., assignor.)						
Floeter, Robert K., Chatham, Ontario, Canada. Fanning-mill	429,565	June 3	700	170	51	1607
Flohr, Otto, Buffalo, N. Y. Hoisting-engine	436,828	Sept. 23	2303	606 607	52	1836
Flora, Ellsworth E., and P. R. Hoy, Chicago, Ill. Electric-lighting device	422,196	Feb. 25	2581	683	50	1077
Florence Motor Company. (See Parcellle, Albert L., assignor.)						
Florence Motor Company. (See Parkhurst, Edward B., assignor.)						
Florence Silk Company. (See Kennedy, John, assignor.)						
Flory, Alvin F., Washington, N. J. Stop-action for reed-organs	423,750	Mar. 18	2091	552	50	1548
Florimont, Peter A., Brooklyn, N. Y. Watch-case spring	441,833	Dec. 2	323	86	53	1327
Flory, Elie H., assignor of one-half to M. Fischer, Abbeville, La. Egg-carrier	422,197	Feb. 25	2583	683	50	1078
Flory, Llewellyn H., Ashley, Pa. Shutter fastener and bower	429,024	May 27	3023	776	51	1438
Flower, George K., Pittsburg, Pa. Type-writing machine	426,931	Apr. 29	3782	988	51	773
Flower, John G. (See Macdonald and Flower.)						
Flowers, Joseph W. (See Loos, Adam, assignor.)						
Floyd, James R., New York, N. Y. Gas-retort lid	438,881	Oct. 21	1875	498	53	369
Floyd, John N., and D. H. Morton, Handsworth, assignors to Tangyes, Limited, Soho, England. Compound pumping-engine	439,579	Oct. 28	2959	786	53	581
Floyd, Mattie E., administratrix. (See Stout, Robert A.)						
Floyd & Sons, James R. (See Ruscoe, John, assignor.)						
Floyd, William T., Clinton, Ill. Water-filter	439,645	Nov. 4	36	10	53	613
Fluck, William R. S., Palmyra, N. J., assignor of one-half to C. F. Dollmer, Philadelphia, Pa. Clasp for umbrellas	425,128 441,234	Apr. 8 Nov. 25	1069 2615	283 677	51 53	216 1133
Fluor, Casper, Oshkosh, Wis. Conductor for flat-roofed buildings	442,032	Dec. 2	634	171 172	53	1387
Flynn, John, Vail, Iowa. Check-row corn-planter	437,395	Sept. 30	3211	845	52	2021
Flynn, John J., St. Louis, Mo. Extension-ladder	421,071	Feb. 11	967	249	50	756
Flynn, Peter H., Los Angeles, Cal. Safety-bolt for whiffletrees	433,338	July 29	3575	922	52	723
Flynn, William E., Frankfort, S. D. End-gate fastener	431,885	July 8	1343	338 339	52	271
Focer, Daniel, Cape May, N. J., assignor of one-half to T. G. Lovegrove, Philadelphia, Pa. Boiler-alarm	432,027	July 15	1554	395	52	318
Focht, George, Hoboken, N. J. Door-spring	419,193	Jan. 14	824	217	50	177
Foerster, Emanuel, New York, N. Y. Stone-cutting machinery	419,194	Jan. 14	826	218	50	177
Foerster, Emanuel, New York, N. Y. Cutting stone						
Fogarty, John. (See Anderson and Fogarty.)						
Fogarty, John P., Bellefontaine, Ohio. Post-office distributing case	439,646	Nov. 4	36	10	53	614
Fogarty, Michael H., and C. A. Buchanan, assignors of one-third to C. D. Austin, Amsterdam, N. Y. Elevator	430,011	June 10	1377	342	51	1747
Föge, Carl H. C., C. H. Griese, and J. L. F. Raders, Hamburg, Germany. Coin-operated photographic apparatus	437,104	Sept. 23	2748	718	52	1923
Fogel, Adam. (See Zell, Benjamin F., assignor.)						
Fogg, Charles M., Philadelphia, Pa. Watch-bow fastener	425,375	Apr. 8	1436	384	51	287
Fogg, John A., et al. (See Nourse, James K. P., assignor.)						
Fogg, John A., et al. (See Turner, James J., assignor.)						
Foglesong, Washington, Dayton, Ohio. Machine for forming paper vessels	432,028	July 15	1556	395 396	52	319
Foglesong, Washington, Dayton, Ohio. Machine for making paper vessels	432,029	July 15	1558	396	52	319
Follens, James. (See Mertsheimer and Follens.)						
Foley, Bartholomew J., et al. (See Lewis, John F., assignor.)						
Foley, Frank P., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Car-heating apparatus	440,891	Nov. 18	2020	520	53	1013
Foley, George H., Philadelphia, Pa. Instrument-holder for music-stands	432,305	July 15	1989	508	52	399
Foley, James S., assignor of one-half to J. Ruse, Toronto, Ontario, Canada. Railway-telegraph	421,394	Feb. 18	1428	370	50	850
Foley, John B., New Haven, Conn. Gas-stove	421,258	Feb. 11	1227	318	50	806
Foley, Thomas J., Hartford, Conn. Mop-wringer	435,088	Aug. 26	2562	675	52	1281
Folger, Francis W., Nicholasville, Ky. Bottle-stopper fastener	420,493	Feb. 4	96	23	50	582
Folger, Francis W., Nicholasville, Ky. Machine for applying or attaching bottle-stoppers	420,494	Feb. 4	97	23	50	582
Follett, Charles, et al. (See Dowling, Robert H., assignor.)						
Follett, Charles H., et al. (See Dowling, Robert H., assignor.)						
Follett, Joseph W., New York, N. Y., and L. F. Marsh, Bristol, England. Letter-sheet envelope	424,413	Mar. 25	3115	826	50	1753
Follett, Melville C. (See Coon, Morian, and Follett.)						
Follmer, Charles J., et al. (See Rich, George, assignor.)						
Folmer, William F., assignor of one-half to W. E. Schwing, New York, N. Y. Gas-burner	419,651	Jan. 21	1495	400	50	319
Folmer, William F., assignor of one-half to W. E. Schwing, New York, N. Y. Gas-burner	419,652	Jan. 21	1497	400	50	319
Folmer, William F., assignor of one-half to W. E. Schwing, New York, N. Y. Igniting-torch	423,235	Mar. 11	1322	343	50	1395
Folsom, Andrew, Chelsea, Mass. Carriage-axle nut	443,828	Dec. 30	3592	923	53	1994
Folsom, Charles, New York, N. Y. Mailing-box	419,117	Jan. 7	697	184	50	147
Folsom, Charles H. (See Mahoney, William P., assignor.)						
Folsom, Fred N. (See Clark and Folsom.)						
Folsom, J. S., et al. (See Appleyard, Arthur E., assignor.)						
Folsom, John N., Providence, R. I. Locking vise	438,104	Oct. 7	670	182	53	129

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Folsom, John O., Cañon City, Oreg. Suspender-catch.....	436,653	Sept. 16	1997	522	52	1768
Folsom, John S., <i>et al.</i> (See Appleyard, Arthur E., assignor.)						
Folsom, John S., <i>et al.</i> (See Monto, Joseph, assignor.) (Reissue.)						
Folsom, William H., Ridgeland, Ill. Manifold-printing apparatus.....	440,892	Nov. 18	2021	520	53	1014
Foltz, Frederick S., United States Army. Railway-joint.....	430,939	June 24	2884	709	51	2055
Fonda, William B., <i>et al.</i> (See Snead, Harry V., assignor.)						
Fontaine, Eugene, Auburndale, Ohio. Railway time-signal.....	438,841	Oct. 21	1813	483	53	357
Fontaine, Patrick H., Elmo, Va. Machine for making wrought-metal bearing-boxes.....	442,430	Dec. 9	1246	322	53	1512
Fontaine, Patrick H., Elmo, Va. Railway-rail joint.....	443,076	Dec. 16	2329	594	53	1734
Foos Company, G. S. (See Funk, Daniel D., assignor.)						
Foos Company, G. S. (See Slager and Liun, assignors.)						
Foot, C. W., <i>et al.</i> (See Amstutz, Noah S., assignor.)						
Foot, Charles H., Chicago, Ill. Hot-blast stove.....	429,342	June 3	368	87	51	1541
Foot, Ernest N., assignor of one-half to A. De Laski, Cleveland, Ohio. Apparatus for making seamless rubber-lined hose.....	440,703	Nov. 18	1708	438	53	955
Foot, Ernest N., assignor to Cleveland Rubber Company, Cleveland, Ohio. Manufacturing seamless-tube rubber hose.....	441,754	Dec. 2	199	52	53	1302
Foot, Frank. (See Morse, Leonard W., assignor.)						
Foot, James B., assignor of one-half to L. W. Dennis, Fredericktown, Ohio. Wrench.....	427,472	May 6	674	169	51	945
Foot, James H., Cincinnati, Ohio. Window-sash.....	426,791	Apr. 29	3596	939	51	735
Foot, James H., Cincinnati, Ohio. Window-sash.....	426,792	Apr. 29	3598	939	51	736
Foot, James H., Cincinnati, Ohio. Window-sash.....	426,793	Apr. 29	3600	939	51	736
Foot, James H., Cincinnati, Ohio. Sash-fastener.....	426,794	Apr. 29	3602	939	51	736
Foot, Lewis A., Lansing, Minn. Seal.....	424,772	Apr. 1	528	142	51	104
Foot, Omer P., Newark, Ohio. Wrench.....	422,516	Mar. 4	220	58	50	1178
Foot, Richard R. (See Walter, John, assignor.)						
Foot, Theodore M., Boston, Mass. Magnetic coupling device.....	433,400	July 29	3654	944	52	739
Foot, Theodore M., Boston, Mass. Variable-speed gearing for electric cars.....	433,401	July 29	3655	944	52	739
Foot, Theodore M., Boston, Mass. Reversing-gear for electric cars.....	433,402	July 29	3657	945	52	739
Foot, Theodore M., Boston, Mass. Electric motor.....	434,180	Aug. 12	1113	299	52	984
Foot, Theodore M., Boston, Mass. Device for the adjustment and testing of electric cars.....	434,181	Aug. 12	1115	299	52	984
Foot, Theodore M., Boston, Mass. Automatic electric switch.....	435,490	Sept. 2	167	47	52	1407
Foot, Theodore M., Allston, assignor of one-half to C. J. Pillsbury, Boston, Mass. Secondary battery.....	431,341	July 1	464	115	52	95
Foot, Theodore M., assignor of one-half to C. J. Pillsbury, Boston, Mass. Printing-telegraph.....	434,261	Aug. 12	1242	321 322	52	1008
Forbes, Benjamin H. (See White, John M., assignor.)						
Forbes, George, Westminster, county of Middlesex, England. Electrical collecting device.....	427,259	May 6	362	94	51	881
Forbes, Henry D., Boston, Mass. Attachment for shelves.....	435,173	Aug. 26	2686	709	52	1304
Forbes, Isaac N., New York, N. Y. Lasting-machine.....	436,849	Sept. 23	2340	617 618 619	52	1844
Forbes, Isaac N., New York, N. Y. Lasting-machine.....	436,850	Sept. 23	2363	619	52	1847
Forbes, Isaac N., New York, N. Y. Lasting-machine.....	436,851	Sept. 23	2367	619 620 621	52	1848
Forbes, Isaac N., New York, N. Y. Lasting-machine.....	436,852	Sept. 23	2371	620 621 622	52	1849
Forbes, Isaac N., New York, N. Y. Lasting-machine.....	436,853	Sept. 23	2382	622 623	52	1851
Forbes, John, Brooklyn, N. Y. Feeding mechanism for sewing-machines.....	420,595	Feb. 4	239	63, 64	50	611
Forbes, Louis D., Berlin, assignor to Berlin Machine Works, Beloit, Wis. Abrading-cylinder.....	425,376	Apr. 8	1437	384 385	51	287
Forbes, Robert B., and S. S. Holly, Hale's Ford, Va. Spring-motor.....	433,076	July 29	3195	821	52	645
Forbes, Samuel D., Wilmington, Del. Spoke-socket.....	432,099	July 22	2596	664	52	525
Forbes, Walter T., Atlanta, Ga. Extracting oil.....	427,410	May 6	583	145 146	51	927
Forbes, Walter T., Atlanta, Ga. Centrifugal extractor.....	433,339	July 29	3576	922	52	723
Forbes, Walter T., Atlanta, Ga. Apparatus for extracting oil with the aid of solvents.....	436,227	Sept. 9	1313	342	52	1631
Forbes, Walter T., Atlanta, Ga. Apparatus for treating fibrous plants.....	439,032	Oct. 21	2095	561	53	412
Forbes, Walter T., Atlanta, Ga. Digester.....	439,033	Oct. 21	2097	562	53	413
Forbes, William H., Philadelphia, Pa. Car-starter.....	441,404	Nov. 25	2882	744	53	1184
Forbriger, Bruno, Schönefeld, near Leipzig, Saxony, Germany. Swing-tent.....	425,540	Apr. 15	1687	451	51	346
Force, William A. (See Sawyer and Force.)						
Force, William A. (See Spielmann, Charles, assignor.)						
Force, William L., Brooklyn, N. Y. Advertising article.....	441,149	Nov. 25	2449	635	53	1105
Ford, Alfred H., North Fitzroy, Victoria. Constructing sliding doors.....	442,220	Dec. 9	928	245 246	53	1451
Ford, Alfred N., assignor to New Wire Wove Roofing Company, (limited,) London, England. Water-proof composition for roofing, &c.....	423,042	Mar. 11	1041	-----	50	1341
Ford, Archibald H., and E. G. Wright, Portsmouth, county of Hants, England. Ventilation for sewers.....	419,764	Jan. 21	1659	440 441	50	349
Ford, Benjamin F., Portland, Me. Warp tension-regulating device for looms, &c.....	425,873	Apr. 15	2188	582	51	442
Ford, Charles S., Jr. (See Dillin and Ford.)						
Ford, David. (See Rieder and Ford.)						
Ford, Edward C., and G. T. Jacobs, assignors of one-third to S. D. Bailey, Washington, D. C. Roll-paper holder and cutter.....	429,566	June 3	702	170	51	1607
Ford, Elijah P., Wichita, Kans. Safety snap-hook.....	431,042	July 1	24	6	52	7
Ford, George H., assignor to Grille Company, New Haven, Conn. Harness-rosette.....	428,901	May 27	2841	722	51	1402
Ford, George M., Montreal, Quebec, Canada. Composition for plastering.....	420,068	Jan. 21	2045	-----	50	426
Ford, George R., Grand Rapids, Mich. Automatic boiler-cleaner.....	426,795	Apr. 29	3604	940	51	736
Ford, Harry, Lyndon, Kans. Timing apparatus for photographers.....	423,473	Mar. 18	1680	444	50	1472
Ford, Jane E., Ross Station, Wash. Steam-cooker.....	436,228	Sept. 9	1315	343	52	1631
Ford, John B. (See Niles and Ford.)						
Ford, John C., Beverly, Mo., assignor to W. Rees & Co., Keokuk, Iowa. Cutting and winding mechanism for printing-machines.....	441,476	Nov. 25	2999	772 773	53	1206
Ford, John M., Ashland, Ohio. Bale-fastener.....	435,218	Aug. 26	2745	725	52	1316
Ford, John O., Hollis, Tex. Cultivator.....	442,876	Dec. 16	1997	512	53	1669
Ford, Joseph, Palmyra, Mich. Egg-preserving apparatus.....	438,073	Oct. 7	623	170	53	119
Ford, Leon E., and A. J. Whitworth, McComb, Miss. Car-coupling.....	421,920	Feb. 25	2184	572	50	1003
Ford, M. L., <i>et al.</i> (See Meisel, Francis, assignor.)						
Ford, Micajah M., Dallas, and H. N. Revelle, Buchanan, Ga.; said Ford assignor to said Revelle. Lumber-way.....	423,389	Mar. 4	38	12	50	1144

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Ford, Simeon J., Placerville, Cal. Car-coupling.....	427,758	May 13	1118	280	51	1041
Ford, Simeon J., and R. Baird, Placerville, Cal. Fire-kindler.....	432,934	July 22	2945	754	52	593
Ford, Summerfield, Chicago, Ill. Cleaning attachment for type-writing machines.....	443,672	Dec. 30	3337	859	53	1945
Ford, Sydney, <i>et al.</i> (See Pead, Walter, assignor.)						
Ford, Terrance P., New York, N. Y. Tubular packing for steam-condenser tubes.....	433,282	July 29	3500	903	52	708
Ford, Thomas. (See Bardo and Ford.)						
Ford, Thomas M., <i>et al.</i> (See Pead, Walter, assignor.)						
Ford, Thomas P., assignor of one-half to W. A. Gibson, London, England. Controlling device for elevators.....	423,236	Mar. 11	1324	{ 343 344 }	50	1396
Ford, Thomas P., assignor of one-half to W. A. Gibson, London, England. Elevator.....	427,065	May 6	50	14, 15	51	819
Ford & Washburn. (See Washburn, George A., assignor.)						
Ford, William, Brooklyn, N. Y. Ladder for sleeping-cars.....	423,237	Mar. 11	1326	344	50	1396
Ford, William A., Indianapolis, Ind. Sash-balance.....	421,828	Feb. 18	2037	538	50	967
Ford, William E., <i>et al.</i> (See Whipple, John D., assignor.)						
Ford, William H., St. Louis, Mo. Gas-saving attachment for gas-stoves.....	436,562	Sept. 16	1850	487 756 757 758 759 760 761 762 763	52	1741
Ford, William H., St. Louis, Mo., assignor to Automatic Electric Exchange Company, East St. Louis, Ill. Automatic telephone-connection.....	435,295	Aug. 26	2860		52	1338
Ford, William T. (See Cowell, Hiram, assignor.)						
Foreband, Sullivan. (See Iye, Martin, assignor.)						
Foreman, Milton, Philadelphia, Pa. Automatic lasso for horses.....	425,771	Apr. 15	2037	{ 542 543 }	51	414
Foreman, Samuel E., Greenleaf, Kans. Crease-retaining device for hats.....	419,653	Jan. 21	1500	400	50	320
Foreman, Stanton. (See Elkins and Foreman.)						
Foreman, William C. (See Elkins and Foreman.)						
Forest, William E., New York, N. Y. Exercising-machine.....	434,439	Aug. 19	1526	398	52	1073
Forgie, William, Washington, Pa. Wrench for oil-well tools.....	422,879	Mar. 4	774	198	50	1284
Forkel, Frederick W., and A. B. Hunn, assignors to Perkins Lock Manufacturing Company, Cleveland, Ohio. Lock.....	438,803	Oct. 21	1732	{ 464 465 }	53	342
Forncrook, Henry. (See Shephard and Forncrook.)						
Forney, Matthias N., New York, N. Y. Safe-depository for railway-cars.....	436,055	Sept. 9	1048	272	52	1583
Forney, Matthias N., New York, N. Y. Car-seat.....	436,563	Sept. 16	1851	488	52	1741
Forrest, Frank E., <i>et al.</i> (See Ruttkar, Charles R., assignor.)						
Forrest, James F., Poynette, Wis. Safety-clevis.....	443,393	Dec. 23	2890	743	53	1851
Forrest, John H., Marion, Ind. Type-writing machine.....	438,617	Oct. 21	1433	387	53	288
Forrest, John W. (See Cobb, Winfield S., assignor.)						
Forrey, George J., Carlisle, assignor of one-half to J. W. Johnson, Reading, Pa. Nut-machine.....	432,522	July 22	2307	{ 507 598 }	52	470
Forry, Charles E., assignor to L. M. Devore, Freeport, Ill. Machine for grinding lawnmower knives.....	418,977	Jan. 7	501	125	50	105
Forshay, Harry C., New York, N. Y., assignor to J. S. Clark & Co., Newark, N. J. Coffin-fastener.....	428,335	May 20	1989	500	51	1219
Forsholm, Rasmus. (See Levi, Moritz, assignor.)						
Forster, Ferdinand E., New York, N. Y. Marine signal.....	440,741	Nov. 18	1761	453	53	966
Forster, John R., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Reversible latch.....	428,771	May 27	2650	671	51	1363
Forster, William, New Orleans, La. Tack-strip.....	422,198	Feb. 25	2585	684	50	1078
Forsyth, Henry C., <i>et al.</i> (See Brown, Theodore H., assignor.)						
Forsyth, Henry H., and H. H., Jr., Chicago, Ill. Clothes-lifter.....	432,523	July 22	2314	598	52	471
Forsyth, John H., Fargo, N. D. Automatic grain-scales.....	439,135	Oct. 28	2263	608	53	450
Forsyth, Thomas A. (See Ginn and Forsyth.)						
Forsythe, Joseph, Pittsburg, Pa. Rotary steam-engine.....	440,120	Nov. 4	741	195	53	754
Fort Wayne Organ Company. (See Vogel, Henry A., assignor.)						
Forter, Samuel, Latrobe, Pa. Crane.....	427,260	May 6	363	94, 95	51	882
Forter, Samuel, Pittsburg, Pa. Mill appliance.....	428,301	May 20	1938	487	51	1208
Forter, Samuel, Pittsburg, and J. Kennedy, Latrobe, Pa. Crane.....	442,877	Dec. 16	1998	{ 512 513 }	53	1670
Forth, Charles, Cleveland, Ohio. Automatic railway-switch.....	423,865	Mar. 18	2360	597	50	1581
Forth, Charles, Cleveland, Ohio. Sash-balance.....	424,414	Mar. 25	3116	826	50	1753
Fortier, John, Fridley, Minn. Car-coupling.....	419,933	Jan. 21	1926	507	50	405
Forwood, Reginald, New York, N. Y. Parallel ruler.....	443,959	Dec. 30	3778	964	53	2029
Foskett, William A., <i>et al.</i> (See Garland, Frank M., assignor.)						
Foss, Charles H., Tewksbury, Mass. Machine for grinding cards.....	428,082	May 20	1600	{ 406 407 }	51	1143
Foss, Fred. M., Rochester, Ill. Plow-clevis.....	438,536	Oct. 14	1304	353	53	257
Foss, Lewis T., and T. K. Keith, Boston, Mass. Type-writing machine.....	429,025	May 27	3024	777	51	1438
Foss, Lewis T., and T. K. Keith, Boston, Mass. Type-writing machine.....	438,916	Oct. 21	1923	512	53	378
Foss, Lewis T., and T. K. Keith, Boston, Mass. Type-writer.....	441,654	Dec. 2	36	10	53	1269
Foss, Webster F. (See Hill and Foss.)						
Foster, Alma A., Pomeroy, Ohio. Butter-worker.....	421,130	Feb. 11	1050	{ 269 270 }	50	772
Foster, Charles, <i>et al.</i> (See Houze, Luke, assignor.)						
Foster, Charles E., Washington, D. C., assignor to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus.....	425,028	Apr. 8	923	{ 245 246 }	51	187
Foster, Charles E., Washington, D. C., assignor to Hydraulic Elevator Company, Chicago, Ill. Elevator.....	443,273	Dec. 23	2695	691	53	1812
Foster, Charles J., Westbrook, Me. Pulp strainer and clearer.....	436,345	Sept. 16	1501	391	52	1677
Foster, Charles P. (See Williams, Orange, assignor.)						
Foster, Ephraim A., Port Clinton, Ohio. Combined can holder and filler.....	422,199	Feb. 25	2585	684	50	1078
Foster, Ephraim A., Port Clinton, Ohio. Napkin-supporter.....	433,340	July 29	3578	923	52	723
Foster, Ephraim A., Port Clinton, Ohio. Clothes-drier.....	433,859	Aug. 5	624	163	52	879
Foster, Frederick V., Dunkirk, N. Y. Carpet-stretcher.....	429,567	June 3	704	171	51	1607
Foster, George E., McPherson, Cal. Check-hook for harness.....	421,131	Feb. 11	1053	270	50	773
Foster, George N., Philadelphia, Pa., assignor of one-half to C. H. Sickles, East Hartford, Conn. Cake or baking pan.....	433,236	July 29	3431	887	52	693
Foster, George W., Port Chester, assignor of forty-five one-hundredths to T. C. Booth, New York, N. Y. Machine for preparing lint and other similar fibers.....	425,874	Apr. 15	2190	582	51	442
Foster, Horace, Sr., Knoxville, Tenn., assignor to B. Fairchild, Washington, D. C. Combined flour safe and sifter.....	425,772	Apr. 15	2038	543	51	414

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Foster, Horatio A., New York, N. Y. Order-book	443,189	Dec. 23	2559	657	53	1786
Foster, James T., Withington, England. Spool-holder	439,136	Oct. 28	2265	609	53	450
Foster, Jed. (See Miller and Foster.)						
Foster, John A. (See Pearson and Foster.)						
Foster, John W., Fall River, Mass. Yarn-winding machine	435,560	Sept. 2	276	77	52	1428
Foster, John W., Fall River, Mass. Machine for winding bobbins	436,521	Sept. 16	1774	468	52	1729
Foster, Joseph S., Salem, Mass. Game apparatus	430,228	June 17	1723	428	51	1824
Foster, Joseph S., Salem, Mass. Game apparatus	441,405	Nov. 25	2885	744	53	1185
Foster, Lucian M., Troy, N. Y. Canceling and registering ballot-box	434,661	Aug. 19	1886	492 493	52	1145
Foster, Marshal T., Madison, assignor of one-half to A. Wehrman, Emporia, Kans. Hub-attaching device	431,187	July 1	230	58	52	48
Foster, Michael A., St. Louis, Mo. Apparatus for consuming the gaseous products of rendering-tanks	425,314	Apr. 8	1353	361	51	271
Foster, Nathaniel C., Fairchild, Wis. Finishing end for railway-rails	431,654	July 8	971	242	52	201
Foster, Oscar S., Utica, N. Y. Bed-bottom	441,652	Dec. 2	34	10	53	1269
Foster, Oscar S., Utica, N. Y. Attachment for spring bed-bottoms	441,653	Dec. 2	35	10	53	1269
Foster, Robert, Seymour, Conn. Pile-warp-supplying mechanism for looms	428,902	May 27	2842	722	51	1402
Foster, Robert G. W., Toledo, Ohio. Vehicle-pole	424,106	Mar. 25	2634	701 702	50	1659
Foster, Samuel L., <i>et al.</i> (See Haslam, John P., assignor.)						
Foster, Samuel L., assignor of three-fourths to F. E. Gallagher, J. P. Haslam, and J. T. Ahrens, Wilmington, Del. Stop-motion	423,917	Mar. 25	2350	618	50	1606
Foster, Timothy H. (See Ayres, Edward F., assignor.)						
Foster, Walter T., Brooklyn, N. Y. Carriage-spring	427,261	May 6	366	95	51	882
Foster, William, and W. H. Millward, Brooklyn, N. Y.; said Millward assignor to said Foster. Steam-actuated valve	433,200	July 29	3383	875	52	683
Foster, William F., New York, N. Y. Glove-fastening	427,296	Sept. 30	3076	806	52	1991
Pottrell, John, Philadelphia, Pa. Insulating material	433,293	Aug. 5	676		52	889
Fouchs, Rudolph, New York, N. Y. Finger-ring	425,096	Apr. 8	1017	272	51	205
Fougeirol, Edouard. (See Servell and Fongeirol.)						
Foulds, Charles E., <i>et al.</i> (See Barter, John, assignor.)						
Foulds, Thomas, Trevorton, Pa. Exhaust-steam receiver	432,797	July 22	2758	705	52	556
Foulds, Thomas, assignor to himself, W. Graeber, and J. T. Heenan, Trevorton, Pa. Metallic railway-tie	443,939	Dec. 30	3748	958	53	2024
Fountain, George H., Plainfield, N. J. Thread-tension device for sewing-machines	437,430	Sept. 30	3303	862	52	2034
Fountain, George H., Plainfield, N. J. Sifter	439,937	Nov. 4	468	122	53	700
Fountain, John H., Ceresco, Mich. Spring-tooth cultivator	427,066	May 6	52	15	51	820
Fouquet, Leon C., Andale, Kans. Tree-protector	428,206	May 20	1773	448	51	1177
Fournier, Joseph A., Ottawa, Canada. Paper-file	436,766	Sept. 16	2181	573	52	1804
Fournier, Philandre, assignor to M. De Mars, Toledo, Ohio. Treadle	431,342	July 1	466	115	52	93
Foust, Thaddens A. (See Sykes and Foust.)						
Foust, William A., Renovo, Pa. Car-coupling link	419,934	Jan. 21	1927	508	50	405
Fouts, George W., <i>et al.</i> (See Demme, Charles F., assignor.)						
Fowler, Alfred B., Exeter, N. H. Rotary cutter and trimmer	425,214	Apr. 8	1205	319	51	244
Fowler, Alfred B., Exeter, N. H., assignor to O. A. Miller, Brockton, Mass. Boot-treemg machine	442,033	Dec. 2	636	172	53	1387
Fowler, Alfred B., Exeter, N. H., assignor to O. A. Miller, Brockton, Mass. Boot-treemg machine	442,034	Dec. 2	639	172 173	53	1388
Fowler, Alfred B., G. E. Warren, and W. C. Evans, assignors to Rockingham Machine Company, Exeter, N. H. Heel-burnishing machine	438,997	Oct. 21	2047	548	53	403
Fowler, Anderson. (See Cunningham, John, assignor.)						
Fowler, Arthur H., Buffalo, N. Y. Sectional boiler	425,415	Apr. 15	1500	403	51	309
Fowler, Charles A. (See Hunt and Fowler.)						
Fowler, Charles W., Cloverport, Ky. Adding-machine	437,889	Oct. 7	325	96	53	64
Fowler, Charles W., Baltimore, Md. Elevator	439,647	Nov. 4	37	10	53	614
Fowler, Edward G. (See Fowler, Nathaniel C., assignor.)						
Fowler, Frank. (See Ulmer and Fowler.)						
Fowler, Frank, and A. M. Ulmer, Philadelphia, Pa. Sash-fastener	423,751	Mar. 18	2092	553	50	1548
Fowler, Frank, and A. M. Ulmer, Philadelphia, Pa. Weather-strip for windows	423,752	Mar. 18	2093	553	50	1548
Fowler, Frank G., Bridgeport, Conn. Preparing feed-water for steam-boilers	423,423	Mar. 18	1609	421	50	1458
Fowler, Frank G., Bridgeport, Conn. Vulcanizing rubber	439,137	Oct. 28	2265	609	53	450
Fowler, George B., Brooklyn, N. Y. Adding-machine	432,266	July 15	1923	492	52	387
Fowler, George B., Brooklyn, N. Y., assignor of one-half to T. A. Keene. Clam-roaster	424,875	Apr. 1	666	181	51	132
Fowler, George L., Kingston, N. Y. Car-brake	424,773	Apr. 1	529	142	51	104
Fowler, Herbert E., New Haven, Conn., assignor of one-half to D. T. Hedges, Sioux City, Iowa. Welding metals by electricity	434,017	Aug. 12	847	223	52	930
Fowler, Jennie B., Bridgeport, Conn. Nursing-nipple	420,651	Feb. 4	323	83	50	627
Fowler, John C., and W. F. Ott, Marietta, Ga. Polishing marble	427,262	May 6	366	95, 96	51	882
Fowler, John W. (See Wood, William C., assignor.)						
Fowler, Joseph C., and E. A. Henkle, Washington, D. C. Reel for offset webs	432,233	July 15	1872	482	52	379
Fowler, Matthew D., East Fishkill, N. Y. Ink-eraser	423,238	Mar. 11	1327	344	50	1396
Fowler, Matthew D., East Fishkill, and C. H. White, Brinkerhoff, N. Y. Thill-coupling	420,596	Feb. 4	241	64	50	611
Fowler, Merwin, Durham, assignor of one-half to F. A. Lane, New Haven, Conn. Animal-trap	441,755	Dec. 2	201	53	53	1302
Fowler, Nathaniel C., Boston, assignor to E. G. Fowler, Cambridge, Mass. Heat-insulating compound	427,167	May 6	224		51	855
Fowler, William A. (See Watson, Oneall, assignor.)						
Fowler, William H. (See Sprague and Fowler.)						
Fowler, William M., New York, N. Y. Recording liquid-measure	433,461	Aug. 5	37	10, 11	52	764
Fowler, William R., Baltimore, Md. Fly-fan	437,921	Oct. 7	373	107	53	72
Fowler, Willie F. (See Shuford and Fowler.)						
Fownes, George E. (See Fownes, Henry and G. E.)						
Fownes, Henry, Newcastle-upon-Tyne, and G. E. Fownes, Cardiff, England. Crank-shaft.	440,555	Nov. 11	1460	376	53	898
Fox, Albert E. (See Story, Fox, and Hill.)						
Fox, Albert T., Kenosha, Wis. Whiffletree-hook	436,229	Sept. 9	1316	343	52	1632
Fox, Andrew M., Dayton, Ohio. Hedge-trimmer	442,035	Dec. 2	643	173	53	1388
Fox, Charles H., and M. Hegele, Delano, Cal. Bottle-stopper	428,248	May 20	1848	464	51	1192
Fox, Christian, Christiana, assignor of one-half to W. J. Aitkin, Gap, Pa. Sad-iron	428,836	May 27	2748	698	51	1383
Fox, Clarence W. (See Gupitill, Winslow W., assignor.)						
Fox & Company, Samuel. (See Jeffery and Simpson, assignors.)						
Fox, Daniel T., Independence, Kans. Invalid-bed	430,635	June 24	2385	582	51	1959
Fox, Edward B., Philadelphia, Pa. Eyeglasses	437,396	Sept. 30	3242	845	52	2022
Fox, Edwin M., Brooklyn, assignor to P. Hathaway, New York, N. Y. Thermometer	434,774	Aug. 19	2058	538	52	1178

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Fox, Frank A., San Francisco, Cal. Car-coupling	424,285	Mar. 25	2873	767	50	1706
Fox, Frank A., San Francisco, Cal. Car-coupling	429,026	May 27	3026	777	51	1438
Fox, George F., Jr. (See Story, Fox, and Hill, assignors.)						
Fox, George H., and H. F. Wheeler, Boston, Mass. Lock for fire-arms	422,930	Mar. 11	865	226	50	1309
Fox, Harrison W. (See Fox, Lyman W. and H. W.)						
Fox, Ivan, Philadelphia, Pa. Box	440,147	Nov. 11	784	206	53	771
Fox, James S., Detroit, Mich. Plow-point	419,935	Jan. 21	1928	508	50	405
Fox, James W. (See Smith and Fox.)						
Fox, Jefferson F., Fostoria, Ohio. Lamp-burner	437,684	Oct. 7	13	5	53	5
Fox, John W., Cleveland, Ohio. Carboy for acids	438,149	Oct. 14	737	202	53	148
Fox, L. Webster, <i>et al.</i> (See Reckenzaun, Anthony, assignor.)						
Fox, Lyman W. and H. W., Mount Pleasant, Pa. Slaw or kraut cutter	429,612	June 10	772	186	51	1631
Fox, Philo L., Bridgeport, Conn. Spirit-level	436,495	Sept. 16	1739	459	52	1722
Fox, Samson, Harrogate, county of York, England. Apparatus for the manufacture of articles from metallic plates	418,869	Jan. 7	330	80	50	69
Fox, Samson, Harrogate, county of York, England. Metallic brake-beam	419,603	Jan. 14	1420	380	50	298
Fox, Samson, Leeds, county of York, England. Sleeper for railways	429,613	June 10	772	186	51	1631
Fox, Samson, Harrogate, county of York, England, assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Under frame for cars	425,501	Apr. 15	1628	434	51	334
Fox Solid Pressed Steel Company. (See Barnes, David L., assignor.)						
Fox Solid Pressed Steel Company. (See Fox, Samson, assignor.)						
Fox Solid Pressed Steel Company. (See Hughes, Edward W. M., assignor.)						
Fox Solid Pressed Steel Company. (See MacKenzie-Hughes, Edward W., assignor.)						
Fox Solid Pressed Steel Company. (See Stirling, William R., assignor.)						
Fox Solid Pressed Steel Company. (See Voss, William, assignor.)						
Fox, William R., Grand Rapids, Mich. Miter-cutting machine. (Reissue)	11,062	Feb. 25	2853	753	50	1128
Fox, William R., Grand Rapids, Mich. Miter-cutter	422,517	Mar. 4	221	58	50	1178
Fox, William R., Grand Rapids, Mich. Dado-cutter	432,824	July 22	2792	714	52	563
Fox, William R., Grand Rapids, Mich. Miter-cutting machine	433,781	Aug. 5	512	133	52	856
Fox, William R., Grand Rapids, Mich. Miter-cutting machine	435,219	Aug. 26	2746	725	52	1316
Fox, William R., Grand Rapids, Mich. Low-water alarm	435,742	Sept. 2	555	147 148	52	1482
Foy, Peter, Freehold, N. J. Puzzle	428,083	May 20	1602	407	51	1143
Foye, James E. (See Foye, James N. and J. E.)						
Foye, James N. and J. E., Dubuque, Iowa. Excavator	429,027	May 27	3027	777 778	51	1438
Foye, William H., Jr., and W. H. Sr., Chicago, Ill. Bottling-machine	441,477	Nov. 25	3001	773	53	1206
Frackelton, David S., Minneapolis, Minn. Machine for fastening pickets to fence-wires	431,043	July 1	25	6	52	7
Frager, Alphonse, Paris, France. Electric meter	428,084	May 20	1602	407 408	51	1144
Fraley, William K. (See Norton, Lemuel F., assignor.)						
Fraley, William K., Lebanon, Ind. Wire fence	422,052	Feb. 25	2361	623	50	1036
Frane, Robert, and C. A. Neff, Newport, R. I. Water-closet	425,416	Apr. 15	1501	403	51	309
France, Joseph R. (See Colburn and France.)						
France, Joseph R., New York, N. Y. Apparel collar, cuff, &c.	418,787	Jan. 7	193	47	50	43
France, Joseph R., New York, N. Y. Cotton-fiber dust and preparing the same	420,447	Feb. 4	31	6	50	570
France, Joseph R., New York, N. Y. Making and attaching button-hole sections to celluloid articles	421,860	Feb. 18	2098	551	50	977
France, Joseph R., New York, N. Y. Water-proof collar, &c.	425,129	Apr. 8	1070	284	51	216
France, Joseph R., New York, N. Y. Manufacturing articles from pyroxyline compounds	420,520	June 17	2195	539 540	51	1916
France, Joseph R., Plainfield, N. J. Soluble nitro-cellulose and process of manufacture	420,445	Feb. 4	26	50	50	570
France, Joseph R., Plainfield, N. J. Insoluble nitro-cellulose and preparing the same	420,446	Feb. 4	29	50	50	570
Francis, Absalom, Liverpool, and E. Manbré, Garston, county of Lancaster, England. Furnace	419,007	Jan. 7	541	135	50	114
Francis, Allan E., Cleveland, Ohio. Graver-holder for engraving-machines	435,416	Sept. 2	56	19	52	1385
Francis, Allan E., Cleveland, Ohio. Turning-point attachment for engraving-machines	437,137	Sept. 23	2807	731	52	1934
Francis, Edward R. (See Drew and Francis.)						
Francis, George T., Newton, assignor to Pettec Machine Works, Newton Upper Falls, Mass. Coiler for carding-engines, &c.	432,132	July 15	1727	444	52	352
Francis, Graham I. (See Fairfield and Francis.)						
Francis, Joseph E., Thornhill, Canada. Car-coupling	436,346	Sept. 16	1502	391	52	1677
Francis, Peter, Petersburg, Va. Alarm-lock	427,441	May 6	584	146	51	927
Francisco, Charles F., assignor to one-eighth to G. Goodwin, San Diego, Cal. Car-coupling	425,166	Apr. 8	1138	301	51	229
Frank, Emil, Philadelphia, assignor to W. P. McClure, Norristown, Pa. Knitting-machine	419,513	Jan. 14	1290	344 345	50	270
Franc American Patent Can Opening Company. (See Waecher, Gustavus A., assignor.) (Reissue.)						
Frank, Ferdinand, Suisun, Cal. Clothes-drier	435,561	Sept. 2	278	77	52	1429
Frank, Ferdinand, Suisun, Cal. Sash-holder	435,966	Sept. 9	911	240	52	1556
Frank, François, Grass Valley, Cal. Combined cap, pillow, and life-preserver	419,765	Jan. 21	1661	441	50	350
Frank, Gustave. (See Pagenstecher, Albrecht, assignor.)						
Frank, Hermann O., Milwaukee, Wis. Solidifying colored fire	420,642	Feb. 4	311	50	52	625
Frank, Isaac W., Allegheny, Pa. Hydraulic crane	428,749	May 27	2620	664	51	1357
Frank, Leopold J. (See Behncke and Frank.)						
Frank, Louis H., New York, N. Y., assignor to J. Royle & Sons, Paterson, N. J. Routing-machine	431,513	July 1	738	181	52	147
Frank, Carl, Iselben, Prussia, Germany. Rock-drill	442,731	Dec. 16	1759	455	53	1621
Franke, John J., Pittsburg, Pa. Molding apparatus	435,743	Sept. 2	557	148 149	52	1483
Frankel, Alexander C., Newark, N. J. Trunk	428,274	May 20	1891	475	51	1200
Franken, Robert, Pomona, Cal. Hose-coupling	425,773	Apr. 15	2039	543	51	415
Franken, Robert, Pomona, Cal. Lawu-sprinkler	443,394	Dec. 23	2891	743	53	1851
Frankenberg, Anthony M., Baltimore, Md. Induction-coil	426,563	Apr. 29	3240	850	51	667
Franker, James F., Dodge City, Kans. Game-board	421,259	Feb. 11	1229	318	50	806
Franker, James F., Dodge City, Kans. Copy-holder	421,260	Feb. 11	1231	318	50	807
Franker, James F., Dodge City, Kans. Type-writer	421,921	Feb. 25	2185	573	50	1004
Franker, James F., Dodge City, Kans. Paper-holder	434,506	Aug. 19	1626	427	52	1094
Franklin, Benjamin. (See Cochran, George W., assignor.)						
Franklin, Edward A., Brenham, Tex., assignor to Bailey, Farrell & Co., Pittsburg, Pa. Cartridge-loading machine	441,616	Nov. 25	3217	828 829 830	53	1249
Franklin, Eugene, Greenville, S. C. Contact-brush for dynamos	435,296	Aug. 26	2882	763	52	1339

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Franklin, Isaac N., assignor of one-half to H. I. Stevens, Chicago, Ill. Convertible baby-jumper and swinging receptacle	439,648	Nov. 4	38	11	53	614
Franklin, James A., Wahash, Ind., assignor of one-half to S. Haggerty, Brooks, Kans. Tool-chest	425,215	Apr. 8	1206	320	51	244
Franklin, John W. A., Michigan City, Ind. Revolving chair and stool	437,188	Sept. 30	2913	759	52	1959
Franklin, Rhodolph H., assignor to C. C. Cummings, Brooklyn, N. Y. Multiple tool	435,890	Sept. 2	794	212	52	1528
Franklin, Rhodolph H., assignor to C. C. Cummings, Brooklyn, N. Y. Watch-maker's tweezers	437,647	Sept. 30	3617	946	52	2098
Franklin, Rhodolph H., assignor to C. C. Cummings, Brooklyn, N. Y. Manufacture of watch-keys	439,059	Oct. 21	2138	574	53	420
Franklin, Robert M., Galveston, Tex. Crab and fish trap	424,548	Apr. 1	176	49	51	37
Franks, Charles E., Houstonia, Mo. Barrel-stand	434,018	Aug. 12	848	223	52	930
Franks, Orrin G. (See Hard, Franks, and Loomis.)						
Franks, William H., Sonora, Tex. Car-coupling	442,771	Dec. 16	1817	470	53	1634
Franzel, Carl, Domstadt, Moravia, Austria-Hungary. Grain scalper, sheller, and peeling machine	426,796	Apr. 29	3605	940	51	737
Franzen, Asmus. (See Ross and Franzen.)						
Frary, Elisha, Brooklyn, N. Y. Key-fastener	420,932	Feb. 11	764	198	50	717
Fraser, Daniel, assignor to Excelsior Elevator Guard and Hatch Cover Company, New York, N. Y. Elevator-guard	421,395	Feb. 18	1429	371	50	851
Fraser, Daniel D., Boston, Mass. Whip-socket attachment	423,679	Mar. 18	1991	525	50	1530
Fraser, Duncan A., Chelsea, assignor of one-half to J. R. McLellan, Boston, Mass. Fire-escape	431,572	July 8	834	208	52	174
Fraser, George C., <i>et al.</i> (See Tavernier, Alphonse E., assignor.)						
Fraser, John R., Milwaukee, Wis. Method of and means for applying the expansive power of heat	432,182	July 15	1793	461	52	364
Fraser, William J., Milwaukee, Wis. Automatic fire-extinguisher	439,293	Oct. 28	2534	678	53	499
Fraser, William J., Milwaukee, Wis. Automatic fire-extinguisher	439,294	Oct. 28	2536	679	53	500
Fraser, William J., Milwaukee, Wis. Recording signaling system	439,295	Oct. 28	2539	680	53	500
Fraser, William S., Pittsburg, Pa. Shade and reflector for electric or other lights	442,577	Dec. 9	1483	381	53	1560
Fraue, William, Yonkers, N. Y. Potato-peeling knife	420,780	Feb. 4	493	129	50	659
Frawley, William H. (See McDonough and Green, assignors.)						
Frazier, Daniel A., Manacelona, Mich. Reversing-gear for steam-engines	439,592	Oct. 28	2980	791	53	586
Frazier, William A. (See Ripson, John D., assignor.)						
Frazier, William A. (See Ripson, John D., assignor.) (Reissue.)						
Frazeur, David C., and W. J. Davis, Newmarket, N. J. Wheel or pulley	436,409	Sept. 16	1610	425	52	1697
Frazier, George H. (See Sumner, Eben T., assignor.)						
Frazier, Harmon H., Alliance, Nebr. Harrow	427,412	May 6	586	146 147	51	928
Frear, Hugo P. (See Parkin, John, assignor.)						
Frear, William H., Washington, D. C. Portable fire-extinguisher	428,596	May 27	2378	605	51	1313
Freas, Louis, assignor to P. C. Dean, Pittsburg, Pa. Fence	435,297	Aug. 26	2883	763	52	1339
Fréchet, Athanase P., and P. M. Dupuis, Carson City, Nev. Safety gas-burner	436,230	Sept. 9	1317	343	52	1632
Fréchou, Jean E. (See Lasmolles and Fréchou.)						
Freck, Frank, Collinsville, Pa. Plow	441,478	Nov. 25	3003	773 774	53	1206
Frockmann, Hermann, T. Ballay, and A. Appel, Covington, Ky. Attachment for rocking-chairs, cradles, &c.	422,390	Mar. 4	40	12	50	1144
Fred, Matts, Hancock, Mich. Painter's implement	429,515	June 3	624	153	51	1591
Fredeen, Peter E. (See Nordenström, Johan O., assignor.)						
Frederick, James M. H., Akron, Ohio. Adjustable supporting-frame for poultry or other cooked meats	436,654	Sept. 16	1998	523	52	1769
Fredericks, Munro & Co. (See Sheibley, William J., assignor.)						
Fredericks, Thomas A. (See Smith, Edwin F., assignor.)						
Fredericks, Thomas A. (See Smith and Fredericks.)						
Fredigké, Charles C., Chicago, Ill. Vaginal tampon	435,491	Sept. 2	168	47	52	1407
Fredrickson, Christian, Chicago, Ill. Folding bay-window	422,585	Mar. 4	322	81	50	1197
Fredrickson, Christian, Chicago, Ill. Folding bay-window	436,066	Sept. 9	1063	276	52	1586
Fredrikson, Andrew J., Grand Rapids, Mich. Pocket-lighter	443,986	Dec. 30	3833	976	53	2040
Free, John R., Strathairn, Ontario, Canada. Guide-chart for type-writers	429,614	June 10	773	187	51	1631
Freehorn, William, Tivoli, N. Y. Cleaning the bottoms of vessels	429,125	June 3	29	7	51	1478
Freeden, Richard v. Walsrode, Prussia, Germany. Manufacture of gunpowder	429,516	June 3	624		51	1591
Freel, Dennis, Chariton, Iowa. Scoop-ditching shovel	440,260	Nov. 11	966	247	53	808
Freeland & Bradley. (See Burt, Elnathan P., assignor.)						
Freeland, William E. (See Gaines, Edward P., assignor.)						
Freeman, Clarence W., and W. H. McCauley, assignors of one-third to J. S. Johnson, Baltimore, Md. Paper-bag holder	442,578	Dec. 9	1481	381	53	1560
Freeman, Forrest E., Worthington, Minn. Horse-collar fastening	423,043	Mar. 11	1042	270	50	1342
Freeman, Francis I., Warren, Ohio. Balanced slide-valve	420,495	Feb. 4	98	24	50	582
Freeman, Francis I., Warren, Ohio. Steam-balanced valve for steam-engines	442,368	Dec. 9	1151	300	53	1493
Freeman, George F. (See Swindells, Peel, and Freeman.)						
Freeman, James F., Lawrence, Mass. Tool-holder	441,834	Dec. 2	324	86	53	1327
Freeman, James F., Lawrence, assignor to J. W. Brooks, trustee, Cambridge, Mass. Edg-trimming cutter	443,434	Dec. 23	2948	759	53	1862
Freeman, James H., Jr., Howard, Colo. Weighing and computing scales	431,456	July 1	652	163	52	131
Freeman, John A., and D. Donald, Penryn, county of Cornwall, England. Self-adjusting bearing	432,608	July 22	2426	625	52	493
Freeman, John R., Boston, Mass. Automatic fire-extinguisher	440,704	Nov. 18	1710	438 439	53	955
Freeman, Joseph L. (See Freeman, William H. and J. L.)						
Freeman, Leon W., Nashville, N. Y. Washing-machine	440,556	Nov. 11	1462	377	53	898
Freeman, Loranza D., Seymour, Mo. Show-rack	440,629	Nov. 18	1586	408	53	931
Freeman, Manfred. (See Sherlock and Freeman.)						
Freeman, Michael. (See Freeman and Davis.)						
Freeman, Michael, assignor to S. Freeman & Sons Manufacturing Company, Racine, Wis. Broadcast seeder	435,691	Sept. 2	492	130	52	1470
Freeman, Samuel D., Swan Bluff, Tenn. Plow-point	423,918	Mar. 25	2352	619	50	1606
Freeman, Simon J., Bradford, Pa. Car-coupling	424,192	Mar. 25	2749	733	50	1682
Freeman & Sons Manufacturing Company, S. (See Freeman, Michael, assignor.)						
Freeman & Sons Manufacturing Company, S. (See Freeman and Davis, assignors.)						
Freeman, Stephen and M., and W. E. Davis, assignors to S. Freeman & Sons Manufacturing Company, Racine, Wis. Feed-cutter	429,432	June 3	503	120	51	1569

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Freeman, Sullivan A., Boston, Mass., assignor to American Steel Car Wheel Company, Portland, Me. Die for upsetting cast-steel car-wheels	430,121	June 17	1563	389	51	1793
Freeman, Walter K., Brooklyn, N. Y., assignor to W. S. Hadaway, Jr., trustee, Boston, Mass. Dynamo-electric machine	440,424	Nov. 11	1254	324	53	858
Freeman, Walter K., Brooklyn, N. Y., assignor to W. S. Hadaway, Jr., trustee, Boston, Mass. Current-collector for dynamo-electric machines	440,425	Nov. 11	1255	325	53	858
Freeman, Walter K., Brooklyn, N. Y., assignor to W. S. Hadaway, Jr., trustee, Boston, Mass. Dynamo-electric machine	440,557	Nov. 11	1462	377	53	898
Freeman, Walter K., Brooklyn, N. Y., assignor to W. S. Hadaway, Jr., trustee, Boston, Mass. Dynamo-electric machine	441,793	Dec. 2	258	68, 69	53	1314
Freeman, Walter K., Brooklyn, N. Y., assignor to W. S. Hadaway, Jr., trustee, Boston, Mass. Regulator for dynamo-electric machines	441,794	Dec. 2	259	69, 70	53	1315
Freeman, William C., Louisiana, Mo. Machine for making potato-mashers	427,981	May 13	1454	368	51	1104
Freeman, William C., Louisiana, Mo. Rolling-pin	434,262	Aug. 12	1244	322	52	1008
Freeman, William H. and J. L., Shell, Ohio. Boiler-lever	428,837	May 27	2749	699	51	1383
Freeman, Winfield. (See Rogers, Charles S., assignor.)						
Freeport Hardware Manufacturing Company. (See Linsley, Newton, assignor.)						
Freeport Hardware Manufacturing Company. (See Redlinger, Michael, assignor.)						
Freeport Hardware Manufacturing Company. (See Taxis, Gideon R., assignor.)						
Freer, William E., Norwalk, Ohio. Attachment for printing-presses	437,105	Sept. 23	2750	719	52	1923
Freese, Claus, St. Louis, Mo. Car-step	428,168	May 20	1722	436	51	1167
Freese, Francis J. (See French and Freese.)						
Frei, Frederick, <i>et al.</i> (See Genett, Louis J., assignor.)						
Frei, Gustav A., Boston, Mass., assignor to Bernstein Electric Light Manufacturing Company, Portland, Me. Cut-out	421,396	Feb. 18	1430	371	50	851
Frei, Gustav A., Boston, Mass., assignor to Bernstein Electric Company, Portland, Me. Ampère meter	423,600	Mar. 18	1857	490	50	1504
Frei, Peter, <i>et al.</i> (See Genett, Louis J., assignor.)						
Freismuth, Franz B., assignor of one-half to W. B. Burford, Indianapolis, Ind. Mask attachment for printing-presses	439,870	Nov. 4	361	93	53	678
Fremont Cultivator Company. (See O'Brian, Leonard W., assignor.)						
Fremont Cultivator Company. (See Schofield, James D., assignor.)						
French, Alvah S., New York, N. Y., assignor to French Fastener Company, of New Jersey. Shoe-fastener	423,601	Mar. 18	1858	490	50	1504
French, Arthur S. (See Hughes, Charles D., assignor.)						
French, Benjamin J., and J. H. Carroll, De Smet, S. D. Car-coupling	442,772	Dec. 16	1818	471	53	1634
French, Charles A. (See Randel and French.)						
French, Charles A., assignor of one-half to C. K. Tenny, Madison, Wis. Back-guard for circular saws	421,861	Feb. 18	2100	551	50	977
French, Charles H. (See Heald and French.)						
French, Charles H., <i>et al.</i> (See Elliott, Richard P., assignor.)						
French, Christopher H. (See Gifford and French.)						
French, Edward B. (See Wells and French.)						
French Fastener Company. (See French, Alvah S., assignor.)						
French, Franklin H. (See Doddridge, Loyal M., assignor.)						
French, Fred. R., Brockton, Mass. Clothes-line reel	424,054	Mar. 25	2558	683	50	1645
French, Frederick, London, county of Middlesex, England. Apparatus for printing indexes	427,229	May 6	312	80	51	873
French, Hiram W., Allegheny, Pa. Felting-machine	425,604	Apr. 15	1784	478 } 479 }	51	361
French, James C., Brooklyn, N. Y. Vault-light frame	427,067	May 6	53	15	51	820
French, John C., Concord, N. H. Shoe	429,267	June 3	230	58	51	1516
French, Justus W. (See Stiles, George A., assignor.)						
French, La Martine, Chicago, Ill. Lock for satchels, trunks, &c.	439,138	Oct. 28	2266	609	53	450
French, Philo N., assignor to A. French Spring Company, (limited,) Pittsburg, Pa. Door-hanger	422,200	Feb. 25	2586	684	50	1078
French, Robert E. (See Getchell and French.)						
French Spring Company, A. (See French, Philo N., assignor.)						
French Spring Company, A. (See Morris, George W., assignor.)						
French, William E. P., Fort Snelling, Minn. Return-ball	439,396	Oct. 28	2695	717	53	530
French, Zachary T., and W. C. Meyer, Boston, Mass. Shuttle for sewing-machines	424,966	Apr. 8	826	220	51	168
French, Zachary T., Boston, and F. J. Freese, Lowell, Mass. Sewing-machine	427,068	May 6	54	15, 16	51	820
Frenier, John H., Rutland, Vt. Stone-sawing machine	432,183	July 15	1796	462	52	364
Frenier, Joseph, Bushnell, Ill. Wheel	432,234	Apr. 1	417	110	51	82
Frenzel, John A., Wausan, Wis. Car-coupling	428,389	May 20	2084	523 } 524 }	51	1238
Freichs, Frederick W. A., St. Louis, Mo. Making alkaline carbonates and acetone	430,734	June 24	2555		51	1992
Fresco, Joseph A., assignor to Count de la Salle de Rocheaure and E. Latte, Angers, France. Paper-file	421,827	Feb. 18	2036	538	50	966
Frese, Bernard, Chicago, Ill. Stem winding and setting watch	419,654	Jan. 21	1500	401	50	320
Frese, Henry. (See Underwood and Frese.)						
Fretz, Edmund H. (See Deschler and Fretz.)						
Frendenfeld, Henry J., Milwaukee, Wis. Stop and waste cock	424,774	Apr. 1	531	143	51	104
Freudenfeld, Henry J., Milwaukee, Wis. Compressed-air water-elevator	424,775	Apr. 1	532	143	51	104
Freund, Abraham L., Chicago, Ill. Bed-pan	435,058	Aug. 26	2517	665	52	1272
Frey, Arnold C., Wilkinsburg, Pa. Electric switch	432,234	July 15	1874	482	52	379
Frey, August A., Pratteln, Switzerland, assignor to A. Holinger, Chicago, Ill. Heat-pre-serving apparatus	411,835	Dec. 2	325	86	53	1327
Frey, Benedict, New York, N. Y., and H. Loges, Newark, N. J. Vent-faucet	429,433	June 3	504	121	51	1569
Frey, Charles E., <i>et al.</i> (See Frey, John A., assignor.)						
Frey, Charles P., East Greenbush, N. Y. Portable reflecting galvanometer	438,882	Oct. 21	1877	498	53	369
Frey, Elmer B. (See Leifer, William, assignor.)						
Frey, Frederick E., assignor to Frey-Sheckler Company, Bucyrus, Ohio. Brick or tile cutting machine	421,691	Feb. 18	1855	485 } 486 } 487 }	50	933
Frey, Frederick E., assignor to Frey-Sheckler Company, Bucyrus, Ohio. Tile-cutting table	421,692	Feb. 18	1858	487	50	933
Frey, Frederick L., <i>et al.</i> (See Hacker, Benjamin K., assignor.)						
Frey, James H., Cincinnati, Ohio. Mechanical power	441,868	Dec. 2	380	99	53	1339
Frey, John A., Brooklyn, N. Y., assignor to C. E. Frey, Jersey City, N. J., and W. Vogel & Bros., Brooklyn, N. Y. Metal can or vessel	420,781	Feb. 4	493	129	50	660
Frey, John A., assignor to W. Vogel & Brothers, Brooklyn, N. Y., and C. E. Frey, Jersey City, N. J. Gas-stove	424,967	Apr. 8	827	220	51	168
Frey, John C., Rochester, N. Y. Burial-casket	422,880	Mar. 4	778	198	50	1285
Frey, Marie, assignor of one-half to A. Brecher, Milwaukee, Wis. Hood	427,263	May 6	369	96	51	883
Frey, Rudolph E., St. Louis, Mo. Book	436,496	Sept. 16	1740	460	52	1723

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Frey-Sheckler Company. (See Frey, Frederick, assignor.)						
Friar, Latharo M. (See Martin and Friar.)						
Frick, Jacob. (See Sheeley, David C., assignor.)						
Frick, John, Laramie, Wyo. Gun-lock	426,004	Apr. 22	2416	639	51	493
Frick, John, Laramie, Wyo. Cane-gun	426,373	Apr. 22	2942	773	51	600
Frick, John, Laramie, Wyo. Breech-loading fire-arm	428,597	May 27	2379	605	51	1313
Fricke, Richard, and L. Schütz, Dresden, Germany. Apparatus for gathering and classifying printed and folded sheets of paper	428,598	May 27	2381	605	51	1314
Fridley, David H., and H. M. Nester, Hendricks, W. Va. Blacksmith's buttress	434,560	Aug. 19	1707	446	52	1110
Friedheim, Emil. (See Mellenthin, Richard, assignor.)						
Friedrich, Jacob M. (See Cochrane, Seabird H. B., assignor.)						
Friedman, Esta, <i>et al.</i> (See Paci, Giuseppe, assignor.)						
Friedman, Herman S. (See Herr, Homer A., assignor.)						
Friedman, Monroe J. (See Barley, Wesley, assignor.)						
Friedmann, Alvin B., Minnesota Lake, Minn. Curry-comb rack	423,085	May 20	1605	408	51	1144
Friedrick, Alphonse, Baldwin, N. Y. Fountain for watering stock	428,838	May 27	2751	699	51	1384
Friend, John T., Irvine, Ky. Car-coupling	437,488	Sept. 30	3391	889	52	2054
Friend, Lucy E., Sydney, New South Wales. Attachment for clothes-props	430,012	June 10	1379	343	51	1748
Friend, William, New York, N. Y. Utilizing rubber for erasive purposes	443,614	Dec. 30	3243		53	1928
Friend, William, New York, N. Y. Rubber eraser	443,615	Dec. 30	3244	833	53	1928
Friend, William, New York, N. Y. Rubber eraser	443,616	Dec. 30	3245	833	53	1928
Friend, William, New York, N. Y. Rubber eraser	443,617	Dec. 30	3246	834	53	1928
Frierson, Luther L. (See Barker, Jacob, assignor.)						
Frierson, Luther L. (See Barker and Frierson.)						
Frierson, Luther L. (See Rich, John F., assignor.)						
Frierson, Luther L., Mount Pleasant, Tenn. Closure for barrels, &c	431,940	July 8	1413	359	52	285
Frierson, Luther L., Mount Pleasant, Tenn. Nut-lock	431,966	July 8	1457	369	52	293
Frierson, Luther L., Mount Pleasant, and J. Barker, Columbia, Tenn. Packing and refrigerating vessel	431,941	July 8	1414	359	52	285
Frierson, Luther L., Mount Pleasant, and J. Barker, Columbia, Tenn. Packing and refrigerating vessel	431,942	July 8	1416	359	52	285
Frierson, Luther L., Mount Pleasant, and J. Barker, Columbia, Tenn. Packing and refrigerating vessel	432,868	July 22	2851	730	52	575
Fries, Charles, and W. H. Richardson, Philadelphia, Pa., assignors of one-third to L. T. Ballinger, Bedford, N. J. Fruit-jar	442,431	Dec. 9	1248	322	53	1512
Friess, Alphonse, and J. Walzer, Bienne, Switzerland. Motor	425,097	Apr. 8	1018	272	51	205
Friess, Louis, New York, N. Y. Indicator for dumb-waiters, &c	426,257	Apr. 22	2780	730	51	567
Friedstedt, Luther P., Chicago, Ill. Method of and apparatus for supporting and lowering foundations of buildings	435,492	Sept. 2	170	47	52	1407
Frink, Herbert J., <i>et al.</i> (See Taylor and Bradburn, assignors.)						
Frink, William B., Revere, assignor of one-half to W. Stirling, Watertown, Mass. Apparatus for the manufacture of oil-gas	423,044	Mar. 11	1043	271	50	1342
Frisbie, Dennis. (See Mallett, Francis W., assignor.)						
Frisbie, Samuel, Unionville, assignor to Upson Nut Company, Farmington, Conn. Bench-plane	423,424	Mar. 18	1609	422	50	1458
Frist, Robert P., Wilmington, Del. Article of chemically-treated fibrous material and making the same	422,760	Mar. 4	574	147	50	1246
Frist, Robert P., Wilmington, Del. Manufacture of rods of parchmentized fiber	424,876	Apr. 1	687	181	51	132
Fritch, Sylvester, assignor of one-half to I. W. Funck, Beatrice, Nebr. Producing fiber	432,825	July 22	2794		52	563
Frith, Thomas F. (See Stokes and Frith.)						
Fritsch, Adolf, Suisun, Cal. Cigar or cigarette holder	439,649	Nov. 4	39	11	53	614
Fritz, John R. (See McDill, Samuel F., assignor.)						
Fritz, Oliver, Stephen, Minn. Combined chair, desk, and table	427,413	May 6	588	147	51	928
Fritz, Theodore H., Cass City, Mich. Wall-paper exhibitor	425,417	Apr. 15	1502	403	51	310
Frizell, Joseph P., Boston, Mass., assignor to Ainslie, Cochran & Co., Louisville, Ky. Pivoted hydraulic gate	434,386	Aug. 12	1424	373	52	1046
Frizell, Joseph P., Boston, Mass., assignor to Ainslie, Cochran & Co., Louisville, Ky. Reciprocating hydraulic gate	435,298	Aug. 26	2884	764	52	1339
Frobisher, Benjamin C., Brockton, assignor to C. E. Ames, Whitman, Mass. Stove-polish	421,564	Feb. 18	1675		50	897
Froelich, John G., Philadelphia, Pa. Clamping mechanism	423,992	Mar. 25	2461	655	50	1627
Froelich, Oscar O. B., Jersey City, N. J. Making antimony fluorides	431,044	July 1	26		52	7
Froh, George, Philadelphia, Pa. Globe for gas or oil lamps	424,776	Apr. 1	534	143	51	105
Frölich, Julius, Barmen, Germany. Rock-drill	435,139	Aug. 26	2635	639	52	1295
Frölich, Julius, Barmen, Germany. Valve	436,578	Sept. 16	1881	495	52	1747
Fromm, Ludwig, Pforzheim, Germany. Metallic thermometer	439,239	Oct. 28	2439	654	53	482
Frömming, August, Lanham, Kans. Plane	440,558	Nov. 11	1464	377	53	899
Fronefield, Horace, and J. M. Price, Philadelphia, Pa. Mower or harvester cutter	436,472	June 17	2126	532	51	1902
Frost, Abel H., and F. L. Bryant, Chicago, Ill. Mattress-making machine	443,673	Dec. 30	3339	859	53	1945
Frost, Albert C. (See Pemberton, Samuel, assignor.)						
Frost & Co., George. (See Preston, Charles A., assignor.)						
Frost, Edward, <i>et al.</i> (See Bremen, George J., assignor.)						
Frost, Eli C., Elmira, N. Y. Cooking-stove	426,496	Apr. 29	3146	826	51	649
Frost, George, <i>et al.</i> (See Smith, Edward S., assignor.)						
Frost, George A., <i>et al.</i> (See Smith, Edward S., assignor.)						
Frost, John, assignor to himself and G. W. Lininger, Omaha, Nebr. Mop-wringer	442,773	Dec. 16	1830	471	53	1635
Frost, John B., Naperville, Ill. Rein-button	442,176	Dec. 9	860	230	53	1439
Frost, Leonard L., Barada, Nebr. Hoop-retaining attachment	420,680	Feb. 4	358	94	50	633
Frost, Leonard L., Barada, Nebr. Spirally-crimped hoop	426,258	Apr. 22	2781	730	51	567
Frost, Leonard L., Barada, Nebr. Hoop for coopers' ware	440,999	Nov. 18	2192	566	53	1046
Frost, Nathaniel N., Malden, assignor of two-thirds to A. Coffin, Gloucester, and E. S. Merchant, West Newton, Mass. Automatic water-ejector for vessels	422,391	Mar. 4	41	12	50	1145
Frost, Richard L., assignor to Union Manufacturing Company, Battle Creek, Mich. Steam-engine valve	421,355	Feb. 11	1368	354	50	831
Frost, Richard L., assignor to Union Manufacturing Company, Battle Creek, Mich. Steam-actuated valve	428,672	May 27	2494	634	51	1333
Frost, Richard L., assignor to Union Manufacturing Company, Battle Creek, Mich. Condenser for steam-pumps	429,808	June 10	1056	260	51	1685
Frost, Richard L., assignor to Union Manufacturing Company, Battle Creek, Mich. Steam-actuated valve	431,045	July 1	27	6	52	7
Frost, William G., Lebanon, Ind. Fence	425,774	Apr. 15	2040	543	51	415
Frost, William R. (See Richey and Frost.)						
Frostad, Peter E., La Conner, Wash. Gaff-joint for vessels	435,926	Sept. 9	856	224	52	1546

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Fry, George, Holden, Mo. Post-hole auger	438,760	Oct. 21	1674	449	53	331
Fry, Greenwood, Cottageville, Ky., assignor of one-half to H. M. Crawford, Los Angeles, Cal. Corn-planter	441,795	Dec. 2	261	70	53	1315
Fry, James B., and J. Zink, Wigner, Ohio. Tube-cutter	441,479	Nov. 25	3005	774	53	1207
Fry, Jay W., Lake Forest, Ill. Smoke consumer or burner	442,677	Dec. 16	1634	421	53	1599
Fry, Samuel, New Orleans, La. Book or parcel carrier	423,380	Mar. 11	1539	404	50	1436
Fry, Stephen D., Attica, Ind. Combined step-ladder, cot, ironing-board, and chair	432,869	July 22	2853	730	52	576
Frye, John J. (See Stevens, Ansel, assignor.)						
Fryer, George G., Philadelphia, Pa. Electrical apparatus for driving Artesian wells	422,201	Feb. 25	2587	684	50	1078
Fuel Gas and Light Improvement Company of America. (See Mackenzie, Philip W., assignor.)						
Fuel Gas and Manufacturing Company. (See Dutton, Chauncey N., assignor.)						
Fuel Gas and Manufacturing Company. (See Rund, Edwin, assignor.)						
Fueller, Henry, Allegheny, Pa. Seat for pistons of triple valves	422,392	Mar. 4	41	12	50	1145
Fuerste, Charles, Guttenberg, Iowa. Working body churn	420,049	Jan. 28	2105	556	50	446
Fuerth, William G., Newark, N. J., assignor to Redding Ink and Duplicator Company, of New Jersey. Ink	437,588	Sept. 30	3541		52	2082
Fuerth, William G., Newark, N. J., assignor to Redding Ink and Duplicator Company, of New Jersey. Reduplicating apparatus	440,756	Nov. 18	1795	464	53	971
Fuerth, William G., Newark, N. J., assignor to Redding Ink and Duplicator Company, of New Jersey. Inking appliance	440,824	Nov. 18	1915	492	53	992
Fuerth, William G., Newark, N. J., assignor to Redding Ink and Duplicator Company, of New Jersey. Typographing stenciling material	441,235	Nov. 25	2616	677	53	1133
Fuhlhage, William, Jr., Yates Centre, Kans. Corn-harvester	429,211	June 3	161	39	51	1502
Fuhrman, Lewis P. (See Conroy and Fuhrman.)						
Fulda, Edward. (See Fulda, Lamartine R., assignor.)						
Fulda, Lamartine R., assignor of one-half to E. Fulda, San Francisco, Cal. Hoop-coupling	441,869	Dec. 2	381	100	53	1340
Fulgham, Emma R. (See Henley and Fulgham, assignors.)						
Fulgham, Jesse P. (See Henley and Fulgham.)						
Fulkerson, James F., Raum, Ill. Fence	441,546	Nov. 25	3104	797	53	1227
Fullaway, Walter L., Philadelphia, Pa. Cuff retainer or holder	424,777	Apr. 1	535	144	51	105
Fuller, Arthur, <i>et al.</i> (See Coy and Paul, assignors.)						
Fuller, Arthur, <i>et al.</i> (See Gordon, William, assignor.)						
Fuller, Benjamin F., McMinnville, Oreg. Clothes-drier	429,378	June 3	426	100	51	1552
Fuller, Charles W. B., Malden, and J. W. Plummer, Somerville, assignors, by mesne assignments, to I. P. T. Edmands, trustee, Boston, Mass. Heel-trimming machine	431,343	July 1	467	$\left\{ \begin{array}{l} 115 \\ 116 \end{array} \right\}$	52	95
Fuller, Drusilla M., Brooklyn, N. Y. Hat-support	426,721	Apr. 29	3492	914	51	715
Fuller, Duncan M., Akron, Ohio. Paper-maker's felt	431,112	July 1	121		52	26
Fuller, Frederick L., Norwich, Conn. Making time-records or pay-rolls for employes	431,344	July 1	469	$\left\{ \begin{array}{l} 116 \\ 117 \end{array} \right\}$	52	96
Fuller, Frederick L., Norwich, Conn. Workman's time-recorder	435,582	Sept. 2	310	$\left\{ \begin{array}{l} 86, 87 \\ 43 \\ 45 \end{array} \right\}$	52	1435
Fuller, Frederick L., and G. H. Griswold, Waterbury, Conn., assignors to Union Cash Register Company, Trenton, N. J. Cash register and indicator	420,554	Feb. 4	175	$\left\{ \begin{array}{l} 43 \\ 44 \end{array} \right\}$	50	598
Fuller, Frederick L., and G. H. Griswold, Waterbury, Conn., assignors to Union Cash Register Company, Trenton, N. J. Cash-indicator	420,555	Feb. 4	180	45, 46	50	599
Fuller, George, <i>et al.</i> (See Portlock, Warren, assignor.)						
Fuller, George R., Rochester, N. Y. Lock for velocipedes	440,949	Nov. 18	2118	550	53	1032
Fuller, George R., Rochester, N. Y. Lock for bicycles	441,949	Dec. 2	499	133	53	1362
Fuller, Georgianna, Gloversville, N. Y. Catamenial sack	438,537	Oct. 14	1305	353	53	258
Fuller, Hugh H. (See Fuller, Samuel L. and H. H.)						
Fuller, Ira A., Pepin, Wis. Water-level indicator and alarm	423,680	Mar. 18	1993	525	50	1530
Fuller, Isham D., assignor, by mesne assignments, to Fuller Watchman's Electrical Detector Company, Chicago, Ill. Watchman's time-recorder	443,435	Dec. 23	2949	759	53	1862
Fuller, James C., and W. A. Lee, Winfield, Kans. Seeding-machine	443,643	Dec. 30	3290	$\left\{ \begin{array}{l} 848 \\ 849 \end{array} \right\}$	53	1936
Fuller, James E., East Orange, assignor to Electric Cutlery Company, Newark, N. J. Razor	436,056	Sept. 9	1049	272	52	1583
Fuller, James W., St. Paul, Minn. Jar-sealing device	433,937	Aug. 12	742	193	52	912
Fuller, Levi K., assignor to Estey Organ Company, Brattleborough, Vt. Reed-organ	430,382	June 17	1993	492	51	1877
Fuller, Samuel B. (See Miller, Lee A., assignor.)						
Fuller, Samuel L., Columbus, and H. H. Fuller, Delaware, Ohio. Sulky	441,480	Nov. 25	3006	774	53	1207
Fuller, Solomon, Danvers, Mass. Wheel-hoe	426,639	Apr. 29	3360	881	51	690
Fuller, W. S., <i>et al.</i> (See Robinson, Clark, assignor.)						
Fuller Watchman's Electrical Detector Company. (See Fuller, Isham D., assignor.)						
Fuller, Willard H., Passaic, N. J., assignor to Scovill & Adams Company, New York, N. Y. Photographic-plate holder	428,809	May 27	2703	686	51	1374
Fuller, Willard H., Passaic, N. J., assignor to Scovill & Adams Company, New York, N. Y. Photographic camera	436,347	Sept. 16	1503	392	52	1677
Fuller, Willard H., Passaic, N. J., assignor to Scovill & Adams Company, New York, N. Y. Roll-holder for photographic cameras	439,650	Nov. 4	40	12	53	614
Fuller, Willard H., Passaic, N. J., assignor to Scovill & Adams Company, New York, N. Y. Roll-holder	439,651	Nov. 4	42	12	53	615
Fuller, William H., Bladen, Nebr. Cultivator	419,936	Jan. 21	1929	508	50	405
Fuller, William H., Bladen, Nebr. Cultivator. (Reissue)	11,134	Dec. 23	3044	783	53	1881
Fuller, Willy S., Orange, Tex., assignor of two-thirds to J. A. Broussard and S. H. Wilson. Automatic fire-extinguisher	443,912	Dec. 30	3700	947	53	2015
Fullerton, George A. (See Duncan and Fullerton.)						
Fullerton, George A., assignor to G. H. P. Flagg, trustee, Boston, Mass. Pasting-machine	424,472	Apr. 1	42	12	51	11
Fullerton, George A., assignor to G. H. P. Flagg, trustee, Boston, Mass. Machine for folding abrasive belts	432,030	July 15	1559	$\left\{ \begin{array}{l} 397 \\ 398 \end{array} \right\}$	52	319
Fullerton, George A., Boston, Mass., assignor to Facile Bottle Stopple Company, New York, N. Y. Bottle-making machine	426,497	Apr. 29	3147	$\left\{ \begin{array}{l} 826 \\ 827 \\ 828 \end{array} \right\}$	51	649
Fullford, Edwin, assignor of one-half to H. T. Van Lauu, Clapton, county of Middlesex, England. Regenerative gas-lamp	433,341	July 29	3578	923	52	723
Fulmer, Jacob, Asheville, N. C. Exhaust-nozzle	439,499	Oct. 28	2844	757	53	559
Fulton, Louis B., Pittsburg, Pa. Ejector	440,803	Nov. 18	1875	482	53	986
Fultz, Austin, Winona, Ohio, assignor to himself and E. H. Bauer, Beaver Falls, Pa. Thill-coupling	434,081	Aug. 12	954	250	52	953
Fulwider, Horace M., Redmon, assignor of one-fourth to J. McVay, Borton, Ill. Grain-elevator	436,348	Sept. 16	1505	392	52	1678
Funcheon, Daniel C., assignor of one-half to G. Funcheon, Denver, Colo. Axle-check for vehicles	424,549	Apr. 1	178	50	51	37

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Funcheon, George. (See Funcheon, Daniel C., assignor.)						
Funck, Isaac W. (See Fritch, Sylvester, assignor.)						
Funk, Christian C. (See Schnarnberger, Jacob H. and J. F., assignors.)						
Funk, Daniel D., assignor to the G. S. Foos Company, Springfield, Ohio. Cultivator	432,031	July 15	1561	{ 398 399 }	52	319
Funk, Henry J. (See Stayman, John W., assignor.)						
Funk, Jacob M., <i>et al.</i> (See Martin, Romeo B. and E. H., assignors.)						
Funk, John B., and J. P. Zeiher, assignors of one-third to A. A. Holland, Clifton, W. Va. Low-water alarm for boilers	419,038	Jan. 7	584	149	50	124
Funk, Zachary T. (See Windell, Marquis D. L., assignor.)						
Funke, Max K., Dresden, Saxony, Germany. Frame for placards, &c	428,599	May 27	2383	605	51	1314
Furber, Frank O., and G. S. Ayer, Saco, Me. Pump	418,709	Jan. 7	85	19	50	19
Furey, Martin D., and E. Thomas, Milwaukee, Wis. Automatic ventilator	432,395	July 15	2113	543	52	423
Furgang, Rudolph. (See Kerstein, Max, assignor.)						
Furlong, Lawrence, assignor to F. C. Rockwell, Hartford, Conn. Cleat for electric wires	433,561	Aug. 5	176	47	52	791
Furlong, Patrick M., New York, N. Y., assignor to Curved Electrotype Plate Company, of New York. Method of and means for bending electrotype-plates	435,036	Aug. 26	2483	657	52	1266
Furman, Fredric J., assignor to Herendeen Manufacturing Company, Geneva, N. Y. Steam-heater	421,261	Feb. 11	1232	319	50	807
Furman, Fredric J., assignor to Herendeen Manufacturing Company, Geneva, N. Y. Steam-heater	421,262	Feb. 11	1234	319	50	807
Furman, Joel N., Blue Point, N. Y. Reefing attachment for sails	436,231	Sept. 9	1319	343	52	1632
Furman, John A., Newark, N. J., assignor to Celluloid Novelty Company, New York, N. Y. Toy	426,120	Apr. 22	2580	678	51	525
Furness, Frank, Philadelphia, Pa. Floor for buildings	424,286	Mar. 25	2876	767	50	1707
Furney, Elliott E., assignor to A. Leslie, St. Louis, Mo. Air-blower	422,202	Feb. 25	2588	685	50	1079
Fuss, John F., Atlanta, Ga. Spoke-socket for vehicle-wheels	428,302	May 20	1939	487	51	1208
Fussell, George, Jr., Lockport, N. Y. Journal-box for steam-engines	440,102	Nov. 4	711	189	53	747
Fussell, George, Jr., Lockport, N. Y. Cut-off for steam-engines	440,103	Nov. 4	711	189	53	747
Fyfe, Paul F. I., Wilmington, Del. Station-indicator	438,232	Oct. 14	855	232	53	170
Fyfe, Peter, and J. Dobson, Glasgow, county of Lanark, Scotland. Drain-testing machine	421,922	Feb. 25	2188	{ 573 574 }	50	1004
Gabbert, Joseph A. and W. D., St. Albans, W. Va. Churn	420,231	Jan. 28	2406	640	50	503
Gabbert, William D. (See Gabbert, Joseph A. and W. D.)						
Gabel, David, New Dundee, Ontario, Canada. Twine-holder for grain-binders	427,844	May 13	1237	313	51	1064
Gabler, Emil, New York, N. Y. Piano	429,434	June 3	505	121	51	1569
Gabriel, Emil G. T., and J. C. Pohl, Steglitz, Germany. Miter-box	432,524	July 22	2315	598	52	472
Gabrielli, Martin, New York, N. Y. Combined table, ironing-board, and step-ladder	440,351	Nov. 11	1111	255	53	832
Gadd, William, Manchester, England. Gas-holder	433,462	Aug. 5	40	{ 11, 12 13 14 }	52	764
Gadd, William, Manchester, England. Gas-holder	433,463	Aug. 5	41	{ 12 13 14 }	52	765
Gadd, William, Manchester, England. Apparatus for cutting weft pile fabrics	438,538	Oct. 14	1305	353	53	258
Gaebel, Mathew. (See Tischler, Gaebel, and Lengyel.)						
Gaede, William H. (See Packer and Gaede.)						
Gaertner, William, Boston, Mass. Combined lamp and alarm-clock	436,456	Sept. 16	1685	444	52	1711
Gaffield, William Z., assignor of two-thirds to E. Vawters and C. G. Lancaster, Marshall, Tex. Propeller-shaft bearing	431,690	July 8	1044	261	52	212
Gaffing, Michael. (See Harteau and Gaffing.)						
Gage, Adelbert S. (See Gage, Charles W. and A. S.)						
Gage, Charles W., deceased, (E. C. Johnson administrator,) and A. S. Gage, Homer, N. Y. Band-saw	441,655	Dec. 2	38	11	53	1269
Gage, David A., Pawtucket, R. I., and T. Cheetham, Attleborough, Mass. Boot or shoe stretcher	425,605	Apr. 15	1786	479	51	364
Gage, Henry A., Manchester, and H. E. Herrick, Merrimac, N. H. Chair	443,913	Dec. 30	3701	947	53	2016
Gage, James L., Chicago, Ill. Wood-cutting machine	428,475	May 20	2201	555	51	1259
Gage, Richard A., Pawtucket, R. I. Looping attachment for circular-knitting machines	431,046	July 1	29	7	52	8
Gage, Richard A., Pawtucket, R. I. Looping attachment for knitting-machines	431,047	July 1	30	7	52	8
Gagen, John, <i>et al.</i> (See Bergendahl, Lewis J., assignor.)						
Gaghan, John, assignor of one-half to F. N. Devereux, Washington, D. C. Device for securing basins in stationary wash-stands	429,028	May 27	3028	778	51	1439
Gaige, Joseph M. (See Gribben, William, assignor.)						
Gaillard, Albérie H., Boston, Mass. Game or puzzle	423,919	Mar. 25	2353	619	50	1606
Gailor, William H., assignor of one-half to E. T. Brackett, Saratoga Springs, N. Y. Thill-coupling	421,565	Feb. 18	1676	434	50	897
Gaines, Edward P., assignor of one-half to W. E. Freeland, Pisgah, Tenn. Fifth-wheel	440,804	Nov. 18	1877	482	53	986
Gaines, George S., Corona, Ala. Car-coupling	425,167	Apr. 8	1142	301	51	230
Gaither, Charles T., assignor of one-half to P. W. Hubler, Youngstown, Ohio. Safety attachment	420,408	Jan. 28	2661	706	50	550
Gaither, Joseph C., and W. H. Hart, Jr., Philadelphia, Pa.; said Gaither assignor to said Hart. Retaining-pin for scarfs	420,050	Jan. 28	2107	556	50	447
Gaitley, John E., Troy, N. Y. Door-knob	443,223	Dec. 23	2620	674	53	1799
Gajardo, Adrian, Valparaiso, Chili. Automatic passenger-register	437,985	Oct. 7	476	{ 134 135 136 137 }	53	91
Galbraith, George J. (See Bailey and Galbraith.)						
Galbraith, Robert A., White City, Kans. Device for testing eggs	441,656	Dec. 2	39	11	53	1269
Galbraith, William A., Flint, Mich. Carriage-pole	422,393	Mar. 4	43	13	50	1145
Galbraith, William A., Flint, Mich. Carriage-pole	422,394	Mar. 4	44	13	50	1145
Galbraith, William A., Flint, Mich. Carriage-pole	422,395	Mar. 4	45	13	50	1146
Galbraith, William A., Flint, Mich. Carriage-pole	422,396	Mar. 4	46	13	50	1146
Galbraith, William A., Flint, Mich. Carriage-pole	422,397	Mar. 4	47	14	50	1146
Galbraith, William A., Flint, Mich. Carriage-pole	422,398	Mar. 4	48	14	50	1146
Galbreath, John, <i>et al.</i> (See Kline, John E., assignor.)						
Gale, Andrew, and E. Tremblay, Chicopee, Mass. Rolling colter	420,051	Jan. 28	2108	557	50	447
Gale, Charles C., Glenville, assignor to E. J. Gale, Cleveland, Ohio. Darning-last	425,606	Apr. 15	1787	479	51	365
Gale & Dickson. (See Houghton, Samuel H., assignor.)						
Gale, Eliza J. (See Gale, Charles C., assignor.)						
Gale, George F. (See Holmes and Gale.)						
Gale, George F., Winthrop, assignor of one-half to A. B. Holmes, Boston, Mass. Electrical call-box	431,141	July 1	158	40	52	34
Gale, George W., Greeley, Colo. Water-elevator	434,029	Aug. 12	863	227	52	933
Gale, Herbert N., Bristol, Conn. Valve for steam-engines	440,757	Nov. 18	1797	{ 464 465 }	53	972

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Gale, Herbert N., Bristol, Conn., assignor of one-half to J. H. Twisden, Boston, Mass. Mount for photographs	425,775	Apr. 15	2042	544	51	415
Gale, Hiram R., Minneapolis, Minn. Spacing-instrument	425,168	Apr. 8	1144	301	51	231
Gale, Horatio, assignor to Albion Manufacturing Company, Albion, Mich. Cultivator	429,343	June 3	370	87, 88	51	1541
Gale Manufacturing Company. (See Hickman, Edgar M., assignor.)						
Gale Manufacturing Company. (See Lester, Eugene C., assignor.)						
Gale Manufacturing Company. (See Ritchie, Samuel, assignor.)						
Gahgher, Frank L., <i>et al.</i> (See Surratt, George, assignor.)						
Galindo, Edwin A., Newark, N. J. Constructing art-panels, &c.	443,651	Dec. 30	3303	851	53	1939
Gallager, Henry, Savannah, Ga. Car-coupling	431,768	July 8	1159	288	52	235
Gallagher, Dominick. (See Bradley and Gallagher.)						
Gallagher, Francis E., <i>et al.</i> (See Foster, Samuel L., assignor.)						
Gallagher, Francis E., <i>et al.</i> (See Haslam, John P., assignor.)						
Gallaugher, Anthony, assignor to Hall & Ross Husking Glove Company, Chicago, Ill. Riv- eting-machine	435,624	Sept. 2	387	{ 104 105 }	{ 52 52 }	{ 1448 1448 }
Galle, Charles, St. Louis, Mo. Flexible and transparent sign-board	428,086	May 20	1606	409	51	1144
Galle, Charles, St. Louis, Mo. Blotter	443,205	Dec. 23	2593	666	53	1794
Galloupe, Francis E. (See Rowell and Galloupe.)						
Galloway, Charles F. (See Richardson and Galloway.)						
Galloway, Charles J., and J. H. Beckwith, Manchester, England. Water-tube boiler	442,036	Dec. 2	644	173	53	1388
Galloway, John R. (See Hudson, Richard, assignor.)						
Galloway, Robert, Macedon, N. Y. Grain-seeding-machine attachment	432,664	July 22	2531	649	52	512
Galloway, Robert, Macedon, N. Y. Fertilizer-distributor	435,037	Aug. 26	2484	657	52	1266
Gallup, Elijah A., Deadwood, S. D. Car-coupling	438,372	Oct. 14	1071	291	53	211
Gallup, Francis M. (See Price and Gallup.)						
Gally, Merritt, Brooklyn, N. Y. Printing-press	430,281	June 17	1843	452	51	1846
Galopin, Henri. (See Alcock and Galopin.)						
Galt, Thomas A., <i>et al.</i> (See Hill, Andrew G., assignor.)						
Galt, Thomas A., Sterling, Ill. Child's carriage	435,997	Sept. 9	955	250	52	1565
Galt, Thomas A., and G. S. Tracy, Sterling, Ill. Seed-planter	422,931	Mar. 11	866	236	50	1309
Galt, Thomas A., and G. S. Tracy, Sterling, Ill. Combined corn-husker and fodder-cutter	422,932	Mar. 11	867	{ 226 227 }	{ 50 50 }	{ 1309 1309 }
Galt, Thomas A., and G. S. Tracy, Sterling, Ill. Corn-harvester	432,184	July 15	1798	{ 462 463 }	{ 52 52 }	{ 365 365 }
Galt, Thomas A., assignor of one-half to G. S. Tracy, Sterling, Ill. Combined hay rake, tedder, and loader	424,415	Mar. 25	3117	{ 827 828 }	{ 50 50 }	{ 1753 1753 }
Gambetti, John. (See Harris, Jerome B., assignor.)						
Gamble, Nathaniel K., Winfield, N. Y. Coffin-fastener	419,846	Jan. 21	1796	474	50	375
Gamble, Rufus E., Mechanicsville, Mo. Shears	434,145	Aug. 12	1060	273	52	973
Gane, Morgan F. (See Reese and Gane.)						
Ganewell Fire Alarm Telegraph Company. (See Decrow, William E., assignor.)						
Ganewell Fire Alarm Telegraph Company. (See Mackenzie, James U., assignor.)						
Ganewell Fire Alarm Telegraph Company. (See Pearce, Frederick, assignor.)						
Gamlen, George, Scipioville, N. Y. Combined squeezer and strainer	434,128	Aug. 12	1037	268	52	968
Gammeter, Ferdinand, St. Louis, Mo. Game apparatus	433,676	Aug. 5	349	89	52	824
Gandee, Abraham C., Racine, Ohio. Sash-fastener	429,901	June 10	1203	298	51	1713
Gandy, Frederick, Fernbank, Ohio. Sand-molding apparatus	433,166	July 29	3333	863	52	673
Gans, Isaac. (See Lewis, Philip M., assignor.)						
Gans, Leo, assignor to L. Cassella & Company, Frankfort, Germany. Blue-black die	442,369	Dec. 9	1152	-----	53	1493
Gansert, Hermann, New York, N. Y. Sewing-machine	438,074	Oct. 7	624	170	53	119
Gauss, Henry, C. E. Clarke, and J. Dengler, East Saginaw, Mich. Game-table	424,193	Mar. 25	2750	733	50	1682
Gaquin, Thomas, Jr., and W. F. Nort, assignors of two-fifths to M. A. Nichols, Haverhill, Mass. Rubbing-in machine for boots or shoes	442,250	Dec. 9	967	255	53	1459
Garben, Adolph F. C., Minneapolis, Minn. Knockdown adjustable shelving	438,741	Oct. 21	1649	442	53	326
Garber, Joseph A., Hutton, assignor of one-half to V. S. Jones, Syracuse, Kans. Cultiva- tor-hoe	422,761	Mar. 4	575	147	50	1246
Garbrant, Stocton and W., Waterloo, Iowa. Drilling-machine	441,756	Dec. 2	202	53	53	1302
Garbrant, Wilard. (See Garbrant, Stocton and W.)						
Garbutt, Thomas W., Spann, Ga. Logging-truck	439,580	Oct. 28	2961	736	53	582
Gareelon, Jennie L., Chicago, Ill. Dress-maker's fitting apparatus	439,500	Oct. 28	2846	758	53	559
Garcés, Benito V., Madrid, Spain. Rope or similar railway	429,235	June 3	191	46	51	1508
Garcia-Sanchez, Julio E., New York, N. Y. Steering apparatus for vessels	427,845	May 13	1238	313	51	1064
Garcia-Sanchez, Julio E., New York, N. Y. Windmill	427,846	May 13	1239	313	51	1064
Gardiner, Howell E., Battle Creek, Mich. Blackboard-eraser	437,106	Sept. 23	2752	719	52	1924
Gardiner, Hubert, Brooklyn, N. Y. assignor to Chambers Brothers Company, Philadel- phia, Pa. Side guide for paper-folding machines	438,804	Oct. 21	1733	465	53	343
Gardiner, Robert M., Hamilton, assignor of one-half to W. Hilborn, Ayr, Canada. Guard for electric-light globes	435,116	Aug. 26	2602	688	52	1288
Gardiner, William H., Camden, Me. Chimney-cap	439,816	Nov. 4	275	69	53	662
Gardner, Charles H. (See Richards, Henry J., assignor.)						
Gardner, Charles T., Oswego, N. Y. Hat and coat rack	432,484	July 15	2248	581	52	452
Gardner, Edward V., Berner's College, county of Middlesex, England. Apparatus for sepa- rating, dressing, and finishing granular and powdered substances	420,496	Feb. 4	99	24	50	583
Gardner Egg Carrier Company. (See Eddy, Charles F. A., assignor.)						
Gardner, Fred, and J. W. Moore, Dodge City, Kans. Railway-switch	421,097	Feb. 11	1007	258	50	763
Gardner, Frederick N., Beloit, Wis. Screw-cutting die	420,904	Feb. 4	713	184	50	698
Gardner, Frederick N., Beloit, Wis., assignor to C. H. Besly, Chicago, Ill. Die for screw- cutting	422,340	Feb. 25	2820	714	50	1121
Gardner, George C., Hinsdale, Ill. Sash-balance	429,212	June 3	162	39	51	1502
Gardner, George W., Napoleon, Ohio. Ironing-board	420,297	Jan. 28	2509	665	50	521
Gardner, Henry L., and B. F. Adams, Springfield, Mass.; said Gardner assignor to said Adams. Yarn-guide for spooling-machines	431,188	July 1	231	58	52	48
Gardner, John, and J. F. Harris, Toledo, Ohio. Refining hydrocarbon oils	442,802	Dec. 16	1866	422	53	1644
Gardner, John A. (See Holth, Severin C. A., assignor.)						
Gardner, John A., Chicago, Ill. Ploving device for tractors	437,755	Oct. 7	123	37	53	26
Gardner, John H., Dalton, Ga. Seed-planter	436,871	Sept. 23	2415	630	52	1856
Gardner, John J., Arcadia, Kans. Windmill	423,602	Mar. 18	1860	{ 490 491 }	{ 50 50 }	{ 1504 1504 }
Gardner, John T. (See Cotton, Margedant, Gardner, and Margedant.)						
Gardner, Louis, and N. Reid, Manchester, N. H. Tool for setting up bent teeth of card- clothing	443,253	Dec. 23	2662	683	53	1806
Gardner, Oliver H., assignor of one-half to T. J. Coughlan, New Bedford, Mass. Scaffold- fastening	432,996	July 29	3071	787	52	622
Gardner, Oliver L. (See Whittaker, George, assignor.)						
Gardner, Richard M., Chicago, Ill. Hydrocarbon vaporizer and burner	435,692	Sept. 2	493	131	52	1476

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Gardner, Richard M., Chicago, Ill. Sash-balance	441,757	Dec. 2	203	53	53	1303
Gardner, William A., assignor to M. J. Stark, Buffalo, N. Y. Artist's easel	440,225	Nov. 11	917	235	53	799
Gare, Thomas, Stockport, county of Chester, England. Journal-box	425,569	Apr. 15	1725	462	51	353
Garey, Caleb E., assignor to W. White, New York, N. Y. Street-railway switch	433,237	July 29	3432	887 888	52	694
Garfield, Lyman M., Xenia, Ohio. Railway-switch	424,968	Apr. 8	828	221	51	168
Garford, Arthur L., Elyria, Ohio. Saddle for bicycles	431,573	July 8	835	208	52	174
Gariepee, Peter L., Milton, Vt. Buckle	443,511	Dec. 30	3079	793	53	1896
Garland, Frank M., assignor of two-thirds to E. B. Beecher, W. A. Foskett, F. P. Newton, New Haven, Conn., and T. H. Sherman, Washington, D. C. Machine-gun	430,206	June 17	1669	415 416	51	1814
Garland, Frank M., assignor to himself W. A. Foskett, and F. P. Newton, New Haven, and E. B. Beecher, Westville, Conn. Cartridge	430,229	June 17	1724	429	51	1824
Garland, George A., assignor to J. Rennison, Boston, Mass. Folding bed	439,348	Oct. 28	2618	698	53	516
Garland, John W., Pittsburg, Pa. Chain-link	426,177	Apr. 22	2666	700	51	543
Garland, Michael, Bay City, Mich. Apparatus for raising sunken ships or vessels	426,259	Apr. 22	2782	730	51	567
Garland, William H., Weymouth, Mass. Electric connector	442,370	Dec. 9	1153	301	53	1493
Garlick, Edward C., assignor to Cuyahoga Manufacturing Company, Cleveland, Ohio. Alarm-knob	442,303	Dec. 16	1868	482	53	1644
Garlick, Joseph E. and W. J., Paterson, N. J. Jacquard mechanism for looms	443,235	Dec. 23	2640	677 678	53	1803
Garlick, Walter J. (See Garlick, Joseph E. and W. J.)						
Garlick, William, Jr., <i>et al.</i> (See Horsfall, William, assignor.)						
Garlinghouse, John E., Devil's Lake, Mich. Combined hay and stock rack for wagons	440,426	Nov. 11	1256	325	53	859
Garlock, William H., Seattle, Wash. Chock-block for logging-trucks	424,287	Mar. 25	2878	768	50	1707
Garlock, William H., Seattle, Wash. Lever for moving locomotives or cars	441,061	Nov. 18	2293	595	53	1066
Garner, Allen. (See Messer and Garner.)						
Garner, Allen. (See Messer, Garner, and Williams.)						
Garner, Frank E., Cornwall, Conn. Clothes-drier	441,481	Nov. 25	3007	774	53	1207
Garner, Josias H., Birmingham, Ala. Car-coupling tool	433,283	July 29	3501	904	52	708
Garner, Lewis P., Ashland, Pa. Exhaust-nozzle	426,260	Apr. 22	2783	731	51	567
Garrett, Algernon S. (See Hiertz, Joseph J., assignor.)						
Garner, Jules, Paris, France. Refining copper	421,046	Feb. 11	934	.....	50	750
Garrett & Co., William T. (See Kitton, John C., assignor.)						
Garren, Edward, Glenwood, Ill. Road-cart	437,189	Sept. 30	2914	759	52	1959
Garretson, Oliver S., Buffalo, N. Y. Hinge for school-seats	425,098	Apr. 8	1019	273 273	51	206
Garrett, Davis, assignor of one-half to J. Clark, Kansas City, Kans. Electro-deposition	428,087	May 20	1607	.....	51	1144
Garrett, Gilbert H., deceased, Newcastle-upon-Tyne, England; W. C. Rodman administrator. Trap for sanitary purposes	424,943	Apr. 1	784	209	51	153
Garrett, Henry H., Pittsburg, Pa. Gas-furnace for melting metals	421,263	Feb. 11	1236	319 320	50	808
Garrett, John W., Jr., and B. B. Huggin, Spartanburg, S. C. Harness-saddle	422,762	Mar. 4	576	148	50	1246
Garrett, Joseph H., King's Mountain, N. C. Sash-fastener	437,190	Sept. 30	2915	759	52	1960
Garrett, Myers A., Chicago, Ill. Refrigerator-car	437,107	Sept. 23	2752	719	52	1924
Garrett, Richard, Hico, Tex. Saddle-jack	424,674	Apr. 1	365	97	51	71
Garrett, William. (See Meysenberg and Garrett.)						
Garrett, William. (See Smith and Garrett.)						
Garrett, William. (See Smith, Pettigrew, and Garrett.)						
Garrett, William, Joliet, Ill. Rolling-mill plant	419,008	Jan. 7	543	135 136	50	114
Garrett, William, Joliet, Ill. Manufacture of sheet metal	443,137	Dec. 23	2458	629	53	1765
Garretson, Ellen E., <i>et al.</i> (See Harbaugh, Samuel V., assignor.)						
Garrison, Calvin B. (See Calhoun and Garrison.)						
Garrison, Charles M., assignor of one-half to W. L. Hazen, Wichita, Kans. Toy	432,935	July 22	2946	755	52	593
Garrison, George B., Jordan, N. Y. Packing device	426,178	Apr. 22	2667	700	51	543
Garrison, Henry S., Cedarville, N. J. Sand-washing machine	428,600	May 27	2383	606	51	1314
Garrison, Joseph W. (See Charles and Garrison.)						
Garrison, Marcus, Stone Church, Pa. Welding compound	425,418	Apr. 15	1503	.....	51	310
Garrison, Oliver L., <i>et al.</i> (See Marsh, Grant, assignor.)						
Garrow, John F., New York, N. Y. Combined rotary inkstand, stamp-drawer, &c.	437,854	Oct. 7	276	82, 83	53	54
Garsed, Robert P., Norristown, Pa. Annunciator	428,810	May 27	2704	686	51	1374
Garsed, Robert P., Norristown, Pa. Annunciator	430,735	June 24	2556	626 626	51	1952
Garsed, Robert P., Norristown, Pa. Elevator signaling apparatus	441,150	Nov. 25	2450	635	53	1106
Garson, James K., Pittsburg, Pa. Trousers-stretcher	434,129	Aug. 12	1039	268	52	969
Garst, Edwin, Dayton, Ohio. Steam-engine indicator	419,326	Jan. 14	1022	271	50	216
Gartner, Alfred. (See Thompson and Gartner.)						
Gartner, Alfred, assignor, by mesne assignments, to A. A. Schmidt, Newark, N. J. Electric motor and generator	439,775	Nov. 4	217	57	53	651
Gartside, William N., Richmond, Ind. Molder's flask	421,693	Feb. 18	1860	487	50	934
Gartze, Ernst, Solingen, Germany. Hammer	427,678	May 13	975	246	51	1013
Garver, David A. (See Leinard, Edgar A., assignor)						
Garver, Madison M., Newark, N. J. Voltmeter	425,068	Apr. 8	979	263	51	197
Garver, Madison M., Newark, N. J. Ammeter	425,069	Apr. 8	981	263 264	51	198
Garver, Madison M., Newark, N. J. Electrical measuring-instrument	426,992	Apr. 29	3874	1012 1013	51	789
Garvey, Henry A., New York, N. Y. Machine for separating plastering hair	432,609	July 22	2427	626	52	493
Garvey, Henry A., New York, N. Y. Sand-screen	437,855	Oct. 7	277	83	53	54
Garvey, Henry A., New York, N. Y. Machine for mixing mortar	438,805	Oct. 21	1735	465	53	343
Garvey, Mathias, Hammondville, N. Y. Stopping seams	442,037	Dec. 2	645	174	53	1389
Garvin, John C., Leadville, Colo., assignor to Garvin Ore-Reduction Company, of Colorado. Ore-concentrating machinery	436,285	Sept. 9	1399	364	52	1649
Garvin Ore-Reduction Company. (See Garvin, John C., assignor.)						
Garwood, Mathew H., South Bend, Ind. Wheel-plow	438,539	Oct. 14	1307	354	53	258
Garwood, Spencer, Milford Centre, Ohio. Velocipede	435,493	Sept. 2	172	48	52	1408
Garwood, Spencer, Milford Centre, Ohio. Vehicle	441,151	Nov. 25	2451	635 636	53	1106
Gary, George E., Macon, Mo., assignor to S. S. Kingry, Cincinnati, Ohio. Roaster	434,440	Aug. 19	1527	399	52	1073
Gas-Moteren-Fabrik-Deutz. (See Otto, Nicolas A., assignor.)						
Gasaway, Louis A. (See Jamison, William T., assignor.)						
Gash, Edgar, Macon, Ill. Dental mouth-speculum	443,512	Dec. 30	3080	793	53	1896
Gaskill, Harvey F., deceased, Lockport, N. Y.; M. E. Gaskill, executrix. Rotary double-piston liquid-meter	421,489	Feb. 18	1561	403 404	50	876

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Gaskill, Harvey F., deceased, Lockport, N. Y.; M. E. Gaskill executrix. Valve-gear.....	423,993	Mar. 25	2465	{ 655 656 }	50	1627
Gaskill, Mary E., executrix. (See Gaskill, Harvey F.)						
Gaskill, William H. (See Evans, Glenn, and Gaskill.)						
Gaskill, William H., assignor to S. W. Evans, Jr., Philadelphia, Pa. Umbrella-runner.....	428,390	May 20	2087	524	51	1239
Gassen, Paul, assignor to himself and J. Heckhausen & Weies, Cologne, Prussia, Germany. Preserving coffee, &c.....	430,182	June 17	1641	.....	51	1808
Gast Bank Note and Lithographing Company, August. (See Rankin, Robert M., assignor.)						
Gaston, Augustine J., Beloit, Wis. Balance.....	437,379	Sept. 30	3221	840	52	2017
Gaston, Charles W., Stafford, Kans. Washing-machine.....	431,691	July 8	1045	262	52	213
Gaston, Oliver B., assignor to S. A. Gaston, Brooklyn, N. Y. Trunk-tray elevating and supporting device.....	443,426	Dec. 23	2952	760	53	1862
Gaston, Sarah A. (See Gaston, Oliver B., assignor.)						
Gastrell, James P. H., Wiesbaden, Nassau, Germany. Mechanical movement.....	428,476	May 20	2202	556	51	1259
Gastrell, James P. H., Wiesbaden, Germany. Mechanism for transforming reciprocating motion into rotary motion.....	428,477	May 20	2203	556	51	1259
Gastrell, James P. H., Wiesbaden, Germany. Mechanical movement. (Reissue).....	11,129	Dec. 2	725	{ 194 195 }	53	1405
Gateau, Antoine, Chicago, Ill. Vapor-burner.....	434,634	Aug. 19	1837	480	52	1135
Gateau, Antoine, Chicago, Ill. Vapor-stove.....	435,693	Sept. 2	494	131	52	1470
Gates, Eugene N., Fitchburg, Mass. Head or collar for supporting tubes in masonry.....	422,881	Mar. 4	760	199	50	1285
Gates, Frank W. (See Gates, Philemon T., assignor.)						
Gates, George, Drytown, Cal. Concentrator.....	435,562	Sept. 2	278	78	52	1429
Gates, George P., Watertown, Wis. Strainer for fluid-pipes.....	435,140	Aug. 26	2637	698	52	1295
Gates Iron Works. (See Gates, Ryerson D., assignor.)						
Gates, Jerome B. (See Morgan and Gates.)						
Gates, Joseph H. (See Hawes, Ferdinand B., assignor.)						
Gates, Merrit C., Denison, Kans. Hay loader and stacker.....	431,113	July 1	121	31	52	26
Gates, Perley A., Chicago, Ill. Metal can.....	425,502	Apr. 15	1629	434	51	334
Gates, Philemon T., assignor to F. W. Gates, New York, N. Y. Vegetable parer and corer.....	440,705	Nov. 18	1713	439	53	955
Gates, Philip J., et al. (See Argerbright, Daniel, assignor.)						
Gates, Ryerson D., assignor to Gates Iron Works, Chicago, Ill. Apparatus for concentrating ores.....	420,933	Feb. 11	765	198	50	717
Gates, Ryerson D., assignor to Gates Iron Works, Chicago, Ill. Pulverizing-machine.....	436,349	Sept. 16	1506	{ 392 393 }	52	1678
Gates, William H. (See Welsh and Gates.)						
Gates, William H., Philadelphia, Pa. Artificial tooth-crown and mounting the same.....	423,239	Mar. 11	1328	345	50	1397
Gathmann, Louis, Chicago, Ill. Constructing and loading cannon.....	424,969	Apr. 8	829	221	51	169
Gathmann, Louis, Chicago, Ill. Loading cannon.....	424,970	Apr. 8	831	222	51	169
Gathright, J. B., et al. (See Gathright, John R., assignor.)						
Gathright, John R., assignor of two-thirds to W. Jarvis and J. B. Gathright, Louisville, Ky. Locomotive street-car.....	421,829	Feb. 18	2038	539	50	967
Gathright, Josiah B. (See Smith, George A., assignor.)						
Gathright, Josiah B., Louisville, Ky. Type-writing machine.....	436,916	Sept. 23	2492	652	52	1872
Gathright, Josiah B., Louisville, Ky. Fire-ladder.....	440,026	Nov. 4	604	160	53	726
Gatlin, Lilburn M., Washburn, Tex. Wind-wheel.....	434,108	Aug. 12	996	260	52	961
Gatling Gun Company. (See Bruce, Lucien F., assignor.)						
Gatling Gun Company. (See Goodell, Silas, assignor.)						
Gatling, Richard J., Hartford, Conn. Mold-core.....	423,045	Mar. 11	1044	{ 271 272 }	50	1342
Gatling, Richard J., Hartford, Conn. Torpedo and gun boat.....	424,288	Mar. 25	2879	768	50	1707
Gatling, Richard J., Hartford, Conn. Pneumatic gun and torpedo-boat.....	427,847	May 13	1241	314	51	1064
Gatling, Richard J., Hartford, Conn. Pneumatic gun and operating mechanism.....	427,848	May 13	1243	314	51	1065
Gatling, Richard J., Hartford, Conn. Pneumatic gun valve.....	434,662	Aug. 19	1888	493	52	1145
Gatsel, Thomas A., et al. (See Sanford, Aaron C., assignor.)						
Gatton, Joseph, et al. (See Hicks, Lewis C., assignor.)						
Gauchot, Paul, assignor of one-half to Grimaud & Chartier, Paris, France. Machinery for composing playing-cards in packs.....	420,194	Jan. 28	2343	{ 620 621 622 623 624 }	50	491
Gaugh, Maria A., Newport, Ky. Wash dish pan and drainer.....	431,943	July 8	1418	360	52	286
Gault, Albert G., et al. (See Egan and Gray, assignors.)						
Gault, Alexander, Medford, Minn. Artificial limb.....	428,839	May 27	2752	699	51	1384
Gaunt, Thomas, Brooklyn, N. Y. Multiple-effect evaporating apparatus.....	430,183	June 17	1641	409	51	1808
Gaunt, Thomas, Brooklyn, N. Y. Evaporating apparatus.....	431,574	July 8	836	208	52	174
Gaunt, Thomas, Brooklyn, N. Y. Evaporating apparatus.....	434,441	Aug. 19	1528	399	52	1073
Gaunt, Thomas, Brooklyn, N. Y. Evaporating apparatus.....	435,090	Aug. 26	2564	{ 676 677 }	52	1281
Gauntt, Newton C., Bowling Green, Ky. Bran-packer.....	442,371	Dec. 9	1155	301	53	1493
Gauthreaux, Richard U. J. (See Deeves and Gauthreaux.)						
Gauttard, Albert L. G., Paris, France. Lever mechanism.....	430,282	June 17	1844	452	51	1847
Gavin, Edward F., Chicago, Ill. Illuminated sign.....	433,677	Aug. 5	351	90	52	824
Gavin, George, and L. W. Cromer, Eureka, Nev. Candlestick.....	428,673	May 27	2496	635	51	1334
Gay, George E., and J. H. Parsons, Augusta, Me. Ratchet screw-driver.....	427,297	Sept. 30	3077	806	52	1991
Gayhart, Aaron W., Washington, Pa. Shade-roller.....	431,886	July 8	1344	339	52	271
Gaylor, Leonard B., Stamford, Conn. Velocipede.....	433,562	Aug. 5	176	47, 48	52	791
Gaylord, Charles E., assignor to A. K. Stiles, Chicago, Ill. Metallic crest-tiling.....	440,104	Nov. 4	713	189	53	748
Gaylord, Emerson, et al. (See Thomas, George H., assignor.)						
Gaylord, George H. (See Neuberger, Perlinsky, and Gaylord.)						
Gaylord, Jared E., Butte City, Mont. Reducing copper matte.....	443,757	Dec. 30	3475	.....	53	1972
Gaylord, Jared E., Butte City, Mont. Reducing copper matte to copper.....	443,758	Dec. 30	3477	892	53	1972
Gaynor Electric Company. (See Gaynor, Thomas F., assignor.)						
Gaynor, Thomas F., Louisville, Ky. Setting for coins.....	439,139	Oct. 28	2267	609	53	451
Gaynor, Thomas F., assignor to Gaynor Electric Company, Louisville, Ky. Insulator.....	437,685	Oct. 7	15	5	53	5
Gaze, Ernest H., London, England. Gas-engine.....	437,776	Oct. 7	158	49, 50	53	33
Gearhart, Joseph E., West Decatur, Pa. Circular-knitting machine.....	424,877	Apr. 1	688	{ 181 182 }	50	133
Gearing, Charles M., assignor to United States Fuel Gas Company, Pittsburg, Pa. Hydrocarbon-burner.....	441,062	Nov. 18	2294	595	53	1066
Geary, John, Philadelphia, Pa. Electro-magnetic bell.....	436,410	Sept. 16	1612	425	52	1698
Geary, John, Philadelphia, Pa. Telegraph-instrument.....	438,233	Oct. 14	858	233	53	171
Geary, John, Philadelphia, Pa. Circuit-closer.....	438,234	Oct. 14	860	233	53	171

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Gebbie, Alexander R., Lowville, N. Y. Harrow	432,997	July 29	3071	788	52	622
Gebby, Johnson R. and R. N., New Richland, assignors of one-half to J. D. and P. F. Campbell, Belle Centre, Ohio. Corn-harvester	425,315	Apr. 8	1354	361	51	272
Gebby, Rankin N. (See Gebby, Johnson R. and R. N.)						
Gebhardt, Henry J., Minneapolis, Minn. Wire-and-picket-fence machine	435,539	Sept. 2	241	67	52	1421
Gebhardt, Henry J., Minneapolis, Minn. Fence-machine	435,540	Sept. 2	245	68	52	1422
Geddes, Joseph, Rochester, N. Y. Hot-air register and ventilator	436,522	Sept. 16	1776	468	52	1729
Geddes, William. (See Fitzpatrick and Geddes.)						
Geddes, William B., Rochester, N. Y. Machine for windlassing and trussing barrels	437,686	Oct. 7	15	5	53	6
Gedicke, Herman W. (See Troxler, Gustavus, Jr., assignor.)						
Gee, Joseph F. (See Martin and Gee.)						
Gee, William, New York, N. Y. Electric burglar and fire alarm	423,753	Mar. 18	2094	553	50	1549
Gee, William, New York, N. Y. Ventilating system for electric subways	424,778	Apr. 1	535	144	51	105
Gee, William, New York, N. Y. Musical op.	430,521	June 17	2197	540	51	1916
Gee, William H. (See Kramer and Gee.)						
Geer, Alexander H., Bartow, Fla. Grapple	423,754	Mar. 18	2097	554	50	1549
Geer, George, Peterborough, N. H. Knife-sharpener	439,799	Nov. 4	253	64	53	657
Gehr, John. (See Worthington and Gehr.)						
Gehrkens, Carl O., Hamburg, Germany. Apparatus for suspending wearing-apparel	431,944	July 8	1419	360	52	286
Gehring, William, San Diego, Cal. Valve for steam-engines	425,169	Apr. 8	1145	302	51	231
Gehrt, Albert A. (See Brown and Gehrt.)						
Gehrt, Albert A., assignor to Collins Plov Company, Quincy, Ill. Baling-press	425,419	Apr. 15	1504	403	51	310
Gehrt, Albert A., assignor to Collins Plov Company, Quincy, Ill. Baling-press	434,775	Aug. 19	2059	538	52	1178
Gehrt, Albert A., assignor to Collins Plov Company, Quincy, Ill. Baling-press	438,540	Oct. 14	1308	354	53	258
Geiger, Andrew, Driftwood, W. Va. Churn-dasher	422,519	Dec. 9	1393	356	53	1541
Geiger, George G., Peoria, Ill. Shoveling-beard	423,425	Mar. 18	1610	422	50	1458
Geiger, Harry M., assignor of one-half to J. M. Cassil, Springfield, Ohio. Poll-book and tally-sheet	434,825	Aug. 19	2125	556	52	1191
Geiger, Jacob, deceased, Stuttgart, Germany; J. A. Straley ancillary administrator. Machine for cutting grooves in card-board	442,878	Dec. 16	2000	513	53	1670
Geigy & Co., John R. (See Ris, Christoph, assignor.)						
Geigy & Co., John R. (See Walter, Johannes, assignor.)						
Geisel, Emanuel, Newark, N. J. Ornamenting and embossing machine	419,847	Jan. 21	1197	475	50	375
Geisenhöner, Henry. (See King and Geisenhöner.)						
Geiser, Peter, Waynesborough, Pa. Plashed hedge fence	421,132	Feb. 11	1054	270	50	773
Geiser, William, Salina, Pa. Ejecting oil out of oil-wells	443,513	Dec. 30	3080	794	53	1896
Geisler, Ernst H., Deshler, Neb. Calf-weaner	436,655	Sept. 16	1999	523	52	1769
Gelatt, Wallace W. (See McCrary and Gelatt.)						
Gelston, William L. (See Watson and Gelston.)						
Geltz, William T., Mansfield, Ohio. Roll-paper holder and cutter	429,029	May 27	3030	779	51	1439
Gemmell, Robert, Brookline, assignor of one-half to J. A. H. Magoun, Medford, Mass. Garment-supporter	440,352	Nov. 11	1112	285	53	832
Gendron, Fernand, Bordeaux, Gironde, France. Galvanic battery	426,932	Apr. 29	3784	989	51	773
Gendron Iron Wheel Company. (See Gendron, Peter, assignor.)						
Gendron Iron Wheel Company. (See Harriott, George, assignor.)						
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Securing trimmings upon tubular and other bodies	419,009	Jan. 7	545	136	50	115
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Wagon running-gear	419,010	Jan. 7	545	136	50	115
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Metal wheel	419,937	Jan. 21	1930	509	50	405
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Machine for truing tires	430,844	June 24	2737	671 672	51	2027
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Making tires	430,845	June 24	2742	672	51	2028
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Vehicle-wheel	434,146	Aug. 12	1061	273	52	973
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Child's carriage	441,950	Dec. 2	501	134	53	1362
General Copying Apparatus Company. (See Levy, Marc A., assignor.)						
Genese, David, Baltimore, Md. Artificial tooth-crown	430,522	June 17	2198	540	51	1916
Genet, Louis J., assignor of part to F. and P. Frei and H. Moore, Marquette, Mich. Pump	436,232	Sept. 9	1320	344	52	1632
Gengenbach, Eugen. (See Claus and Gengenbach.)						
Genin, John B., St. Albans, Vt. Combination clutch-coupling for pipes	429,126	June 3	30	7	51	1478
Genner, Edward G., et al. (See Stolp, Mary E., assignor.)						
Gennert, Emil F., New York, N. Y. Insulated joint	426,121	Apr. 22	2581	679	51	525
Gennert, Emil F., New York, N. Y. Insulating joint	430,546	June 24	2744	672	51	2029
Gent, John R. (See Cook and Gent.)						
Gent, Joseph E., Columbus, Ind. Pneumatic separator and grader	420,153	Jan. 28	2274	603	50	479
Gent, William T. (See Morris and Gent.)						
Genth, Frederick A., Jr. (See Criswell, James A., assignor.)						
Gentner, Valentine, Jr. (See Reynhold, Charles, assignor.)						
Gentry, John W., assignor of one-half to J. Jacob, Oakland, Cal. Railway-cable grip	438,761	Oct. 21	1675	450	53	331
Geoffroy, Nicolas, New York, N. Y. Button	435,820	Sept. 2	682	182	52	1507
Geoghagan, Frank B., Chicago, Ill. Car-door cleat	433,403	July 29	3659	945	52	740
George, Adam H., Passaic, N. J. Hand-screw	431,719	July 8	1088	271	52	221
George, Albert F., assignor of one-half to G. W. Bozzell, Kansas City, Mo. Spring-motor for cars	434,264	Aug. 12	1247	323 324	52	1009
George, Conrad. (See Seebach, George, and Bush.)						
George, Henry. (See Porter and George.)						
George, James N., et al. (See Sargent, Milton O., assignor.)						
George, John, Parsons, Pa. Packing-box	429,517	June 3	625	153	51	1531
George, William B., and J. A. McGinness, Harlan, Iowa. Wagon end-gate	433,593	Aug. 5	228	60	52	800
Georgia Hay Press Company. (See Sanders, James E., assignor.)						
Geraghty, Frank J. (See Geraghty, John J. and F. J.)						
Geraghty, John J. and F. J., Streator, Ill. Hydraulic refrigerator	425,541	Apr. 15	1688	451	51	346
Gerbel, Wilhelm, Rorschach, Switzerland. Preparation of flour from curd of milk	421,830	Feb. 18	2039		50	967
Gerbe, Henri, Brussels, Belgium. Clothes-suspending device	435,117	Aug. 26	2603	688	52	1288
Gerbsch, Herman J., Wausau, Wis. Pump	431,575	July 8	838	208	52	175
Gerdes, August, and B. Thoens, New Orleans, La. Distilling water	425,316	Apr. 8	1355	362	51	272
Gerding, Charles H. A., Nashville, Tenn. Ice-cream freezer	431,345	July 1	473	117	52	96
Gerfin, Frederick and F. C., Columbia, Pa. Pruning implement	432,396	July 15	2114	543	52	423
Gerfin, Fredrick C. (See Gerfin, Frederick and F. C.)						
Gerhardt, Hans P., and A. Gould, Chicago, Ill. Addressing-machine	430,184	June 17	1643	409 410	51	1809
Gerkey, John L. (See Gerkey, William M., assignor.)						
Gerkey, William M., assignor of one-half to J. L. Gerkey, Carthage, Mo. Button-setting machine	428,903	May 27	2844	723 724	51	1403

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Gerlach, Carl C., Cleveland, Ohio. Tube-cutter	422,341	Feb. 25	2822	744	50	1121
Gernuain, Edward. (See Cowles, George C., assignor.)						
Gerruain, Pierre, Clermont-Ferrand, France. Dynamite	427,679	May 13	976	.....	51	1014
Germanson, Gilbert F., assignor of one-half to G. F. Steele, Centralia, Wis. Suction-roll for paper-machines	439,871	Nov. 4	363	93	53	678
Gerow, Edward S., Lafayette, assignor of one-half to J. Eva, San Francisco, Cal. Reversible plow	424,926	Apr. 1	759	202	51	147
Gerow, Joseph U. (See Levy and Gerow.)						
Gerson, Edward. (See Eads, Gerson, and Eads.)						
Gerson, Karl, Hamm, Germany. Ship for bathing purposes	431,226	July 1	297	73	52	60
Gesford, Preston G., Jr., Napa, Cal. Adjustable bed bottom and brace	427,168	May 6	225	57	51	855
Gesner, John F., New York, N. Y. Manufacture of artificial stone	419,655	Jan. 21	1503	.....	50	320
Gesner, John F., New York, N. Y. Frame and press for forming and hardening plastic materials	419,656	Jan. 21	1508	{ 401 402 }	50	321
Gesner, John F., New York, N. Y. Artificial solid material	419,657	Jan. 21	1511	.....	50	321
Gesner, William N., Hamden, Conn. Fair-leader	428,391	May 20	2087	524	51	1239
Gessner, David, Worcester, Mass. Finishing fabrics	424,055	Mar. 25	2558	683	50	1645
Gessner, David, Worcester, Mass. Cloth-pressing machine	424,971	Apr. 8	832	{ 229 223 }	51	169
Gessner, David, Worcester, Mass. Steam-box for dampening cloth, &c.	427,069	May 6	57	16	51	821
Gessner, David, Worcester, Mass. Cloth-pressing machine	429,268	June 3	230	58	51	1516
Gessner, David, Worcester, Mass. Cloth-pressing machine	438,774	Oct. 21	1693	454	53	335
Gessner, Ernst, Aue, Germany. Winder for spinning-spindles	441,000	Nov. 18	2193	{ 566 567 }	53	1046
Gestetner, David, London, England. Cyclostyle-pen	434,331	Aug. 12	1343	350	52	1029
Getchell, Charles E., assignor of one-half to J. Edmonds, Waltham, Mass. Making rolls from husks, &c.	419,327	Jan. 14	1025	271	50	217
Getchell, Charles E., Palmer, assignor to J. M. Kilgore, I. H. Bullard, and A. Curtin, Waltham, Mass. Grate-bar	423,603	Mar. 18	1862	491	50	1505
Getchell, Winfield S., San José, and R. E. French, Oakland, Cal. Packing for stuffing-boxes	425,776	Apr. 15	2043	544	51	415
Gethmann, Adolph. (See Gethmann, William, J. L., and A.)						
Gethmann, John L. (See Gethmann, William, J. L., and A.)						
Gethmann, William, J. L. and A., Gladbrook, Iowa. Halter	434,182	Aug. 12	1116	290	52	985
Getler, Charles F., assignor of one-half to J. P. Schenck, Matteawan, N. Y. Camera	425,130	Apr. 8	1071	284	51	216
Getman, John L., Herkimer, N. Y. Gage-pin	437,687	Oct. 7	17	6	53	6
Getten, Albert C., Chicago, Ill. Mechanism for bundling paper bags or other articles	427,849	May 13	1245	{ 314 315 }	51	1065
Getty, Fred I., Springfield, Ill. Planer and shaper	441,152	Nov. 25	2453	636	53	1106
Geuder, William, et al. (See Kayser, William J., assignor.)						
Geÿer, Anton, Shaler, Pa. Horse-covering	438,105	Oct. 7	671	182	53	129
Geyer, George, Brooklyn, N. Y. Sash-cord fastener	427,850	May 13	1248	315	51	1066
Geyer, Philip, Newark, N. J. Furnace	425,170	Apr. 8	1146	{ 302 303 }	51	231
Gholson, William C., Cincinnati, Ohio. Fence-post	425,317	Apr. 8	1356	362	51	272
Gianella, Henry, et al. (See Ahlström, Alfred C., assignor.)						
Giant Electric Motor Company. (See Chapman, William H., assignor.)						
Gibb Brothers & Moran. (See Melicher, Oswald E., assignor.)						
Gibble, Clayton, Manheim, Pa. Collar-stiffener	440,027	Nov. 4	607	160	53	727
Gibbon, Catherine L., Albany, N. Y. Construction of side-bearing railway-tracks	429,127	June 3	31	7	51	1478
Gibbon, Catherine L., Albany, N. Y. Construction of railway-tracks	429,128	June 3	33	8	51	1478
Gibboney, John W., Lynn, Mass. Type-writing machine	426,005	Apr. 22	2416	639	51	493
Gibboney, John W., Lynn, Mass. Automatic type-cleaner for type-writing machines	438,618	Oct. 21	1436	387	53	288
Gibbons, James, Jersey City, N. J. Gas-stove	436,656	Sept. 16	1999	{ 523 524 }	52	1769
Gibbons, Patrick C., and G. R. Heaberlin, Baring, Mo. Sickle-driving mechanism	423,088	May 20	1608	409	51	1144
Gibbons, Pierce F., Oak Park, Ill. Grate	443,759	Dec. 30	3478	{ 692 893 }	53	1972
Gibbons, Rodmond, New York, N. Y. Party plate	421,264	Feb. 11	1237	320	50	808
Gibbons, William M. (See Monrath and Gibbons.)						
Gibbons, William R. (See Conyngham, Philip, assignor.)						
Gibbons, Willis S., Russell, N. Y. Spring-clasp	439,652	Nov. 4	43	12	53	615
Gibbs, Charles, New York, N. Y. Dumping-cart	427,851	May 13	1249	315	51	1066
Gibbs, Edward B., North Platte, Nebr. Spark-arrester	422,586	Mar. 4	323	81	50	1197
Gibbs, George, assignor of one-half to F. A. Robbins, San Francisco, Cal. Stock and die for cutting metal screws	433,201	July 29	3384	875	52	683
Gibbs, Jacob S., Manchester, and C. G. Perkins, Hartford, Conn. Reciprocating snap-switch	436,080	Sept. 9	1090	282	52	1590
Gibbs, James B., Mexico, and H. Boozer, Mansfield, Ohio. Corn-harvester	431,576	July 8	838	209	52	175
Gibbs, James D., Jeffersonville, Ind. Ticket-machine	443,960	Dec. 30	3779	{ 965 966 }	53	2030
Gibbs, James E. (See Carts and Gibbs.)						
Gibbs, James E. (See Peirce and Gibbs.)						
Gibbs, James E. A. (See Wilcox and Gibbs.)						
Gibbs, William E., New York, N. Y. Electric dental plugger	427,070	May 6	58	16	51	821
Gibbs, William H., Mendon, Ill. Whiffletree-hook	429,615	June 10	774	187	51	1631
Gibert, Juan A. y. New York, N. Y. Screw-propeller	424,056	Mar. 25	2559	684	50	1645
Gibson, Adelbert R., Cleveland, Ohio. Seal for cars, &c.	421,566	Feb. 18	1677	434	50	898
Gibson, Charles D. P., Jersey City, N. J. Method of and apparatus for preparing electrodes for secondary batteries	439,240	Oct. 28	2439	654	53	483
Gibson, Chauncey W., San Francisco, Cal. Beverage-carbonizer	422,203	Feb. 25	2549	675	50	1079
Gibson, Chauncey W., Detroit, Mich. Gas-generator	436,975	Sept. 23	2568	671	52	1887
Gibson Company, Thomas. (See Murphy, Richard, assignor.)						
Gibson, Francis M., Good Hope, Ohio. Dumping-cart	422,518	Mar. 4	224	59	50	1178
Gibson, James C., San Francisco, Cal. Clutch-pulley	439,140	Oct. 28	2271	610	53	451
Gibson, James G., Peoria, Ill. Corn-planter	420,652	Feb. 4	324	83, 84	50	627
Gibson, John. (See Diehl and Gibson.)						
Gibson, John H., Canton, Ohio. Wrench	431,655	July 8	972	242	52	201
Gibson, Joshua R., Cincinnati, Ohio. Urinal	436,174	Sept. 9	1236	322	52	1616
Gibson, Lyman B., assignor of one-half to J. A. Stanton, Painted Post, N. Y. Boot scraper and cleaner	443,437	Dec. 23	2953	760	53	1862
Gibson, Robert, Denver, Colo. Flush-tank and water-closet	442,177	Dec. 9	862	231	53	1439
Gibson, Scott S., Whiting, Kans. Windmill-regulator	441,296	Nov. 25	2714	704	53	1151
Gibson, Walter L., Turnbull, assignor to himself, and J. H. Leo, Oviedo, Fla. Wrench	437,589	Sept. 30	3542	924	52	2083

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Gibson, William A. (See Ford, Thomas P., assignor.)						
Giddens, Robert M. (See Wood, William T., assignor.)						
Giddings, Solomon P. (See Clark, Norman, assignor.)						
Giebel, Charles E., Fremont, Ohio. Shade or canopy	437,336	Sept. 30	3133	819	52	2006
Gielow, Charles, assignor to L. Wolf Manufacturing Company, Chicago, Ill. Flushing-tank for water-closets	442,804	Dec. 16	1870	483	53	1644
Giesler, Franklin B., Milwaukee, Wis. Water-meter	427,852	May 13	1251	315 316	51	1066
Giesey, James H., Wheeling, W. Va. Flooring-clamp	443,961	Dec. 30	3788	966	53	2031
Gifford, Alenza T., Hopedale, Mass. Milling-machine	432,936	July 22	2947	755	52	593
Gifford, Alenza T., assignor to Dutcher Temple Company, Hopedale, Mass. Automatic sprinkler	435,998	Sept. 9	957	251 413 414 415 416	52	1565
Gifford, Alenza T., and C. H. French, Hopedale, assignors to Shaw Stocking Company, Lowell, Mass. Circular-knitting machine	438,685	Oct. 21	1529	414 415 416	53	306
Gifford, Ezra N., assignor to Railway Device Manufacturing Company, Chicago, Ill. Car-coupling	434,865	Aug. 19	2186	573	52	1203
Gifford, Fred S., assignor of one-half to A. G. Baker, New Bedford, Mass. Displaying-receptacle	427,982	May 13	1456	369	51	1105
Gifford, Frederick S. (See Baker, Ansel G., assignor.)						
Gifford, John, assignor to Gifford Manufacturing Company, Watertown, N. Y. Churn	432,032	July 15	1563	399	52	320
Gifford Manufacturing Company. (See Gifford, John, assignor.)						
Gifford Manufacturing Company. (See Waite, Hamilton D., assignor.)						
Gifford, Squire D., Wallace, W. Va. Shovel plow and cultivator	420,994	Feb. 11	856	221	50	735
Gilbert, Adelbert L., Milwaukee, Wis., assignor to Iverson, Blakeman & Co., New York, N. Y. Combined manuscript-holder and place-indicator	422,342	Feb. 25	2823	745	50	1121
Gilbert, Alonzo, Stanton, Mich. Fifth-wheel for vehicles	425,938	Apr. 15	2294	607	51	461
Gilbert, Andrew T., Salem, Oreg. Hose-coupling	437,890	Oct. 7	328	96	53	64
Gilbert, Cephas, Branford, Fla. Cotton-gin	419,514	Jan. 14	1292	345	50	271
Gilbert, Charles. (See Wintherlich, Hans J., assignor.)						
Gilbert, Clarence S. (See Wadleigh, Merian, assignor.)						
Gilbert, Edwin, Georgetown, Conn., assignor of one-half to L. G. Beers, Chicago, Ill. Gate or fence	420,681	Feb. 4	358	94	50	634
Gilbert, Edwin, Georgetown, Conn., and P. Drendul, assignors of one-third to L. G. Beers, Chicago, Ill. Staple bridging or furring for wire lathing	433,894	Aug. 5	676	175	52	889
Gilbert, Edwin R., Hartford, Conn. Rheostat	439,939	Nov. 4	470	123	53	700
Gilbert, Emerson A., Jamestown, N. Y. Frame for coating aristotype-paper	428,089	May 20	1610	409	51	1145
Gilbert, Francis M., Silver City, N. Mex. Ter. Bird-cage	436,475	Sept. 16	1718	453	52	1718
Gilbert, Frank L., Conroe, Tex. Motor	429,379	June 3	428	101	51	1553
Gilbert, George A., and W. Richardson, Milwaukee, Wis.; said Richardson assignor to said Gilbert. Grain-cleaning machine	442,805	Dec. 16	1871	483	53	1645
Gilbert, George H., Philadelphia, Pa. Web-holder for knitting-machines	435,174	Aug. 26	2686	709	52	1304
Gilbert, Harry T., Philadelphia, Pa. Oven-slide	429,380	June 3	429	101	51	1553
Gilbert, Henry J., Saginaw, Mich. Friction-clutch	421,694	Feb. 18	1862	488	50	934
Gilbert, Henry J., Saginaw, Mich. Barrel-machine	427,071	May 6	60	17 18 19 80 81 82	51	821
Gilbert, Henry J., Saginaw, Mich. Making barrels	427,230	May 6	314	81 82	51	873
Gilbert, Henry J., Saginaw, Mich. Curtain-pole support	443,175	Dec. 23	2521	645	53	1777
Gilbert, Henry J., Saginaw, Mich. Curtain-pole ring	443,514	Dec. 30	3081	794	53	1897
Gilbert, Henry W., assignor to H. W. Lyon, Bridgeport, Conn. Button-strip	434,367	Aug. 12	1424	374	52	1046
Gilbert, Ivar R., Manchester, N. H. Door-spring	441,547	Nov. 25	3105	797	53	1227
Gilbert, Jesse J., New York, N. Y. Detergent	429,435	June 3	506		51	1569
Gilbert, John I. (See Ross, Robert, assignor.)						
Gilbert, Joseph H., Philadelphia, Pa. Flue-protector	432,397	July 15	2115	543	52	423
Gilbert, Oscar L., St. Paul, Minn. Car-coupling	434,332	Aug. 12	1344	350	52	1029
Gilbert, Oscar L., St. Paul, Minn. Car-coupling	440,770	Nov. 18	1824	470	53	976
Gilho, Michael J., et al. (See Schlegel, Herman T., assignor.)						
Gildersleeve, George H., Grand Rapids, Mich. Harness	435,059	Aug. 26	2519	665	52	1273
Gildersleeve, Joseph, assignor to J. T. Hanson, London, England. Organ	439,397	Oct. 28	2696	717 718	53	530
Giles, Ernest N. (See Plough and Giles.)						
Giles, Jason, Indian Orchard, Mass. Straight-way valve	423,755	Mar. 18	2098	554	50	1549
Giles, Jason, Indian Orchard, Mass. Indicator-valve for stand-pipes	437,489	Sept. 30	3393	889	52	2054
Giles, John E., Hazleton, Pa. Arc and incandescent lighting system	438,619	Oct. 21	1438	387	53	289
Giles, John E., Hazleton, Pa. Electric-arc lamp	442,617	Dec. 16	1549	401	53	1582
Giles, Nelson, Jr., L. E. and W. E. Brown, National City, Cal. Insecticide	438,593	Oct. 14	1386		53	274
Giles, Stephen, Patten, Me. Holdback for vehicles	429,756	June 10	964	241	51	1672
Gillilan, Essington N., assignor, by mesne assignments, to Johnston Car Seat Company, Chicago, Ill. Car-seat	436,829	Sept. 23	2306	607 608	52	1837
Gillilan, Essington N., Chicago, assignor, by mesne assignments, of one half to W. H. and L. E. Dodge, Waukegan, Ill. Spring-scales	431,205	July 1	261	65, 66	52	54
Gillilan, Essington N., and J. S. Emmert, assignors to Johnston Car Seat Company, Chicago, Ill. Reclining-chair	421,356	Feb. 11	1369	355	50	831
Gillilan, William, Steinway, N. Y. Surgical-bandage winder	442,314	Dec. 9	1063	279	53	1477
Gill-Alexander Electric Manufacturing Company. (See Alexander, William W., assignor.)						
Gill-Alexander Electric Manufacturing Company. (See Gill, Edwin R., Jr., assignor.)						
Gill, Edwin R., Jr., Pleasant Hill, assignor to Gill-Alexander Electric Manufacturing Company, Kansas City, Mo. Electric circuit-controlling apparatus	430,636	June 24	2387	582	51	1959
Gill, Edwin R., Jr., Pleasant Hill, assignor to Gill-Alexander Electric Manufacturing Company, Kansas City, Mo. Automatic signal and switch controlling apparatus and verifying mechanism	430,637	June 24	2392	583	51	1960
Gill, Leonard U., and A. Bradley, London, England; said Bradley assignor to said Gill. Guillotine paper-cutting machine	439,817	Nov. 4	276	69, 70	53	662
Gill, Martin G. (See Sneider, Charles E., assignor.)						
Gill, Walter J., Boston, Mass. Pencil-sharpener	431,769	July 8	1160	289	52	235
Gill, William A. (See Morningstar, Charles A., assignor.)						
Gill, William E. (See Wollensak and Gill.)						
Gillam, George E., assignor of one-half to W. Prentiss, Macomb, Ill. Automatic brake for cars	436,057	Sept. 9	1049	273	52	1583

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Gillard, Nathaniel, and H. Loewer, assignors of one-third to P. Byrnes, Rochester, N. Y. Boot-tree	441,657	Dec. 2	40	11	53	1270
Gillespie, George W., Hartford, Conn. Rotary cutter	437,298	Sept. 30	3078	806	52	1991
Gillespie, Robert A., <i>et al.</i> (See Thompson, John B., assignor.)						
Gillespie, Robert W., St. Louis, Mo. Seal-lock	435,821	Sept. 2	683	182	52	1507
Gillespie, Robert W., St. Louis, Mo. Box-fastener	441,548	Nov. 25	3107	797	53	1227
Gillet, Charles F., Springfield, Ill. Coin-released spirometer	419,938	Jan. 21	1931	509	50	405
Gillet, Elizabeth A. (See Gillet, Etienne, assignor.)						
Gillet, Etienne, assignor to E. A. Gillet, New York, N. Y. Steam-boiler	426,586	Apr. 29	3278	860	51	675
Gillett, Egbert W. (See Hoffman, Orville S., assignor.)						
Gillett, Jerome S. (See Lord and Gillett.)						
Gillett, Lester A., Leonardville, Kans. Automatic grain-meter	424,972	Apr. 8	835	223	51	170
Gillett, Schuyler L., Lima, N. Y. Bottle-washing machine	434,628	Aug. 19	1816	475	52	1132
Gillette, Harleigh, Highland Park, Ill. Box-fastener	420,597	Feb. 4	242	64	50	612
Gillette, Harleigh, Highland Park, Ill. Electric crossing-gate	438,620	Oct. 21	1439	388	53	289
Gillette, Harleigh, Highland Park, Ill. Electric gate	442,114	Dec. 9	767	206 207	53	1420
Gillette, Harry L., Buffalo, N. Y. Railway-bedding	429,436	June 3	507	121	51	1569
Gillette, Thurber J., Syracuse, N. Y. Sliding door	433,678	Aug. 5	352	90	52	825
Gillies, George, Gananoque, Ontario, Canada. Carriage-top joint	430,638	June 24	2396	583	51	1961
Gillihan, Lucius. (See Hart and Gillihan.)						
Gilliland, Ezra T. (See Edison and Gilliland.)						
Gilliland, Ezra T., New York, N. Y., assignor to Automatic Phonograph Exhibition Company, of New York. Vending-machine	443,254	Dec. 23	2662	683 684	53	1806
Gilliland, Samuel B., Monroe City, Mo. Hay-rake	423,146	Mar. 11	1201	313	50	1371
Gillin, William F. (See Woodside, George W., assignor.)						
Gillinder, Edgar A., Philadelphia, Pa., assignor to Gillinder & Sons. Manufacturing double-surface glass reflectors	425,939	Apr. 15	2295	607	51	461
Gillinder & Sons. (See Gillinder, Edgar A., assignor.)						
Gillis, B. W., <i>et al.</i> (See Gillis, Bosanquet W., assignor.)						
Gillis, Bosanquet W., assignor, by mesne assignments, to B. Wilkins and B. W. Gillis, Washington, D. C. Printer's type-measure	431,692	July 8	1046	262	52	213
Gillis, Edwin, assignor of one-half to J. W. Struthers, Kalamazoo, Mich. Negative-holder	425,420	Apr. 15	1505	404	51	310
Gillis, Harry A., Elmira, assignor of one-half to S. Hanford, Binghamton, N. Y. Implement for removing paint, &c.	427,759	May 13	1119	280	51	1041
Gillis, Simeon. (See Jarvis, Samuel, assignor.)						
Gillmore, George C. (See Wood and Gillmore.)						
Gillmore, George C. (See Wood and Gillmore.) (Reissue.)						
Gilson, Louis K. (See Haggard, Henry S., assignor.)						
Gilman, Charles A., assignor of one-half to F. Tucker, North Weare, N. H. Knife and scissors sharpener	431,887	July 8	1345	339	52	271
Gilman, Charles A., North Weare, N. H., assignor of two-thirds to A. M. and J. H. Preble, Lynn, Mass. Machine for cutting soles for boots or shoes	443,515	Dec. 30	3082	794	53	1897
Gilman, Charles C., Eldora, Iowa. Underground conduit for electric wires or cables	424,057	Mar. 25	2560	684	50	1645
Gilman, John D. (See Wallace, William V., assignor.)						
Gilmartin, Elizabeth, <i>et al.</i> (See Clark, John, assignor.)						
Gilmer, John G., Oxford, Fla. Binding attachment for harvesters	441,297	Nov. 25	2716	704 705	53	1152
Gilmer, John G., Oxford, assignor of one-third to M. P. Sellmer, Zellwood, Fla. Grain-binder	443,176	Dec. 23	2522	645 646	53	1778
Gilmer, Thomas W., assignor of two-thirds to T. H. Walker and H. Webb, Big Stone Gap, Va. Railway-tie	433,524	Aug. 5	119	34	52	780
Gilmore, Harrison E. (See Robinson, Darius S., assignor.)						
Gilmore, Ira F., and G. W. Padget, Leroy, Ill. Corn-husking machine	419,250	Jan. 14	907	239 240	50	194
Gilmore, Orpheus C., Clinton, Wis. Snap-hook	419,011	Jan. 7	546	136	50	115
Gilmore, Weller S., Chester Cross Roads, Ohio. Evaporating-pan and furnace for operating the same	441,001	Nov. 18	2195	567 568	53	1047
Gilmour, James M., East Orange, N. J. Coupling	425,171	Apr. 8	1148	303	51	232
Gilmour, John. (See Alsop, James N., assignor.)						
Gilmour, John P. (See Turpin, William J., assignor.)						
Gilray, James, Buffalo, N. Y. Lace-curtain stretcher	439,272	Oct. 28	2491	667	53	492
Gilray, Robert. (See Stewart, Robert E., assignor.)						
Gilreath, George B., Civil Bend, Mo. Gate	436,702	Sept. 16	2071	545	52	1784
Gilson, Cicero, Augusta, Ga. Truss-pad	439,141	Oct. 28	2272	610	53	451
Gilson, John, Port Washington, Wis. Revolving and tilting chair	439,614	June 17	1890	464	51	1857
Gilson, William L., McMinnville, Oreg. Grain-separator	420,316	June 10	775	187	51	1632
Gilstrap, Willis H., Pixley, Cal. Washing-machine	432,133	July 15	1728	444	52	352
Gimmini, Hugo, San Francisco, Cal. Combined yarn-winder, darning, and spool-stand	427,853	May 13	1252	316	51	1066
Gimson, Arthur J. (See Gimson, Josiah M., J., A. J., and S. A.)						
Gimson, Josiah. (See Gimson, Josiah M., J., A. J., and S. A.)						
Gimson, Josiah M., J., A. J., and S. A., Leicester, England. Sole and heel trimming machine	433,782	Aug. 5	514	133 134	52	856
Gimson, Sidney A. (See Gimson, Josiah M., J., A. J., and S. A.)						
Gindorff, Bernard C., Chicago, Ill. Sad-iron support	433,679	Aug. 5	353	90, 91	52	825
Gindorff, Matthew, Chicago, Ill. Folding tub-stand	424,878	Apr. 1	689	182	51	133
Gingras, Timothy. (See Plumbly, Frederick K., assignor.)						
Gingras, Timothy, Buffalo, N. Y. Belting	419,432	Jan. 14	1181	314	50	249
Gingras, Timothy, Buffalo, N. Y. Leather-washer	441,406	Nov. 25	2886	745	53	1185
Gingrich, John L. (See Brinser, Eli H. G., assignor.)						
Ginn, Henry J., Bowman, Ga. Combination-harrow	420,682	Feb. 4	359	95	50	634
Ginn, William B., Baltimore, Md., and T. A. Forsyth, Wilmington, Del. Grinding attachment for sewing-machines	443,760	Dec. 30	3481	893	53	1972
Ginochio, Noel B., assignor of one-half to E. M. Greene, New York, N. Y. Magneto-telephone	429,129	June 3	34	8	51	1479
Ginochio, Noel B., assignor of one-half to E. M. Greene, New York, N. Y. Magneto-generator	438,434	Oct. 14	1158	313	53	228
Ginther, Henry S., assignor to M. J. Schrader, Duquoin, Ill. Implement for removing button-fasteners	420,340	Jan. 28	2565	681	50	532
Ginty, John, San Diego, Cal. Combined pipe-coupling and expanding metallic sleeve	435,927	Sept. 9	857	225	52	1547
Gipperich, Adolphus, Richmond, Va. Synchronizer for clocks	438,314	Oct. 14	984	266	53	193
Gira, Frank A., and F. J. Asterlin, Bellevue, Ohio. Chimney-cowl	441,236	Nov. 25	2617	678	53	1133
Girdler, Lewis, Sellersburg, Ind. Device for molding cement into forms to be tested	423,756	Mar. 18	2100	554	50	1550

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Girdler, Lewis, Sellersburg, Ind. Weighing-machine for testing purposes.....	427,169	May 6	226	57	51	856
Girdlestone, John O. (See Andersen and Girdlestone.)						
Giroux, Joseph E., Alpena, Mich. Nutmeg-grater.....	433,077	July 29	3197	821	52	646
Girtanner, Engear, Columbus, Nebr. Book-cutting machine.....	427,170	May 6	227	57, 58	51	856
Gisholt Machine Company. (See Conradson, Conrad M., assignor.)						
Gissing, Samuel, Pittsburg, Pa. Nut-lock.....	442,970	Dec. 16	2153	554	53	1700
Gissing, Samuel, assignor of one-half to G. W. Gosser, Pittsburg, Pa. Velocipede.....	429,344	June 3	371	88	51	1541
Githens, George M., Brooklyn, N. Y. Elastic key for holding rock-drills.....	426,640	Apr. 29	3361	481	51	690
Githens, Joseph C., New York, N. Y., assignor to Rand Drill Company, of New York.						
Rock-drill.....	421,490	Feb. 18	1563	404	50	876
Githens, Joseph C., New York, N. Y., assignor to Rand Drill Company, of New York.						
Rock drilling and channeling machine.....	421,491	Feb. 18	1564	405	50	877
Giuseppe, Henri N. B., Luri, Corsica, France. Aerial railway.....	420,154	Jan. 28	2276	604	50	480
Giussani, Gaetano, Turin, assignor to C. Sacco, Genoa, Italy. Brake.....	425,670	Apr. 15	1892	{ 505 506 }	51	385
Given, Oliver E., Stuart, Iowa. Druggists' label-case and attachment for bottles and jars.	135,928	Sept. 9	858	225	52	1547
Glad, George H., Boston, Mass. Rotary water-meter.....	440,559	Nov. 11	1464	378	53	899
Glader, William, Chicago, Ill. Barrel-heading machine.....	439,241	Oct. 28	2441	655	53	483
Glaeser, Ado, Brooklyn, N. Y. Electric door-opener.....	419,766	Jan. 21	1662	{ 441 442 }	50	350
Glankler, Frank, assignor of one-half to W. W. Simmons, Memphis, Tenn. Barrel-hooping machine.....	420,683	Feb. 4	360	95	50	634
Glankler, Frank, assignor to Simmons & Wellford, Memphis, Tenn. Barrel-hooping machine.....						
Glanton, James A., Columbus, Ind. Extension-table.....	439,142	Oct. 28	2273	610	53	451
Glascock, Frank R., Hillsborough, Ohio. Cultivator.....	440,261	Nov. 11	966	247	53	808
Glasier, Charles J., St. Paul, Minn. Perforating device.....	443,914	Dec. 30	3702	948	53	2016
Glass, Albert J. (See Glass, Sheldon J., assignor.)	420,535	Feb. 4	154	38	50	594
Glass, Albert J., Batavia, N. Y. Disk harrow.....	429,437	June 3	508	121	51	1569
Glass, Albert J., Batavia, N. Y., assignor of one-half to S. J. Glass, Chicago, Ill. Disk harrow.....	427,854	May 13	1253	{ 316 317 }	51	1066
Glass, Henry L. (See Kendrick, William F., assignor.)						
Glass, James, New Castle, Pa. Bottle-case.....	442,971	Dec. 16	2154	554	53	1700
Glass, Johann, Leipsic, Saxony, assignor to A. Kessler, Jr., Markneukirchen, Germany.						
Violin-bow.....	425,503	Apr. 15	1630	434	51	334
Glass, John C., et al. (See Taylor, William G., assignor.)						
Glass, Louis, and W. S. Arnold, assignors to R. W. Smith, San Francisco, Cal. Coin-actuated attachment for phonographs.....	428,750	May 27	2621	{ 664 665 }	51	1357
Glass, Louis, and W. S. Arnold, assignors to R. W. Smith, San Francisco, Cal. Coin-actuating attachment for phonographs.....	428,751	May 27	2626	665	51	1358
Glass, Paul, Racine, Wis. Stove.....	430,185	June 17	1646	410	51	1809
Glass, Sheldon J. (See Glass, Albert J., assignor.)						
Glass, Sheldon J., Chicago, Ill., assignor of one-half to A. J. Glass, Batavia, N. Y. Disk harrow.....	427,855	May 13	1255	317	51	1067
Glass Transmitter Telephone Company. (See Prince, Jerome, assignor.)						
Glasser, Rudolph, et al. (See Daellenbach, Charles R., assignor.)						
Glatz, Joseph. (See Licht, Daniel, assignor.)						
Gleason, Albert H., Warsaw, Ind. Latch.....	437,590	Sept. 30	3543	925	52	2083
Gleason, Elliott P., New York, N. Y. Device for controlling the tension of belts of spinning frames or mules.....	426,440	Apr. 29	3065	803	51	633
Gleason, Elliott P., New York, N. Y. Pump.....	432,665	July 22	2533	650	52	513
Gleason, Michael, assignor to Ritters Metallic Picket Fence Company, Liberty, Ind. Fence-making machine.....	423,316	Mar. 11	1452	380	50	1419
Gleeson, Catherine M. E., Cleveland, Ohio. Pencil-holder.....	433,938	Aug. 12	743	194	52	912
Glantz, August, New York, N. Y. Piano-case.....	421,265	Feb. 11	1238	320	50	808
Glen Cove Machine Company. (See Autenrieth, Ernst F., assignor.)						
Glen Cove Machine Company. (See Hutchinson and Autenrieth, assignors.)						
Glen Cove Manufacturing Company. (See Grimm, Paul H., assignor.)						
Glencross, Charles, Sydney, New South Wales. Door-hanging device for cabs.....	439,143	Oct. 28	2274	{ 610 611 }	53	452
Glenn, Edmund L. (See Evans, Glenn, and Gaskill.)						
Glenn, James M., Cincinnati, Ohio. Pneumatic apparatus for propelling vessels.....	436,350	Sept. 16	1510	393	52	1679
Glennan, Edward T., New York, and J. Hamilton, Long Island City, N. Y. Pneumatic beer-pump.....	420,052	Jan. 28	2109	557	50	447
Glew, Frederick H., London, England. Manufacture of porous sheets or surfaces for the absorption of liquids, &c.....	438,998	Oct. 21	2050	548	53	404
Glick, Alvin J., Millersville, Ill. Two-wheeled vehicle.....	428,303	May 20	1940	488	51	1209
Glidden, Charles W., Lynn, assignor to J. W. Brooks, trustee, Cambridge, Mass. Top-lift holder.....	427,308	May 6	429	111	51	896
Glidden, Charles W., Lynn, and A. D. Elliott, Lawrence, assignors to J. W. Brooks, trustee, Cambridge, Mass. Heel-trimming machine.....	439,060	Oct. 21	2140	{ 574 575 }	53	421
Glidden, David W., Montrose, Pa. Wagon-seat lock.....	423,681	Mar. 18	1993	525	50	1531
Glidden, David W., Montrose, Pa. Vehicle-spring.....	425,029	Apr. 8	925	246	51	187
Glidden, Edmond E., West Oldtown, Me. Lantern.....	424,289	Mar. 25	2882	769	50	1708
Glidden, Oscar F., Grand Rapids, Mich. Removable tank for refrigerators.....	437,299	Sept. 30	3079	806	52	1991
Glidden, Oscar F., assignor to Michigan Washing Machine Company, Grand Rapids, Mich. Washing-machine.....	435,822	Sept. 2	684	183	52	1507
Glisson, George W., Jr., Rutherford, Tenn. Cotton-press.....	419,433	Jan. 14	1183	314	50	249
Globe Company. (See Dom, Alexander, assignor.)						
Globe Curtain Pole Company. (See Field, Albert D., assignor.)						
Gloekner, Peter J., Canton, Ohio. Belt-stretcher.....	420,782	Feb. 4	495	129	50	660
Gloekler, Charles A., Pittsburg, Pa. Meat-rack.....	430,341	June 17	1936	474	51	1865
Glor, Jacob, Prague, Nebr. Line-holder for walking-cultivators.....	419,039	Jan. 7	586	149	50	124
Glover, Charles, assignor to P. & F. Corbin, New Britain, Conn. Sheet-metal knob.....	436,523	Sept. 16	1777	469	52	1729
Glover, Edmond C., Randall, Ark. Car-brake.....	422,519	Mar. 4	225	59	50	1179
Glover, Eli S., Battle Creek, Mich. Album or picture-exhibitor.....	421,266	Feb. 11	1239	320	50	808
Glover, Eli S., Battle Creek, Mich. Stand or holder for albums.....	421,267	Feb. 11	1242	321	50	808
Glover, Eli S., Battle Creek, Mich. Tool-holder.....	438,150	Oct. 14	738	{ 202 203 }	53	149
Glover, George T., Chicago, Ill. Machine for making ice-roads.....	426,006	Apr. 22	2417	640	51	493
Glover, George T., Chicago, Ill., assignor to United States Spring Company, of Illinois.						
Vehicle-spring.....	440,402	Nov. 11	1204	311	53	851
Glover, George T., Chicago, Ill., assignor to United States Spring Company, of Illinois.						
Vehicle-spring.....	440,403	Nov. 11	1205	311	53	851

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Glover, Henry P. (See Johnston, Walter, assignor.)						
Glover, Horace B. (See Stayman, David F., assignor.)						
Glover, James B., Savannah, Ga. Car-axle lubricator	420,783	Feb. 4	496	130	50	660
Glover, James B., Jr., Marietta, Ga. Journal-lubricating device	434,983	Aug. 26	2403	636	52	1251
Glover, James B., Marietta, Ga., assignor of one-third to J. Malloch, Elderslie, Scotland. Apparatus for detecting irregularities in railway-tracks	433,167	July 29	3334	863	52	674
Glover, John M. (See Mallonee, Joseph D., assignor.)						
Glover, John M., et al. (See Malmberg, Ernst R., assignor.)						
Glover, Robert E., Granger, Mo. Drug-scales	421,695	Feb. 18	1863	488	50	935
Glover, Taylor, and W. Armstrong, Maryville, Mo. Scraper for cleaning steam-boilers	440,028	Nov. 4	608	161	53	727
Glover, Theodore S., South Norwalk, Conn. Heating railway-cars	421,696	Feb. 18	1865	488	50	935
Glover, Theodore S., South Norwalk, Conn. Car-heater	421,697	Feb. 18	1867	489	50	935
Glover, Truman J., Washington, D. C. Bicycle-lock	431,457	July 1	653	163	52	132
Glover, Truman J., Washington, D. C. Bicycle-brake lock	437,591	Sept. 30	3545	925	52	2053
Glover, Wilson, Greenville, S. C. Bale-covering	431,048	July 1	32	52	52	8
Gloy, John, Chicago, Ill. Parlor gymnasium apparatus	431,206	July 1	262	66	52	54
Glunt, Samuel P. (See Locke, Joseph S., assignor.)						
Glynn, Michael A., Havana, Cuba. Railway-rail	441,002	Nov. 18	2197	568	53	1047
Glynn, Michael A., Havana, Cuba. Railway-sleeper and rail-fastener	441,549	Nov. 25	3108	798	53	1227
Glynn, William, Boston, assignor to himself and E. H. Marsh, Somerville, Mass. Candy-rolling and cutting machine	432,937	July 22	2948	756	52	593
Gmünder, George F., New York, N. Y. Sash-fastener	420,298	Jan. 28	2510	665	50	522
Gnehm, Robert, assignor to Society of Chemical Industry, Basle, Switzerland. Red dye	425,504	Apr. 15	1630	51	51	335
Gnehm, Robert, and J. Schmid, Basle, Switzerland, assignors to Fr. von Heyden, Nachfolger, Radebeul, Germany. Carbonic-acid compound of meta-amidophenol	427,564	May 13	816	51	51	983
Gnehm, Robert, and J. Schmid, Basle, Switzerland, assignors to Fr. von Heyden, Nachfolger, Radebeul, Germany. Carbonic-acid compound of dimethyl meta-amidophenol	427,565	May 13	817	51	51	983
Goddard, William, and W. Fiddler, Tonawanda, N. Y. Railway-rail fastener	443,594	Dec. 30	3212	826	53	1922
Godbey, Thomas K., Waldo, Fla. Cultivator-tooth	424,973	Apr. 8	837	223	51	171
Goddard, Andrew. (See Smith, Goddard, Higginbottom, and Mannoek.)						
Goddard, Calvin, assignor to Edison Electric Light Company, New York, N. Y. Thermal cut-out	439,398	Oct. 28	2097	718	53	530
Goddard, Frederick B. (See Crowell, Albert I., assignor.)						
Goddard, Silas W., Worcester, Mass. Cylinder for carding-engines	433,620	Aug. 5	265	71	52	808
Goddu, Louis, Winchester, assignor to J. W. Brooks, Cambridge, and F. F. Stanley, Swampscott, Mass., trustees. Nailing-machine	440,805	Nov. 18	1878	483	53	986
Goddu, Louis, Winchester, assignor to J. W. Brooks, Cambridge, and F. F. Stanley, Swampscott, Mass., trustees. Nail-making machine	443,077	Dec. 16	2330	595	53	1735
Goddu, Louis, Winchester, assignor to J. W. Brooks, Cambridge, and F. F. Stanley, Swampscott, Mass., trustees. Burning crude petroleum	443,660	Dec. 30	3313	854	53	1940
Godfrey, Henry W., C. F. Leake, and C. E. Lucas, Staines, county of Middlesex, England, Manufacture of linoleum	425,875	Apr. 15	2190	583	51	443
Godfrey, Lincoln, et al. (See Reckenzaun, Anthony, assignor.)						
Godfrey, William L., assignor of one-half to H. F. Hellsberg, Brooklyn, N. Y. Electric door-opener	425,777	Apr. 15	2044	544	51	416
Godfrey, William L., Brooklyn, N. Y., assignor of one-half to L. B. McGregor and R. B. Mitchell, Jr. Letter-box	441,063	Nov. 18	2296	595	53	1067
Godsey, William J., Cleburne, Tex. Car-coupling	436,954	Sept. 23	2540	665	52	1881
Godsalk, E. H. (See Martin and Gee, assignors.)						
Godshall, Joseph R., Blooming Glen, Pa. Windmill	441,153	Nov. 25	2454	636	53	1106
Godshaw, Charles, et al. (See Barnum, Joseph P., assignor.) (Reissue.)						
Godwin, Joshua B., Washington, N. C. Fire extinguisher and alarm	438,726	Oct. 21	1614	433	53	320
Goebbels, Leo V. (See Winand and Goebbels.)						
Goeddeke, Joseph, Detroit, Mich. Malt-scuturing machine	432,998	July 29	3073	788	52	622
Goehler, George J. H., Pittsburg, Pa. Safe and vault	419,658	Jan. 21	1516	402	50	321
Goehler, George J. H., assignor to Cary Safe Company, Limited, Buffalo, N. Y. Forging-machine	435,494	Sept. 2	173	48, 49	52	1408
Goehler, George J. H., assignor to Cary Safe Company, Limited, Buffalo, N. Y. Safe-door	436,411	Sept. 16	1614	425	52	1698
Goehring, Charles L. (See Van Houten, Frank H., assignor.)						
Goehst, John H., Chicago, Ill. Electric-light shade	432,826	July 22	2795	714	52	563
Goeldner, Eugene C., Watertown, Wis. Dental grindstone wetter and wiper	443,572	Dec. 30	3174	815	53	1914
Goelet Automatic Car Coupler and Manufacturing Company. (See Goelet, Edward B., assignor.)						
Goelet, Edward B., New Orleans, La., assignor to Goelet Automatic Car Coupler and Manufacturing Company. Car-coupling	431,693	July 8	1048	262	52	213
Goepel, Ewald C., Newark, N. J. Satchel-frame attachment	443,138	Dec. 23	2460	629	53	1765
Gertz, August, Newark, N. J. Purse or bag frame	423,994	Mar. 25	2466	656	50	1627
Goetz, Louis, New York, N. Y. Reclining-chair	425,778	Apr. 15	2046	545	51	416
Goetting, George C. (See Watton, Fealdon E., assignor.)						
Goetz, Charles. (See Phillips, Edward D., assignor.)						
Goetz, George W., Milwaukee, Wis. Apparatus for repairing furnace-linings	436,976	Sept. 23	2569	672	52	1887
Goetz, George W., Milwaukee, Wis. Process of and apparatus for comminuting materials of a viscous or pasty nature	441,951	Dec. 2	502	134	53	1363
Goetz, George W., Milwaukee, Wis. Calcining or analogous furnace	443,438	Dec. 23	2954	760	53	1843
Goetz, Henry A., New Albany, Ind. Timber seat and tie for building purposes	437,592	Sept. 30	3546	926	52	2083
Goetze, George H., Sedalia, Mo. Closet	429,518	June 3	626	153	51	1591
Goff, F. C., et al. (See Amstutz, Noah S., assignor.)						
Goff, George W., East Hampton, Conn. Bell	419,767	Jan. 21	1664	442	50	350
Goff, Herbert E., North Attleborough, Mass. Rosette for jewelry	419,251	Jan. 14	910	241	50	194
Goff, Samuel B., Camden, N. J. Water-motor	426,261	Apr. 22	2784	731	51	568
Goff, Samuel B., Camden, N. J. Water wheel or motor	426,262	Apr. 22	2785	731	51	568
Goff, Samuel B., Camden, N. J. Water-wheel	426,263	Apr. 22	2786	732	51	568
Goff, Samuel B., Camden, N. J. Water wheel or motor	426,264	Apr. 22	2787	732	51	569
Goff, Samuel B., Camden, N. J. Water-wheel	426,265	Apr. 22	2789	732	51	569
Goff, Samuel B., Camden, N. J. Ship propulsion	429,438	June 3	510	122	51	1570
Goff, Samuel B., Camden, N. J. Rotary engine or water-wheel	433,727	Aug. 5	420	107	52	837
Goff, Samuel B., Camden, N. J. Guard for boats, ships, &c	438,917	Oct. 21	1925	512	53	378
Goff, William E., De Witt, assignor of one-half to L. A. Worden, Syracuse, N. Y. Game or puzzle	427,506	May 6	721	181	51	954

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Goforth, Marshall T. (See Sheets and Goforth.)						
Goggin, Henry J., New York, N. Y. Fishing-reel support.	426,616	Apr. 29	3324	872	51	684
Gohm, James, Newport, R. I. Potato-digger.	437,593	Sept. 30	3548	926	52	2084
Gohn, William D. (See Hill and Gohn.)						
Gohn, William J., Danville, Ill. Cultivator.	419,328	Jan. 14	1027	271	50	217
Gohn, William J., Oakwood, Ill. Cultivator.	428,559	May 20	2308	586	51	1280
Golay, Edouard, Geneva, Switzerland. Alloy.	420,598	Feb. 4	243		50	612
Gold, Edward E., New York, N. Y. Steam-trap.	424,779	Apr. 1	537	144	51	106
Gold, Edward E., New York, N. Y. Pipe-coupling for railway-cars.	424,780	Apr. 1	539	{ 144 145 }	51	106
Gold, Edward E., New York, N. Y. Pipe-coupling for railway-cars.	435,016	Aug. 26	2453	649	52	1260
Gold, Joseph S., assignor of one-half to H. Schrader, Columbus, Ohio. Billiard-cue dresser.	422,204	Feb. 25	2590	685	50	1079
Goldberg, Nehemiah. (See Kopf, Louis, assignor.)						
Goldberg, Nehemiah, Philadelphia, Pa. Folding step-ladder.	438,883	Oct. 21	1879	499	53	369
Golden, Charles E., Oskaloosa, Kans. Device for raising and lowering cellar-doors.	443,962	Dec. 30	3789	966	53	2032
Golden, Eliza. (See Stockford, Benjamin F., assignor.)						
Golden Rule Company. (See Dickinson, Charles A., assignor.)						
Golder, Evan R., Swampscot, Mass. Folding table.	424,879	Apr. 1	690	182	51	133
Golder, William H., Portland, Oreg. Device for operating elevator-gates.	439,940	Nov. 4	472	123	53	700
Goldie, William, West Bay City, Mich. Railway-rail brace.	421,268	Feb. 11	1244	321	50	809
Goldie, William, West Bay City, Mich. Railway-rail chair.	426,530	Apr. 29	3194	838	51	657
Goldie, William, West Bay City, Mich. Rail-fastening device.	443,274	Dec. 23	2696	{ 691 692 }	53	1813
Goldman, Jacob J. (See Ceperley, George W., assignor.)						
Goldman, Samuel S., assignor to L. D. Dozier, St. Louis, Mo. Cover for boxes.	420,196	Jan. 28	2352	625	50	493
Goldmann, Philipp, New York, N. Y. Fire-escape.	421,269	Feb. 11	1246	{ 321 322 }	50	809
Goldrick, Philip, Haverstraw, N. Y. Roof for drying-sheds.	420,784	Feb. 4	498	130	50	660
Goldsborough, Louis P., Baltimore, Md. Dancing puppet.	423,757	Mar. 18	2101	554	50	1550
Goldschmid, Albert, Zurich, Switzerland. Pocket photographic apparatus.	441,064	Nov. 18	2297	596	53	1067
Goldschmidt, Rudolf, trustee. (See Roberts, Robert R., assignor.)						
Goldschmidt, Philipp, Paterson, N. J. Warping-machine.	428,772	May 27	2651	672	51	1364
Goldschmidt, Philipp, Paterson, N. J. Electric stop-motion for warping-machines.	443,674	Dec. 30	3342	{ 860 861 }	53	1946
Goldsmith, Albert. (See Bond and Goldsmith.)						
Goldsmith, Byron B., New York, N. Y. Pen-holder.	434,265	Aug. 12	1250	324	52	1010
Goldsmith, Edwin C. (See Bond and Goldsmith.)						
Goldsmith, Edwin M., Philadelphia, Pa. Coin-holder.	435,220	Aug. 26	2747	725	52	1316
Goldsmith, Frederick E., assignor of two-thirds to W. H. Allen and J. Bureky, Hamilton, Ohio. Seed or fertilizer distributor.	426,993	Apr. 29	3877	1013	51	790
Goldsmith, Frederick E., assignor of one-half to H. H. Augspurger, Hamilton, Ohio. Vessel for receiving liquids.	430,425	June 17	2052	506	51	1888
Goldsmith, Nathaniel O. (See Weir and Goldsmith.)						
Goldsmith, Nathaniel O., assignor to Weir Frog Company, Cincinnati, Ohio. Crossing and switch.	431,514	July 1	740	{ 184 185 }	52	148
Goldsmith, Nathaniel O., assignor to Weir Frog Company, Cincinnati, Ohio. Coke-drawing machine.	435,891	Sept. 2	795	{ 212 213 }	52	1528
Goldsmith, Nathaniel O., assignor to Weir Frog Company, Cincinnati, Ohio. Switch-stand.	440,560	Nov. 11	1466	378	53	899
Goldsmith, Philipp. (See Wolf, Julius J., assignor.)						
Goldsmith, William H. (See Hamblin and Goldsmith.)						
Goldsmith, William H., Fall River, Mass. Cotton-waste picker.	419,434	Jan. 14	1184	315	50	249
Goldstein, Jacob, and I. Block, New York, N. Y. Oil-stove.	419,040	Jan. 7	587	149	50	124
Goldstone, Louis, San Francisco, Cal. Street or station indicator.	439,941	Nov. 4	473	{ 123 124 }	53	701
Goldthwait, Everett. (See Brennan, Jones, and Goldthwait.)						
Goldthwait, Everett, Elkhart, Ind. Bolt-cutting machine.	432,033	July 15	1564	399	52	320
Goldthwait, William, Long Meadow, Mass. Watch-regulator.	427,072	May 6	75	19	51	826
Goldthwaite, William F., et al. (See Porter, Daniel R., assignor.)						
Goldwater, Henry, New York, N. Y. Apparatus for purifying vapors.	432,525	July 22	2316	598	52	472
Gonzalez-Gomez, Ynocencio, Cascante, Navarre, Spain. Match and mode of making.	426,007	Apr. 22	2419		51	494
Good, D. R., et al. (See Stine, Samuel B., assignor.)						
Good, Henry N. B., Deizes, county of Wilts, England. Photographic camera.	421,923	Feb. 25	2189	574	50	1005
Good, John, Brooklyn, N. Y. Spindle and fier.	433,122	July 29	3269	842	52	660
Good, John C., Fort Seneca, Ohio. Straw-carrier.	413,089	Dec. 23	2369	605	53	1750
Good, Peter, Wilkes-Barré, Pa. Spool-box.	437,688	Oct. 7	18	6	53	6
Goodale, Charles I., Somerville, Mass. Decorative ware and making the same.	437,431	Sept. 30	3304	862	52	2035
Goodale, George P. (See Thorpe, Thomas J., assignor.)						
Goodall, Francis M., Philadelphia, Pa. Grate.	422,763	Mar. 4	577	{ 148 149 }	50	1247
Goodall, Thomas, and T. Webster, Sunderland, county of Durham, England, assignor to J. Bertram & Son, Edinburgh, Scotland. Pulp-strainer.	435,091	Aug. 26	2567	{ 677 678 }	52	1282
Goodbody, Robert, Clara, county of Kings, Ireland. Automatic visible-feed injector.	423,758	Mar. 18	2101	555	50	1550
Goode, William H. C. (See Kilborn, Wilber E., assignor.)						
Goode, Abner C., Jr. (See Goode, Zina, assignor.)						
Goode, Albert D. and H. E., Shelburne Falls, Mass. Screw-driver.	432,729	July 22	2636	674	52	534
Goode Company. (See Oaks, William A. C., assignor.)						
Goode, Henry E. (See Goode, Albert D. and H. E.)						
Goode, Silas, assignor to Gatling Gun Company, Hartford, Conn. Cartridge-feeder for machine-guns.	421,862	Feb. 18	2101	551	50	978
Goode, Zerah D., et al. (See Brenizer, Orson W., assignor.)						
Goode, Zina, Salem, Mass. Hatchway for elevators.	429,519	June 3	627	154	51	1592
Goode, Zina, assignor to A. C. Goode, Jr., Salem, Mass. Elevator.	419,041	Jan. 7	588	150	50	124
Goodenough, A. Chapin. (See Kendall, George D. and W. F., assignors.)						
Goodenough, Thomas, Woodside, assignor to W. P. Ward, New York, N. Y. Door-check.	432,485	July 15	2249	581	52	452
Goodfellow, Frank, assignor of one-half to J. H. Liephart, Plattsburg, Ohio. Pump-operating apparatus.	425,216	Apr. 8	1207	320	51	245
Goodfellow, James, New York, N. Y. Safety-brake.	441,298	Nov. 25	2719	705	53	1152
Goodfellow, John H., assignor of two-thirds to H. G. Hammett and E. S. Strait, Troy, N. Y. Sand-blast apparatus for cleaning stove-plate castings.	437,922	Oct. 7	374	{ 108 109 }	53	72
Goodhue, George J., Chicago, Ill. Timber structure for mines.	429,439	June 3	511	122	51	1570
Goodhue, Henry M. (See Combs and Goodhue.)						
Gooding, Charles S., Brookline, and S. W. Ladd, Somerville, Mass. Nail and tack driving machine.	423,920	Mar. 25	2353	{ 619 620 }	50	1606

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Gooding, Charles S., Brookline, and S. W. Ladd, Somerville, Mass. Pegging-machine.....	423,921	Mar. 25	2355	{ 620 621 622 623 624	50	1607
Gooding, Charles S., Brookline, and S. W. Ladd, Somerville, Mass. Lasting-machine.....	423,922	Mar. 25	2356	{ 625 626 627 628 629	50	1607
Gooding, Charles S., Brookline, and S. W. Ladd, Somerville, Mass. Nail-driving machine.	441,462	Nov. 25	3008	775	53	1207
Gooding, James F. (See Gooing, Martin B., assignor.)						
Gooding, W. S. (See Major, Albert D., assignor.)						
Goodman, Albert G. (See Fleury and Goodman.)						
Goodman, Henry M., Louisville, Ky. Self-oiling axle.....	422,764	Mar. 4	578	149	50	1247
Goodman, Henry M., Louisville, Ky. Axle-box.....	442,520	Dec. 9	1395	356	53	1542
Goodman, Henry M., Louisville, Ky. Axle-box for vehicles.....	442,521	Dec. 9	1396	356	53	1542
Goodman, Henry M., assignor of one-half to C. Warren, Louisville, Ky. Car-axle lubricator.....	419,604	Jan. 14	1420	381	50	298
Goodman, Henry M., assignor of one-fourth to A. Baker, Louisville, Ky. Sash-fastener.....	429,091	May 27	3134	808	51	1458
Goodman, Henry M., assignor of one-third to J. S. Bell and F. A. Baker, Louisville, Ky. Car-axle lubricator.....	431,967	July 8	1459	370	52	294
Goodman, Henry M., assignor of one-third to F. A. Baker and J. S. Bell, Louisville, Ky. Car-axle lubricator.....	433,404	July 29	3660	945	52	740
Goodman, Henry M., assignor of one-sixth to J. S. Bell and F. A. Baker, Louisville, Ky. Self-oiling car-truck.....	438,999	Oct. 21	2051	549	53	404
Goodrich, Benjamin F., Homer, Mich. Bath-tub.....	420,599	Feb. 4	243	65	50	612
Goodrich, George, Williston, assignor of one-half to C. W. Howe, Richmond, Vt. Potato-digger.....	424,781	Apr. 1	545	145	51	107
Goodrich, Harry C., Chicago, Ill. Eraser.....	424,107	Mar. 25	2635	702	50	1659
Goodrich, Harry C., Chicago, Ill. Velocipede.....	425,779	Apr. 15	2048	{ 545 546 547	51	416
Goodrich, Harry C., Chicago, Ill. Bicycle.....	437,191	Sept. 30	2915	{ 759 760	52	1960
Goodrich, Joseph, Chicago, Ill. Barrel-roller.....	420,053	Jan. 28	2109	557	50	447
Goodrich, Joseph, Chicago, Ill. Drive-chain.....	420,341	Jan. 28	2565	681	50	532
Goodrich, Joseph, Chicago, Ill. Circus toy.....	442,038	Dec. 2	646	174	53	1389
Goodrich, Joseph F., New Haven, Conn. Jump-seat carriage.....	427,856	May 13	1257	317	51	1067
Goodrich, Joseph F., New Haven, Conn. Convertible carriage.....	434,663	Aug. 19	1889	493	52	1145
Goodrich, Joseph F., New Haven, Conn. Vehicle-seat.....	436,129	Sept. 9	1166	305	52	1603
Goodridge, Frederick A., St. Louis, Mo. Stirrup.....	437,108	Sept. 23	2754	720	52	1924
Goodridge, James F., Boston, Mass. Coin-operated picture-exhibitor.....	431,049	July 1	32	7, 8	52	8
Goodsell, Alfred T. (See King and Goodsell.)						
Goodsell, Charles N. (See Helms, Charles H., assignor.)						
Goodson, George A., assignor to Minneapolis Electro-Matrix Company, Minneapolis, Minn. Attachment for type-writing machines.....	427,680	May 13	977	247	51	1014
Goodson, George A., assignor to Minneapolis Electro-Matrix Company, Minneapolis, Minn. Electro-matrix machine.....	427,681	May 13	980	{ 247 248 249	51	1015
Goodson, George A., assignor of one-half to J. F. Williamson, Minneapolis, Minn. Matrix-making machine.....	436,703	Sept. 16	2072	{ 545 546 547	52	1784
Goodson, George A., assignor of one-half to J. F. Williamson and W. H. Blodgett, Minneapolis, Minn. Toy.....	431,656	July 8	973	243	52	201
Goodson, George A., A. S. Capehart, and C. L. Travis, assignors to Minneapolis Electro-Matrix Company, Minneapolis, Minn. Forming matrices for stereotype-plates.....	427,682	May 13	983	248	51	1015
Goodwin, Adolphus D., Salem, Va. Door-spring.....	432,398	July 15	2116	544	52	423
Goodwin, Adolphus D., Salem, Va. Shutter-blower.....	439,000	Oct. 21	2052	549	53	404
Goodwin, Asahel J., Brookline, Mass. Bedstead.....	419,118	Jan. 7	698	184	50	147
Goodwin, Asahel J., Brookline, Mass. Invalid-bed.....	420,197	Jan. 28	2354	625	50	493
Goodwin, Charles Q., Malden, assignor to P. B. Wiley, Wakefield, Mass., and Bell-Rock Electrical Conductor Company, Portland, Me. Apparatus for coating wire.....	434,866	Aug. 19	2189	{ 573 574	52	1203
Goodwin, Charles R., Paris, France. Composition for porous carbon structures.....	431,743	July 8	1126	52	52	229
Goodwin, Charles R., Paris, France, assignor to Electric Gas Lighting Company, Boston, Mass. Galvanic battery.....	431,742	July 8	1125	220	52	229
Goodwin, Charles R., Paris, France, assignor to Electric Gas Lighting Company, of Maine. Forming porous pots for voltaic batteries.....	431,968	July 8	1460	370	52	294
Goodwin Gas Stove and Meter Company. (See Goodwin, Lee, and Mansur, assignors.)						
Goodwin, George. (See Francisco, Charles F., assignor.)						
Goodwin, Henry. (See Dawson and Goodwin.)						
Goodwin, Henry D., and W. S. Burnett, Milwaukee, Wis. Stop and start device for phonographs.....	441,361	Nov. 25	2807	725	53	1168
Goodwin, John M., Sharpsville, Pa. Dumping-car.....	419,939	Jan. 21	1934	{ 509 510	50	406
Goodwin, Levi H., Cincinnati, Ohio. Carrying and power cable apparatus.....	431,945	July 8	1420	360	52	286
Goodwin, Nelson J., assignor of one-half to E. Kempshall, Hartford, Conn. Artificial denture.....	430,639	June 24	2397	524	51	1961
Goodwin, Peter A., Owensborough, Ky. Furnace.....	431,458	July 1	655	164	52	132
Goodwin, Richard D., et al. (See Howe, Patrick, assignor.)						
Goodwin, Thomas A., Pitman Grove, N. J. Game apparatus.....	443,439	Dec. 23	2955	760	53	1863
Goodwin, Wilbur E., administrator. (See Dart, Lewis.)						
Goodwin, William H. (See Faucher, Alton H., assignor.)						
Goodwin, William W., Bordentown, N. J. Range-door.....	432,267	July 15	1924	492	52	387
Goodwin, William W., Bordentown, N. J., E. T. Lee, and J. H. Mansur, Philadelphia, Pa., assignors to Goodwin Gas Stove and Meter Company, of Pennsylvania. Gas-meter.....	443,915	Dec. 30	3703	{ 948 949	53	2016
Goodyear, Austin, Holyoke, Mass. Stall-door.....	436,778	Sept. 23	2203	581	52	1817
Goodyear, George, Jr., and J. B. Plum, Ravenna, Ohio. Hanger for clothes-lines.....	435,625	Sept. 2	390	105	52	1448
Goodyear, Robert B., assignor to T. Wood & Company, Philadelphia, Pa. Shuttle-box motion for looms.....	419,435	Jan. 14	1185	315	50	249
Goodyear, Robert B., assignor of one-half to J. Hoffman, Philadelphia, Pa. Shedding mechanism for looms.....	431,346	July 1	474	{ 117 118	52	96
Goodyear, Robert B., assignor of one-half to J. Taylor, Philadelphia, Pa. Stop-motion for knitting machines.....	431,969	July 8	1461	370	52	294
Gooing, Martin B., Haroldton, Ark., assignor of one-half to J. F. Gooding. Double-side harrow and cultivator.....	428,045	May 13	1548	392	51	1123
Goggins, James G., Fairfield, Me. Convertible chair.....	434,826	Aug. 19	2127	557	52	1192

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Goold, Frederick D., New York, N. Y. Electrical switch	436,412	Sept. 16	1615	426	52	1698
Gordon, A. S. (See Richardson, Edward M., assignor.)						
Gordon, Albert A. (See Wyman and Gordon.)						
Gordon, Charles H., East Orange, N. J. Producing lithographic stippling	438,918	Oct. 21	1925	.....	53	378
Gordon, Edward F., assignor of one-half to H. Hobbs, Concord, N. H.; A. W. Hobbs administratrix of H. Hobbs, deceased. Valve-gear for engines	422,343	Feb. 25	2824	745	50	1122
Gordon, Frank A. (See Huston, William H., assignor.)						
Gordon, James F., assignor to Shaw Stocking Company, Lowell, Mass. Circular-knitting machine	438,686	Oct. 21	1543	416	53	307
Gordon, John H. (See Curtis, Andrew J., assignor.)						
Gordon, Thomas, Philadelphia, Pa. Gas-burner	421,924	Feb. 25	2192	574	50	1005
Gordon, Thomas, Philadelphia, Pa., assignor to Siemens-Lungren Company, of Pennsylvania. Wind-casing for regenerative gas-lamps	421,698	Feb. 18	1868	429	50	936
Gordon, Thomas, Philadelphia, Pa., assignor to Siemens-Lungren Company, of Pennsylvania. Lamp	429,440	June 3	512	122	51	1571
Gordon, Thomas, Philadelphia, Pa., assignor to Siemens-Lungren Company, of Pennsylvania. Lamp	429,441	June 3	513	123	51	1571
Gordon, Thomas, Philadelphia, Pa., assignor to Siemens-Lungren Company, of Pennsylvania. Regenerative gas-burner	432,399	July 15	2117	544	52	424
Gordon, Thomas, and W. R. Swift, Philadelphia, Pa. Regenerative gas-burner	422,587	Mar. 4	324	82	50	1198
Gordon, Thomas, and W. R. Swift, Philadelphia, Pa. Regenerative gas-lamp	422,588	Mar. 4	327	82	50	1198
Gordon, Thomas, and W. R. Swift, Philadelphia, Pa. Regenerative gas-burner	422,589	Mar. 4	329	82	50	1199
Gordon, Thomas M., Cambridge, Mass. Mechanical movement	434,442	Aug. 19	1530	399	52	1074
Gordon, William, Boston, Mass. Sole-pressing machine	426,218	Apr. 8	1210	321	51	245
Gordon, William, Boston, Mass. Machine for laying channel-flaps of boot or shoe soles	426,374	Apr. 22	2943	774	51	601
Gordon, William, Boston, Mass. Heel-breasting machine	434,333	Aug. 12	1345	{ 350 351 }	52	1030
Gordon, William, assignor of two-thirds to A. Fuller, Boston, and E. C. Judd, Lynn, Mass. Sole-edge-burnishing machine	425,217	Apr. 8	1209	330	51	245
Gore, Fannie E., Baltimore, Md. Spool-holder	431,347	July 1	477	118	52	97
Gore, Henry A., assignor to Goshen Folding Bed Company, Goshen, Ind. Folding bed	437,151	Sept. 23	2851	741	52	1940
Gore, Henry A., assignor of two-thirds to H. W. Ru Ton and E. W. Walker, Goshen, Ind. Folding bedstead	437,150	Sept. 23	2850	741	52	1940
Gore, Michael. (See Donohue and Gore.)						
Gore, Russell L., Carlisle, Ky. Washing-machine	435,092	Aug. 26	2568	678	52	1282
Gores, John C., Eau Claire, Wis. Safety attachment for pencils	428,752	May 27	2629	665	51	1359
Gorham, John M., et al. (See Cardew, Philip, assignor.)						
Gorman, George A., et al. (See Strang, Lew K., assignor.)						
Gorman, Thomas. (See Dunn, Dennis, assignor.)						
Gormley, J. B., et al. (See Gwynn, John W., assignor.)						
Gormully & Jeffery Manufacturing Company. (See Hering, Albert, assignor.)						
Gormully, R. Philip, et al. (See Cottle, Luther M., assignor.)						
Gornall, Richard, Baltimore, Md. Automatic advertising apparatus	435,118	Aug. 26	2605	{ 688 689 }	52	1288
Gorrill, Edward, Morecambe, county of Lancaster, England. Combined boot and leggin	431,348	July 1	478	118	52	97
Gorse, Arthur E., West Bromwich, county of Stafford, England. Inkstand	425,780	Apr. 15	2049	546	51	417
Gorse, Arthur E., West Bromwich, England. Machine for making barbed-wire fencing	441,237	Nov. 25	2618	{ 678 679 680 }	53	1134
Gorton, Adelos, Camden, N. J. Electric railway	434,827	Aug. 19	2128	557	52	1192
Gorton, George, Racine, Wis. Basket-closure	435,823	Sept. 2	685	183	52	1507
Gose, Jacob C. (See McIlvain, Gose, and Pickett.)						
Goshen Folding Bed Company. (See Gore, Henry A., assignor.)						
Gosling, John W., Cincinnati, Ohio. Door stop, holder, and closer	439,296	Oct. 28	2546	680	53	503
Gosney, John, and D. B. Jones, Wilmington, Del. Thill-coupling	434,334	Aug. 12	1347	351	52	1030
Goss, Charles E., Brooklyn, assignor to himself, T. H. Ronayne, New York, and W. J. Cotten, Brooklyn, N. Y. Lasting-machine	438,919	Oct. 21	1926	{ 512 513 }	53	378
Goss, Charles F., Versailles, assignor of one-half to S. S. Roszell, Lexington, Ky. Washing-machine	428,478	May 20	2204	557	51	1259
Goss, Chauncey P., assignor to Scovill Manufacturing Company, Waterbury, Conn. Wick-tube for oil-stoves	438,842	Oct. 21	1814	483	53	357
Goss, Edward, Hartford, Vt. Self-oiling pulley	432,666	July 22	2535	650	52	513
Goss, Edward, Hartford, Vt. Pulley	432,667	July 22	2535	650	52	513
Goss, Edward, assignor to Feed Water Heater Company, St. Johnsbury, Vt. Feed-water heater. (Reissue)	11,090	June 24	3017	741	51	2081
Goss, Elbert W., Amesbury, Mass. Electric-motor-car truck	436,779	Sept. 23	2204	581	52	1817
Goss, Philip H. (See Read, William, Jr., assignor.)						
Goss Printing Press Company. (See Goss, Samuel G., assignor.)						
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Adjustable form-table	432,034	July 15	1566	400	52	320
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Printing-press delivery apparatus	432,035	July 15	1567	{ 400 401 }	52	321
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Printing-press delivery apparatus	432,036	July 15	1568	{ 401 402 }	52	321
Gosser, George W. (See Gissinger, Samuel, assignor.)						
Gothard, James, Chicago, Ill. Tailor's measure	420,448	Feb. 4	34	7	50	570
Gothberg, Ernst, Jersey City, N. J. Manufacture of spirally-corrugated sheet-metal spheroids	425,099	Apr. 8	1021	273	51	206
Gothberg, Ernest, Jersey City, N. J. Corrugating-machine	434,594	Aug. 19	1762	461	52	1121
Götter, Hermann, Jersey City, N. J., assignor to International Wine Company, of New Jersey. Apparatus for the manufacture of fermented liquids	443,190	Dec. 23	2560	657	53	1787
Gottwald, Otto E., Sayville, N. Y. Harness for oxen or other cattle	432,400	July 15	2119	544	52	421
Gouert, Charles W. (See Anderson, George V., assignor.)						
Gouert, Charles W. (See Anderson, George V., assignor.)						
Gouilly, Alexandre, Paris, France. Means for increasing the effect of screw-propellers	427,983	May 13	1457	369	51	1105
Gould, Alfred. (See Gerhardt and Gould.)						
Gould, Charles E., assignor to Gould Rolling Machine Company, Leominster, Mass. Ball-grinding machine	431,163	July 1	194	49	52	40
Gould, Charles E., assignor to Gould Rolling Machine Company, Leominster, Mass. Machine for grinding metallic forms	435,495	Sept. 2	176	49	52	1409
Gould, Charles W., et al., executors. (See Dickerson, Edward N.)						
Gould, Claude C., Batavia, assignor to Eastern Electrical Manufacturing Company, Wheatfield, N. Y. Telephone-switch system	422,765	Mar. 4	579	149	50	1247

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Gould, Clement. (See Millbourn, James, assignor.)						
Gould, Elijah G. (See Moore, Myron E., assignor.)						
Gould, Herbert L. (See Preston, Ellen M., assignor.)						
Gould, James C., San José, Cal. Railway cattle-guard	432,897	July 22	2796	714	52	563
Gould, John C., Chicago, Ill. Sash-fastener	442,178	Dec. 9	864	231	53	1439
Gould Rolling Machine Company. (See Gould, Charles E., assignor.)						
Gould Rolling Machine Company. (See Reed, William S., assignor.)						
Gould, Thomas B., et al. (See Stein, Samuel P., assignor.)						
Gould & Watson Company. (See Watson, George B., assignor.)						
Gould & Watson Company, et al. (See Luscomb, Henry H., assignor.)						
Gould, William P., Newtonville, Mass. Non-conductive and ornamental handle for vessels, &c.	433,284	July 29	3502	904	52	709
Goulden, Samuel. (See Allen and Goulden.)						
Goulding, Alfred, assignor to E. Wright, Worcester, Mass. Cnif-holder	427,414	May 6	589	147	51	928
Goulding, Henry C., Nashoba, Mass. Locomotive	422,075	Feb. 25	2392	{ 632 633 }	50	1042
Goulette, Cyril J., Ellendale, N. D. Feeder for thrashing-machines	435,824	Sept. 2	687	183	52	1507
Goundry, John B., et al. (See Watson, Nelson M., assignor.)						
Gourdé, Louis J. E., Paris, France. Lacing-hook	442,221	Dec. 9	930	246	53	1452
Gourlay, John S., Syracuse, N. Y. Combined carriage and sleigh	432,268	July 15	1925	492	52	388
Gourley, John L., Tarentum, assignor of one-half to W. N. Anchors, Allegheny County, Pa. Overshoe-secrner	440,148	Nov. 11	785	206	53	772
Gouverneur Machine Company. (See Levasseur, Frank, assignor.)						
Gove, Edward H., Biddeford, Me. Ash-sifter	436,351	Sept. 16	1511	394	52	1679
Gove, Edward H., Biddeford, Me. Ash-sifter	436,352	Sept. 16	1512	394	52	1679
Gove, Richard A., Waukesha, Wis. Steam-engine	438,843	Oct. 21	1816	{ 483 484 }	53	357
Gowan, Benjamin L. E., assignor to Gowan Manufacturing Company, Boston, Mass. Cribbing-iron for horses	420,054	Jan. 28	2111	557	50	447
Gowan Manufacturing Company. (See Gowan, Benjamin L. E., assignor.)						
Gowans, James A., Stratford, Ontario, Canada, assignor to W. W. Allis, Milwaukee, Wis., and J. M. Duncan, Boston, Mass. Screw conveyer	422,766	Mar. 4	582	149	50	1248
Gowdy, Edrick, Ansonia, Conn. Device for setting the edges of plane-bits	441,758	Dec. 2	204	53	53	1303
Gowdy, Harry M. (See Gowdy, Revilo T., assignor.)						
Gowdy, Revilo T., assignor of one-half to H. M. Gowdy, Westfield, Mass. Whip	432,486	July 15	2250	582	52	452
Grabau, Hans E. (See Benzinger and Grabau.)						
Grabe, Gustave H. (See Snyder and Grabe.)						
Grabiel, Zephaniah O., Lima, Ohio. Reversing-valve for engines	429,852	June 10	1125	278	51	1698
Grabill, Phares R., Millersburg, Pa. Grain-scales	440,613	Nov. 11	1558	{ 400 401 }	53	916
Grabler, Peter, Allegheny, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Release-valve for automatic air-brakes	433,895	Aug. 5	677	175	52	889
Gräßner, Johann C., and H. Ruperti, Kupferhammer, near Brackwede, Prussia, Germany. Cylinder and piston motor-engine	425,172	Apr. 8	1150	303	51	232
Gräßner, Johann C., and H. Ruperti, Kupferhammer, near Brackwede, Germany. Steam-actuated valve	434,335	Aug. 12	1347	351	52	1030
Grace, Charles D. (See Brigam, William C., assignor.)						
Grace, Edward M., Philadelphia, Pa. Oil-cup	419,436	Jan. 14	1187	315	50	250
Grace, Isaac. (See Warner and Grace.)						
Gracey, Robert, Allegheny, assignor to R. Gracey & Sons, Pittsburg, Pa. Shafts for vehicles	427,507	May 6	724	181	51	955
Gracey & Sons, R. (See Gracey, Robert, assignor.)						
Grady, James H., New Bedford, Mass. Life-saving garment	429,269	June 3	232	58	51	1517
Grady, M. J., et al. (See McDougald, Alexander, assignor.)						
Graeber, William, et al. (See Foulds, Thomas, assignor.)						
Graebert, Gustav J., Detroit, Mich. Valve-operating mechanism	423,240	Mar. 11	1330	345	50	1397
Graef, Jean. (See Trost, Philipp, assignor.)						
Graepel, Hugo, Buda-Pesth, Austria-Hungary. Grinding-mill	420,934	Feb. 11	767	199	50	718
Graesser, Heinrich, Gotha, Germany. Doll-head	440,706	Nov. 18	1714	{ 439 440 }	53	956
Graf & Co. (See Stelzer, Carl F. W., assignor.)						
Graf, Emil, New York, N. Y. Advertising show-case	421,699	Feb. 18	1869	490	50	936
Graf, Henry J., St. Louis, Mo. Remelting iron in cupola-furnaces	437,109	Sept. 23	2755	720	52	1924
Graf, Robert R., assignor of one-half to F. W. Reis, Baltimore, Md. Composition for making fabrics fire-proof	436,599	Sept. 16	1908		52	1751
Graff, Albert. (See Müller, Henry, assignor.)						
Graff, Edwin D., New York, N. Y. Means for actuating air-brakes	436,233	Sept. 9	1321	344	52	1632
Graff, Edwin D., New York, N. Y. Railway appliance	441,483	Nov. 25	3009	775	53	1208
Graff, Edwin D., New York, N. Y. Railway appliance	441,484	Nov. 25	3010	775	53	1208
Graff, George E. (See Van Fleet and Graff.)						
Graff, George S., Brooklyn, N. Y. Paper-carriage for type-writing machines	429,757	June 10	985	241	51	1672
Grafte, Frederick, Jr., Fort Wayne, Ind. Compound for cleaning jewelry	425,668	Apr. 15	1891		51	385
Grafton, Henry, London, England. Steam or other engine	427,171	May 6	228	58	51	856
Grafton, Henry, No. 26 Willes Road, Kentish-Town, county of Middlesex, England. Steam-engine	427,231	May 6	320	83	51	874
Grafton, William M., Sewickley, Pa. Railway semaphore-signal	431,888	July 8	1346	339	52	271
Grah, Emil, Toledo, Ohio. Forming table-knives	418,710	Jan. 7	86	20	50	19
Grah, William, Jr., Toledo, Ohio. Electric lock	421,567	Feb. 18	1679	{ 434 435 }	50	898
Graham, Alfred, assignor to Consolidated Telephone Construction and Maintenance Company, Limited, London, England. Telephone system	437,986	Oct. 7	482	{ 137 138 }	53	92
Graham, C. H. (See Eckerson, Homer, assignor.)						
Graham, Charles, Brooklyn, N. Y. Making crockery wash-tubs	436,413	Sept. 16	1617	426	52	1698
Graham, Charles, Brooklyn, N. Y. Tower for condensing acid	436,414	Sept. 16	1618	426	52	1698
Graham & Co., J. C. (See Pearson, Fred, assignor.)						
Graham, David T., Trenton, Mo. Curtain-fixture	441,550	Nov. 25	3109	798	53	1228
Graham, Frank A. (See Hummel and Graham.)						
Graham, James A., assignor to Milwaukee Harvester Company, Milwaukee, Wis. Grain-harvester	428,479	May 20	2205	557	51	1260
Graham, James A., assignor to Milwaukee Harvester Company, Milwaukee, Wis. Harvester-reel support	431,970	July 8	1464	{ 370 371 }	52	295
Graham, James W., East View, Ky. Fruit-picker	424,880	Apr. 1	690	183	51	133
Graham, John, Jr., and E. Graves, Camden, N. J. Hydraulic traveling crane	422,399	Mar. 4	50	13, 14	50	1147

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Graham, John, Jr., and E. Graves, Camden, N. J. Mold for casting pipes and cylinders	439,501	Oct. 28	2847	758	53	559
Graham, John E. (See Holland, Charles L., assignor.)						
Graham, Nathan M., assignor of one-half to A. M. Hussey, Springfield, Ohio. Ironing-table	422,344	Feb. 25	2826	745	50	1122
Graham, Robert, Reading, Mass. Electric cigar-lighter	432,197	July 15	1819	468	52	369
Graham, Robert A., assignor of one-half to R. E. McDonald and W. G. Ebersole, Carrollton, Ohio. Dental anæsthetic	420,653	Feb. 4	326	.....	50	627
Graham, Samuel, Lebeck, Mo. Vehicle-standard	425,070	Apr. 8	984	264	51	199
Graham, Simon P., Detroit, Mich. Cutting-tool and handle	433,078	July 29	3198	821	52	646
Graham, Thomas R., Kenton, Del., assignor to N. C. Horton, Philadelphia, Pa. Compartment for secretly marking ballots	424,416	Mar. 25	3120	829	50	1754
Graham, Thomas T., and J. Monheimer, Louisville, Ky. Cork-holding bottle-neck	422,127	Feb. 25	2480	655	50	1058
Graham, Thomas W., assignor of two-thirds to F. H. Williams and F. Thombly, Dubuque, Iowa. Roller grinding-mill	434,707	Aug. 19	1967	511	52	1158
Gralike, Anton, St. Louis, Mo. Oil-can	432,870	July 22	2855	730	52	576
Gramke, Joseph, Jr., Cincinnati, Ohio. Furniture	428,090	May 20	1611	409	51	1145
Grams, Charles. (See Henkel, Frederick, assignor.)						
Grand Detour Plow Company. (See Ruef, Charles S., assignor.)						
Grand Rapids Cycle Company. (See Hain, Ralph B., assignor.)						
Grand Rapids Hand Screw Company. (See Wheeler, John, assignor.)						
Grandison, James L., Manchester, England, assignor of one-half to P. J. McMahon, New Orleans, La. Lubricator	441,407	Nov. 25	2887	745	53	1185
Grandy, Edward F. (See Copeland, Crisp, and Grandy.)						
Grandy, Edward F., assignor to Copeland Improved Lasting and Tacking Company, Boston, Mass. Lasting-machine	420,268	Jan. 28	2468	{ 655 656 }	{ 50	514
Gramer, John, assignor of one-half to S. Stern, New Orleans, La. Machine for obtaining fiber from aquatic plants	425,318	Apr. 8	1357	362	51	272
Gramer, John, assignor of one-half to J. B. Camors, New Orleans, La. Needle-loom	441,796	Dec. 2	262	70, 71	53	1315
Grange, John W. (See Smith, Orren M., assignor.)						
Granger, Arthur O., assignor to United Gas Improvement Company, Philadelphia, Pa. Manufacturing gas	418,711	Jan. 7	87	20	50	19
Granger Foundry and Machine Company. (See Honeyman, Henry W., assignor.)						
Granger, James B. (See Johnson and Granger.)						
Granger, James B., assignor of one-half to A. Stearn, Delhi, N. Y. Car-coupling	427,683	May 13	985	248	51	1016
Granger, Edward B., and W. H. Johnson, Delhi, N. Y. Hame-fastener	439,502	Oct. 28	2849	758	53	560
Granniss, James E. (See Adams and Tracy, assignors.)						
Granniss, James E. (See Tracy, Lewis W., assignor.)						
Grant, Arthur W. (See Jefferies and Grant.)						
Grant, Arthur W., assignor to Tricycle Manufacturing Company, Springfield, Ohio. Vehicle running gear	429,681	June 10	872	212	51	1650
Grant, Belville A., Lockport, Ill. Wire-galvanizing apparatus	423,995	Mar. 25	2470	657	50	1628
Grant, Carrie A., Cambridgeport, Mass. Vehicle-axle	423,923	Mar. 25	2364	629	50	1608
Grant, Duncan E., Quebec, Canada. Latch and lock combined	436,780	Sept. 23	2205	{ 581 582 }	{ 52	1817
Grant, Edgar H., assignor of one-half to W. Broadwell, Marshall, Mich. Folding bath-tub	428,840	May 20	2207	557	51	1260
Grant, Frank, assignor of one-half to A. H. Murray, Middleport, Ohio. Brick-machine	420,055	Jan. 28	2111	{ 558 559 }	{ 50	448
Grant, John J. (See Simonds and Grant.)						
Grant, John T., San José, Cal. Harrow	441,154	Nov. 25	2456	637	53	1107
Grant, Joseph, Gloucester, Mass. Life buoy or preserver	440,088	Nov. 4	692	184	53	743
Grant, Jott, Boston, Mass. Friction-hinge	450,847	June 24	2745	672	51	2029
Grant, Oscar F. (See Haarlander and Grant.)						
Grant, Oscar F., Pittsburg, Pa. Burner for natural gas	435,299	Aug. 26	2885	764	52	1340
Grant, Sidney A., assignor to United States Envelope Machine Company, Springfield, Mass. Envelope-machine	432,749	July 22	2668	{ 682 683 684 }	{ 52	539
Grant, William H., Waltham, Me. Wagon-brake	434,776	Aug. 19	2061	538	52	1178
Grant, William T., Jacksonville, Ill. Gate	426,441	Apr. 29	3067	{ 803 804 }	{ 51	633
Grant, William T., Jacksonville, Ill. Suspension-hinge gate	435,646	Sept. 2	421	112	52	1454
Granville, William P., Stroud Green, county of Middlesex, England. Electric log	439,840	Nov. 4	315	79	53	669
Grapewine, Charles E., Ogden, Utah Ter. Egg-case	419,252	Jan. 14	911	241	50	195
Graphite Electric Company, et al. (See Parrish, Myron W., assignor.)						
Grasser, Charles, assignor to Smith Brothers Manufacturing Company, Passaic, N. J. Method of and apparatus for making dies	426,375	Apr. 22	2943	774	51	601
Grasser, John L., Newark, Ohio. Rain-water cut-off	422,770	Mar. 4	587	151	50	1249
Gratz, Anderson and B., St. Louis, Mo. Making jute-bagging	432,401	July 15	2120	.....	52	424
Gratz, Benjamin. (See Gratz, Anderson and B.)						
Gravel, Arthur. (See Lallemand and Gravel.)						
Graver, Erwin S., Philadelphia, Pa. Machine for furnishing toilet-paper	430,848	June 24	2746	673	51	2029
Graves, Calvin V. (See Phillips, Lewis B., assignor.)						
Graves, Calvin V. (See Welch, Henry J., assignor.)						
Graves, Edward J., New York, N. Y. Cigar-vending machine	435,626	Sept. 2	391	105	52	1448
Graves, Erwin. (See Graham and Graves.)						
Graves, Henry N., and R. S. Hyer, Georgetown, Tex. Nursing-bottle	420,195	Jan. 28	2351	624	50	492
Graves, Jerome R., Corry, Pa. Hair-spring tweezers	421,925	Feb. 25	2193	575	50	1005
Graves, John. (See Van Wagenen and Graves.)						
Graves, John, New York, assignor of one-half to G. Van Wagenen Company, Brooklyn, N. Y. Sheet-metal mantle	418,788	Jan. 7	194	47	50	43
Graves, John, assignor to G. Van Wagenen Company, Brooklyn, N. Y. Sheet-metal mantle	419,659	Jan. 21	1517	402	50	322
Graves, John C. (See Close, John W., assignor.)						
Graves, John J., assignor to S. S. Jewett & Co., Buffalo, N. Y. Stove-grate	419,012	Jan. 7	547	137	50	115
Graves, John J., assignor to S. S. Jewett & Co., Buffalo, N. Y. Hot-water heater	423,759	Mar. 18	2103	555	50	1550
Graves, John J., assignor to S. S. Jewett & Co., Buffalo, N. Y. Range or stove door	426,442	Apr. 29	3068	804	51	633
Graves, John J., assignor to S. S. Jewett & Co., Buffalo, N. Y. Counterbalancing device for doors	438,435	Oct. 14	1160	313	53	228
Graves, Katharine A., assignor, by mesne assignments, to G. Van Wagenen Company, Brooklyn, N. Y. Sheet-metal mantle	435,017	Aug. 26	2455	650	52	1260
Graves, William D., Jr., Presque Isle, Me. Knife-grinding machine	425,781	Apr. 15	2050	546	51	417
Graves, William D., assignor of one-half to F. J. Stafford, Cleveland, Ohio. Electric lamp	435,967	Sept. 9	911	240	52	1556
Graves, Willis N., St. Louis, Mo., assignor of one-half to Hydraulic Press Brick Company, of Missouri. Oil-burner	419,515	Jan. 14	1293	345	50	271

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Gray, Adolph, <i>et al.</i> (See Vogel, William, assignor.)						
Gray, Albert Y. (See Gray, Leonidas and A. Y.)						
Gray Company, G. A. (See Gray, George A., assignor.)						
Gray, George A., assignor to G. A. Gray Company, Cincinnati, Ohio. Metal-planing machine	419,437	Jan. 14	1188	315	50	250
Gray, George F., San Francisco, Cal. Cable-railway construction	432,730	July 22	2638	674	52	534
Gray, George L., Chicago, Ill. Drop-cabinet for sewing-machines	431,307	July 1	263	66	52	54
Gray, Henry F. (See Egan and Gray.)						
Gray, Henry J., London, England. Photographic camera	440,427	Nov. 11	1257	326	53	859
Gray, Isaac C., assignor of one-half to J. W. Wesler, Tippecanostown, Ind. Wrench	422,767	Mar. 4	552	150	50	1248
Gray, Isaac J., Beloit, Wis. Knob attachment	427,673	May 6	76	19	51	826
Gray, James E., Elyria, Ohio. Wave-power	429,617	June 10	776	188	51	1632
Gray, James M. (See Hall, Oliver S., assignor.)						
Gray, James R., Ayer, assignor to G. Draper & Sons, Hopedale, Mass. Support for spinning-spindles	437,923	Oct. 7	382	109	53	73
Gray, John, Jefferson, Iowa. Bridle	426,797	Apr. 29	3607	941	51	737
Gray, John F., Providence, R. I. Steam-boiler	433,405	July 29	3661	946	52	740
Gray, Le Roy, and E. Estep, Plano, assignors to Plano Manufacturing Company, Chicago, Ill. Mowing machine	427,857	May 13	1258	318	51	1068
Gray, Leonidas and A. Y., Middletown Springs, Vt. Brake for horse-powers or speed-regulators	434,266	Aug. 12	1252	324	52	1010
Gray, Philander R., Jr., Elizabeth, N. J. Absorber for refrigerative apparatus	437,192	Sept. 30	2918	760	52	1960
Gray, Philander R., Jr., Elizabeth, N. J. Still	437,193	Sept. 30	2920	760	52	1961
Gray, Theo, assignor of one-half to G. J. R., and W. V. Brewer, Columbus, Ohio. Insect-extermiator	429,345	June 3	372	88	51	1542
Gray, Thomas F., Monroeville, Ohio. Automatic grain-scales	441,658	Dec. 2	41	11, 12	53	1270
Gray, William, assignor of one-half to C. Soby, Hartford, Conn. Coin-controlled apparatus for telephones	426,266	Apr. 22	2790	733	51	569
Gray, William C., Ayer, county of Ayer, and W. Tannahill, Aberdeen, county of Aberdeen, Scotland; said Tannahill assignor to said Gray. Carpet fabric	419,516	Jan. 14	1294	346	50	271
Gray, William D., Milwaukee, Wis. Middlings-purifier	428,774	May 27	2497	635	51	1334
Gray, William D., assignor to E. P. Allis & Co., Milwaukee, Wis. Roller grinding-mill	436,234	Sept. 9	1323	344 345	52	1633
Gray, William E., <i>et al.</i> (See Minton, Albert K., assignor.)						
Gray, William S., assignor of one-half to L. H. Newton and A. Rasines, New York, N. Y. Automatic valve	424,974	Apr. 8	838	223	51	171
Graydon, Thomas W. (See Sullivan, John J., assignor.)						
Greathhead, James H., Westminster, England. Tunneling-shield	432,871	July 22	2855	731	52	576
Greaves, Abram, Bridgewater, Vt. Swing	433,783	Aug. 5	517	134	52	856
Greaves, William. (See Richardson and Greaves.)						
Greb, Louis W., Canton, Ohio. Ruby-pin setter	421,831	Feb. 18	2040	539	50	967
Greeley & Company, E. S. (See Wood, Frank B., assignor.)						
Green, Alfred N., Lewistown, Ohio. Horseshoe	437,152	Sept. 23	2852	741	52	1940
Green, Bernard R., Washington, D. C. Book-support	436,704	Sept. 16	2075	546	52	1785
Green, Charles. (See Bornstein, Henry, assignor.)						
Green, Daniel D., Scofield, Utah Ter. Car-coupling	440,825	Nov. 18	1917	492	53	993
Green, Daniel W., New York, N. Y. Detachable spout and can-opener	432,872	Oct. 14	1218	330	53	240
Green, David R., and F. R. Fisher, Waterloo, Iowa. Grinding-mill	437,756	Oct. 7	124	37	53	27
Green, Francis H. (See McDonough and Green.)						
Green, Frank, Peoria, Tex. Cotton-chopper	427,566	May 13	818	204	51	983
Green, George F., Kalamazoo, Mich. Photographic shutter	432,999	July 29	3074	789	52	622
Green, George R. (See Bayles and Green.)						
Green, George R., East Orange, N. J., assignor to Spiral Weld Tube Company, of New Jersey. Cross-welding machine	429,568	June 3	705	171	51	1608
Green, Henry, Unionville, Conn. Spirit-level	438,541	Oct. 14	1309	354	53	258
Green, Henry C., Anniston, Ala. Sawing-machine	429,902	June 10	1205	298	51	1713
Green, Henry J., Brooklyn, N. Y. Clinical thermometer-case	432,872	July 22	2857	731	52	576
Green, Ira L., St. Regis Falls, N. Y. Cuff-holder	425,669	Apr. 15	1891	505	51	385
Green, James A., Winnipeg, Manitoba, Canada. Berth-guard	424,881	Apr. 1	692	183	51	134
Green, James A., assignor of two-thirds to T. McDonough and L. McDowell, Philadelphia, Pa. Metallic tie and rail for railways	434,542	Aug. 19	1679	438	52	1104
Green, James D., Arcadia, Kans., assignor of one-half to E. W. Anderson, Washington, D. C. Shears for dehorning animals	441,065	Nov. 18	2298	596	53	1067
Green, John, St. Louis, Mo. Cutter-head	421,832	Feb. 18	2041	539	50	967
Green, John F. (See Corban and Green.)						
Green, John V., Wilburtha, N. J. Potato-planter	422,016	Feb. 25	2310	610	50	1027
Green, Joseph W., Jr. (See Moore, George C., assignor.)						
Green, Joseph W., Jr., and E. H. Sawyer, East Hampton, Mass. Elastic woven fabric	436,872	Sept. 23	2416	630	52	1857
Green, Junius W., Columbus, Ind. Machine for sharpening the sickles of harvest reapers and mowers	426,122	Apr. 22	2583	679	51	526
Green, Lewis M. (See Wilson, Joseph B., assignor.)						
Green, Marion M., County Line, Tenn. Combination-tool	427,309	May 6	430	111	51	896
Green, Marion M., County Line, Tenn. Car-coupling	427,310	May 6	431	111	51	896
Green, Marion M., County Line, Tenn. Combined railway-chair and cross-tie	435,221	Aug. 26	2748	726	52	1317
Green, Marion M., County Line, Tenn. Harrow	438,920	Oct. 21	1929	514	53	379
Green, Martin A., Altoona, Pa. Crank-shaft	441,551	Nov. 25	3111	798	53	1228
Green, Martin A., Altoona, Pa. Engine-governor	442,774	Dec. 16	1821	471	53	1635
Green, Monroe, Brooklyn, N. Y. Knockdown trunk	436,657	Sept. 16	2006	524	52	1771
Green, Nelson E., Minneapolis, Minn. Adjusting device for hoisting-cables	422,933	Mar. 11	869	227	50	1310
Green, Nelson E., Minneapolis, Minn. Sewer-sheathing driver	424,708	Apr. 1	418	110	51	83
Green, Nelson E., Minneapolis, Minn. Loading and unloading mechanism	434,664	Aug. 19	1890	494	52	1145
Green, Paul M. (See Babcock, Ezra S., assignor.)						
Green, Samuel F., West Somers, N. Y. Bolt-heading machine	424,975	Apr. 8	840	224	51	171
Green, William. (See Aldrich, George W., assignor.)						
Green, William W., Chicago, Ill. Metal-bending machine	420,935	Feb. 11	769	199	50	718
Green, William W., Chicago, Ill. Dumping-car	425,607	Apr. 15	1789	480	51	365
Green, William W., assignor to American Fire Proof Steel Car Company, Chicago, Ill. Composite board	421,397	Feb. 18	1432	371	50	851
Green, William W., assignor to American Fire Proof Steel Car Company, Chicago, Ill. Freight-car	432,487	July 15	2250	582	52	452
Green, William W., Chicago, Ill., assignor to American Fire Proof Steel Car Company, of Illinois. Freight-car covering	438,580	Oct. 14	1368	371	53	270
Greenawalt, Jacob. (See Weitmyer, John H., assignor.)						
Greenberg, Harman, Huntingdon, Pa. Pocket for vests	431,050	July 1	36	8	52	9

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Greene, Barton M., assignor of one-third to R. W. Airey, Eckley, Oreg. Watch-case spring.	419,517	Jan. 14	1295	346	50	272
Greene, Elias M. (See Ginochio, Noel B., assignor.)						
Greene, Forrest D., <i>et al.</i> (See Leighton and Bailey, assignors.)						
Greene, Frank, Toccoa, Ga., assignor of one-half to C. C. McPhail, Richmond, Va. Seal-lock.	431,051	July 1	37	8	52	9
Greene, George A., Cazenovia, N. Y. Truss	422,768	Mar. 4	584	150	50	1248
Greene, George A. and J. F., Cazenovia, N. Y. Loom	436,937	Sept. 23	2520	660	52	1877
Greene, Jerome E., assignor of one-third to J. McJunkin, Toccoa, Ga. Bench-plane	439,061	Oct. 21	2143	575	53	421
Greene, Joseph D., Marshall, Mo. Rail-joint	429,758	June 10	986	241	51	1672
Greene, Joseph F. (See Greene, George A. and J. F.)						
Greene, Levi R., Boston, Mass. Pole for electric wires	425,071	Apr. 8	985	264	51	199
Greene, Mary A., Philadelphia, Pa. Game apparatus	442,618	Dec. 16	1552	401	53	1582
Greene, Mary E., New York, N. Y. Shaving and dressing stand	423,147	Mar. 11	1203	314	50	1372
Greene, Noble T., Providence, R. I. Liberating valve-gear for engines	422,769	Mar. 4	584	150	50	1249
Greene, Noble T., Providence, R. I. Exhaust-valve for engines	424,605	Apr. 1	258	69	51	53
Greene, Noble T., Providence, R. I. Exhaust-valve gear for engines	425,219	Apr. 8	1212	322	51	245
Greene, Noble T., Providence, R. I. Slide-valve for steam-engines	439,349	Oct. 28	2619	698	53	517
Greene, Oliver Z., Decatur, Ill. Screw-driver	422,520	Mar. 4	226	59	50	1179
Greene & Prunty. (See Prunty, John E., assignor.)						
Greene, Robert H., Birmingham, Ala. Gage-bracket	434,777	Aug. 19	2062	538	52	1179
Greene, W. S., <i>et al.</i> (See Curtis, David W., assignor.)						
Greene, William F., Troy, N. Y. Door-knob	434,543	Aug. 19	1681	439	52	1104
Greene & Wood Manufacturing Company. (See Bass, Lewis C., assignor.)						
Greenfield, Edwin T., New York, N. Y., assignor, by mesne assignments, to Interior Conduit and Insulation Company. Tubular paper elbow or bend	441,836	Dec. 2	326	87	53	1328
Greenfield, Edwin T., New York, N. Y., assignor, by mesne assignments, to Interior Conduit and Insulation Company. Conduit for electric conductors	441,837	Dec. 2	327	87	53	1328
Greenfield, Edwin T., New York, N. Y., assignor, by mesne assignments, to Interior Conduit and Insulation Company. Attaching device for electric conductors	441,838	Dec. 2	328	87	53	1328
Greenfield, Edwin T., New York, N. Y., assignor, by mesne assignments, to Interior Conduit and Insulation Company. Underground conduit for electric wires	441,840	Dec. 2	331	87, 88	53	1321
Greenfield, Edwin T. and J. Nagel, New York, N. Y., assignors, by mesne assignments, to Interior Conduit and Insulation Company. Impregnating porous bodies	441,839	Dec. 2	329	.....	53	1328
Greenfield, Edwin T. and J. Nagel, New York, N. Y., assignors, by mesne assignments, to Interior Conduit and Insulation Company. Working high-boiling hydrocarbons for impregnating purposes	441,870	Dec. 2	382	.....	53	1340
Greenfield, Edwin T. and J. Nagel, New York, N. Y., assignors, by mesne assignments, to Interior Conduit and Insulation Company. Tube	442,090	Dec. 2	723	194	53	1404
Greenhalgh, James, Woonsocket, R. I., assignor of one-half to J. B. Greenhalgh, Blackstone, Mass. Flushing-tank	440,589	Nov. 11	1512	389	53	908
Greenhalgh, John B. (See Greenhalgh, James, assignor.)						
Greenleaf, Enoch O. (See Taylor and Roderick, assignors.)						
Greenleaf, Jonas S., Fargo, N. D. Seed-planter	434,267	Aug. 12	1253	325	52	1010
Greenleaf, Joseph H., New Haven, Conn. Loom for weaving with short wefts	421,270	Feb. 11	1249	322 323	50	810
Greenleaf, Joseph H., New Haven, assignor to N. A. Baldwin, Milford, Conn. Loom for weaving with short wefts	429,618	June 10	777	188	51	1632
Greenleaf, Miller T., Quincy, Ill. Oven-thermometer	441,299	Nov. 25	2721	705	53	1153
Greenlee, Ralph S. and R. L., Chicago, Ill. Mortising-machine	418,978	Jan. 7	503	125 126	50	105
Greenlee, Ralph S. and R. L., Chicago, Ill. Crosscut-sawing machine	419,848	Jan. 21	1798	475 476	50	376
Greenlee, Robert L. (See Greenlee, Ralph S. and R. L.)						
Greenlow, Jesse C., Pepperwood, Cal. Fruit-picking stand	426,267	Apr. 22	2792	733	51	570
Greenough, Malcolm S., E. C. Jones, and W. R. Addicks, Boston, Mass. Apparatus for the manufacture of gas	429,309	June 3	314	74	51	1530
Greenstein, Adolph. (See Dinsmore, Robert, assignor.)						
Greenstreet, Jason H., Indianapolis, Ind. Curing meats	439,144	Oct. 28	2275	.....	53	452
Greenwade, William, Ash Grove, Mo. Car-coupling	438,151	Oct. 14	740	203	53	149
Greenwald, L. (See Tulloch, Alexander E., assignor.)						
Greenwald, Louis. (See Chapman, Edward C., assignor.)						
Greenwald, Louis. (See Cummins and Greenwald.)						
Greenwood, George D., <i>et al.</i> (See Diffenderfer, John K. E., assignor.)						
Greenwood, John. (See Wilson and Greenwood.)						
Greenwood, John T., Kalamazoo, Mich. Cultivator	425,030	Apr. 8	926	246	51	187
Greenwood, John T., Kalamazoo, Mich. Harrow	432,185	July 15	1801	463	52	366
Greenwood, Kate M., Kensington, England. Mirror-support	439,001	Oct. 21	2053	549	53	404
Greenwood, Ransford S., Howell, Mich. Seat attachment for bicycles	441,485	Nov. 25	3012	776	53	1208
Greeny, Simon, Chicago, Ill. Clock-case	435,060	Aug. 26	2520	666	52	1273
Greer, Francis B., Barnhill, Ill. Poke	435,175	Aug. 26	2687	709	52	1305
Greer, Howard, Chicago, Ill. Railway-splice-bar bolt	432,526	July 22	2317	599	52	472
Greer, John W., Austin, Tex. Machine-gun	431,515	July 1	742	185 186	52	148
Greer, Moses, Jr., Knoxville, Tenn. Soldering-tweezers	420,874	Feb. 4	660	172	50	689
Greeven, Georg A., Crefeld, Germany. Apparatus for washing and dyeing yarn	443,177	Dec. 23	2525	646	53	1778
Gregg, Alexander, Jr., Detroit Mich. Carpet-lining	419,849	Jan. 21	1800	476	50	376
Gregg, Elwood L., Hoxie, Kans. Toe-weight	418,945	Jan. 7	464	115	50	97
Gregg, Frank W., Boston, Mass. Door attachment	439,942	Nov. 4	476	124	53	701
Gregg, John, assignor to Link Belt Machinery Company, Chicago, Ill. Endless-rope power-transmission	423,046	Mar. 11	1045	272	50	1342
Gregg, Luther B., Wauwatosa, assignor of two-thirds to G. H. Wolcott and M. Baner, Milwaukee, Wis. Beater	434,635	Aug. 19	1838	480	52	1136
Gregg, Myron E., Washington, D. C. Magazine-gun	430,799	June 24	2665	654	51	2014
Gregg, Presley, Aurora, Ind. Hay-sled	435,417	Sept. 2	57	19	52	1385
Gregg, Samuel H., Crawfordsville, Ind. Post-hole digger	429,903	June 10	1206	299	51	1714
Gregg, Samuel H., Crawfordsville, Ind. Wire fence	441,003	Nov. 18	2197	568	53	1047
Gregg, Samuel H., Crawfordsville, Ind. Fence-post	441,004	Nov. 18	2199	568	53	1047
Gregg, Samuel H., Crawfordsville, Ind. Wire fence	441,005	Nov. 18	2200	569	53	1048
Gregg, Thornton F., New York, N. Y. Book attachment	432,700	July 22	2597	664	52	525
Gregg, William L., Philadelphia, Pa. Brick-machine	419,042	Jan. 7	590	150 151	50	125
Gregg, William L., Philadelphia, Pa. Re-pressing and molding machine	419,043	Jan. 7	593	152	50	125
Gregory, John W., assignor of one-half to M. F. Story, Millville, Tenn. Cotton-press	438,762	Oct. 21	1676	450	53	332
Gregory, Oakley M. (See Rockett, Francis, assignor.)						
Gregory, Richard K., Greensborough, N. C. Adhesive plaster	443,963	Dec. 30	3790	53	2032

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Gregory, Thomas, Southport, England. Registering and recording apparatus for tram-cars, omnibuses, &c.	443,090	Dec. 23	2370	605	53	1750
Gregory, William H. (See Eckert and Gregory.)						
Grenfell, Hubert H., London, England. Sight for guns	429,030	May 27	3031	779 780	51	1439
Grenfell, Hubert H., assignor to W. G. Armstrong, Mitchell & Co., (limited,) Newcastle-upon-Tyne. Sight for ordnance	418,789	Jan. 7	195	47 48 49	50	43
Grenon, Sam, and C. F. La Clair, Hurley, Wis. Potato-planter	440,404	Nov. 11	1207	311 312	53	851
Gresty, Jonathan, Manchester, county of Lancaster, England. Steam-boiler furnace	432,402	July 15	2120	545	52	424
Grethen, Adolf, Minneapolis, Minn. Autograph-manuscript-copying table or device	421,926	Feb. 25	2194	572	50	1005
Grether, John. (See Bender, Horace G., assignor.)						
Grey, Savil J., Morgantown, Ky. Fire-escape	438,542	Oct. 14	1310	355	53	259
Gribben, William, assignor of one-fourth to J. M. Gaige, Crosswell, Mich. Feed-regulator	442,139	Dec. 23	2461	629	53	1765
Grice, Henry, Ackley, Iowa. Combined sleigh and carriage	423,241	Mar. 11	1331	345	50	1397
Grider, John, La Grange, Cal. Grain-cleaner attachment	437,891	Oct. 7	328	96	53	64
Grier, William W., Hulton, Pa. Stilt	434,708	Aug. 19	1968	511	52	1159
Grierson, Thomas W., St. Paul, Minn. Tape-measure	421,133	Feb. 11	1056	270	50	773
Griese, Carl H. (See Föge, Griese, and Raders.)						
Grieser, George, assignor to F. Baumer, Syracuse, N. Y. Apparatus for finishing wax candles	421,700	Feb. 18	1870	490	50	936
Griest, John M., Bergen Point, N. J., assignor to Singer Manufacturing Company of New Jersey. Attachment-holder for sewing-machines	421,927	Feb. 25	2195	575	50	1005
Grieves, Edward W., Baltimore, Md. Bolster-guide plate for car-trucks	434,336	Aug. 12	1349	351 352	52	1031
Griffin, John D., New York, N. Y. Fastening for shoes	440,866	Nov. 18	1880	483	53	986
Griffin, John D., New York, N. Y. Shoe-fastening	440,867	Nov. 18	1881	483	53	987
Griffin, Alonzo J., Wilkes-Barré, Pa. Pneumatic signal and gate for railways	433,860	Aug. 5	625	163	52	879
Griffin, Alonzo J., Wilkes-Barré, Pa. Automatic railway-signal	443,440	Dec. 23	2956	761	53	1863
Griffin, Charles R., Groton, Conn. Safety-pocket	438,288	Oct. 14	951	257	53	187
Griffin, Claude M., Kansas City, Kans. Automatic lightning-arrester	427,964	May 13	1458	369	51	1105
Griffin, Clayton B., Dunnville, Ontario, Canada. Clasp or buckle	432,731	July 22	2639	674	52	534
Griffin, Duane D., Westfield, Mass. Feeding attachment for braiding-machines	439,943	Nov. 4	477	125	53	701
Griffin, Harry M., Bradford, Vt. Garment-supporter	439,640	June 24	2398	584	51	1961
Griffin, Heber C., Franklin Falls, assignor to Griffin Lock Company, Franklin, N. H. Per-mutation-lock	423,148	Mar. 11	1204	314	50	1372
Griffin, Ira J., Sing Sing, N. Y. Fluid-pressure regulator	436,235	Sept. 9	1324	345	52	1633
Griffin, Ira J., Sing Sing, N. Y. Nut-lock	443,675	Dec. 30	3344	861	53	1946
Griffin, James F. (See Staats, William H., assignor.)						
Griffin, James M., et al. (See Willis, Don F., assignor.)						
Griffin, John, Cork, Ireland. Manufacturing flat woven gut belting	429,270	June 3	233		51	1517
Griffin, John M., et al. (See Griffin, Patrick, assignor.)						
Griffin, John M., et al. (See Griffin, Patrick, assignor.) (Reissue.)						
Griffin, John S., et al. (See Willis, Don F., assignor.)						
Griffin, Leander L., Scranton, Pa. Road-car	423,242	Mar. 11	1332	346	50	1397
Griffin Lock Company. (See Griffin, Heber C., assignor.)						
Griffin, Martin L., Holyoke, E. S. Thayer, and E. S. Buffum, Salem, Mass. Recovering fatty products	443,940	Dec. 30	3749		53	2024
Griffin, Michael, assignor of one-half to J. W. Hart, Weymouth, Mass. Channeling-machine	432,161	July 15	1768	454 455	52	360
Griffin, Patrick, Utica, N. Y. Paving streets	430,013	June 10	1380	343	51	1748
Griffin, Patrick, assignor of five-sixths to J. F. Leahy, J. Hackett, E. Callahan, J. L. Maher, and J. M. Griffin, Utica, N. Y. Steam road-roller	430,575	June 17	2275	559	51	1929
Griffin, Patrick, assignor of five-sixths to J. F. Leahy, E. Callahan, J. Hackett, J. L. Maher, and J. M. Griffin, Utica, N. Y. Roadway. (Reissue.)	11,088	June 17	2334	572	51	1942
Griffin, Patrick H., Buffalo, N. Y. Car-wheel	419,850	Jan. 21	1800	476	50	377
Griffin, Patrick H., Buffalo, N. Y. Device for testing car-wheels	421,271	Feb. 11	1253	323	50	810
Griffin, Patrick H., Buffalo, N. Y. Conduit for electric railways	421,398	Feb. 18	1433	372	50	851
Griffin, Patrick H., Buffalo, N. Y. Balanced car-wheel	427,415	May 6	589	147	51	928
Griffin, Patrick H., Buffalo, N. Y. Handling railway-car wheels	431,114	July 1	123	31	52	26
Griffin, Seth, Poughkeepsie, N. Y. Track or road scraping machine	420,342	Jan. 28	2566	681 682	50	532
Griffith, Goldsborough S., Jr., Baltimore, Md. Carpet or upholstery fabric	420,269	Jan. 28	2469	656	50	514
Griffith, John J., San Bernardino, Cal. Track-gage	418,712	Jan. 7	88	20	50	19
Griffith, John J., San Bernardino, Cal. Folding bed-screen	418,946	Jan. 7	465	115 116	50	97
Griffith, John J., San Bernardino, Cal. Burglar-alarm	439,503	Oct. 28	2850	759	53	560
Griffith, John R., Marion, Ky. Hame-hook	435,659	Sept. 2	443	118	52	1459
Griffith, Thomas R., Wilkes-Barré, Pa. Chute-loader	430,800	June 24	2667	654	51	2015
Griffith, William A., Milwaukee, assignor to A. C. Johnson and P. A. Nelson, Racine, Wis. Cooling-board	434,443	Aug. 19	1531	399	52	1074
Griffiths, Howard B., Philadelphia, Pa. Indicator for letter-boxes	432,306	July 15	1990	508	52	399
Grigg, Alexander T. (See Valentine and Grigg.)						
Griggs, Albert C., Wilmington, Del. High and low water alarm for boilers	425,570	Apr. 15	1726	463	51	353
Grigsby, William B., Oaktown, Ind. Post-driving machine	435,222	Aug. 26	2749	726	52	1317
Griley Company. (See Ford, George H., assignor.)						
Grillo, Wilhelm. (See Schroeder, Max, assignor.)						
Grim, John, Philadelphia, Pa. Blanket-harness	426,722	Apr. 29	3493	914	51	715
Grimaud & Chartier. (See Ganchot, Paul, assignor.)						
Grimes, Andrew, et al. (See Sidentopf, Frederick, assignor.)						
Grimes, Charles D., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	436,579	Sept. 16	1885	495	52	1747
Grimes, Charles L., Moline, Ill. Hydrostatic fire-setter	442,579	Dec. 9	1485	382	53	1560
Grimes, George S., et al. (See Toucey, Ferris D., assignor.)						
Grimes, Robert R., Santa Monica, Cal. Attachment for lawn-mowers	432,307	July 15	1992	509	52	400
Grimes, Wallace G., New London, Conn. Surecingle	433,000	July 29	3076	789	52	623
Grimley, Charles H., New York, N. Y. Electric belt	419,013	Jan. 7	548	137	50	116
Grimm, Gustave H., Hudson, Ohio. Evaporating-pan	432,400	Mar. 4	54	15	50	1148
Grimm, Paul H. (See Albertson, Edward D., assignor.)						
Grimm, Paul H., assignor of one-half to L. T. Duryea, Glen Cove, N. Y. Pulley	432,701	July 22	2598	664	52	525
Grimm, Paul H., assignor to Duryea's Brothers, Glen Cove, N. Y. Sugar-cutter	438,412	Oct. 14	1135	306	53	223
Grimm, Paul H., assignor to Glen Cove Manufacturing Company, Glen Cove, N. Y. Apparatus for drying starch refuse, &c.	440,262	Nov. 11	968	247 248	53	809

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Grinberg, Paul J., New York, N. Y. Wick-tube.	431,577	July 8	842	209	52	175
Grindley, William H. (See Hensley and Grindley.)						
Grinnell, Frederick, Providence, R. I. Automatic fire-extinguisher	431,971	July 8	1468	371	52	296
Grinnell, Frederick, Providence, R. I. Automatic fire-extinguisher	431,972	July 8	1470	371	52	296
Grinnell, Frederick, Providence, R. I. Locked joint for fire apparatus	432,403	July 15	2121	545	52	424
Grinnell, Frederick, Providence, R. I. Automatic fire-extinguisher	432,404	July 15	2122	545	52	425
Gripp, John, <i>et al.</i> (See Lewis, James, assignor.)						
Grisel, George, Golden Gate, assignor of two-thirds to F. Severio and J. D. Case, San Francisco, Cal. Machine for wrapping block-matches	419,851	Jan. 21	1802	477	50	377
Grisel, George, and F. Severio, assignors of one-third to J. D. Case, San Francisco, Cal. Match-making machine.	430,604	June 17	2321	570	51	1939
Grisham, James M., Whitney, Tex. Railway-gate	441,952	Dec. 2	503	134	53	1363
Grissim, William H., Santa Rosa, Cal. Measuring-funnel	426,667	Apr. 29	3395	891	51	697
Griswold, Alanson B., and J. M. Bradbury, Bunker Hill, Kans. Automatic safety fire-alarm	422,205	Feb. 25	2592	685	50	1080
Griswold, Charles H., <i>et al.</i> (See Schilling, Joseph, assignor.)						
Griswold, George H. (See Fuller and Griswold.)						
Griswold, George M., New Haven, Conn. Paper-box-making machine.	429,236	June 3	193	47, 48	51	1509
Griswold, George M., New Haven, Conn. Printing and sanding mechanism for paper-box machines	441,759	Dec. 2	205	54, 55	53	1303
Griswold, George M., New Haven, assignor to American Button Fastener Company, New Britain, Conn. Button-setting machine	432,076	Feb. 25	2394	633	50	1042
Griswold, George M., New Haven, assignor to American Button Fastener Company, New Britain, Conn. Button-setting machine	440,893	Nov. 18	2022	520	53	1014
Griswold, Henry J. (See Barfoot, John A., assignor.)						
Griswold, John B., Zanesville, Ohio. Brick-kiln	420,684	Feb. 4	361	95, 96	50	634
Griswold, John W., Troy, N. Y. Fire-screen	418,713	Jan. 7	90	20	50	20
Griswold, John W., Troy, N. Y. Fire-screen	418,714	Jan. 7	90	21	50	20
Griswold, John W., Troy, N. Y. Bale-tie	420,497	Feb. 4	101	24	50	583
Griswold, John W., Troy, N. Y. Machine for straightening and cutting wire	420,509	Feb. 4	116	29	50	586
Griswold, Lewis F., assignor to C. Parker Company, Meriden, Conn. Extension device for lamp-fixtures	420,875	Feb. 4	661	172	50	689
Griswold, Lewis F., assignor to C. Parker Company, Meriden, Conn. Extension-fixture for lamps, &c. (Reissue)	11,067	Mar. 18	2302	607	50	1589
Griswold, Lewis F., assignor to C. Parker Company, Meriden, Conn. Stop-hinge	431,459	July 1	656	164	52	132
Griswold, Lewis F., assignor to C. Parker Company, Meriden, Conn. Spring-roller	440,428	Nov. 11	1260	326	53	860
Griswold, Marius E., Chicago, Ill. Saw-mill	442,665	Dec. 16	1616	417	53	1596
Groble, James, assignor to J. Moore, Chicago, Ill. Machine for decorating circular moldings.	430,576	June 17	2276	559	51	1929
Groff, Sylvanus E., Marietta, Pa. Screw-nail	426,008	Apr. 22	2420	640	51	494
Groff, Sylvanus E., Marietta, Pa. Child's play-house	436,705	Sept. 16	2076	546	52	1785
Groom, Benjamin B., <i>et al.</i> (See Chapin, Myron H., assignor.)						
Groom, Patrick W., deceased, St. Louis, Mo.; J. Kennedy, administrator. Manufacture of shovels	430,014	June 10	1381	343	51	1748
Groom, Richard, Jr., Pueblo, Colo. Combined letter-box and gate-post	438,476	Oct. 14	1218	330	53	240
Gros, Arthur. (See Perret, Gros, and Million.)						
Grosché, Bruno, <i>et al.</i> (See Noppel, Emil, assignor.)						
Groshon, John A., assignor of one-half to R. M. Macdonough, New York, N. Y. Steam-boiler	427,074	May 6	77	19, 20	51	826
Gross, Adam, Milwaukee, Wis. Elevator and hoist	426,531	Apr. 29	3197	838	51	658
Gross, Edgar J. (See Teal and Gross.)						
Gross, Edgar J., assignor to Chicago Safe and Lock Company, Chicago, Ill. Hinge mechanism for doors of safes or vaults	423,149	Mar. 11	1206	314	50	1372
Gross, Edward D. (See Richardson, George W., assignor.)						
Gross, George A. (See Scandlan and Gross.)						
Gross, Isaac G., Henryville, Ala. Moustache-guard	441,155	Nov. 25	2457	637	53	1107
Gross, Jacob, assignor of one-half to G. J. Miller, Philadelphia, Pa. Device for collecting drip oil	442,972	Dec. 16	2154	555	53	1700
Grossich, Antonio, and P. Mateovich, Fiume, Austria-Hungary. Manufacturing antiseptic paper	426,933	Apr. 29	3786		51	773
Grossnickle, Jonas. (See Swank and Cosner, assignors.)						
Grosvenor, Charles F. (See Holmes and Grosvenor.)						
Grosvenor, J. B. M., <i>et al.</i> (See Seabury, Samuel, assignor.)						
Groswith, Henry. (See Kennedy and Groswith.)						
Groswith, Henry, assignor of three-fourths to C. W. Kennedy, Philadelphia, Pa. Electric motor	435,744	Sept. 2	560	149	52	1483
Groswith, Henry, assignor to Kennedy-Groswith Electric Company, Philadelphia, Pa. Electric motor	441,953	Dec. 2	505	135	53	1363
Groswith, Henry, assignor to Kennedy-Groswith Electric Company, Philadelphia, Pa. Operating electric cars	441,954	Dec. 2	505	135	53	1363
Groswith, Henry, assignor of part to C. W. Kennedy and R. F. Rankin, Philadelphia, Pa. Electric motor or generator	428,481	May 20	2208	558	51	1260
Groth, Frederick W., Chicago, Ill. Surgical forceps	430,849	June 24	2747	673	51	2029
Groth, Lorentz A., London, England. Tanning by electricity	442,115	Dec. 9	769	207	53	1420
Groth, William, Seattle, Wash., assignor of one-third to T. S. Constantine, New York, N. Y. Post-marking and stamp-canceling machine	419,014	Jan. 7	549	137 138 139 140	50	116
Grothaus, Herman R., Richmond, Ind. Coffin-fastener	436,035	Sept. 9	1016	264	52	1577
Gront, Francis W. (See Elliott and Grout.)						
Grove, David, Berlin, Germany. Portable shower-bath	426,798	Apr. 29	3607	941	51	737
Grove, David, Berlin, Germany. Apparatus for heating baking-compartments or cooking-vessels, &c.	443,516	Dec. 30	3083	794 795	53	1897
Grove, John A., Bluffton, Ind. Hedge-fence	437,689	Oct. 7	19	6	53	6
Grovenor, Mary L. (See Mowers, Eugene P., assignor.)						
Grover, Stillman R., assignor to E. B. Bullock, Attleborough, Mass. Button	422,882	Mar. 4	781	199	50	1285
Grover, William B., Chester, Pa. Paint	423,047	Mar. 11	1046		50	1342
Groves, Fergus O., Newton Lower Falls, Mass. Device for straightening the teeth of barr-cylinders	438,413	Oct. 14	1136	306	53	223
Groves, Hiram C., Nashville, Kans. Crank-movement	440,561	Nov. 11	1467	379	53	899
Groves, Isaac N., Montesano, Wash. Lifting-jack	432,732	July 22	2641	675	52	534
Grozier, Edwin A., New York, and F. P. Anderson, Brooklyn; said Anderson assignor to F. A. Duneka, New York, N. Y. Base-ball bulletin-board	427,508	May 6	725	181	51	955
Grub, Charles, <i>et al.</i> (See Reeh, Jacob, Jr., assignor.)						
Grubb, Amaziah B., Goose Lake, Iowa. Hoodwink	425,782	Apr. 15	2052	547	51	417

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Grubb, Charles M. (See Wright and Grubb.)						
Grubb, Renben J., assignor of one-half to A. Cochran, Philadelphia, Pa. Manufacturing carpets, rugs, mats, &c.	430,230	June 17	1725	429	51	1824
Grubb, William H., assignor of one-half to J. M. Lionbeberger, Quincy, Ill. Adjustable hinged window or door screen.	441,096	Nov. 18	2356	611	53	1078
Grubbs, Albert M., Cedar Rapids, Iowa. Railway-frog.	436,906	Sept. 23	2470	644	52	1867
Grubbs, John, Marble, Pa. Combined bit and reamer.	422,771	Mar. 4	588	151	50	1249
Grueninger, Edward, Cincinnati, Ohio. Coffin.	427,760	May 13	1120	281	51	1042
Grundon, Oliver H. P. (See Fewins, Frank W., assignor.)						
Gruenowwerk. (See Röstel, Carl, assignor.)						
Gschwender, Henry, Winona, Minn. Grain-scorer.	421,369	Feb. 11	1387	358	50	834
Guastavino, Rafael, New York, N. Y. Construction of tiled arches for ceilings, stair-cases, &c.	430,122	June 17	1564	389	51	1793
Gubelmann, William S., Buffalo, N. Y. Disinfecting device.	436,130	Sept. 9	1168	305	52	1603
Gubbins, Richard R., Belvedere, county of Kent, England. Piling puddle-bars.	426,443	Apr. 29	3069	804	51	634
Guckert, Russell W., et al. (See Snee, William, assignor.)						
Guedel, John, Cambridge City, Ind. Saw.	424,194	Mar. 25	2751	733	50	1682
Guels, Herman, St. Louis, Mo. Steam-muffler.	419,940	Jan. 21	1938	510	50	406
Guels, Herman, St. Louis, Mo., assignor, by mesne assignments, to Westinghouse Air Brake Company, Pittsburg, Pa. Automatic air-brake system. (Reissue.)	11,070	Apr. 15	2344	622	51	470
Guels, Herman, St. Louis, Mo., assignor, by mesne assignments, to Westinghouse Air Brake Company, Pittsburg, Pa. Automatic valve for air-brakes. (Reissue.)	11,071	Apr. 15	2349	622	51	473
Guenzburg, Isaac B., St. Petersburg, Russia. Passenger-car.	429,619	June 10	781	189	51	1632
Guerra, Asterio, assignor to F. J. Euler and J. Donnelly, Philadelphia, Pa. Artificial toboggan-slide.	438,414	Oct. 14	1137	{ 306 307 }	53	223
Guerra, Elias R., Hacienda de San Matias, Jalisco, Mexico. Crossing for elevated cable railways.	425,220	Apr. 8	1213	322	51	246
Guerra, Elias R., Hacienda de San Matias, Mexico. Cable-grip.	426,799	Apr. 29	3608	{ 941 942 }	51	738
Guerra, Elias R., Hacienda de San Matias, Jalisco, Mexico. Elevated cable railway.	427,761	May 13	1121	281	51	1042
Guerra, Elias R., Hacienda de San Matias, Jalisco, Mexico. Cable-grip.	428,904	May 27	2848	724	51	1404
Guerra, Elias R., Hacienda de San Matias, Jalisco, Mexico. Gate.	428,905	May 27	2850	725	51	1404
Guerra, Elias R., Hacienda de San Matias, Jalisco, Mexico. Cable-grip.	429,790	June 10	1030	{ 252 253 }	51	1680
Guerra, Elias R., Hacienda de San Matias, Jalisco, Mexico. Cable-grip.	433,123	July 29	3270	{ 842 843 }	52	660
Guerra, Elias R., Hacienda de San Matias, Jalisco, Mexico. Cable-grip.	437,110	Sept. 23	2756	{ 720 721 }	52	1925
Guerrant, George M., New York, N. Y., assignor to J. T. Morehead, Leaksville, N. C. Means for moving and guiding turning, engraving, or planing tools.	431,578	July 8	843	210	52	175
Guerrant, George M., assignor to himself and H. A. W. Wood, New York, N. Y. Automatic safety cut-off for electric circuits.	420,198	Jan. 28	2356	625	50	493
Guertin, Henry C., Winchendon, Mass. Hair-curler.	420,574	Feb. 4	206	53	50	604
Guest, Charles H. (See Barrow and Guest.)						
Guest, Joseph, Pittsburg, Pa. Rolling metals.	421,272	Feb. 11	1254	324	50	810
Gueths, Frank, F., Fond du Lac, Wis. Rotary feed-beater.	432,186	July 15	1802	463	52	366
Gugenheim, Barbare. (See Bray, Simeon L., assignor.)						
Guggenheimer, Henry. (See Lispenard, George, assignor.)						
Gnidotti, Claudia, Chicago, Ill. Infant's garment.	426,800	Apr. 29	3610	942	51	738
Guignard, Gaston, Paris, France. Purifying crude alcohol.	432,198	July 15	1821		52	369
Guignard, Gaston, and A. Hérouin, Paris, France. Process of and apparatus for manufacturing alcohol.	436,735	Sept. 16	2115	537	52	1793
Guilbert, John M., Philadelphia, Pa. Paper bag.	432,308	July 15	1993	509	52	400
Guilbert, John M., assignor to W. H. Hart, Jr., Philadelphia, Pa. Necktie-pin.	430,940	June 24	2886	709	51	2056
Guilbert, John M., assignor to W. H. Hart, Jr., Philadelphia, Pa. Necktie-fastener.	441,617	Nov. 25	3220	831	53	1250
Guilbert, John M., assignor to W. H. Hart, Jr., Philadelphia, Pa. Buckle.	441,618	Nov. 25	3221	831	53	1250
Guild, Frank D. (See Sack, Charles, assignor.)						
Guild, George M., Boston, Mass. Sounding-board bridge for pianos.	440,251	Nov. 11	953	245	53	806
Guild, George M., assignor to H. E. Guild, Boston, Mass. Music-rack for upright pianos.	426,268	Apr. 22	2794	{ 733 734 }	51	570
Gnild, H. E. (See Guild, George M., assignor.)						
Guilford, Anson B. (See Fanning, Frank, assignor.)						
Guilford, Edward J., Rockford, Ill. Device for marking watch-dials.	431,807	July 8	1224	306	52	247
Guilford, Joseph H. N., and W. M. Quinn, Whigham, Ga. Plow.	443,275	Dec. 23	2698	692	53	1813
Guillaume, Alfred, Chicago, Ill. Drying apparatus.	442,806	Dec. 16	1875	484	53	1646
Guillaume, John B. (See Julian and Guillaume.)						
Guillaume, Pierre P., Paris, France. Dress-shield.	427,985	May 13	1459	370	51	1106
Guillemet, Leonidas, San Francisco, Cal. Air-brake.	437,300	Sept. 30	3080	807	52	1991
Guinn, John A., Perry, Iowa. Fire-extinguisher.	440,630	Nov. 18	1587	408	53	932
Guinn, John A., Angus, Iowa. Automatic fire-extinguisher for railway-car stoves.	441,156	Nov. 25	2458	637	53	1107
Guinnip, Lyman, Chicago, Ill. Butter-making.	432,235	July 15	1875		52	379
Guinon, Richard V. F. de, Brooklyn, N. Y. Apparatus for treating charcoal.	429,682	June 10	873	{ 212 213 }	51	1650
Gunter, Ferdinand, assignor of one-half to G. Pellingner and C. Traxler, Akron, Ohio. Fountain-inkstand.	428,753	May 27	2629	666	51	1359
Gniol, Adolph F. (See Ekstrom, Harry R., assignor.)						
Guion, Prior M. (See Hatch and Guion.)						
Gulick, John F., et al. (See Siedentopf, Frederick, assignor.)						
Guliver, William C., et al., administrators. (See Hotchkiss, Benjamin B.)						
Gulowsen, Gulow A., and A. A. Ugland, Philadelphia, Pa. Station-indicator.	427,684	May 13	986	249	51	1016
Gulpen, Max v., Mülheim-on-the-Rhine, Prussia, Germany. Cigar-bunching machine.	422,325	Feb. 25	2788	{ 733 734 }	50	1115
Gummer, Albert, Onro, Wis. Vehicle-spring.	443,573	Dec. 30	3175	816	53	1914
Guncel, Winfield O., Terre Haute, Ind. Pump-regulator.	433,680	Aug. 5	354	91	52	825
Gunder, James H., and W. H. Pierce, Tolono, Ill. Automatic grain-weighing scales.	436,854	Sept. 23	2389	693	52	1852
Gunder, John, St. Points, Ohio. Gate.	431,579	July 8	846	210	52	176
Gunderson, Ole M. (See Anderson, Jesse N., assignor.)						
Gunderson, Walter N., Chicago, Ill. Book.	442,222	Dec. 9	930	246	53	1452
Gundlach, Ernst, Rochester, N. Y. Photographic objective.	442,251	Dec. 9	968	255	53	1460
Gundlach, William L., Lake Mills, Iowa. Ink-eraser.	425,783	Apr. 15	2053	547	51	417
Gunkelmann, Frank A., Medina, Ohio. Vehicle-spring.	438,543	Oct. 14	1312	355	53	259
Gunkle, Katherine E., Frazier, Pa. Jar.	422,934	Mar. 11	871	227	50	1310
Gunn, George P., Ilion, N. Y. Breech-loading gun.	421,492	Feb. 18	1567	405	50	877
Gunn, Hugh J., Owasa, Iowa. Draft-equalizer.	430,641	June 24	2399	554	51	1962

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Gunn, John, New York, N. Y. Bracket for combined electric and gas lighting	442,666	Dec. 16	1617	417	53	1596
Gunn, John A., Hyde Park, Mass. Soap	423,866	Mar. 18	2261	50	50	1581
Gunning, Josephus H., New York, N. Y. Rheostat	437,111	Sept. 23	2759	721	52	1925
Gunsell, Charles, Newark, N. J. Curtain-fixture	436,097	Sept. 9	1110	287	52	1594
Gunsell, Charles, Newark, N. J. Curtain-fixture	436,131	Sept. 9	1169	305	52	1604
Gunsell, Charles, Newark, N. J. Curtain-fixture	441,955	Dec. 2	507	136	53	1363
Gunsell, Charles, Newark, N. J. Curtain-fixture	443,091	Dec. 23	2372	606	53	1750
Gunsolus, William H., Sutter Creek, Cal. Water-wheel	440,353	Nov. 11	1113	286	53	832
Guthrie, George P. A. (See Peterson, Albert H., assignor.)						
Guptill, Roderick G., Elgin, Ill. Plate-glass carrier	430,223	June 17	1845	{ 452 453 }	51	1847
Guptill, Roderick G., Elgin, Ill. Traveler for transporting glass	430,284	June 17	1847	453	51	1847
Guptill, Roderick G., Elgin, Ill. Machine for casting glass pipes	438,806	Oct. 21	1736	{ 466 467 }	53	343
Guptill, Roderick G., Pendleton, Ind. Glass-pipe-casting machine	438,807	Oct. 21	1740	467	53	344
Guptill, Roderick G., Elgin, Ill., assignor of one-fourth to L. O. Bailey, Indianapolis, Ind. Annealing-oven for plate-glass	437,027	Sept. 23	2640	{ 659 660 690 }	52	1901
Guptill, Roderick G., Elgin, Ill., assignor of one-fourth to L. O. Bailey, Indianapolis, Ind. Plate-glass-rolling mechanism	437,028	Sept. 23	2641	{ 691 691 }	52	1902
Guptill, Winslow W., Boston, assignor to C. W. Fox, Saugus, Mass. Syringe	441,238	Nov. 25	2621	680	53	1134
Guptill, Winslow W., Boston, assignor to C. W. Fox, Saugus, Mass. Syringe	441,239	Nov. 25	2622	680	53	1134
Guptill, Winslow W., Boston, assignor to C. W. Fox, Saugus, Mass. Locking-stopper for bottles	441,240	Nov. 25	2624	681	53	1135
Gurley, D. S. (See Slaughter, Nicholas H., assignor.)						
Gurley, Eber A., et al. (See Blackburn, William, assignor.)						
Gurley, W. & L. E. (See Arms, Edward W., assignor.)						
Gurney, Charles, Piffard, N. Y. Head and back rest	427,311	May 6	432	112	51	897
Gurney, Worth H. and J. P. Rummel, Mansfield, Ohio. Suspender-buckle	426,376	Apr. 22	2948	774	51	601
Gusdorf, Alexander, Ranches of Taos, N. Mex. Ter. Chimney	426,532	Apr. 29	3198	531	51	658
Gusdorf, Alexander, Ranches of Taos, N. Mex. Ter. Chimney	422,179	Dec. 9	865	231	53	1439
Guss, Orrange G., Lima, Ohio. Low-water boiler-alarm	428,482	May 20	2209	558	51	1261
Gustafson, Axel R., Marinette, Wis. Spreader for liquid blacking	420,785	Feb. 4	499	130	50	661
Gustafson, John, assignor to Lagerman Typotheter Company, New York, N. Y. Machine for setting type	419,119	Jan. 7	700	{ 184 185 }	50	147
Gustafson, John, assignor, by mesne assignments, to Lagerman Typotheter Company, New York, N. Y. Type-setting machine	427,685	May 13	988	{ 249 250 }	51	1016
Gustafson, John, assignor to Lagerman Typotheter Company, New York, N. Y. Apparatus for setting type	428,906	May 27	2552	725	51	1405
Gustavson, John A., Chicago, Ill. Door-knob	433,464	Aug. 5	42	14	52	765
Gustin, F. M., et al. (See Rand, Allen S., assignor.)						
Gustin, Frank M. (See Seales, Jackson, and Gustin.)						
Gutenberger, Wilhelm. (See Strathmeier and Gutenberger.)						
Gutenkunst, Charles A. (See Gutenkunst, William and C. A.)						
Gutenkunst, William, Milwaukee, Wis., assignor to Milwaukee Hay Tool Company, of Wisconsin. Combined feed-cutter and corn-busker	440,826	Nov. 18	1919	{ 492 493 }	53	993
Gutenkunst, William and C. A., Milwaukee, Wis. Track for carriers	426,179	Apr. 22	2668	700	51	543
Guthrie, Sylvester W., Racine, Wis. Machine for stripping rubber goods	440,226	Nov. 11	918	236	53	799
Gutmann, Emil, New York, N. Y. Suspenders	425,173	Apr. 8	1151	304	51	233
Gutmann, Ludwig, Fort Wayne, Ind. Electric commutator	419,660	Jan. 21	1518	403	50	322
Gutmann, Ludwig, Fort Wayne, Ind. Dynamo or motor	419,661	Jan. 21	1520	{ 403 404 }	50	322
Gutmann, Ludwig, Fort Wayne, Ind. Electric commutator	419,662	Jan. 21	1522	{ 404 405 }	50	323
Gutmann, Ludwig, Fort Wayne, Ind. Producing alternating electric currents	419,663	Jan. 21	1524	{ 405 406 }	50	323
Gutmann, Ludwig, Fort Wayne, Ind. Alternating-current-motor regulator	419,664	Jan. 21	1525	406	50	323
Gutmann, Ludwig, Fort Wayne, Ind. Electric-railway system	423,552	Mar. 18	1793	{ 470 471 472 }	50	1492
Gutmann, Ludwig, Fort Wayne, Ind. Alternating-current electric regulator	423,553	Mar. 18	1797	473	50	1492
Gutmann, Ludwig, Fort Wayne, Ind. Choking electro-magnets	424,606	Apr. 1	260	69	51	53
Gutmann, Ludwig, Fort Wayne, Ind. Electric-railway system	426,269	Apr. 22	2795	{ 734 735 }	51	570
Gutmann, Ludwig, Fort Wayne, Ind. System of electrical distribution	431,460	July 1	657	{ 164 165 }	52	132
Gutsche, John A. (See Sharp and Gutsche.)						
Gutzkow, Frederick, San Francisco, Cal. Elevator	431,164	July 1	197	49	52	41
Gny, Albert E., New York, N. Y. Match-box	425,608	Apr. 15	1790	480	51	365
Guzeman, William A., assignor to Z. E. P. Guzeman, Englewood, and L. C. Riggs, Chicago, Ill. Adding-machine	427,567	May 13	818	205	51	983
Guzeman, Z. Estelline P., et al. (See Guzeman, William A., assignor.)						
Gwinner, Lewis, Hamilton, Ohio. Stove-truck	439,776	Nov. 4	218	57	53	651
Gwynn, John W., assignor of four-fifths to J. B. Gormley, R. Maudsley, M. B. and K. E. Lemert, Bucyrus, Ohio. Lantern for electric-arc lights	427,986	May 13	1460	370	51	1106
Gype, Adam, Tedrow, Ohio. Hay-sling	442,619	Dec. 16	1553	401	53	1582
Haaf, Fred. (See Dietz and Haaf.)						
Haaf, Herman H., Chicago, Ill. Animal-tag	427,075	May 6	78	20	51	827
Haag, Ferdinand, Rochester, N. Y. Insole	424,195	Mar. 25	2752	734	50	1682
Haag, Gustave, Flushing, N. Y. Loading attachment for dump-carts	435,825	Sept. 2	688	184	52	1508
Haag, Lewis R. (See Webb and Haag.)						
Haan, Rudolph M., New York, N. Y. Letter-box	422,401	Mar. 4	55	15	50	1148
Haarlander, August, Allegheny, Pa. Flushing-tank for water-closets	439,062	Oct. 21	2145	576	53	421
Haarlander, August, Allegheny, Pa. Flushing-tank for water-closets	441,097	Nov. 18	2357	611	53	1078
Haarlander, August, and O. F. Grant, assignors to Standard Manufacturing Company, Allegheny, Pa. Handle for culinary vessels	430,941	June 24	2886	709	51	2056
Haas, Charles W., Allentown, Pa. Shaft-tug	439,002	Oct. 21	2053	550	53	404
Haas, David, assignor of one-half to J. H. Carr, Palo Alto, Pa. Game	441,619	Nov. 25	3321	831	53	1250
Haas, Edwin, Philadelphia, Pa. Stirrup-jar	424,675	Apr. 1	366	97	51	71
Haas, Frederick. (See Miles and Haas.)						
Haas, Friedrich W. H., Stein, near Nuremberg, Bavaria, Germany. Pointing apparatus to be employed in pencil-holders	419,768	Jan. 21	1665	442	50	350
Haas, George W., Louisville, Ky. Locomotive-tender	431,052	July 1	38	9	52	10
Haas, Josef, Jr., Vienna, Austria-Hungary. Electric signal	427,762	May 13	1125	282	51	1042
Haas, Levi, Chester, Pa. Railway-tie	420,299	Jan. 28	2511	666	50	522

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Haas, Walter G., Dayton, Ohio. Roll-paper holder and cutter	439,872	Nov. 4	365	94	53	679
Haberkam, Ludwig, Leipsic, Saxony, Germany. Carillon	428,207	May 20	1774	448	51	1177
Haberkorn, Theodore H., Fort Wayne, Ind. Brake mechanism for cars	435,418	Sept. 2	59	19	52	1386
Haberlin, Herman, Akron, Ohio. Friction-clutch	422,402	Mar. 4	57	16	50	1148
Haberman, Frederick, New York, N. Y. Spittoon	421,273	Feb. 11	1255	324	50	811
Hablston, Frederick L., Richmond, Va. Car-coupling	436,067	Sept. 9	1064	276	52	1586
Habrecht, Edward, Chicago, Ill. Game-table	420,786	Feb. 4	500	131	50	661
Hack, Henry S., Taunton, Mass. Calendar	436,415	Sept. 16	1620	427	52	1699
Hack, John N., and N. Alten, Milwaukee, Wis. Brush	440,149	Nov. 11	786	206	53	772
Hacker, Benjamin K., Lexington, assignor of two-thirds to M. K. Hacker and F. L. Frey, Litzitz, Pa. Automatic railway-signal	440,405	Nov. 11	1209	312	53	852
Hacker, Joseph, Waterloo, Iowa. Water-heater and steam-cooker	433,238	July 29	3437	888	52	695
Hacker, Joseph, L. W. Colby, and J. W. Helton, Waterloo, Iowa. Water-heater	421,274	Feb. 11	1255	324	50	811
Hacker, Martin K., <i>et al.</i> (See Hacker, Benjamin K., assignor.)						
Hackett, Allen, Pittsfield, Me. Machine for molding spools or bobbins	432,037	July 15	1569	402	52	321
Hackett, James, Taunton, Mass. Cylinder printing-machine	422,206	Feb. 25	2594	686	50	1080
Hackett, John, <i>et al.</i> (See Griffin, Patrick, assignor.)						
Hackett, John, <i>et al.</i> (See Griffin, Patrick, assignor.) (Reissue.)						
Hackett, Sumner H. (See Williams and Hackett.)						
Hackett, Theobald M., Albany, N. Y. Adjustable stake-holder	421,701	Feb. 18	1872	490	50	937
Hackney, Herbert, Topeka, Kans. Car-brake	419,665	Jan. 21	1527	406	50	324
Hackney, Herbert, Chicago, Ill. Kindling fire in furnaces	420,056	Jan. 28	2118	559	50	448
Hadaway, William S., Jr., trustee. (See Freeman, Walter K., assignor.)						
Hadfield, Reuben, assignor to Akron Iron Company, Akron, Ohio. Wire-drawing die	432,236	July 15	1876	482	52	379
Hadfield, Robert, deceased, Sheffield, England; J. D. Weeks ancillary administrator.						
Steel alloy	436,497	Sept. 16	1742	.....	52	1723
Hadfield, Robert A., Sheffield, county of York, England. Making steel containing carbon, manganese, and aluminium	422,403	Mar. 4	58	.....	50	1148
Hadley, Artemus N., Indianapolis, Ind. Corn-harvester	432,750	July 22	2672	684	52	540
Hadley, Charles E., Bridgeport, Conn., assignor, by mesne assignments, to Krnse Check and Adding Machine Company, of New York. Cash-recording machine	433,728	Aug. 5	420	107	52	837
Hadley, Charles F., Allegheny, assignor to United States Fuel Gas Company, Limited, Pittsburg, Pa. Process of and apparatus for manufacturing heating and illuminating gas.	433,784	Aug. 5	517	135	52	857
Hadley, Joshua A., assignor to J. D. and A. J. Sourwine, Brazil, Ind. Coffee-pot	423,867	Mar. 18	2262	597	50	1582
Hadley, Lizzie T., Kansas City, Kans. Stiffening for collars, &c	435,929	Sept. 9	859	225	52	1547
Hadlock, William E., Wenham, Mass. Bell and engine-indicator for pilot-houses of steam-vessels	426,009	Apr. 22	2421	640	51	494
Hadstate, Hoyte C. (See Martin and Hadstate.)						
Hadstate, Hoyte C., and S. J. Martin, Detroit, Mich., assignors to Carter & Company, Limited, Niagara Falls, N. Y. Numbering-machine	443,517	Dec. 30	3085	795	53	1898
Haelberle, George I., Lawrence, Mass. Hand-card	422,772	Mar. 4	589	151	50	1249
Haeldicke, Hermann, Renscheid, Germany. Combined gas and steam motor engine	433,563	Aug. 5	179	48	52	791
Haes, Frank, North Kensington, county of Middlesex, England. Lamp for use in photographic dark-rooms	425,319	Apr. 8	1358	362	51	273
Haefely, Alfred C., New York, N. Y. Album-clasp	436,132	Sept. 9	1170	305	52	1604
Haff & Walbridge. (See Walbridge and Stepp, assignors.)						
Häflner, Carl, Chicago, (Lake View) Ill. Apparatus for treating beer	425,421	Apr. 15	1505	404	51	310
Häflner, Carl, Chicago, Ill. Apparatus for brewing	436,498	Sept. 16	1744	460	52	1723
Hagadone, George C., Newell, Iowa. Furnace	440,562	Nov. 11	1468	379	53	899
Hagarty, Cornelius E., Jamaica, N. Y. Plashing device	425,300	Aug. 26	2886	764	52	1340
Hagel, Robert W., Douglas, Nebr. Listing-cultivator	429,520	June 3	629	155	51	1592
Hagelberg, Wolff, Berlin, Germany. Sectional picture	422,521	Mar. 4	227	60	50	1179
Hagelberg, Wolff, Berlin, Germany. Picture-card	422,522	Mar. 4	228	60	50	1179
Hagelberg, Wolff, Berlin, Germany. Manufacturing transparent relief-pictures	428,483	May 20	2210	.....	51	1261
Hageman, Otto F., Asheville, N. C. Self-closing cock or faucet	420,155	Jan. 28	2277	604	50	480
Hagemann, Heinrich, Berlin, Germany. Instrument for transferring measurements according to one system into another system	426,010	Apr. 22	2424	640	51	494
Hagemann, Otto C. (See Domeier and Hagemann.)						
Hagemann, Otto C., London, England, assignor to J. S. Kirk & Company, Chicago, Ill. Purifying spent soap-lyes	443,761	Dec. 30	3482	.....	53	1972
Hagemann, Otto C., London, England, assignor to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Purifying glycerine	428,484	May 20	2210	559	51	1261
Hagen, Arthur T., Rochester, N. Y. Ironing-machine	424,976	Apr. 8	843	224	51	172
Hagenbuehle, John B., <i>et al.</i> (See Stocker, Rudolf, assignor.)						
Hageney, Patrick H., Ashtabula, assignor to J. McMyler, Cleveland, Ohio. Hoisting-bucket	442,432	Dec. 9	1249	323	53	1513
Hager, Charles, assignor of two-thirds to H. Baethig and L. B. Crocker, Buffalo, N. Y. Railway-switch	430,801	June 24	2668	654	51	2015
Hagerty, James S., Baltimore, Md. Cash-receiver	432,610	July 22	2428	626	52	494
Hagerty, James S., Baltimore, Md. Parcel-carrier for street-cars	441,300	Nov. 25	2732	706	53	1153
Hagerty, John M., Farmington, V. Va. Car-coupling	439,242	Oct. 28	2443	655	53	483
Hagerty, Michael J., <i>et al.</i> (See Brown, John E., assignor.)						
Hagerty, Patrick, <i>et al.</i> (See Brown, John E., assignor.)						
Haggard, Henry S., assignor to L. K. Gillson, Chicago, Ill. Railway-car table	431,580	July 8	847	210	52	176
Haggenmacher, Carl, Buda-Pesth, Austria-Hungary. Apparatus for sifting and sorting meal, flour, &c.	428,907	May 27	2853	726	51	1405
Haggenmacher, Carl, Buda-Pesth, Austria-Hungary. Chop-grader	428,908	May 27	2858	727	51	1406
Haggenmacher, Carl, Buda-Pesth, Austria-Hungary. Sifting-machine	428,909	May 27	2861	728	51	1406
Haggenmacher, Jakob, Zurich, Switzerland. Shedding mechanism for looms	428,584	May 20	2356	729	51	1289
Haggerty, Sharp. (See Franklin, James A., assignor.)				730		
Hagstoz, Thomas B. (See Ecanbert and Hagstoz.)				731		
Hague, Clinton I., New Haven, Conn. Friction-clutch	439,504	Oct. 28	2852	731	53	561
Hague, Edmund H., Jackson, Mich. Photographer's background	443,762	Dec. 30	3483	732	53	1973
Hague, Luke G., and W. P. Bolles, Bloomington, Ill. Horse-spreading device	428,485	May 20	2211	733	51	1261

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Hagne, Luke G., and W. P. Bolles, Bloomington, Ill. Horse-spreading device.....	443,362	Dec. 23	2846	732	53	1842
Hahn, Adam. (See Brinham and Hahn.)						
Hahn, Edward C., <i>et al.</i> (See Carr, William M., assignor.)						
Hahn, Edward C., <i>et al.</i> (See Bobemerith, Lewis E., assignor.)						
Hahn, Henry T., and J. Schröder, Hickory Grove, Iowa. Safety-machine	424,550	Apr. 1	178	50	51	37
Hahn, John, New York, N. Y. Switch or signal setting apparatus	423,554	Mar. 18	1799	473 474	50	1493
Hahn, John, New York, N. Y. Brake-operating mechanism for motors	423,555	Mar. 18	1799	474	50	1493
Hahn, John, New York, N. Y. Switch-operating mechanism	423,556	Mar. 18	1801	474 475	50	1493
Hahn, John, New York, N. Y. Car-brake	423,557	Mar. 18	1802	475	50	1494
Hahn, Knrd, Hildburghausen, Germany. Field-kitchen	443,206	Dec. 23	2594	666 667 668	53	1794
Hahn, Leroy M., <i>et al.</i> (See Bobemerith, Lewis E., assignor.)						
Hahn, Wilhelm, Neumühle, near Entin, Germany. Sieve	428,719	May 27	2578	653	51	1349
Haigh, De Lagnel, St. Louis, Mo. Composition of matter for plaster	433,861	Aug. 5	628		52	880
Haigh, Edward and E. Hargreaves, Huddersfield, England. Stop-motion for spinning-machines	437,194	Sept. 30	2921	760 761	52	1961
Haigh, Frederick F. (See Bard, David J., assignor.)						
Haigh, Joseph P., New Cumberland, W. Va., assignor to H. Kennedy, Sharpsburg, Pa. Wheel for barrows	430,942	June 24	2887	710	51	2056
Haight, Charles L., Pittsburg, Pa. Heater	428,336	May 20	1991	501	51	1219
Haight, Charles L., assignor to Schoenberger & Co., Pittsburg, Pa. Horseshoe-machine ..	426,564	Apr. 29	3242	850 851	51	667
Haight, George W., Jr. (See Eymmer and Haight.)						
Haight, Henry J., New York, N. Y. Wind-vane indicator	420,057	Jan. 28	2119	560	50	449
Haight, Henry J., New York, N. Y. Metallic thermometer	442,879	Dec. 16	2000	513 514	53	1670
Haight, Henry J., New York, N. Y. System for indicating thermometric records	442,880	Dec. 16	2002	514 515 516 517	53	1670
Haight, Henry J., New York, N. Y. Means for the transmission of meteorological indications	442,881	Dec. 16	2012	517 518	53	1672
Haight, Henry J., New York, N. Y. Multiple-circuit closer	442,882	Dec. 16	2016	518 519	53	1672
Haight, Henry J., New York, N. Y. Combined electric indicating and telephone system ..	442,883	Dec. 16	2021	519	53	1673
Haight, James R., Adrian, assignor of one-half to F. I. Bowles, Detroit, Mich. Corset-fastening	420,409	Jan. 28	2662	706	50	550
Haight, James R., Adrian, assignor of one-half to F. I. Bowles, Detroit, Mich. Corset-fastening	420,410	Jan. 28	2663	706	50	551
Haight, Orrin R., Osage, Iowa. Bedclothes-clamp	426,011	Apr. 22	2425	641	51	495
Haight, Silas M., <i>et al.</i> (See Trump, John G., assignor.)						
Hailes, William, Albany, N. Y. Car-wheel	441,241	Nov. 25	2626	681	53	1135
Hain, Ralph B., assignor to Grand Rapids Cycle Company, Grand Rapids, Mich. Bicycle-saddle	420,009	Jan. 21	2045	539	50	426
Hain, Ralph B., assignor to Grand Rapids Cycle Company, Grand Rapids, Mich. Crank-fastening	420,010	Jan. 21	2046	539	50	426
Hain, William T., Reading, Pa. Stove-plate for cooking-vessels	443,518	Dec. 30	3086	796	53	1898
Haines, Alvin Z., Pittsburg, and J. H. Curry, Wilkinsburg, assignors of one-eighth to W. A. Rose, Rochester, and M. D. McWhinney, Wilkinsburg, Pa. Automatic cut-out	431,516	July 1	745	186	52	149
Haines, Edward C., Woodstown, N. J. Can-filling machine	435,745	Sept. 2	561	149 150	52	1483
Haines, Franklin. (See Dart, Edward, assignor.)						
Haines, Fred. M., Fort Fairfield, Me. Combined plow and fertilizer-dropper	439,944	Nov. 4	480	125	53	702
Haines, George B., New York, N. Y. Potato-peeler	423,150	Mar. 11	1208	315	50	1373
Haines, George W., Stockton, Cal. Traveling thrasher and cleaner	440,843	Nov. 18	1946	499 500	53	998
Hainkel, Sigel, Quincy, Ill. Strap-beveling machine	443,519	Dec. 30	3087	796	53	1898
Hair, Josiah T., assignor, by mesne assignments, to Woven Down Duster Company, Chicago, Ill. Feather duster	442,433	Dec. 9	1250	323	53	1513
Haire, John C., assignor to Anti-Kalsomine Company, Grand Rapids, Mich. Wall decoration	437,112	Sept. 23	2760	721	52	1926
Haischer, Victor, <i>et al.</i> (See Stasch, Emil R., assignor.)						
Haish, Jacob, De Kalb, Ill. Car-coupling	424,473	Apr. 1	43	12	51	11
Haish, Jacob, De Kalb, Ill. Nail	428,091	May 20	1612	410	51	1145
Haish, Jacob, De Kalb, Ill. Rein-holder and indicating-plate	429,620	June 10	782	190	51	1633
Haist, John G. (See Schmitges, William, assignor.)						
Hakewessell, Reinhold, and F. K. Rand, Hartford, Conn. Bevel-protractor	424,977	Apr. 8	846	225	51	172
Haldeman, Charles D., assignor of two-thirds to C. V. Keith, Des Moines, and E. M. Halderman, Humeston, Iowa. Horse-tail tie	429,569	June 3	707	172	51	1608
Halderman, E. M., <i>et al.</i> (See Haldeman, Charles D., assignor.)						
Hale, Charles A., Cleveland, Ohio. Electrical call, lighting, and alarm system	441,157	Nov. 25	2459	637 638	53	1107
Hale, George C., Kansas City, Mo. Portable water-tower	428,092	May 20	1613	410 411	51	1145
Hale, George C., and A. Barrett, Kansas City, Mo. Combined system of fire-alarm and police-patrol telephone and telegraph	440,563	Nov. 11	1469	379 380	53	900
Hale, Henry S. (See Comer, Henry B., assignor.)						
Hale, Henry S., Philadelphia, Pa. Car-seat	425,505	Apr. 15	1631	434	51	335
Hale, Henry S., Philadelphia, Pa. Folding bed	431,657	July 8	974	243	52	202
Hale, Henry S., Philadelphia, Pa. Car-seat	432,702	July 22	2599	665	52	526
Hale, Henry S., Philadelphia, Pa. Car-seat	432,703	July 22	2601	665	52	526
Hale, Henry S., Philadelphia, Pa. Car-seat lock	433,168	July 29	3337	864	52	674
Hale, James W., Newburyport, Mass. Puzzle apparatus	423,381	Mar. 11	1540	405	50	1436
Hale, James W., Newburyport, Mass. Valve for wash-basins	439,818	Nov. 4	278	71	53	662
Hale & Kilburn Manufacturing Company. (See Norcross, William M., assignor.)						
Hale, Lorin E., Kansas City, Mo. Snap-hook	426,498	Apr. 29	3149	828	51	649
Hale, Samuel, Newark, assignor to Sip-Hale Manufacturing Company, Jersey City, N. J. Adjustable saw-frame	424,927	Apr. 1	760	202 203	51	147
Hale, Seth P. H., Hubbardston, Mass. Apparatus for moving invalids	430,642	June 24	2401	584 585	51	1962

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Hale, Thomas, <i>et al.</i> (See Martin, Orien B., assignor.)						
Hale, William E., and N. C. Bassett, assignors to Hydranlic Elevator Company, Chicago, Ill. Elevator	419,148	Jan. 7	743	{ 196 197 }	{ 50 51 }	155
Hales, Henry W., Ridgewood, N. J. Shutter attachment for photographic cameras	436,658	Sept. 16	2008	524	52	1771
Hales, Henry W., Ridgewood, N. J., assignor to E. I. Horsman, New York, N. Y. Camera	423,682	Mar. 18	1994	526	50	1531
Hales, John I., Williamsport, Pa. Lock for gages	426,617	Apr. 29	3327	872	51	684
Haley, Adell A., <i>et al.</i> (See Haley, Charles C., assignor.)						
Haley, Charles C., assignor to H. A. Haussling and A. A. Haley, Newark, N. J. Bottle-stopper	430,285	June 17	1848	453	51	1848
Haley, H. F. (See Evans, Charles F., assignor.)						
Haley, William H., Floyd, Iowa. Hay-loader	440,105	Nov. 4	714	190	53	748
Halfpenny, James D., Pontiac, Mich. Mouth-opener for animals	442,180	Dec. 9	866	231	53	1440
Hall, Albert C., Denver, Colo. Vehicle-wheel	425,506	Apr. 15	1633	435	51	335
Hall, Albert E., assignor to himself and E. Hall, Cambridge, Mass. Hat and garment hook	429,346	June 3	373	88	51	1542
Hall & Brown Wood Working Machine Company. (See Adkins, Samuel S., assignor.)						
Hall, Carey F., Dunkinsville, Ohio. Fire-proof double-ventilated flue	440,475	Nov. 11	1327	343	53	873
Hall, Charles, assignor of one-half to S. Howard, Scranton, Pa. Animal-trap	429,521	June 3	630	155	51	1592
Hall, Charles J. (See Lozier, Hall, and Kelle.)						
Hall, Charles W., Lyons, Iowa. Car-starter	433,982	Aug. 12	809	211	52	922
Hall, Cofran L., assignor of one-half to P. Cahill, San Francisco, Cal. Elevator valve mechanism	443,644	Dec. 30	3294	{ 849 850 }	{ 53 54 }	1937
Hall, Dean S., South Cabot, Vt. Cant-dog	442,620	Dec. 16	1554	402	53	1583
Hall, Edgar. (See Hall, Albert E., assignor.)						
Hall, Edgar, Cambridge, Mass. Rotary looper for sewing-machines	420,449	Feb. 4	35	7	50	570
Hall, Edgar, Somerville, Mass. Sewing-machine	424,290	Mar. 25	2883	769	50	1708
Hall, Edward C., <i>et al.</i> (See McArthur, Robert X., assignor.)						
Hall, Edward J., and H. I. Norton, Bennington, Vt. File-band and confining-asp therefor	434,926	Aug. 26	2329	615	52	1237
Hall, Edwin J., Waltham, Mass. Apparatus for pluning watch-balance springs	437,345	Sept. 30	3153	825	52	2005
Hall, Frances D., Plattsburg, N. Y. Ointment	439,541	Oct. 28	2962		53	582
Hall, Frank, Philadelphia, Pa. Amusement apparatus	438,315	Oct. 14	987	267	53	194
Hall, Franklin M., Farmer Village, N. Y. Harness attachment	419,044	Jan. 7	594	152	50	125
Hall, Fred J., Wallingford, Conn. Game-counter	424,551	Apr. 1	180	50	51	37
Hall, Frederick F. (See Pruyn, Wallace E., assignor.)						
Hall, George. (See Dillon, William S. F., assignor.)						
Hall, George A., Deering, assignor to Hall Mowing Machine Company, Portland, Mo. Cutter for mowing machines	426,801	Apr. 29	3611	942	51	738
Hall, George H. (See Thomas, Lewis E., assignor.)						
Hall, George T., Monrovia, Cal. Crate	428,840	May 27	2753	700	51	1385
Hall, Harry F., Philadelphia, Pa. Expandible pulley	431,889	July 8	1347	340	52	271
Hall, Harry F., New York, N. Y. Expandible wheel	443,276	Dec. 23	2699	692	53	1813
Hall, Henry, Jr. (See Brunner and Hall.)						
Hall, Henry C., Augusta, Ga. Baling-press	420,536	Feb. 4	155	38	50	594
Hall, Henry G., Shelby, N. C. Manufacturing bands for spinning and twisting machines and machine therefor	440,476	Nov. 11	1328	343	53	873
Hall, Hiram, Jr., Spruce Head, Me. Ax-helve	441,408	Nov. 25	2889	745	53	1185
Hall, Horace E. (See Hinchliff and Hall.)						
Hall, James. (See Driscoll, William, assignor.)						
Hall, James M., C. Morris, and W. S. Hamilton, Ritchie Court-House, W. Va. Furniture-polish	422,128	Feb. 25	2481		50	1058
Hall, James T., St. Louis, Mich. Railway cattle-guard	437,757	Oct. 7	125	38	53	27
Hall, James T., assignor to National Surface Guard Company, Chicago, Ill. Surface cattle-guard	421,928	Feb. 25	2197	575	50	1006
Hall, John, New York, N. Y. Flag and flag-staff	433,124	July 29	3274	843	52	661
Hall, John D. (See Wilcox, Elbert F., assignor.)						
Hall, John D., Orrville, Ohio. Wagon	427,416	May 6	590	148	51	928
Hall, John S., New York, N. Y. Oil-cup	427,312	May 6	433	112	51	897
Hall, Joseph, Marske, near Richmond, county of York, England. Type-writing machine	421,702	Feb. 18	1872	491	50	937
Hall, Joseph, Marske, near Richmond, county of York, England. Type-writer	425,876	Apr. 15	2192	583	51	443
Hall, Lewis D. (See Burrus and Hall.)						
Hall, Marquis L., Omaha, Neb. Blind-stop	430,286	June 17	1850	454	51	1848
Hall, Martha E., Crawfordsville, Ind. Device for fitting and drafting garments	435,301	Aug. 26	2887	764	52	1340
Hall, Martin E., U. S. Navy. Valve-gear	420,058	Jan. 28	2123	561	50	450
Hall Mowing Machine Company. (See Hall, George A., assignor.)						
Hall, Oliver S., assignor of one-half to J. M. Gray, Marion, Iowa. Electric body-battery	420,936	Feb. 11	770	199	50	719
Hall, Osborn B., Malden, Mass. Metal post	433,001	July 29	3077	789	52	623
Hall, Oscar L., Lee, Mass. Thill-coupling	439,505	Oct. 28	2854	759	53	561
Hall, Rodney N., Paris, Me. Wall-bracket for staging	420,937	Feb. 11	771	200	50	719
Hall & Ross Husking Glove Company. (See Gallagher, Anthony, assignor.)						
Hall, Samuel, East Orange, N. J. Producing imitation press-copied letters	423,558	Mar. 18	1803	475	50	1494
Hall, Samuel C., Racine, Wis. Wagon-jack	433,862	Aug. 5	630	163	52	880
Hall, Samuel L., Chicago, Ill. Door for admitting light to ovens	433,342	July 29	3579	923	52	724
Hall Signal Company. (See Morse and Winton, assignors.)						
Hall Signal Company. (See Winton, Henry D., assignor.)						
Hall, Spencer F., Racine, Wis. Lifting-jack	425,785	Apr. 15	2054	547	51	418
Hall, Sylvester W., Elmira, N. Y. Earth-scraper	424,058	Mar. 25	2561	684	50	1645
Hall, Thadens M., Granada, assignor of one-half to L. W. Markham and T. H. Cecil, Lamar, Colo. Wheel-hub	438,921	Oct. 21	1930	514	53	379
Hall, Thomas, Birmingham, England. Water-heating apparatus	429,237	June 3	198	49	51	1510
Hall, Thomas, and D. Young, Lawrence, Mass. Picker-motion for looms	432,527	July 22	2318	599	52	472
Hall, Thomas E. (See Leineweber, Hermann, assignor.)						
Hall, Thomas G., Brooklyn, N. Y. Plumb-level	419,329	Jan. 14	1027	272	50	217
Hall, Thomas G., Milford, Conn., assignor to Interchangeable Tool Company, of New York. Nippers	419,666	Jan. 21	1529	407	50	324
Hall, Thomas S., New York, N. Y. Abdominal brace and supporter	425,784	Apr. 15	2054	547	51	417
Hall, Walter R., San Francisco, Cal. Salve	432,611	July 22	2429		52	494
Hall, Walter S., assignor of one-half to J. H. Osgood, Boston, Mass. Obstetrical apparatus	439,399	Oct. 28	2698	{ 718 719 }	{ 53 54 }	531
Hall, Walton, Lodi, N. Y. Crate	432,405	July 15	2123	545	52	425
Hall, Walton, Lodi, N. Y. Covered basket	441,006	Nov. 18	2202	569	53	1048
Hall, Wilbur J., Troy, N. Y. Foretop-holder	440,894	Nov. 18	2024	531	53	1014
Hall, William A., Bellows Falls, assignor of one-half to S. Edson, Saxton's River, Vt. Paint	438,621	Oct. 21	1441		53	289

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Hall, William H., Tiffin, Ohio. Brick-machine.....	442,181	Dec. 9	867	{ 232 233 }	53	1440
Hall, William H., Tiffin, Ohio. Automatic releasing device for brick-machine pitmen.....	442,372	Dec. 9	1157	301	53	1494
Hall, William H., assignor of three-fourths to C. W. Shaw, C. C. Thorington, and E. Nichols, Romeo, Mich. Attachment for dressing-cases or bureaus.....	429,683	June 10	875	213	51	1650
Hall, William H., assignor of three-fourths to C. W. Shaw, C. C. Thorington, and E. Nichols, Romeo, Mich. Friction-hinge.....	429,684	June 10	876	213	51	1650
Hall, William J., New York, assignor of one-half to M. H. Brown, Yonkers, N. Y. Car-window sash.....	437,337	Sept. 30	3135	820	52	2001
Hall, Willis E., Altoona, Pa. Steam-trap.....	432,269	July 15	1926	493	52	388
Hall, Zachary T. (See Moore, George R., assignor.)						
Halladay, Lewis P., Chicago, Ill. Saw-swage.....	418,715	Jan. 7	91	21	50	20
Halladay, Lewis P., Chicago, Ill. Saw-sharpening machine.....	418,790	Jan. 7	198	49	50	43
Hallam, Frank, Jackson, Miss. Egg-beater.....	424,108	Mar. 25	2636	702	50	1660
Hallas, James G., Waterbury, Conn. Hose-connection.....	440,844	Nov. 18	1948	500	53	999
Hallbauer, Albert L., and E. L. Hiller, Lynn, Mass. Support for electric wires.....	433,896	Aug. 5	678	176	52	889
Halle, John. (See Schenck, Charles S., assignor.)						
Hallenbeck, Joseph P., New York, assignor to National Machine Company, Troy, N. Y. Machine for sewing on buttons.....	425,422	Apr. 15	1507	{ 404 405 }	51	311
Hallenbek, James W. (See Van Guysling, Walter F., assignor.)						
Hallenborg, Axel W., Malden, Mass. Type-aligner for type-writing machines.....	418,791	Jan. 7	199	49	50	43
Haller, Augustine, Pittsburg, Pa. Salt-evaporating tank.....	439,945	Nov. 4	481	125	53	702
Haller, Joseph S., Defiance, Ohio. Car-coupling.....	442,182	Dec. 9	873	233	53	1441
Hallett, Andrews. (See Crowell, David, assignor.)						
Hallett, Fred N., Portland, Oreg. Elevator attachment for operating gates.....	425,174	Apr. 8	1152	304	51	233
Hallett, John B., Valley Springs, S. D. Steering and propelling mechanism for floating batteries, &c.....	419,941	Jan. 21	1940	{ 510 511 }	50	407
Hallidie, Andrew S. (See Rowland, Robert, assignor.)						
Halloek, Samuel, Philadelphia, Pa. Apparatus for rolling plastic material.....	439,946	Nov. 4	483	126	53	703
Halloek, William, Middletown, N. Y. Drainage and sewerage system.....	424,196	Mar. 25	2753	734	50	1682
Halloran, Annie C., et al. (See Bibikov, Nicholas A., assignor.)						
Halloran, Annie C., et al. (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Hallowell, Ellwood, and L. C. Hickman, Philadelphia, Pa. Fire-proof structure.....	422,207	Feb. 25	2596	687	50	1080
Hallqvist, Victor A. (See Kindahl and Hallqvist.)						
Hall's Safe and Lock Company of Ohio. (See Corry, William, assignor.)						
Hallstrom, Charles E. (See Bolander, Charles, assignor.)						
Hallwood, Henry S., Columbus, Ohio. Brick-kiln.....	424,474	Apr. 1	46	13	51	12
Hallwood, Henry S., Columbus, Ohio. Brick-kiln.....	436,524	Sept. 16	1778	469	52	1729
Halsey, Charles D., Newark, N. J., assignor to Shoulder Tie Plate Company, Philadelphia, Pa. Railway-tie plate.....	437,153	Sept. 23	2853	742	52	1941
Halsey, Frederic A. (See Rand and Halsey.)						
Halsey, Lewis B. (See Howe, Thomas B., assignor.)						
Halsey, Louis M., Brooklyn, assignor to American Dental Manufacturing Company, New York, N. Y. Dental grinding and polishing wheel.....	426,994	Apr. 29	3879	1013	51	790
Halsey, Samuel L., and W. McGhie, New Decatur, Ala. Sash-weight mold.....	433,079	July 29	3199	822	52	646
Halstead, Charles, Brooklyn, N. Y. Coffee or tea pot.....	427,568	May 13	824	205	51	984
Halstead, Charles L., La Crosse, Wis. Device for securing hose-bands.....	436,706	Sept. 16	2077	546	52	1785
Halstead, John J., Kesler's Cross Lanes, W. Va. Wheel.....	492,404	Mar. 4	60	16	50	1148
Halyburton, John L., Philadelphia, assignor of one-half to C. M. Rhodes, Wayne, Pa. Metallic piston-rod packing.....	430,074	June 10	1483	368	51	1767
Ham, Albert W., et al. (See Prescott, George P., assignor.)						
Ham, Albert W., Lansingburg, N. Y. Button-setting machine.....	437,924	Oct. 7	384	{ 109 110 }	53	74
Ham, Charles T., Rochester, N. Y. Lantern.....	433,564	Aug. 5	181	48, 49	52	791
Ham, Charles T., assignor to C. T. Ham Manufacturing Company, Rochester, N. Y. Tubular lantern.....	436,416	Sept. 16	1621	427	52	1699
Ham, Foster. (See Boyer and Ham.)						
Ham, Lemuel M., Boston, Mass. Machine for sawing metal.....	428,773	May 27	2654	673	51	1364
Ham Manufacturing Company, C. T. (See Ham, Charles T., assignor.)						
Hamaker, Joseph O., Bonanza, Oreg. Buggy-seat protector.....	425,423	Apr. 15	1514	405	51	312
Haman, F. H., et al. (See Brokaw, Harvey, assignor.)						
Hamann, Carl, Reinbeck, Prussia. Pruning implement.....	434,595	Aug. 19	1764	461	52	1192
Hambay, James T., Wilkinsburg, Pa. Machine for making clew-thimbles.....	439,350	Oct. 28	2620	{ 698 699 }	53	517
Hambay, James T., Wilkinsburg, assignor to Jackson Manufacturing Company, Harrisburg, Pa. Hoisting-block.....	419,852	Jan. 21	1806	478	50	378
Hambay, James T., Wilkinsburg, assignor to Union Switch and Signal Company, Pittsburg, Pa. Test-lock for switch and signal apparatus.....	420,193	June 3	133	32	51	1496
Hambay, James T., Wilkinsburg, assignor to Union Switch and Signal Company, Pittsburg, Pa. Detector and lock for draw-bridges.....	439,063	Oct. 21	2146	576	53	422
Hambleton, Francis H., Baltimore, Md. Apparatus for measuring and carbureting air or gas.....	429,271	June 3	233	59	51	1517
Hamblin, Silvanus, New Bedford, Mass. Picking-motion for power-loom.....	421,703	Feb. 18	1876	491	50	937
Hamblin, Stephen M., New Bedford, and W. H. Goldsmith, Fall River, assignors to said Goldsmith and J. S. Wright, Duxbury, Mass. Spool-holder for spooling-machines.....	421,399	Feb. 18	1434	372	50	852
Hamblin, Stephen M., New Bedford, and W. H. Goldsmith, Fall River, assignors to said Goldsmith and J. S. Wright, Duxbury, Mass. Spooling-machine.....	421,400	Feb. 18	1435	372	50	852
Hamburjer, Ephraim, assignor to I. A. Metcalf, Detroit, Mich. Pencil-sharpener.....	429,130	June 3	35	8	51	1479
Hamburjer, Ephraim, assignor to Detroit Lock and Manufacturing Company, Detroit, Mich. Lock.....	443,479	Dec. 23	3030	779	53	1878
Hamburger, Manes, Washington, D. C. Fastening device.....	432,938	July 22	2951	756	52	594
Hamburger, Manes, Washington, D. C. Trousers.....	434,984	Aug. 26	2404	636	52	1252
Hamill, Alexander, Baltimore, Md. Roller-punch.....	429,442	June 3	515	124	51	1571
Hamilton, Albert D. (See Bole and Hamilton.)						
Hamilton, Clarence J., Plymouth, Mich. Barrel for spring air-guns.....	427,313	May 6	435	112	51	897
Hamilton, Cornelius J., assignor to Novelty Electric Company, Philadelphia, Pa. Electro-magnetic annunciator.....	422,773	Mar. 4	590	151	50	1249
Hamilton, Cornelius J., assignor to Novelty Electric Company, Philadelphia, Pa. Electric snap-switch.....	425,507	Apr. 15	1634	435	51	336
Hamilton, Ebenezer. (See Procutner, Frank G., assignor.)						
Hamilton, Edwin, Philadelphia, Pa. Loom-temple.....	432,187	July 15	1803	464	52	366
Hamilton, Emery M., New York, N. Y. Type-writing machine.....	430,771	June 24	2622	642	51	2006
Hamilton, Emery M., New York, N. Y. Type-writing machine.....	430,772	June 24	2623	643	51	2006

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Hamilton, Emery M., New York, N. Y. Type-writing machine	430,773	June 24	2626	{ 643 644	51	2007
Hamilton, Emery M., New York, N. Y. Key for type-writing machines	430,774	June 24	2628	{ 644 645	51	2007
Hamilton, Emery M., New York, N. Y. Type-writing machine	430,775	June 24	2629	{ 644 645	51	2007
Hamilton, Emery M., New York, N. Y. Type-writing machine	430,776	June 24	2630	{ 645 646	51	2008
Hamilton, Emery M., New York, N. Y. Type-writing machine	430,777	June 24	2636	{ 646 647	51	2009
Hamilton, Emery M., New York, N. Y., assignor to H. Abbott, Newark, N. J. Apparatus for recording measurements of time, space, or quantity	424,291	Mar. 25	2885	{ 769 770	50	1709
Hamilton, Emery M., New York, N. Y., assignor to H. Abbott, Newark, N. J. Apparatus for recording measurements of time, space, or quantity	424,292	Mar. 25	2886	{ 770 771	50	1709
Hamilton, Emery M., assignor to Hamilton Type Writer Company, New York, N. Y. Type-writing machine	427,858	May 13	1259	{ 318 319	51	1068
Hamilton, George B., Memphis, Tenn. Ear-protector	432,612	July 22	2429	{ 626 627	52	494
Hamilton, Harvey R., St. Croix, Ind., assignor to M. Siersdorfer, Cincinnati, Ohio, and E. Dupaquier, Louisville, Ky. Cant-hook	434,828	Aug. 19	2129	{ 557 558	52	1192
Hamilton, James J., and J. W. Hull, New Castle, Ind. Seed-sower	420,450	Feb. 4	36	{ 7 8	50	570
Hamilton, John. (See Glennan and Hamilton.)						
Hamilton, John H. (See Hurst, Richard T., assignor.)						
Hamilton, John R., Charleston, S. C. Exercising-machine	443,631	Dec. 30	3274	{ 843 844	53	1933
Hamilton, John W., assignor to Champion Self-Manufacturing Company, Springfield, Ohio. Washing-machine	427,859	May 13	1262	{ 319 320	51	1069
Hamilton, Lorin G. (See Sickler, James, assignor.)						
Hamilton, Mamian, executrix. (See Hamilton, Silas H.)						
Hamilton, Milton A., Detroit, Mich. Wire-and-slat basket	436,917	Sept. 23	2494	{ 652 653	52	1872
Hamilton, Milton A., Detroit, Mich. Woven-wire-and-slat packing-case	437,594	Sept. 30	3550	{ 926 927	52	2054
Hamilton, Milton A., Detroit, Mich. Barrel-compressing machine	439,273	Oct. 28	2492	{ 668 669	53	492
Hamilton, Montgomery, Rock Rapids, Iowa. Hay and straw burner	438,075	Oct. 7	627	{ 171 172	53	120
Hamilton, Napoleon E., Montreal, Quebec, Canada. Device for exhibiting advertisements, &c.	424,882	Apr. 1	692	{ 183 184	51	134
Hamilton, Richard F., and J. Wodiska, New York, N. Y. Belt-keeper	435,930	Sept. 9	859	{ 226 227	52	1547
Hamilton, Silas H., deceased, New York, N. Y.; M. Hamilton, executrix. Method of and apparatus for utilizing water-power	431,540	July 1	784	{ 195 196	52	156
Hamilton Type Writer Company. (See Hamilton, Emery M., assignor.)						
Hamilton, William C., San José, Cal. Fruit-grader	427,687	May 13	996	{ 251 252	51	1018
Hamilton, William M. (See Munroe and Hamilton.)						
Hamilton, Willie S. (See Hall, Morris, and Hamilton.)						
Hamilton Wire Cloth Company. (See Strowbridge, Clarence S., assignor.)						
Hamilton, Wood. (See Bowers and Hamilton.)						
Hamlin Car Wheel and Manufacturing Company. (See Hamlin, Mahlon, assignor.)						
Hamlin, Charles S. (See Harper and Hamlin.)						
Hamlin, Charles W., Chatfield, Minn. Invalid-bedstead	431,189	July 1	232	{ 58, 59 60	52	49
Hamlin, George E., New York, N. Y. Thill-coupling	420,938	Feb. 11	772	{ 200 201	50	719
Hamlin, Mahlon, assignor to Hamlin Car Wheel and Manufacturing Company, Catawissa, Pa. Sectional grate	430,943	June 24	2888	{ 710 711	51	2056
Hamm, Charles, assignor to G. A. Macbeth, Pittsburg, Pa. Tool for finishing lamp-chim- neys, &c.	437,154	Sept. 23	2855	{ 742 743	52	1941
Hamm, Phillip, assignor of one-half to J. N. Kirschner, Fostoria, Ohio. Tobacco-moistener	430,643	June 24	2403	{ 585 586	51	1962
Hammann, Edward, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Wash- basin	422,523	Mar. 4	229	{ 60 61	50	1179
Hammann, Edward, Brooklyn, and T. Susemihl, assignors to J. L. Mott Iron Works, New York, N. Y. Sink	431,808	July 8	1226	{ 306 307	52	248
Hammeken, Edward F., Mexico, Mexico. Freight-car	428,093	May 20	1620	{ 411 412	51	1147
Hammeil, John, Hill City, assignor to J. B. Starr, Concordia, and M. W. Carney, Hill City, Kans. Open mold-board and share for plows and listers	426,012	Apr. 22	2426	{ 641 642	51	495
Hammeilmann, Charles, Buffalo, N. Y. Wood-planing machine	427,860	May 13	1262	{ 319 320	51	1069
Hammer, Bernhard, Ludwigsbürg, Württemberg, Germany. Alcohol cooking-stove	426,802	Apr. 29	3612	{ 942 943	51	739
Hammer, John H., Ballston, Va. Fence	442,039	Dec. 2	649	{ 174 175	53	1386
Hammer, William H., Washington Court-House, Ohio. Vending apparatus	440,029	Nov. 4	608	{ 161 162	53	727
Hammer, Joseph, Long Island City, N. Y. Refrigerator	430,944	June 24	2889	{ 710 711	51	2056
Hammerly, Anton, et al. (See Betz, William, assignor.)						
Hammerschmidt, Louis. (See Walker, William J., assignor.)						
Hammersley, Harry D., Philadelphia, Pa. Cornstalk-cutting machine	438,775	Oct. 21	1694	{ 455 456	53	335
Hammerstad, Benjamin P., and J. Lyken, Cayuga, N. D. Car-coupling	439,653	Nov. 4	45	{ 13 14	53	615
Hammerstein, Oscar, New York, N. Y. Apparatus for cutting fillers for long-filler cigar- bunches	428,208	May 20	1775	{ 449 450	51	1177
Hammerstein, Oscar, New York, N. Y. Cigar-bunching machine	430,644	June 24	2404	{ 585 586	51	1963
Hammesfahr, Ernst, Solingen, Germany. Rotary motor	436,417	Sept. 16	1622	{ 427 428	52	1699
Hammett, Hiram G., et al. (See Goodfellow, John H., assignor.)						
Hammill Fire Escape Company. (See Hammill, Richard, assignor.)						
Hammill, Richard, assignor to Hammill Fire Escape Company, Chicago, Ill. Ladder	426,180	Apr. 22	2668	{ 701 702	51	543
Hamming, Franz, Regensburg, Bavaria, Germany. Velocipede	427,076	May 6	80	{ 20 21	51	827
Hammon, Wendell P., Oakland, and C. J. Sechrist, San Francisco, Cal. Fruit-drying tray	441,871	Dec. 2	383	{ 100 101	53	1340
Hammond, Erasmus L., Dutton, Mich. Fence	441,362	Nov. 25	2808	{ 725 726	53	1169
Hammond, Frank, et al. (See Reddout, William N., assignor.)						
Hammond, Glen W., Wellsborough, Pa. Pipe-wrench	440,564	Nov. 11	1475	{ 380 381	53	900
Hammond, Henry W., Waterloo, Iowa. Portable stock-chute	430,426	June 17	2054	{ 506 507	51	1889
Hammond, Isaac B., Chicago, Ill. Feeding device for ore-roasting furnaces	423,924	Mar. 25	2365	{ 629 630	50	1608
Hammond, Isaac B., Chicago, Ill. Roasting-hearth attachment for operating stirrers	428,094	May 20	1621	{ 411 412	51	1147
Hammond, Wilberforce B., Boston, Mass. Machine for sawing and drilling metal or other substances	421,027	Feb. 11	902	{ 233 234	50	744
Hammons, Charles, Sheldon, Ill. Washing-machine	442,183	Dec. 9	874	{ 233 234	53	1441
Hamon, Augustin H., Paris, France. Apparatus for the transmission of rotary motion	427,987	May 13	1461	{ 370 371	51	1106
Hampton, Robert L., Athens, Ga. Coupling for railway steam-heating pipes	422,208	Feb. 25	2597	{ 687 688	50	1061
Hamrick, Graham H., Philippi, W. Va. Manufacturing butter	433,729	Aug. 5	426	{	52	839
Hamrick, Harry M., Philadelphia, Pa. Toy registering savings-bank	441,301	Nov. 25	2723	{ 706 707	53	1153
Hamrick, Thomas G. (See Anderson and Hamrick.)						
Hams, Charles E., Oriskany Falls, assignor to Canastota Casket Company, (limited,) Can- astota, N. Y. Box-fastener	426,803	Apr. 29	3613	{ 943 944	51	739

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Hamsley, Millard F., Brooklyn, N. Y. Top for cans	422,935	Mar. 11	871	228	50	1310
Hanagin, Joseph A., assignor to Western Electric Company, Chicago, Ill. Terminal for electric cables	428,046	May 13	1549	392	51	1123
Hance, William A. (See Ziegler and Hance.)						
Hance, William A., assignor to Warren Manufacturing Company, Freeport, Ill. Coffee-mill.	437,856	Oct. 7	277	83	53	54
Hanchett, Theodore D., Jamestown, N. Y. Bed-lounge	424,980	Apr. 8	850	{ 225 226 }	{ 51	173
Hancock, Frank A. D. (See Koyl and Hancock.)						
Hancock Inspirator Company. (See Lynde, John D., assignor.)						
Hancock, John, assignor of one-half to J. Hancock, Philadelphia, Pa. Wire fabric	436,977	Sept. 23	2571	672	52	1887
Hancock, Joseph. (See Hancock, John, assignor.)						
Hand, Constant W. (See Fagan and Hand.)						
Hand, David, Netherwood, N. J. Tail-guard and line-rest	428,337	May 20	1992	501	51	1219
Hand, Ekins, assignor of one-half to J. J. Fisher, Rochester, N. Y. Washing compound	428,486	May 20	2212	-----	51	1261
Hand, Jesse H. (See Beardslee and Hand.)						
Hand, John E., Atco, N. J. Binnacle for ships' compasses	426,804	Apr. 29	3614	943	51	739
Hand, Loren M. (See Hand, Porter B., assignor.)						
Hand, Porter B., Handsborough, Miss. Shears	428,601	May 27	2366	606	51	1314
Hand, Porter B., Handsborough, Miss. Sad-iron	437,758	Oct. 7	126	38	53	27
Hand, Porter B., Handsborough, assignor to L. M. Hand, Moss Point, Miss. Gang-edger	437,925	Oct. 7	386	110	53	74
Händel, Reinhold, Leipsic, Saxony, Germany. Apparatus for stirring and mixing fluids, powder, &c.	421,704	Feb. 18	1877	492	50	937
Händel, Reinhold, Leipsic, Saxony, Germany. Musical toy	424,293	Mar. 25	2888	771	50	1709
Handloser, Thomas, New York, N. Y. Grinding-machine	423,243	Mar. 11	1333	{ 346 347 }	{ 50	1398
Handy, Fred. (See Day and Handy.)						
Handy, Jonathan, and W. D. Sherman, New Bedford, Mass. Wagon-seat riser	434,183	Aug. 12	1117	290	52	985
Hanford, Melancthon, Malden, Mass., assignor, by mesne assignments, to Hanford-Stanford Company, of Maine. Apparatus for cooling beer	426,805	Apr. 29	3615	943	51	739
Hanford, Samuel. (See Gillis, Harry A., assignor.)						
Hanford, Samuel, Binghamton, N. Y. Carbureting air or gas	425,877	Apr. 15	2194	583	51	443
Hanford-Stanford Company. (See Hanford, Melancthon, assignor.)						
Hanford-Stanford Company. (See Stanford, Charles D., assignor.)						
Hanger, Andrew S., Fishersville, Va. Railway-gate	436,236	Sept. 9	1325	345	52	1633
Hancke, Moritz P., and P. Bernich, Blasewitz, near Dresden, Germany. Automatic delivery apparatus	428,720	May 27	2579	653	51	1349
Hanika, Christian, Wichita, Kans. Machine for making iron fences	423,426	Mar. 18	1612	423	50	1458
Hanimann, Charles. (See Miller and Hanimann.)						
Hanington, Alfred W., and A. E. Southward, New York, N. Y. Toy puzzle	434,337	Aug. 12	1350	352	52	1031
Hankenhof, Julius, assignor to himself and F. Cook, Jr., New York, N. Y. Water-closet valve mechanism	434,778	Aug. 19	2063	539	52	1179
Hanks, Austin J., Wilmington, Ohio. Vehicle-wheel	433,285	July 29	3503	904	52	709
Hanks, Austin J., Wilmington, Ohio. Machine for forming steel felloes for vehicle-wheels	433,286	July 29	3504	{ 904 905 }	{ 52	709
Hanley, John, Minneapolis, Minn. Locomotive toy	439,064	Oct. 21	2147	576	53	422
Hanlon, John, New York, N. Y. Apparatus for manufacturing wood-gas	423,939	July 22	2952	{ 756 757 }	{ 52	594
Hanlon, John, New York, N. Y. Water-cooled valve	434,867	Aug. 19	2192	574	52	1204
Hanlon, John R., Pennington, N. J. Surveyor's instrument	430,015	June 10	1383	343	51	1748
Hanlon, William, Cohasset, Mass. Beheading block and ax	420,995	Feb. 11	857	221	50	735
Hanlon, William, Cohasset, Mass. Dismembering apparatus	421,493	Feb. 18	1568	{ 405 406 }	{ 50	878
Hanmore, Hiram M., Santa Cruz, Cal. Covering for pipes	432,162	July 15	1770	455	52	360
Hann, Chester K., Columbus, Ohio. Window-screen	432,092	Dec. 23	2374	606	53	1751
Hann, Edmund P., assignor of one-half to W. S. Baker, Portland, Ind. Plane	426,806	Apr. 29	3618	943	51	739
Hann, George L., Beverly, Ohio, assignor of one-half to V. and S. A. Dodge. Easel	423,151	Mar. 11	1209	315	50	1373
Hannay, James B., Loch Long, county of Dumbarton, Scotland, assignor to White Lead Company, (limited,) London, England. Manufacturing sulphate-of-lead pigment	429,522	June 3	632	155	51	1592
Hannay, James B., Loch Long, county of Dumbarton, Scotland, assignor to White Lead Company, (limited,) London, England. Apparatus for the manufacture of sulphate-of-lead pigment	429,523	June 3	633	155	51	1593
Hannen, John, Chicago, Ill. Swing	431,260	July 1	341	85	52	69
Hannes, George, Cincinnati, Ohio. Metallic wheel	433,621	Aug. 5	266	71	52	808
Hanney, David, Turner, Ill. Variable exhaust for locomotives	432,704	July 22	2603	665	52	527
Hanney, David, Turner, Ill. Metallic steam-packing	435,141	Aug. 26	2638	698	52	1205
Hannis, Henry F., assignor of two-fifths to G. L. Pfouts, Philadelphia, Pa. Car-ventilator	439,065	Oct. 21	2148	576	53	422
Hannum, Gilman E. (See McCurdy, John D., assignor.)						
Hanover, Major E., Evansville, Wis. Fastening device for packages	419,853	Jan. 21	1808	478	50	378
Hanrahan, Joseph F., Detroit, Mich. Refrigerator	432,134	July 15	1730	{ 444 445 }	{ 52	352
Hanscomb, Charles D., et al. (See Rhodes, Jay B., assignor.)						
Hansdoerfer, Reinhold. (See Lippitt and Hansdoerfer.)						
Hanse, William, and T. Eder, Brooklyn, N. Y. Device for connecting picker-straps to the picker-sticks of looms	438,152	Oct. 14	741	203	53	149
Hansen, Carelius, Beloit, Wis. Plow	424,294	Mar. 25	2889	771	50	1709
Hansen, Fredrick G. (See Anderson and Hansen.)						
Hansen, Hans N. (See Bergstrom and Hansen.)						
Hansen, Jens. (See Christiansen, Hans P., assignor.)						
Hansen, John L., Portland, Oreg. Stippling and stenciling brush	438,808	Oct. 21	1742	468	53	345
Hansen, John S., and C. D. Wainwright, Medford, Mass., assignors, by mesne assignments, to Wainwright Manufacturing Company of Massachusetts. Machine for corrugating tubes	434,060	Aug. 12	903	{ 238 239 }	{ 52	942
Hansen, Julius W., Humphrey, Nehr. Watch-bow fastener	437,690	Oct. 7	20	6	53	6
Hansen, Lewis. (See Newhouse and Hansen.)						
Hansen, Mads L., assignor of one-half to Armstrong Manufacturing Company, Bridgeport, Conn. Lasting-machine	422,774	Mar. 4	590	152	50	1250
Hansen, Ole, Mount Pleasant, Utah. Axle-nut	425,786	Apr. 15	2055	548	51	418
Hansen, Soren. (See Saugman and Hansen.)						
Hansen, Thorvald T. A., Copenhagen, Denmark. Centrifugal separator	434,130	Aug. 12	1041	269	52	969
Hansen, William P., New Haven, Conn. Balance-escapement for time-pieces	443,363	Dec. 23	2846	732	53	1842
Hansing, Siegfried, New York, N. Y. Piano-action. (Reissue)	11,055	Jan. 14	1437	385	50	302
Hansing, Siegfried, New York, N. Y. Lid and music-rack for pianos	442,373	Dec. 9	1158	301	53	1494
Hansing, Siegfried, New York, N. Y. Pressure-bar for upright pianos	443,277	Dec. 23	2700	693	53	1813

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Hanson, Albert. (See Johnson, Hanson, and Whiteley.)						
Hanson, Christian R., Savanna, Ill. Roundabout.	439,003	Oct. 21	2054	550	53	405
Hanson, Dempsey B., assignor of one-half to W. W. Allis, Milwaukee, Wis. Band-saw mill.	437,490	Sept. 30	3396	889	52	2055
Hanson, Edward H., Philadelphia, Pa. Electrotype	443,278	Dec. 23	2701	693	53	1814
Hanson, Frank B., New York, N. Y. Hydraulic ram	422,936	Mar. 11	873	228	50	1310
Hanson, John H., Oakland, Cal. Harrow	428,392	May 20	2088	524	51	1239
Hanson, John T. (See Gildersleeve, Joseph, assignor.)						
Hanson, Jorgen. (See Skattebo, Ole O., assignor.)						
Hanson, Miles, Sheboygan, Wis. Blacking-stand	443,441	Dec. 23	2959	761	53	1863
Hanson, Olaus, assignor to I. Johnson, Worcester, Mass. Velocipede-seat	420,060	Jan. 28	2128	562	50	451
Hanson, Olaus, assignor to I. Johnson, Worcester, Mass. Velocipede-wheel	420,061	Jan. 28	2129	562	50	451
Hanson, Olaus, and P. Lobben, assignors to I. Johnson, Worcester, Mass. Velocipede	420,059	Jan. 28	2125	561 562	50	450
Hanson, Paul, St. Paul, Minn. Grain-binder	424,709	Apr. 1	420	110 111 112	51	83
Hanson, William C., and L. C. Ferrell, New Orleans, La. Transferring apparatus	427,314	May 6	435	112 113	51	897
Hantsche, Emil, Jr., New York, N. Y. Window-blind	421,047	Feb. 11	935	242	50	750
Hantsche, Emil, Jr., New York, N. Y. Window-blind	425,542	Apr. 15	1689	451	51	346
Happgood Plow Company. (See Black, Joseph P., assignor.)						
Happoldt, Marion C., Providence, R. I. Automatic circuit-breaker	422,524	Mar. 4	230	60	50	1180
Harbaugh, Howard E. (See Midgley and Harbaugh.)						
Harbaugh, Howard E., Rockford, Ill. Mechanical movement	423,604	Mar. 18	1863	491 492	50	1505
Harbaugh, Samuel V., assignor to A. E. Cradick and E. E. Garrettson, Baltimore, Md. Cleansing compound	430,850	June 24	2747		51	2029
Harbeck, Theodor, Chicago, Ill. Casing for paper match-boxes	422,405	Mar. 4	61	16	50	1148
Harbeck, William H., Toledo, Ohio. Flash-light photographic apparatus	441,158	Nov. 25	2465	638 639	53	1108
Harbin, John W., New York, N. Y. Pea-shelling machine	437,987	Oct. 7	485	139	53	92
Harbon, George W., Englewood, Ill. Printer's block	421,929	Feb. 25	2198	576	50	1006
Harbour, Thomas J., Markley, Tex. Trace-carrier	443,645	Dec. 30	3296	850	53	1937
Hard, Charles H., O. G. Franks, and A. E. Loomis, assignors to said Hard, J. Crawford, and H. D. Hard, Oneida, N. Y. Machine for weaving wire mattresses	439,873	Nov. 4	365	94, 95	53	679
Hard, Henry D., et al. (See Hard, Franks, and Loomis, assignors.)						
Hard, John R. (See Taylor and Hard.)						
Hard, John W., Venice, Pa., assignor to Victor Safe and Lock Company, Cincinnati, Ohio. Time-lock	428,393	May 20	2089	525	51	1239
Harden, John J., assignor to himself and C. F. Elmes, Chicago, Ill. Fire-extinguisher	425,221	Apr. 8	1214	322	51	246
Hardenbergh, William A. (See Brownson, Ralph, assignor.)						
Harder, Charles N. (See Sagendorph, Longley L., assignor.)						
Harder, John, San Francisco, Cal. Wind-engine	438,251	Oct. 14	884	240	53	175
Harder, William A. (See Carr, William H., assignor.)						
Harder, William A., Lansingburg, assignor of one-half to C. A. Brown, Troy, N. Y. Under-garment	429,310	June 3	316	74 780 781 782 783 784 785 599 606	51	1531
Hardie, Robert, Brooklyn, assignor to H. C. Elliot, New York, N. Y. Cigarette-machine.	429,031	May 27	3033	601 602 603 604	51	1440
Hardie, Robert, Brooklyn, assignor to H. C. Elliot, New York, N. Y. Cigarette-machine. (Reissue)	11,104	Aug. 19	2281		52	1220
Hardie, Robert W., Albany, N. Y. Harrow	422,406	Mar. 4	61	16	50	1149
Harding, Charles K., Atlantic, Iowa. Electric-railway system	437,358	Sept. 30	3178	830	52	2009
Harding, Edward W., Boston, Mass. Book-mark	432,038	July 15	1572	402	52	322
Harding, James C., Topeka, Kans. Harvesting-machine	437,113	Sept. 23	2761	722	52	1926
Harding, John H., New York, N. Y. Method of and device for ornamenting wall-plaster, &c.	433,785	Aug. 5	519	135	52	857
Harding, Joseph M., Oil City, Pa. Insufflator	419,942	Jan. 21	1942	511	50	407
Harding, William O., New York, N. Y. Game-counter	413,279	Dec. 23	2701	693 694	53	1814
Hardinge, Franklin, Toronto, Canada. Watch-maker's polisher	438,415	Oct. 14	1139	307	53	224
Hardinge, Franklin, Toronto, Canada. Watch-maker's roller-extractor	438,416	Oct. 14	1140	308	53	224
Hardinge, George F., Vineland, N. J., assignor of fifty-one one-hundredths to F. Acker, Philadelphia, Pa. Sad-iron	432,309	July 15	1994	509	52	400
Hardsoeg, Martin, Ottumwa, Iowa. Coal-drilling machine	426,587	Apr. 29	3279	860 861	51	675
Hardsoeg, Martin, Ottumwa, Iowa. Coal-mining machine	426,618	Apr. 29	3328	873	51	685
Hardwick, Harry, Philadelphia, Pa. Jacquard mechanism for looms	441,486	Nov. 25	3013	776 777	53	1208
Hardwick, S. W., et al. (See Elam, William E., assignor.)						
Hardy, Augustus E., Mishawaka, Ind. Machine for forming felt boot-blanks	421,275	Feb. 11	1256	324	50	811
Hardy, Dexter D., Lake View, assignor to Hardy High Speed Engine Company, Chicago, Ill. Steam-engine	434,561	Aug. 19	1708	447	52	1110
Hardy, Edgar R. (See Cracraft, Richard, assignor.)						
Hardy, Emery E., Newark, N. J. Velocipede	436,873	Sept. 23	2417	630 631	52	1857
Hardy, Emery E., Newark, N. J. Velocipede	441,409	Nov. 25	2890	745 746	53	1185
Hardy, Franklin D., assignor of part to Crews & Owen and E. J. Blood, Chicago, Ill. Electrical governor	440,590	Nov. 11	1513	390	53	908
Hardy, George, Lawrence, Mass. Car-coupling	441,410	Nov. 25	2894	746	53	1186
Hardy, George J., Jr., Brooklyn, N. Y. Machine for making cigar or cigarette boxes	422,077	Feb. 25	2397	634	50	1043
Hardy High Speed Engine Company. (See Hardy, Dexter D., assignor.)						
Hardy, John, et al. (See Bolding, Arch, assignor.)						
Hardy, Lewis W., Chicago, Ill., assignor to Roller Bearing Axle Company, Hillsborough, Wis. Anti-friction bearing for car-axles	439,654	Nov. 4	46	13	53	615
Hardy, Wallace L., Ottawa, Ill. Rotary cutting-knife	435,627	Sept. 2	392	105	52	1449
Harfield, William H., London, England. Steering-gear for ships or boats	428,249	May 20	1849	464	51	1192

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Hargan, James A., Chester, Pa. Ship's davit.....	443,318	Dec. 23	2779	{ 712 713	{ 53	1828
Harger, David, Des Moines, Iowa. Composite roofing.....	419,120	Jan. 7	701	185	50	148
Hargreaves, Edwin. (See Haigh and Hargreaves.)						
Hargreaves, George, and S. A. Baugh, Detroit, Mich. Rail-brace.....	427,315	May 6	436	113	51	898
Hargreaves, George, E. W. Porter, and J. P. Scranton, Detroit, Mich. Carburetor.....	432,270	July 15	1927	493	52	388
Hargreaves, James, Farnworth, county of Lancaster, England. Internal combustion thermo-motor.....	431,581	July 8	848	211	52	176
Hargreaves, James, Farnworth, England. Internal-combustion thermo-motor.....	436,781	Sept. 23	2211	582	52	1818
Hargreaves, William, Manchester, England. Shuttle-operating mechanism for looms for weaving wire.....	439,145	Oct. 28	2276	611	53	452
Hargrove, William, assignor to himself and J. Fitzsimmons, Chicago, Ill. Treadle-power.....	425,571	Apr. 15	1727	463	51	354
Haring, George T., Brooklyn, N. Y. Bag-sewing clamp.....	424,109	Mar. 25	2637	702	50	1660
Harker, Henry K., assignor to F. C. Weir, Cincinnati, Ohio. Bag-lock.....	442,884	Dec. 16	2025	520	53	1674
Harker, Henry K., assignor of three-fourths to J. H. Davis and W. D. Beggs, Cincinnati, Ohio. Pencil-sharpener.....	431,517	July 1	746	186	52	149
Harker, John T., Camden, N. J. Axle-nut.....	433,730	Aug. 5	427	109	52	839
Harkins, James S., assignor of one-half to J. Merritt, Minneapolis, Minn. Boiler-furnace.....	425,072	Apr. 8	986	265	51	199
Harkins, James S., assignor of one-half to J. Merritt, Minneapolis, Minn. Heater.....	425,222	Apr. 8	1215	{ 322 323	{ 51	246
Harkins, James S., assignor of one-half to J. Merritt, Minneapolis, Minn. Cooking-stove.....	425,320	Apr. 8	1360	363	51	273
Harkness, Lisle B., and C. E. Quaife, Cleveland, Ohio, assignors, by mesne assignments, to said Harkness. Type-bar for type-writing machines.....	422,775	Mar. 4	595	152	50	1251
Harkness, William J., Yanketown, Ill. Car-coupling.....	432,039	July 15	1573	403	52	322
Harlan, George F., Leeds, Md. Car-coupling.....	433,152	Mar. 11	1212	315	50	1374
Harlan, Samuel C., Lake City, Minn. Stove-pipe thimble, collar, and cover.....	422,209	Feb. 25	2600	688	50	1081
Harland, Joel W., Michigantown, Ind. Gate.....	430,577	June 17	2728	559	51	1930
Harland, John T., Clinton, Ontario, Canada. Shipping-can.....	422,525	Mar. 4	232	61	50	1180
Harless, Joe D., Anniston, Ala. Car-door.....	435,176	Aug. 26	2688	710	52	1305
Harley, Aaron H., et al. (See Taggart, William P., assignor.)						
Harley, Alfred, Albany, N. Y. Apparatus for lifting and moving invalids.....	428,602	May 27	2385	606	51	1315
Harley, Alfred, Albany, N. Y. Life-saving apparatus for fire-service.....	428,603	May 27	2387	607	51	1315
Harley, Howard W., and W. Diebel, Philadelphia, Pa. Needle-cylinder and needle for circular-knitting machines.....	423,244	Mar. 11	1335	347	50	1398
Harley, John, assignor of one-half to M. J. Murphy, Detroit, Mich. Feed device for saws.....	425,223	Apr. 8	1217	323	51	247
Harley, John, assignor of one-half to M. J. Murphy, Detroit, Mich. Saw-guide.....	427,316	May 6	437	113	51	898
Harley, John, assignor of one-half to M. J. Murphy, Detroit, Mich. Lathe.....	436,175	Sept. 9	1238	{ 322 323	{ 52	1616
Harlow, Charles F., assignor to Seam Machine Company, Boston, Mass. Sewing-machine.....	418,716	Jan. 7	93	21	50	20
Harlow, Charles F., Boston, and E. E. Bartlett, Hyde Park, Mass., assignors to Addax Basting Machine Company, Portland, Me. Sewing-machine for basting.....	423,996	Mar. 25	2471	657	50	1628
Harlow, M. B., et al. (See Bond, Nathan O., assignor.)						
Harlow, Philander, Hyde Park, Mass. Wax-thread sewing-machine.....	422,210	Feb. 25	2601	{ 688 689	{ 50	1081
Harlow, Philander, Hyde Park, Mass., assignor to National Sewing Machine Company, New Haven, Conn. Sewing-machine.....	443,941	Dec. 30	3750	959	53	2024
Harman, Ananias, Roann, Ind. Saw-gage.....	433,465	Aug. 5	43	14	52	765
Harman, Charles F., Valley Falls, Kans. Loading apparatus.....	421,568	Feb. 18	1680	435	50	898
Harman, Clarence, Omaha, Nebr. Sewing-machine.....	443,395	Dec. 23	2293	{ 743 744	{ 53	1851
Harman, Daniel M., Baltimore, Md. Trolley-toboggan.....	432,271	July 15	1929	{ 493 494	{ 52	389
Harman, Joseph E., Rochester, N. Y. Fire-escape.....	422,345	Feb. 25	2827	745	50	1122
Harman, Samuel W., Bentonville, Ark. Wire-straightener.....	431,582	July 8	850	211	52	177
Harmer, Barton W., Avoca, Nebr. Horse hay-rake.....	441,552	Nov. 25	3111	799	53	1228
Harmer, Frederick, Onekama, Mich. Sash-holder.....	423,239	July 29	3438	888	52	696
Harmer, Joseph J., assignor to J. A. Bach, Philadelphia, Pa. Box-hinge.....	442,434	Dec. 9	1251	323	53	1513
Harmlless, Marshal A., Schell City, Mo. Grain-measure.....	441,302	Nov. 25	2726	707	53	1154
Harmon, Clarence G., et al. (See Johnson, Charles L., assignor.)						
Harmon, Eleazer, Baltimore, Md. Alarm-lock.....	419,769	Jan. 21	1666	{ 442 443	{ 50	351
Harmon, Orville S., Brooklyn, N. Y., assignor to P. and P. Lorillard, Jr., C. H. Barkew, G. D. Finlay, and E. Allen, Jersey City, N. J. Elevator.....	421,569	Feb. 18	1682	{ 435 436	{ 50	898
Harmon, Willard R., Battle Creek, Mich. Picket-fence machine.....	419,438	Jan. 14	1189	316	50	250
Harmeunt, George A. (See Armstrong, Charles G., assignor.)						
Harnish, Joseph M., Mansfield, Ohio. Fastening for wire gates.....	431,744	July 8	1127	280	52	220
Harold, Adam C. (See Harold, John A. and A. C.)						
Harold, John A. and A. C., Rochester, N. Y. Window-stop.....	439,655	Nov. 4	47	13	53	616
Harper, Arthur C., and C. S. Hamlin, Los Angeles, Cal. Machine for punching and riveting.....	432,528	July 22	2319	599	52	472
Harper, Clark. (See Ratchford and Harper.)						
Harper, Henry D. (See Crabtree and Collins, assignors.)						
Harper, Henry H. (See Finley and Harper.)						
Harper, Henry H., Benham, Tex. Horse-detacher.....	423,760	Mar. 18	2104	555	50	1551
Harper, J. C., et al. (See Siedentopf, Frederick, assignor.)						
Harper, John, Fairfield, Iowa. Combined wire reel and stretching machine.....	443,442	Dec. 23	2960	762	53	1864
Harper, John M., Fairfield, Iowa. Strap-coupling.....	438,809	Oct. 21	1743	468	53	345
Harper, Joshua. (See Wildin and Harper.)						
Harper, Joshua, Melvern, Kans. Suspension-bridge.....	442,435	Dec. 9	1252	324	53	1513
Harper, Rubin J. (See Wildin and Harper.)						
Harper, Samuel E., East Meredith, N. Y. Draft attachment for vehicle-tongues.....	430,945	June 24	2889	710	51	2056
Harper, William D., Quanaah, Tex. Two-wheeled vehicle.....	438,742	Oct. 21	1659	442	53	326
Harpold, Adam, Colton, Cal. Tree baller and transplanter.....	442,184	Dec. 9	876	234	53	1411
Harps, Jacob, San Fernando, Cal. Hand-truck.....	427,232	May 6	323	83	51	874
Harr, Deck D. and J. L., Belmont, Iowa. Type-writing machine.....	442,973	Dec. 16	2155	{ 555 556	{ 53	1700
Harr, John L. (See Harr, Deck D. and J. L.)						
Harragh, Charles D., Macon, Ill. Tongue-support.....	441,363	Nov. 25	2809	726	53	1169
Harrell, Alexander S., Minden, La. Cotton chopper and cultivator.....	438,153	Oct. 14	742	203	53	149
Harrelson, William H., Kansas City, Mo. Wire riprap and jetty work.....	426,807	Apr. 29	3619	944	51	740
Harriman, Jeremiah P., Woonsocket, R. I. Knitting-machine.....	428,304	May 20	1941	488	51	1209
Harriman, Orlando, New York, N. Y. Railway-car.....	424,475	Apr. 1	47	13, 14	51	12
Harriman, Orlando, New York, N. Y. Ventilator for railway-cars.....	424,476	Apr. 1	49	14	51	12
Harriman, William F., Des Moines, Iowa. Trolley-arm for electric cars.....	427,569	May 13	825	{ 205 206	{ 51	984

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Harrington, Edward E., Everett, Mass. Protractor-bevel	438,750	Oct. 21	1661	445	53	329
Harrington, Francis, South Bend, Ind. Apparatus for polishing paint or varnish	436,892	Sept. 23	2446	639	52	1864
Harrington, Gardner P., <i>et al.</i> (See Darling, William H., assignor.)						
Harrington, George H., Cincinnati, Ohio. Pipe-hood	421,098	Feb. 11	1009	258	50	764
Harrington, John C., Providence, R. I. Bracelet	423,605	Mar. 18	1866	492	50	1505
Harrington, John H., assignor of one-half to N. B. Kerr, New Bedford, Mass. Coupling for pipes to convey heat from car to car	431,518	July 1	748	186 187	52	149
Harrington & Richardson Arms Company. (See Caldwell, Homer M., assignor.)						
Harrington, Samuel E., North Amherst, Mass. Sash-fastener	436,707	Sept. 16	2078	547	52	1785
Harrington, Samuel H. (See O'Brien and Harrington.)						
Harrington, Samuel H., Binghamton, N. Y. Unlatching device for car-couplings	426,565	Apr. 29	3245	851 852	51	668
Harrington, Samuel H., Binghamton, N. Y. Railway time-signal	433,565	Aug. 5	182	49	52	792
Harrington, Samuel H., Binghamton, N. Y. Railway time-signal	433,566	Aug. 5	184	49	52	793
Harrington, Samuel H., Binghamton, N. Y. Railway-signal	433,567	Aug. 5	186	49, 50	52	792
Harrington, Walter E., Atlantic City, N. J., assignor of one-half to L. Atwood, Philadelphia, Pa. Wire-joint for commutators	441,487	Nov. 25	3017	777	53	1209
Harriott, George, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Bicycle	439,400	Oct. 28	2699	719	53	531
Harris, Abraham W., <i>et al.</i> (See Bibikov, Nicholas A., assignor.)						
Harris, Abraham W., <i>et al.</i> (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Harris, Albert M., South Bend, Ind. Spark-arrester	435,177	Aug. 26	2690	710	52	1305
Harris, Anthony, Middlesborough, county of York, England. Coin freed or actuated machine	434,109	Aug. 12	997	260 261	52	961
Harris, Arthur, Independence, Mo. Lifting-jack	430,946	June 24	2890	711	51	2057
Harris, Benjamin D. (See Lindner and Harris.)						
Harris, Benjamin S. H. (See Harris, William A. and B. S. H.)						
Harris, Benjamin S. H., and G. W. Taylor, Belton, S. C. Loom-shuttle threader	435,603	Sept. 2	338	94	52	1440
Harris, Bradner L., <i>et al.</i> (See Smith, George F., assignor.)						
Harris, Carleton C., Chicago, Ill. Surgical applicator	421,072	Feb. 11	968	249	50	756
Harris, Carleton C., Chicago, Ill., assignor to A. N. Bartlo, Salida, Cal. Automatic fire-kindler	435,892	Sept. 2	800	213	52	1529
Harris, Charles B. (See Blomén, Jonas E., assignor.)						
Harris, Charles B., New York, N. Y. Incandescent gas-burner	435,628	Sept. 2	393	106	52	1449
Harris, Charles B., New York, N. Y. Heating and ventilating apparatus	436,353	Sept. 16	1513	394 395	52	1679
Harris, Charles B., New York, N. Y. Incandescent burner	437,114	Sept. 23	2763	722	52	1926
Harris, Charles B., New York, N. Y. Making incandescent elements for gas-burners	441,553	Nov. 25	3113	709	53	1228
Harris, Charles D., Indianapolis, Ind. Thermostatic valve-regulator	430,578	June 17	2279	560	51	1930
Harris, Charles R., Williamsport, Pa. Clasp for suspenders	431,694	July 8	1049	263	52	214
Harris, Charles R., Williamsport, Pa. Clasp	433,466	Aug. 5	44	14	52	765
Harris, Charles W. (See Schmidt and Harris.)						
Harris, Daniel E. (See Thompson and Harris.)						
Harris, David, Brooklyn, N. Y. Fishing-reel	431,142	July 1	159	41	52	34
Harris, David T., and V. R. Smith, Dawson County, assignors to C. D. and J. T. Smith, Hall, Ga. Cotton-planter	434,985	Aug. 26	2405	637	52	1252
Harris, Edward L., Red Banks, Miss. Cotton-seed planter	419,330	Jan. 14	1029	272	50	217
Harris, Edward M., New York, N. Y. Cigarette	439,004	Oct. 21	2056	550	53	405
Harris, Elijah T., Chicago, Ill. Fire-place frame	424,059	Mar. 25	2562	684 685	50	1645
Harris, Elijah T., Chicago, Ill. Gravity-trap for ash-pits	439,146	Oct. 28	2376	611	53	452
Harris, Ernest A., Victoria, British Columbia, Canada. Perambulator	422,407	Mar. 4	62	17	50	1149
Harris, Frank H., Auburndale, Ohio. Toy dray	420,787	Feb. 4	501	131	50	661
Harris, Frank H., and C. E. Crandall, Canandaigua, N. Y. Word-spacing mechanism for type-writing machines	442,315	Dec. 9	1068	280	53	1477
Harris, Frank L. (See Vaughn, Benjamin E., assignor.)						
Harris, George W. (See Allen and Harris.)						
Harris, George W., Brushton, N. Y. Car-door fastening	420,556	Feb. 4	183	46	50	600
Harris, Henry J., Niles, Ohio. Screw-connection in metal-rolling mills	443,319	Dec. 23	2781	713	53	1829
Harris, James F. (See Gardner and Harris.)						
Harris, James P., Lorado, Ark. Buckle	431,946	July 8	1421	361	52	286
Harris, Jerome B., assignor of one-half to J. Gambetti, Stockton, Cal. Traction-engine	434,131	Aug. 12	1042	269	52	969
Harris, John B., Eutaw, Ala. Fountain marking-brush	438,622	Oct. 21	1441	388	53	289
Harris, John B., Eutaw, Ala. Bale-tie	443,045	Dec. 16	2370	582	53	1724
Harris, John I., Melbourne, Victoria. Pen-holder	494,552	Apr. 1	181	50	51	37
Harris, Joshua W., assignor of one-half to T. P. Wallace, Fredericksburg, Va. Pocket-knife	436,659	Sept. 16	2010	524	52	1771
Harris, Metal Wheel Company. (See Newhouse, Frederick, assignor.)						
Harris, Milo. (See Herby, John, assignor.)						
Harris, Milo, Jamestown, N. Y. Hoof-expander	419,667	Jan. 21	1530	407	50	324
Harris, Oswald & Noble. (See Oswald, Joseph, assignor.)						
Harris, R. Duncan. (See Wahlén, Lundström, and Collins, assignors.)						
Harris, Robert L., New York, N. Y. Foundation for piers or other structures	435,142	Aug. 26	2639	699	52	1295
Harris, Samuel, assignor to T. L. Johnson, Cleveland, Ohio. Brake	419,015	Jan. 7	557	140	50	117
Harris, Samuel, assignor to T. L. Johnson, Cleveland, Ohio. Coupling for trolley-wires	424,110	Mar. 25	2638	703	50	1660
Harris, Silas, San Francisco, Cal. Axle-machine	437,029	Sept. 23	2643	691 692	52	1902
Harris, Silas, San Francisco, Cal. Upsetting-machine	440,565	Nov. 11	1476	380 381	53	901
Harris Son & Company, A. (See Jones and Wedlake, assignors.)						
Harris Supply Company. (See Harris, William T., assignor.)						
Harris, Thomas, assignor of three-fourths to N. T. Thurber, A. Lucking, and H. F. D. Cameron, Detroit, Mich. Galvanometer	437,926	Oct. 7	387	110	53	74
Harris, Thomas C., Pleasant Grove, Minn. Nut-lock	426,270	Apr. 22	2798	735	51	571
Harris, William A. and B. S. H., Pelzer, S. C. Air-brake coupling	442,621	Dec. 16	1555	402	53	1583
Harris, William E., assignor to B. B. Purdy, New York, N. Y. Separating solder from tinned iron	419,195	Jan. 14	827	218	50	177
Harris, William H. (See Martin and Harris.)						
Harris, William H., Claremont, Va. Car-coupling	428,910	May 27	2861	732	51	1407
Harris, William H., assignor to Holmes & Harris, Newberry, S. C. Car-coupling	436,660	Sept. 16	2011	525	52	1771
Harris, William M., and T. B. Reese, Mansfield, Ohio. Pipe-coupling	422,017	Feb. 25	2311	610	50	1027
Harris, William O., Lawrence, Mass. Mechanism for operating gates of turbines	439,351	Oct. 28	2622	699	53	517
Harris, William T., Jr., Mount Sterling, Ky. Hedge fence	428,754	May 27	2639	666	51	1360
Harris, William T., Indianapolis, Ind. Valve	433,731	Aug. 5	428	109	52	839
Harris, William T., assignor to Harris Supply Company, Indianapolis, Ind. Metallic packing	424,978	Apr. 8	847	225	51	172

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Harris, William W. (See Davis, Frank E., assignor.)						
Harris, William W., Golightly, S. C. Combined planter, cultivator, and fertilizer-distributor.	427,417	May 6	592	148	51	929
Harrison, Abraham C., Grand Rapids, Ohio. Fence-post.	420,537	Feb. 4	156	39	50	554
Harrison, Benjamin. (See Struble, Jacob, assignor.)						
Harrison, Edward Y., Ballina, Richmond River, New South Wales. Grab or clam-shell dredger.	423,427	Mar. 18	1615	{ 423 424 }	{ 50	1459
Harrison, Frank S., <i>et al.</i> (See Hess, Edwin C., assignor.)						
Harrison, George P., <i>et al.</i> (See Campbell, James A., assignor.)						
Harrison, George W., assignor of two-thirds to T. W. Dickson and H. S. Tarver, Santa Anna, Tex. Horse-detcher.	429,904	June 10	1207	299	51	1714
Harrison, Henry, Philadelphia, Pa. Sash-fastener.	427,233	May 6	325	83	51	875
Harrison, Henry H., New York, N. Y., and F. C. Buffum, Stanton, Fla. Hectograph printing-press.	427,077	May 6	80	20, 21	51	827
Harrison & Hoag. (See Hoag, Chester R., assignor.)						
Harrison, James P., and J. L. Waring, Danville, Va. Safe.	425,508	Apr. 15	1636	435	51	336
Harrison, John. (See Hoyle and Harrison.)						
Harrison, John. (See Nodder and Pettford, assignors.)						
Harrison, John, Stamford, county of Lincoln, England. Securing rails in railway-chairs.	418,891	Jan. 7	376	91	50	78
Harrison, John F. (See Crossley, Emmott, and Harrison.)						
Harrison, John O. (See Harrison, William D., assignor.)						
Harrison, John W., <i>et al.</i> (See McArthur, Peter, assignor.)						
Harrison, Lemuel P., <i>et al.</i> (See Anderson, Lee, assignor.)						
Harrison, Leonard C., and C. Keef, Warrior, Ala. Miner's combination-box.	435,746	Sept. 2	563	150	52	1484
Harrison, Louisa A., Boston, Mass. Presser-foot for sewing-machines.	438,623	Oct. 21	1443	368	53	269
Harrison, Nancy M., Adair, Iowa. Flour receptacle and sifter.	422,937	Mar. 11	874	228	50	1311
Harrison, Samuel, and J. T. Sheard, Salford, England. Apparatus for testing gas pipes and fittings.	441,659	Dec. 2	44	12, 13	53	1270
Harrison, Samuel T., Skipanon, Oreg. Dressing and thread-cutting tool.	442,480	Dec. 9	1319	341	53	1527
Harrison, Thomas, assignor to Scheppers Brothers, Philadelphia, Pa. Loom.	440,591	Nov. 11	1515	{ 390 391 }	{ 53	909
Harrison, Thomas, assignor to Scheppers Brothers, Philadelphia, Pa. Loom for weaving pile fabrics.	440,592	Nov. 11	1520	{ 392 393 393 }	{ 53	909
Harrison, Thomas, assignor to Scheppers Brothers, Philadelphia, Pa. Loom for weaving pile fabrics.	440,593	Nov. 11	1526	{ 394 395 }	{ 53	910
Harrison, Thomas B., <i>et al.</i> (See Smith and Heiskell, assignors.)						
Harrison, Thomas H. (See Welles and Harrison.)						
Harrison, Walter H., New Edinburg, Ark. Collar for animals.	424,197	Mar. 25	2754	735	50	1683
Harrison, William, Kingston, Ontario, Canada. Nut-lock.	430,802	June 24	2670	655	51	2015
Harrison, William D., Pine Bluff, Ark., assignor of one-fourth to J. O. Harrison. Box-lid.	435,541	Sept. 2	246	63	52	1422
Harrison, William D., and D. C. Burford, Pine Bluff, Ark. Elevator.	428,841	May 27	2754	700	51	1385
Harrison, William H., and G. C. Westervelt, Marseilles, Ill. Printing attachment for paper-roll holders.	441,660	Dec. 2	47	13	53	1271
Harriss, Milford B., assignor to himself, J. H. Lewis, C. Jones, and E. Young, Greensborough, Ala. Car-coupling.	432,135	July 15	1739	445	52	352
Harrold, Ernest E. (See Heithersay, William, assignor.)						
Harron, Samuel V., administrator. (See Clark, Edward.)						
Harryman, Sarah A., Sedalia, Mo. Foot-warmer.	421,930	Feb. 25	2199	576	50	1006
Harsh, Samuel E., assignor of one-half to J. M. Harter, Wabash, Ind. Overdraw-loop.	428,487	May 20	2212	559	51	1261
Harsh, Samuel E., assignor of one-half to J. M. Harter, Wabash, Ind. Buckle.	428,488	May 20	2213	559	51	1261
Harsin, Charles D. (See Hersom, William J., assignor.)						
Harsin, Charles D. (See Middlekanf and Harsin.)						
Harsin, William M., Lyons, Nebr. Corn-planter.	434,268	Aug. 12	1253	325	52	1010
Harston, Charles G., Whitehall, county of Middlesex, England. Cartridge-magazine for fire-arms.	419,518	Jan. 14	1296	346	50	272
Hart, Abraham, Brooklyn, N. Y. Crayon.	418,947	Jan. 7	466		50	98
Hart, Andrew S., Morrisville, N. Y. Heater for omnibuses, &c.	439,874	Nov. 4	369	95	53	680
Hart, Anthony W., Boston, Mass. Electric shaft-controller.	423,245	Mar. 11	1336	348	50	1398
Hart, Charles E., and T. Coriscaden, assignors to Stanley Works, New Britain, Conn. Gage for press-slides.	425,131	Apr. 8	1072	{ 284 285 }	{ 51	216
Hart, Charles L., Brooklyn, N. Y. Making spirally-seamed pipe.	435,419	Sept. 2	60	20	52	1386
Hart, Charles L., Brooklyn, N. Y., and T. S. Crane, East Orange, N. J. Sheet-metal pipe.	434,927	Aug. 26	2330	615	52	1237
Hart, Edward, assignor to himself, J. T. Baker, and G. P. Adamson, Easton, Pa. Acid-bottle.	423,683	Mar. 18	1995	526	50	1531
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Company, Little Falls, N. Y. Steam-engine governor.	421,931	Feb. 25	2199	576	50	1006
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeding machine.	434,629	Aug. 19	1818	{ 475 476 477 478 }	{ 52	1133
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeder.	434,630	Aug. 19	1827	{ 478 479 }	{ 52	1134
Hart, Frederick, Poughkeepsie, assignor to D. H. Burroll & Co., Little Falls, N. Y. Centrifugal creamer.	436,418	Sept. 16	1624	428	52	1699
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Centrifugal separator.	436,419	Sept. 16	1626	428	52	1700
Hart, Frederick D., Brooklyn, N. Y. Indicator-gear for pressure-engines.	433,939	Aug. 12	744	194	52	912
Hart, George B., Viola, Iowa. Cultivating-plow.	429,171	June 3	98	23	51	1491
Hart, Henry C., Detroit, Mich. Weighing and price scales.	428,560	May 20	2309	{ 586 587 }	{ 51	1280
Hart, Henry C., Detroit, Mich. Spring air-gun.	437,491	Sept. 30	3397	890	52	2055
Hart, Henry C., Detroit, Mich. Water-closet.	440,030	Nov. 4	611	162	53	
Hart, Henry C., Detroit, Mich. Water-closet.	442,041	Dec. 2	650	175	53	1390
Hart, Henry C., Detroit, Mich., assignor to Van Wagoner & Williams Company, of New York. Spring-hinge.	419,943	Jan. 21	1942	511	50	407
Hart, Henry C., Detroit, Mich., assignor to Van Wagoner & Williams Company, of New York. Spring-hinge.	431,349	July 1	478	118	52	97
Hart, Henry C., and C. W. Stanton, Cohocton, N. Y. Car-coupling.	434,986	Aug. 26	2407	637	52	1252
Hart, Herman. (See Davidson and Hart.)						
Hart, Jacob P., Upper Sandusky, Ohio. Fodder-harvesting machine.	425,609	Apr. 15	1791	{ 460 461 }	{ 51	366
Hart, James, South Strabane, Pa. Tool for extracting drill-rods, &c., from wells.	431,890	July 8	1349	340	52	272
Hart, Joel T., Foster, Miss. Weather-strip.	423,925	Mar. 25	2366	629	50	1609
Hart, John J., Lowell, Mass. Printing calico.	429,131	June 3	36	8	51	1479

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Hart, John R., C. F. Currey, and C. F. Bridge, North Topeka, Kans. Rotary engine.....	419,770	Jan. 21	1668	443	50	351
Hart, John W. (See Griffin, Michael, assignor.)						
Hart, John W., and L. Gillihan, Iola, Kans. Ice-cream freezer	442,316	Dec. 9	1070	280	53	1477
Hart, Marshall W., assignor to himself, L. S. Brown, G. A. Ebenback, and J. C. McGahan, Yellow Bud, Ohio. Check-row corn-planter	437,338	Sept. 30	3136	820	52	2001
Hart, Myrtle E., <i>et al.</i> (See Jolley, Mathias, assignor.)						
Hart, Orlando W., Fall River, Mass. Electric signal-circuit	428,095	May 20	1622	412	51	1147
Hart, Stacy B., Peoria, Ill. Grain-conveyer	420,788	Feb. 4	503	132	50	661
Hart, Stacy B., Peoria, Ill. Grain-weigher	420,789	Feb. 4	505	132	50	662
Hart, Stacy B., Peoria, Ill. Elevator for grain-separators	434,082	Aug. 12	955	250	52	953
Hart, Stacy B., Peoria, Ill. Grain-spout	435,968	Sept. 9	913	240	52	1556
Hart, Thomas J. (See Essex, George B., assignor.)						
Hart, Thomas J., assignor of one-half to G. B. Essex, Buffalo, N. Y. Lubricator	426,377	Apr. 22	2949	775	51	601
Hart, Thomas J., assignor to Sherwood Manufacturing Company, Buffalo, N. Y. Grease-cup	440,309	Nov. 11	1056	272	53	822
Hart, Thomas J., assignor to Sherwood Manufacturing Company, Buffalo, N. Y. Flue-cleaner	440,310	Nov. 11	1057	272	53	822
Hart, Thomas W. (See Eliott and Higginbottom, assignors.)						
Hart, Walter, New York, N. Y. Sliding calculating-scales	426,444	Apr. 29	3070	805	51	634
Hart, William C., Manistique, Mich. Snow-plow	439,274	Oct. 28	2493	668	53	492
Hart, William H., Jr. (See Gaither and Hart.)						
Hart, William H., Jr. (See Guilbert, John M., assignor.)						
Hart, William H., Jr., Philadelphia, Pa. Retaining-pin for scarfs	420,063	Jan. 28	2131	563	50	451
Hart, William H., New Britain, Conn. Box-handle	420,062	Jan. 28	2130	562	50	451
Hart, William H., Brooklyn, N. Y. Pipe-coupling	432,733	July 22	2642	675	52	535
Hart, William T. A., <i>et al.</i> (See Wood, Charles F., assignor.)						
Hartean, David M., and M. Gaffing, Green Bay, Wis. Steam-boiler furnace	432,668	July 22	2536	650	52	514
Harter, Elam, San Diego, Cal. Step-ladder	424,782	Apr. 1	546	146	51	107
Harter, John M. (See Harsh, Samuel E., assignor.)						
Hartford, David F., Boston, Mass. Machine for cutting soles or like forms	424,477	Apr. 1	49	$\left\{ \begin{array}{l} 14 \\ 15 \\ 16 \end{array} \right\}$	51	12
Hartford Heel Plate Company. (See Richards, Francis H., assignor.)						
Hartford, Isaac J., Kirksville, Mo. Steam-condenser	442,885	Dec. 16	2028	520	53	1674
Hartford, Isaac J., Kirksville, Mo. Smoke and spark conductor	442,886	Dec. 16	2029	$\left\{ \begin{array}{l} 520 \\ 521 \end{array} \right\}$	53	1674
Hartje, Frederick, New York, N. Y. Bracelet and making the same	423,246	Mar. 11	1337	348	50	1398
Hartle, Americus V., Marseilles, Ohio. Earth-anger	432,705	July 22	2604	665	52	527
Hartleb, Bernhard, assignor to W. Knabe Manufacturing Company, Baltimore, Md. Piano-action	439,147	Oct. 28	2277	611	53	452
Hartley, Charles J., assignor of two-thirds to J. K. Warren and B. K. Durfee, Decatur, Ill. Conveyor attachment for thrashing-machines	434,338	Aug. 12	1351	$\left\{ \begin{array}{l} 352 \\ 353 \end{array} \right\}$	52	1031
Hartley & Graham. (See Moulton and Crofut, assignors.)						
Hartley, William, Houghton, Wis. Blasting	442,678	Dec. 16	1636	421	53	1600
Hartman, Andrew, Chicago, Ill. Trace-carrier	433,287	July 29	3507	905	52	709
Hartman, Henry W. (See Midgley, Thomas, assignor.)						
Hartman, James E., College Springs, Iowa. Washing-machine	439,243	Oct. 28	2443	655	53	483
Hartman, John, Jr., Philadelphia, Pa. Cable-railway mechanism	421,494	Feb. 18	1570	406	50	878
Hartman, John C., Waterloo, Iowa. Vent	437,988	Oct. 7	487	139	53	93
Hartman, John M., Philadelphia, Pa. Apparatus for transporting and dumping cinders ..	443,574	Dec. 30	3176	816	53	1914
Hartman, Joseph C., Cleveland, Ohio. Friction-clutch	442,703	Dec. 16	1687	432	53	1609
Hartman, Rufus A., Fairmount Springs, Pa. Paper or card rack	426,600	Sept. 16	1909	501	52	1751
Hartmann, Charles J., Summit, N. J. Electrode for storage-batteries	422,300	Feb. 25	2753	726	50	1109
Hartmann, Charles J., Summit, N. J. Electrode for secondary batteries	422,301	Feb. 25	2755	726	50	1109
Hartmann, Emil H. C., and A. Meedom, assignors of one-third to E. A. Roth, Philadelphia, Pa. Friction-clutch	442,374	Dec. 9	1159	302	53	1494
Hartmann, Henry, assignor to J. P. and E. P. Mitchener, Stockton, Utah. Cincture attachment for riding-saddles	438,477	Oct. 14	1220	330	53	240
Hartmann, Jacob, New York, N. Y. Safety attachment for bridles	421,401	Feb. 18	1437	372	50	852
Hartmann, Nicholas, assignor of one-half to M. Schroeder, Philadelphia, Pa. Cnspidor ..	426,410	Apr. 22	3023	791	51	615
Hartmann, Paul, Ludwigshafen-on-the-Rhine, Germany. File or holder for letters or similar papers	438,154	Oct. 14	743	204	53	149
Hartness, James, Springfield, Vt. Screw-machine tool	424,979	Apr. 8	848	225	51	173
Hartness, James, Springfield, Vt. Stock-feeding device for screw-machines	441,411	Nov. 25	2895	$\left\{ \begin{array}{l} 746 \\ 747 \end{array} \right\}$	53	1187
Hartness, James, assignor to Jones & Lamson Machine Company, Springfield, Vt. Chnck-feeding mechanism for screw-machines	425,224	Apr. 8	1218	324	51	247
Hartness, James, assignor to Jones & Lamson Machine Company, Springfield, Vt. Stock-feeding mechanism for screw-machines	425,377	Apr. 8	1438	385	51	288
Hartness, James, assignor to Jones & Lamson Machine Company, Springfield, Vt. Attachment for metal-screw machines	431,809	July 8	1227	307	52	248
Hartnampf, Paul, Birmingham, Ala. Engine connection	443,046	Dec. 16	2271	583	53	1724
Hartsaugh, D. Maurice, Mason City, assignor to himself and J. K. Powers, Cedar Rapids, Iowa. Sketching apparatus	424,111	Mar. 25	2639	703	50	1660
Hartsheld, Dosier L., Hope, Ark., assignor of one-half to W. R. Basden. Bedstead-slat lock ..	435,178	Aug. 26	2691	710	52	1305
Hartshorn, Edwin A., Troy, N. Y. Hemp-brake	420,575	Feb. 4	207	53, 54	50	605
Hartshorn, Stewart, Short Hills, N. J. Shade-roller	423,938	Mar. 11	875	229	50	1311
Hartshorn, Stewart, Short Hills, N. J. Shade-roller	424,198	Mar. 25	2755	735	50	1683
Hartshorn, Stewart, Short Hills, N. J. Shade-roller	425,787	Apr. 15	2056	548	51	418
Hartshorne, Henry G., <i>et al.</i> (See Howe, Patrick, assignor.)						
Hartwell, David S. (See Hartwell, Harmon and D. S.)						
Hartwell, Harmon and D. S., Marseilles, Ohio. Fence	429,685	June 10	877	213	51	1650
Hartz, Henry V., Cleveland, Ohio. Stop-clutch	424,478	Apr. 1	52	16	51	13
Hartz, Henry V., Cleveland, Ohio. Snatch and tackle block	442,679	Dec. 16	1637	422	53	1600
Hartzell, Seth, Audubon, Iowa. Veterinary obstetrical instrument	442,887	Dec. 16	2032	521	53	1675
Harvester and Binder Patent Company. (See Dewey, John J., assignor.)						
Harvey, Charles A., Washington, D. C. Railway-track fastening	418,892	Jan. 7	377	92	50	79
Harvey, Charles A., New York, N. Y. Railway-track fastening	439,352	Oct. 28	2623	700	53	517
Harvey, Edmund A., Wilmington, Del. Machine for planishing metal	423,048	Mar. 11	1047	272	50	1342
Harvey, Edmund A., Wilmington, Del. Annealing-furnace	423,049	Mar. 11	1049	272	50	1343
Harvey, Ernest W. (See Biedermann and Harvey.)						
Harvey, Francis B., Charlestown, Pa. Roller and harrow	420,016	June 10	1384	344	51	1749
Harvey, Frank, and J. Kane, Renovo, Pa. Car-coupling	443,916	Dec. 30	3708	949	53	2017
Harvey, George, Forestville, Cal. Stump-puller	425,671	Apr. 15	1895	506	51	386
Harvey, George L., Chicago, Ill. Siding for buildings	423,050	Mar. 11	1050	273	50	1343

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Harvey, George L., Chicago, Ill. Car construction	432,272	July 15	1931	494	52	389
Harvey, George L., Chicago, Ill. Car construction	432,273	July 15	1932	494	52	389
Harvey, George L., Chicago, Ill. Draw-gear for cars	432,274	July 15	1935	495	52	390
Harvey, George L., Chicago, Ill. Car construction	432,275	July 15	1937	495	52	390
Harvey, George L., Chicago, Ill. Car construction	432,276	July 15	1938	495 496	52	390
Harvey, George L., Chicago, Ill. Car construction	436,893	Sept. 23	2447	639 640	52	1864
Harvey, Hayward A., Orange, N. J. Machine for making spiral washers	420,557	Feb. 4	184	47	50	600
Harvey, Hayward A., Orange, N. J. Resilient spiral washer	440,631	Nov. 18	1588	409	53	932
Harvey, John, Brooklyn, N. Y. Adjustable scraper for roller-mills	429,381	June 3	430	101	51	1553
Harvey, John B., Steamburg, Ohio. Extension-ladder	441,872	Dec. 2	384	100	53	1340
Harvey, Patrick, Chicago, Ill. Stop and waste valve	440,263	Nov. 11	970	248	53	809
Harvey, William. (See Wilson and Harvey.)						
Harvey, William J. (See Bennett, Alexander W., assignor.)						
Harvey, Winthrop A. (See Tinkham, Henry I., assignor.)						
Harwell, William P. (See Orr, Walker P., assignor.)						
Harwood, Herbert J., Littleton, Mass. Theater-chair	426,013	Apr. 22	2427	641	51	495
Harwood, Herbert J., Littleton, Mass. Theater-chair	426,533	Apr. 29	3199	839	51	658
Harwood, Herbert J., Littleton, Mass. Opera-chair	427,570	May 13	827	206	51	985
Hasard, Walter. (See Lomax and Hasard.)						
Hasbrouck, Julian A. H., assignor to New York & New Jersey Liquor Maturing Company, Plainfield, N. J. Aging liquors	418,792	Jan. 7	201	49	50	44
Hasbrouck, Oscar, Jr., Modena, N. Y. Butter-cutter	437,814	Oct. 7	220	67	53	44
Haselhorst, Horst, and J. O. Vogel, Dresden, Germany. Bottle-stopping apparatus	441,242	Nov. 25	2627	681	53	1135
Hasenclever Söhne, C. W. (See Quack, Edward, assignor.)						
Haseupfug, George, Cleveland, Ohio. Sash-fastener	423,761	Mar. 18	2105	555	50	1551
Haskell, Lewis W., Anburn, Me. Dust-collector	429,347	June 3	374	89	51	1542
Haskell, Luther D., Jr., Salem, Mass. Thill-coupling	441,412	Nov. 25	2897	747	53	1187
Haskell, William, Smethport, Pa., assignor of one-half to C. A. Smith, Buffalo, N. Y. Gas-regulator	424,199	Mar. 25	2757	735	50	1683
Haskell, William W., Sterling, Ill. Letter-box	425,225	Apr. 8	1220	324	51	247
Haskin, Charles G., Evanston, Ill. Live-steam feed-water purifier	423,606	Mar. 18	1866	492	50	1505
Haskins, Fred. A. (See Cheney and Haskins.)						
Haskins, George W., Chicago, Ill. Curtain-fixture	435,061	Aug. 26	2521	666	52	1273
Haskins, James H., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Vertical gang-lathe	420,064	Jan. 28	2132	563 564	50	452
Haskins, James H., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Machine for constructing journal-boxes	422,590	Mar. 4	330	83	50	1199
Haskins, Marvin L., Willow Creek, Mont. Wagon-brake	419,045	Jan. 7	595	153	50	126
Haskins, Urial M., Taunton, Mass. Spoke-socket	423,474	Mar. 18	1682	444	50	1472
Haslam, John P., et al. (See Foster, Samuel L., assignor.)						
Haslam, John P., assignor of three-fourths to F. E. Gallagher, S. L. Foster, and J. T. Ahrens, Wilmington, Del. Electric stop-motion for knitting-machines	424,295	Mar. 25	2890	772	50	1710
Haslam, John P., assignor of seven-tenths to F. E. Gallagher, S. L. Foster, and J. T. Ahrens, Wilmington, Del. Electric stop-motion for warping-machines	432,040	July 15	1574	403	52	322
Haslam, Lewis, Ravenswood, and C. Marshall, Bolton, county of Lancaster, England; said Marshall assignor to said Haslam. Loom for cross-weaving	440,566	Nov. 11	1477	381 382	53	901
Haslop, William, Sidney, assignor of one-half to J. H. Doering, Wapakoneta, Ohio. Wheelbarrow	442,042	Dec. 2	651	175	53	1390
Haslop, William, Sidney, assignor of one-half to J. H. Doering, Wapakoneta, Ohio. Wheel	442,043	Dec. 2	652	176	53	1390
Hass, Theodore M., New York, N. Y. Clasp for boxes, &c	433,240	July 29	3439	888	52	696
Hasselman, Otto H., Indianapolis, Ind. Voting-booth	435,604	Sept. 2	340	95	52	1440
Hasselman, Otto H., Indianapolis, Ind. Voting-booth	437,691	Oct. 7	21	7	53	7
Hasselman, Otto H., Indianapolis, Ind. Election-booth	438,624	Oct. 21	1444	389	53	290
Hasselstrom, Axel F., Hermosa, S. D. Pocket-knife	426,445	Apr. 29	3071	805 806	51	634
Hassenpflug, Henry, Huntingdon, Pa. Washing-machine	427,861	May 13	1264	320	51	1069
Hassett, William, Wallingford, Conn. Table	429,443	June 3	517	124	51	1572
Hastings, Azariah H., New York, N. Y. Hinge	423,247	Mar. 11	1338	348	50	1399
Hastings, Azariah H., New York, N. Y. Music-desk for piano-fortes, &c	439,875	Nov. 4	370	95	53	680
Hastings, Henry N. (See Hatchard, Ashley H., assignor.)						
Hastings, John B., Jackson, Ohio. Metal-grinding machine	438,581	Oct. 14	1369	371	53	270
Hastings, John B., Jackson, Ohio. Making glaziers' points	438,582	Oct. 14	1370	371	53	270
Hastings, John B., assignor of two-thirds to J. M. Tripp and J. M. Lively, Jackson, Ohio. Wire-nail machine	419,944	Jan. 21	1944	512	50	407
Hastings, Walter W., Jersey City, N. J. Gear-cutter	434,019	Aug. 12	850	224 225	52	930
Hastings, William P. (See Bowles, David, assignor.)						
Hat Dipping Machine Company. (See Chittenden, Harvey M., assignor.)						
Hatch, Adin A., assignor to B. F. Jones, E. L. Martin, and A. W. Jones, Kansas City, Mo. Electrical signaling apparatus	435,893	Sept. 2	801	214	52	1529
Hatch, Adin A., assignor to B. F. Jones, E. L. Martin, and A. W. Jones, Kansas City, Mo. Electrical signaling apparatus	435,894	Sept. 2	805	214	52	1530
Hatch, Davis P., and P. M. Guion, Kansas City, Mo. Ore concentrator and separator	433,983	Aug. 12	811	212	52	923
Hatch, George E., Cambridge, Mass., assignor to D. H. Burrell, Little Falls, and J. R. Stebbins, Watertown, N. Y. Secondary battery	441,413	Nov. 25	2898	747	53	1187
Hatch, George W., Seattle, Wash. Washing machine	419,519	Jan. 14	1299	347	50	273
Hatch, Jesse W., assignor to Clark's Coking and Smokeless Furnace Company, Rochester, N. Y. Furnace	423,926	Mar. 25	2367	630	50	1609
Hatch, John, San Francisco, Cal. Safety device for elevators	439,081	Oct. 21	2177	585	53	428
Hatch, Moses E., et al. (See Waters, Benjamin E., assignor.)						
Hatch, Silas A. (See Bennetts, Lewis, and Hatch.)						
Hatch, Theodosia, et al. (See Hussey, Levi, assignor.)						
Hatch, Thomas J., Denver, Colo. Ore-concentrator	436,476	Sept. 16	1719	454	52	1718
Hatchard, Ashley H., assignor of one-half to H. N. Hastings, Lynn, Mass. Hose-bridge	420,065	Jan. 28	2135	565	50	452
Hatcher, Sidney W., Ceres, Ga. Plow	431,891	July 8	1350	341	52	272
Hatcher, William C., Norborne, Mo. Adjustable attachment for hair-clippers	429,722	June 10	932	229	51	1662
Hatcher, William C., Norborne, Mo. Adjustable attachment for hair-clippers	442,807	Dec. 16	1879	484	53	1646
Hatfield, James F., Dublin, Ind. Grain-separator	422,776	Mar. 4	596	153	50	1251
Hatfield, Louis I., and E. A. Chubb, assignors of one-half to H. Malmberg and H. Robbins, Cortland, N. Y. Carriage-spring	420,905	Feb. 4	714	184	50	698
Hatfield, Samuel P., Jamaica, N. Y. Recoil apparatus for ordnance	439,947	Nov. 4	485	126 127	53	703

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Hatfield, Wentworth W., Florence, Colo. Endless clothes-line	442,044	Dec. 2	653	176	53	1390
Hathaway, Charles, Cleveland, Ohio. Railway transfer-table	423,762	Mar. 18	2107	556	50	1551
Hathaway, Charles W., assignor to H. Muhr's Sons, Philadelphia, Pa. Watch-case pendant.	443,480	Dec. 23	3031	779	53	1878
Hathaway, Edgar F. (See Hathaway and Woodard.)						
Hathaway, Edwin C., Washington, D. C. Regenerative lamp	420,538	Feb. 4	157	39	50	594
Hathaway, George H., Boston, assignor of one-half to W. A. Perry, Winchester, Mass. Automatic fertilizer-distributor	441,554	Nov. 25	3115	799	53	1228
Hathaway, George M., New York, N. Y. Cigar-wrapper cutter	420,451	Feb. 4	38	7 8	50	571
Hathaway, George M., New York, N. Y. Machine for cutting cigar-wrappers	420,452	Feb. 4	39	8	50	571
Hathaway, George M., New York, N. Y. Cigar-wrapper-rolling machine	424,296	Mar. 25	2894	{ 772 773 183 184 }	{ 50 51 }	{ 1710 134
Hathaway, George M., New York, N. Y. Cigar-wrapping machine	424,883	Apr. 1	693	{ 183 184 }	{ 51 }	{ 134
Hathaway, Martin, assignor of one-half to J. B. Roberts, Atlanta, Ga. Oil-burner	428,096	May 20	1623	412	51	1148
Hathaway, Philip. (See Fox, Edwin M., assignor.)						
Hathaway, Philip, <i>et al.</i> (See Fink, William M., assignor.)						
Hathaway, Philip, New York, N. Y. Electric push-button	434,506	Aug. 19	1764	461	52	1122
Hathaway, Russell, Fairhaven, Mass. Apparatus for erecting poles	426,534	Apr. 29	3200	839	51	659
Hathaway, Selim A. (See Keep, William H., assignor.)						
Hathaway, Selim D., Gilead, Mich. Gate	439,005	Oct. 21	2057	551	53	405
Hathaway, Thomas H., New Bedford, Mass. Apparatus for sealing gummed paper	424,200	Mar. 25	2759	736	50	1684
Hathaway, Thomas H., New Bedford, Mass. Apparatus for sealing gummed paper. (Re-issue)	11,096	July 22	3011	773	52	604
Hathaway, William E. and E. F., and A. B. Woodard, Hornellsville, N. Y. Fencing-strand	433,940	Aug. 12	745	194	52	912
Hathaway, William E. and E. F., and A. B. Woodard, Hornellsville, N. Y.; said Woodard assignor to said Hathaway and Hathaway. Fencing-strand	440,632	Nov. 18	1589	409	53	932
Hatherell, Albert, Jamesville, Wis. Watering device for transplanting-machines	438,155	Oct. 14	744	204	53	150
Hatlestad, Joseph A., Handsborough, Miss. Mail-pouch catcher	430,851	June 24	2749	673	51	2029
Hatschek, Berthold, Prague, Austria-Hungary. Skate	441,841	Dec. 2	334	89	53	1329
Hatteberg, Axel K., Marsfield, Wis. Sandpapering-machine	432,873	July 22	2857	{ 731 732 }	{ 52 }	{ 576
Hattersley, Richard L., and J. Hill, Keighley, county of York, England. Shedding mechanism for looms	434,061	Aug. 12	906	239	52	942
Hattersley, Richard L., and J. Hill, Keighley, England. Shedding mechanism for looms	437,195	Sept. 30	2924	761	52	1961
Hattersley, Richard L., and J. Hill, Keighley, England. Shedding mechanism for looms	437,196	Sept. 30	2925	761	52	1962
Hatton, Joseph E., Colon, Cuba. Cane-mill	421,705	Feb. 18	1878	{ 492 493 }	{ 50 }	{ 938
Hautman, Leon F., New Orleans, La. Diffusion apparatus	435,747	Sept. 2	564	{ 150 151 }	{ 52 }	{ 1484
Hauck, Charles J., Jr., Brooklyn, N. Y. Strainer	419,520	Jan. 14	1300	347	50	273
Hauck, Charles J., Jr., Brooklyn, N. Y. Sheet-metal box	426,378	Apr. 22	2951	775	51	602
Hauck, Charles J., Jr., Brooklyn, N. Y. Agitator for liquids	437,473	May 6	675	169	51	945
Hauck, Charles J., Jr., Brooklyn, N. Y. Sheet-metal box	434,269	Aug. 12	1257	326	52	1011
Hauck, Philip, Philadelphia, Pa. Machine for pasting paper strips	432,751	July 22	2676	{ 685 686 }	{ 52 }	{ 540
Hauck, Thomas, assignor of one-half to W. C. Howe, Evansville, Ind. Curtain-fixture	430,249	June 17	1757	437	51	1830
Haudel, Fred, Boston, Mass. Safety attachment for elevators	430,017	June 10	1385	344	51	1749
Hanerbach, Adolph J., Salt Lake City, Utah. Time gas-lighter	426,808	Apr. 29	3621	945	51	740
Hauger, Aloysius, New York, N. Y. Picture-nail	437,317	May 6	439	113	51	898
Haugh, Benjamin F., Indianapolis, Ind., and P. F. Leach, Chicago, Ill., assignors to Cushion Car Wheel Company, Indianapolis, Ind. Cushioned car-wheel	443,047	Dec. 16	2272	583	53	1724
Haugh, Benjamin O., Indianapolis, Ind. Tension-governor for wire fences	443,575	Dec. 30	3179	817	53	1915
Haughawout, John W., Omaha, Nebr., assignor to J. S. Leslie, Paterson, N. J. Rotary snow-plow	419,149	Jan. 7	745	{ 197 198 }	{ 50 }	{ 156
Haulenbeck, John H., Cleveland, Ohio. Detachable chair-back	433,125	July 29	3275	843	52	661
Hanprecht, Mathias, Brooklyn, N. Y. Spike	440,227	Nov. 11	918	236	53	799
Haupt, George, Spring Hill, Minn. Sash-holder	421,706	Feb. 18	1879	493	50	938
Haupt, George W., Germantown, Ohio. Hand-planter	433,288	July 29	3508	905	52	709
Haupt, William W., Kyle, Tex. Wagon	423,475	Mar. 18	1683	{ 444 445 }	{ 50 }	{ 1473
Haupt, William W., Kyle, Tex. Wagon attachment	424,981	Apr. 8	851	226	51	173
Haury, John, Erhart, Ohio. Road-cart	421,707	Feb. 18	1880	493	50	938
Hausburg, William A. (See Henkel, Frederick, assignor.)						
Hausburg, William A., and F. Henkel, Chicago, Ill. Bottle receptacle and stopper	427,692	May 13	1266	320	51	1069
Hausser, Christian, Elmwood, Canada. Extension-top	442,223	Dec. 9	932	246	53	1452
Hausman, John. (See Smiley and Batty, assignors.)						
Hausmann, Lincoln, New York, N. Y. Rotary engine	430,342	June 17	1937	474	51	1865
Hausmann, McComb & Dunn. (See Scheffer, David M., assignor.)						
Hauss, Augustus P., New Albany, Ind. Mail-bag catcher and deliverer	431,461	July 1	659	165	52	133
Haussler, Otto. (See Lear, Edward, assignor.)						
Haussling, Henry A., <i>et al.</i> (See Haley, Charles C., assignor.)						
Haussmann, Hermann, Chicago, Ill. Eraser	422,777	Mar. 4	597	153	50	1251
Haussmann, Hermann, Chicago, Ill. Portable case for fragile articles	440,633	Nov. 18	1589	409	53	932
Havana Press Drill Company. (See Phelps, Harvey J., assignor.)						
Haven, John V. D., assignor of one-half to Z. A. Phillips, Chicago, Ill. Wheel	423,051	Mar. 11	1051	273	50	1343
Haven, Wilson D., Trenton, N. J. Shelf-support	431,745	July 8	1128	281	52	229
Havens, James H. (See Parry, William H., assignor.)						
Havens, Jane C., Philadelphia, Pa. Rein-guide	437,197	Sept. 30	2926	762	52	1962
Havens, Silas B., Pawtucket, R. I. Gas-heating apparatus	443,829	Dec. 30	3593	923	53	1995
Havens, William A., Stockbridge, Mich. Rein-holder	438,373	Oct. 14	1072	292	53	211
Haver, George. (See Bodell and Haver.)						
Haverhill Roller Toboggan Company. (See Merrill, Ezra F., assignor.)						
Havey, Cornelius M., and R. Black, New York, N. Y. Switch-lock for railways	431,208	July 1	266	67	52	54
Haviland, Gilbert L. (See Singer, William F., assignor.)						
Haviland, Joseph H., and T. A. Mitchell, Weedsport, N. Y. Button-hole strip	433,863	Aug. 5	631	164	52	880
Haves, Benjamin N., assignor to Hawes, Moorman & Co., Toledo, Ohio. Hydrocarbon-burner	443,763	Dec. 30	3484	893	53	1973
Hawes, Ferdinand B., Eau Claire, assignor of one-half to J. H. Gates, Rice Lake, Wis. Clothes-drier	419,668	Jan. 21	1531	408	50	324
Hawes, Grace M., Birchardville, Pa. Dish-washer	440,150	Nov. 11	787	207	53	772
Hawes, Henry S., Marcellus, Mich. Jar-wrench	430,287	June 17	1851	454	51	1848
Hawes, Ithamar C., New Milford, Conn. Nut-lock	438,922	Oct. 21	1932	514	53	379
Hawes, Lewis H., Brooklyn, and A. Kimball, New York, N. Y. Color ticket-printing machine	429,621	June 10	783	{ 190 191 }	{ 51 }	{ 1633

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Hawes, Loman N., Central Valley, N. Y. Fishing-rod	428,755	May 27	2631	666	51	1360
Hawes, Moorman & Co. (See Hawes, Benjamin N., assignor.)						
Hawes, William Le B. (See Hess and Hawes.)						
Hawk, Hale E., Bucyrus, Ohio. Grain-meter	440,354	Nov. 11	1114	286	53	833
Hawk, Hale E., Bucyrus, Ohio. Automatic grain-scales	440,355	Nov. 11	1116	286 287	53	833
Hawk, Wayne K., Philadelphia, Pa. Nut-lock	422,346	Feb. 25	2828	746	50	1123
Hawke, Madison G., Saratoga Springs, N. Y. Thill-coupling	419,016	Jan. 7	560	140	50	118
Hawke, Madison G., Saratoga Springs, N. Y. Thill-coupling	423,763	Mar. 18	2108	556	50	1551
Hawke, Madison G., Saratoga Springs, N. Y. Thermometer	440,567	Nov. 11	1479	382	53	901
Hawkesworth, Robert W., East Orange, N. J. Overhead contact and switch	419,771	Jan. 21	1670	444	50	351
Hawkey Electric Manufacturing Company. (See Thone, Frank, assignor.)						
Hawkins, Arthur, et al. (See Shaw, William C., assignor.)						
Hawkins, Arthur C. (See Spike and McLeod, assignors.)						
Hawkins, Charles R., Cincinnati, Ohio. Rotary balanced valve	425,610	Apr. 15	1792	481	51	366
Hawkins, Colin M., et al. (See Wilson, Peter M., assignor.)						
Hawkins, John J., Newark, assignor to A. Angell, East Orange, N. J. Hemp-cleaner	427,763	May 13	1126	282	51	1043
Hawkins, John J., Newark, assignor to A. Angell, East Orange, N. J. Hemp-brake	427,764	May 13	1127	283	51	1043
Hawkins, John K., Mohawk, Tenn. Coffee pot or boiler	435,302	Aug. 26	2888	765	52	1340
Hawkins, John T., Taunton, Mass. Perfecting printing-machine and means for preventing offset in the same	418,979	Jan. 7	506	126 127	50	106
Hawkins, John T., Taunton, Mass. Offset-roller for perfecting printing-machines	418,980	Jan. 7	510	127	50	107
Hawkins, John T., Taunton, Mass. Means for preventing offset in perfecting printing-machines	419,017	Jan. 7	561	140	50	118
Hawkins, John T., Taunton, Mass. Oscillating-cylinder printing-press	423,052	Mar. 11	1052	273 274	50	1343
Hawkins, John T., Taunton, Mass. Printing-machine	423,153	Mar. 11	1213	316	50	1374
Hawkins, John T., Taunton, Mass. Means for preventing offset in perfecting printing-machines	427,318	May 6	440	114	51	898
Hawkins, John T., Taunton, Mass. Perfecting printing-machines, with means for preventing offset in the same	427,319	May 6	442	114 115	51	899
Hawkins, John T., Taunton, Mass. Means for securing flexible printing-plates	427,320	May 6	446	115	51	899
Hawkins, John T., Taunton, Mass. Two-color printing-machine	429,905	June 10	1208	299	51	1714
Hawkins, John T., Taunton, Mass. Two-color printing-machine	429,906	June 10	1210	300	51	1715
Hawkins, John T., Taunton, Mass. Means for holding in place machines having reciprocating members	429,907	June 10	1213	300	51	1715
Hawkins, John V., Archie, Mo. Stock-trap	430,757	Sept. 16	2167	569	52	1802
Hawkins, Lorenzo D., Stoneham, and E. Woodward, Somerville, Mass., assignors, by mesne assignments, to Heaton Button Fastener Company, Providence, R. I. Button-setting machine	424,417	Mar. 25	3121	829	50	1754
Hawkins, Peter W., et al. (See Shaw, William C., assignor.)						
Hawkins, Rebecca W., et al. (See Shaw, William C., assignor.)						
Hawkins, Robert L., Dadeville, Mo. Flour-bolt	438,287	Oct. 14	950	257	53	187
Hawkins, Samuel, St. Louis, Mo. Washing-machine	419,669	Jan. 21	1531	408	50	324
Hawkins, Samuel K., Elmira, N. Y., assignor to C. C. Corner, Columbus, Ohio. Tie-plate for brush-fillings	431,770	July 8	1162	289	52	236
Hawkins, Westel E., assignor to Simpson, Hall, Miller & Company, Wallingford, Conn. Machine for embossing metal	437,432	Sept. 30	3305	863	52	2035
Hawkins, William B., Jr., East Saginaw, Mich. Sparrow-trap	433,241	July 29	3440	889	52	696
Hawkins, William H., Schaghticoke, N. Y. Gutter-section fastener	426,446	Apr. 29	3073	806	51	634
Hawks, Enos S., Cummington, Mass. Painting-machine	443,576	Dec. 30	3179	817 818	53	1915
Hawksworth, David, Plattsmouth, Nebr. Door-opener	424,060	Mar. 25	2563	685	50	1646
Hawley, De Witt, Rochester, N. Y. Tailor's measure	439,747	Nov. 4	173	45	53	642
Hawley, Edward, and C. L. Barrett, Allegan, Mich. Grain-binder	419,945	Jan. 21	1946	512 513	50	408
Hawley, Edward, and C. L. Barrett, Allegan, Mich. Grain-binder	442,045	Dec. 2	654	176 177	53	1391
Hawley, George D., Urbana, Iowa. Windmill	436,661	Sept. 16	2012	525 526	52	1772
Hawley, George F., Grand Rapids, Mich. Window-screen	433,343	July 29	3582	924	52	724
Hawley, Henry, assignor of one-half to P. M. Rixey, Washington, D. C. Window-shutter	424,061	Mar. 25	2565	685 686	50	1646
Hawley, Henry Q., assignor to Century Gas Stove and Furnace Company, New York, N. Y. Apparatus for heating air with gas	437,777	Oct. 7	160	50, 51	53	33
Hawley, William D., Syracuse, N. Y. Time-measuring device	441,661	Dec. 2	48	13	53	1271
Hawn, William, Knoxville, Tenn. Alternating medicine-case	418,793	Jan. 7	202	50	50	44
Haworth, George D., Decatur, Ill. Corn-planter	427,234	May 6	326	84	51	875
Hawthorn, Aldus F., et al. (See Hepting, John A. P., assignor.)						
Hay, Charles R., assignor of one-half to R. H. Marchant, San Francisco, Cal. Can-printing device	431,165	July 1	199	50	52	41
Hay, Ellwood, Phillipsburg, N. J. Rotary-shear stay-bolt cutter	434,597	Aug. 19	1765	462	52	1122
Hay, George, Pictou, Canada. Heating-stove	442,481	Dec. 9	1320	341	53	1527
Hay, Stephen M., et al. (See Horne, Samuel E., assignor.)						
Hayden Articulating Cash Register Company. (See Hayden, Austin B., assignor.)						
Hayden, Austin B., Auburn, N. Y., assignor to Hayden Articulating Cash Register Company, Kansas City, Mo. Cash register and indicator	435,038	Aug. 26	2486	657 658	52	1266
Hayden, Austin B., assignor to Hayden Articulating Cash Register Company, Auburn, N. Y. Cash-register	435,303	Aug. 26	2889	765 766	52	1341
Hayden, Charles M., assignor to himself, A. Fisk, and F. S. Hayden, South Thomaston, Me. Rigging of vessels	438,076	Oct. 7	628	171	53	120
Hayden, Frederick S., et al. (See Hayden, Charles M., assignor.)						
Hayden, Henry B. (See Hayden, James H., assignor.)						
Hayden, Hiram W., and C. S. Dikeman, Waterbury, Conn., assignors to Holmes, Booth & Hayden, New York, N. Y. Suspension device for incandescent lamps	422,501	Mar. 4	332	83	50	1200
Hayden, James H., assignor of one-third to H. B. Hayden, Colorado Springs, Colo. Device for closing and opening covers for ink-wells	439,148	Oct. 28	2278	612	53	453
Hayden, James T., Chicago, Ill., assignor to Crane Brothers Manufacturing Company, of Illinois. Chuck having revolvable jaws	420,199	Jan. 28	2357	626	50	493
Hayden, James T., assignor to Crane Bros. Manufacturing Company, Chicago, Ill. Oil-cup	425,031	Apr. 8	927	247	51	188
Hayden, James W., Lewisport, Ky. Spool-thread cabinet	427,509	May 6	726	182	51	955
Hayden, Mortimer M., New York, N. Y. Electric cigar-lighter	436,354	Sept. 16	1514	395	52	1680
Hayden, William B., Columbus, Ohio. Machine for molding blocks or bricks	436,237	Sept. 9	1326	346 347	52	1634

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Haydock, William T. (See Muench, Otto L., assignor.)						
Hayes, Calvin Q., Goldfield, Iowa. Fumigator	430,018	June 10	1387	344	51	1749
Hayes, Charles C., Penn Yan, N. Y. Vehicle-spring	419,196	Jan. 14	828	218	50	178
Hayes, Charles C., Penn Yan, N. Y. Two-wheeled vehicle	424,297	Mar. 25	2896	773	50	1711
Hayes, Charles C., Penn Yan, N. Y. Running-gear for vehicles	437,193	Sept. 30	2927	762	52	1962
Hayes, Charles C., Penn Yan, N. Y. Running-gear for vehicles	437,778	Oct. 7	162	51	53	33
Hayes, E. A., et al. (See Newberry, George W., assignor.)						
Hayes, George, New York, N. Y. Metallic lathing	420,654	Feb. 4	326	84	50	627
Hayes, George, New York, N. Y. Sheet-metal lathing	420,655	Feb. 4	327	84	50	627
Hayes, George, New York, N. Y. Metallic lathing	420,656	Feb. 4	328	84	50	628
Hayes, George, New York, N. Y. Metallic lathing	420,657	Feb. 4	328	85	50	628
Hayes, George, New York, N. Y. Metallic lathing	420,658	Feb. 4	329	85	50	628
Hayes, George, New York, N. Y. Metallic lathing	420,659	Feb. 4	330	85	50	628
Hayes, George, New York, N. Y. Metallic lathing	420,660	Feb. 4	330	85	50	628
Hayes, George, New York, N. Y. Metallic lathing	420,661	Feb. 4	331	86	50	628
Hayes, George, New York, N. Y. Metallic lathing	427,988	May 13	1462	371	51	1106
Hayes, George, New York, N. Y. Metallic lathing	427,989	May 13	1463	371	51	1107
Hayes, George, Girardville, Pa. Miner's lamp	439,656	Nov. 4	48	13	53	616
Hayes, Hammond V., Cambridge, assignor to American Bell Telephone Company, of Massachusetts. Thermal protector	441,066	Nov. 18	2299	596 597	53	1067
Hayes, J. O., et al. (See Newberry, George W., assignor.)						
Hayes, James J., assignor of one-half to D. Simmons, Saybrook, Ill. Tongue-support	430,575	June 17	2281	560	51	1930
Hayes, James P., Mount Vernon, F. Ansley, Brooklyn, and W. Eschenbrenner, assignors to Standard Folding Bed Company, New York, N. Y. Folding bed	442,725	Dec. 16	1751	453	53	1620
Hayes, John J., and O. S. Feich, Brooklyn, N. Y. Friction-clutch	431,209	July 1	268	67	52	55
Hayes, John P., Philadelphia, Pa. Hydrocarbon device for burning off paint	427,474	May 6	676	169	51	945
Hayes, Lewis S., Cortland, N. Y. Knockdown book-case and desk	431,695	July 8	1051	263	52	214
Hayes, Mary, et al. (See Soper, Robert W., assignor.)						
Hayes, Mary E. (See Curry, John E., assignor.)						
Haymaker, Michael R., et al. (See Elwood, Campbell G., assignor.)						
Haynes, James C. (See Cooley, Fred W., assignor.)						
Haynes, John W., Donnellson, Ill. Fence	436,286	Sept. 9	1400	364	52	1650
Hays, William W., Bunker Hill, Ill. Fruit-gatherer	424,645	Apr. 1	321	83	51	63
Hayssen, Henry H., New Holstein, Wis. Ointment for goiter	418,717	Jan. 7	95		50	21
Hayton, James, Salt Lake City, Utah Ter. Mechanical movement	435,826	Sept. 2	690	184	52	1508
Hayward, Edwin, Brooklyn, and E. S. Sims, New York, N. Y. Burglar-alarm	428,774	May 27	2655	673	51	1364
Hayward, Henry, New York, N. Y., assignor to F. J. Mather, Morristown, N. J. Soap-powder	423,927	Mar. 25	2368		50	1609
Hayward, John W., St. John's, Newfoundland. Signaling-lantern	441,555	Nov. 25	3116	800	53	1229
Hazard, Augustus A., assignor to M. D. Hazard, Council Bluffs, Iowa. Thill-coupling	438,106	Oct. 7	672	182	53	130
Hazard, Frederick J. H., Toronto, Ontario, Canada. Cash-carrier apparatus	430,996	June 24	2966	728	51	2071
Hazard, Louis A., and W. O. Crain, assignors of one-half to Wise Brothers, Baltimore, Md. Cloth-piling machine	426,809	Apr. 29	3622	945	51	740
Hazard, M. D. (See Hazard, Augustus A., assignor.)						
Hazard, Rowland R. (See Barnes, David L., assignor.)						
Hazard, Rowland R. (See Marshall, Waldo H., assignor.)						
Hazard, Rowland R., New York, N. Y. Railway-car truck	424,062	Mar. 25	2567	686	50	1646
Hazeltine, Charles W., assignor to himself and Parker-Russell Mining and Manufacturing Company, St. Louis, Mo. Electric-arc lamp	437,901	Oct. 7	345	100	53	67
Hazleton, Charles C., Watertown, assignor of one-half to G. Van Horne, Milton, Mass. Boot or shoe clasp	423,041	July 15	1578	404	52	323
Hazleton, George H., Boston, Mass. Vessel for measuring sugar, &c	429,622	June 10	785	191	51	1633
Hazleton, Ivory, assignor of two-thirds to S. D. Short, Boston, Mass. Car-heating apparatus	427,863	May 13	1267	330 321	51	1069
Hazen, Fred, assignor of one-half to S. N. McCloud, Marysville, Ohio. Corn-harvester	420,939	Feb. 11	773	200 201	50	719
Hazen, Henry H., H. Lyddon, and T. Farmer, Oil City, Pa. Ruling-pen	428,250	May 20	1850	465	51	1192
Hazen, Sanford, Ripon, Wis. Land-roller	423,248	Mar. 11	1339	348	50	1399
Hazen, William L. (See Garrison, Charles M., assignor.)						
Hazlett, Francis. (See Sheppard, Hazlett, and Cluff.)						
Hazlett, John T., San Francisco, Cal. Combined ruler and pencil-sharpener	418,870	Jan. 7	332	81	50	69
Heaberlin, George R. (See Gibbons and Heaberlin.)						
Head, Henry H., Dublin, and L. Sanderson, Kingstown, county of Dublin, Ireland; said Head assignor to said Sanderson. Carbon for electric lamps	422,302	Feb. 25	2757		50	1109
Headen, John S., and C. G. Farmer, Pleasant Hill, Mo. Sash-balance	418,948	Jan. 7	467	116	50	98
Headly & Carrow Manufacturing Company. (See Headly, Charles B., assignor.)						
Headly, Charles B., assignor to Headly & Carrow Manufacturing Company, Philadelphia, Pa. Mounting metallic ornaments on roughened surfaces	432,940	July 22	2954	757	52	595
Heagle, Henry E. (See Staples, Covell, and Heagle.)						
Heal, Charles P., Baltimore, Md. Fire-lighter	429,908	June 10	1214	300	51	1716
Heald, Alfred, Philadelphia, Pa. Woven fabric	431,844	July 8	1284	322	52	260
Heald, Alfred, assignor of one-half to H. McCallum and A. J. Sloan, Philadelphia, Pa. Woven fabric	424,201	Mar. 25	2760	736	50	1684
Heald, Arthur, Westminster, England. Appliance for use with incandescent gas-lamps	423,317	Mar. 11	1454	380	50	1420
Heald, David, et al. (See Elliott, Richard P., assignor.)						
Heald, David, Milford, and C. H. French, Nashua, N. H. Mirror supporting and adjusting device	419,521	Jan. 14	1301	347	50	273
Heald, John, Springfield, Mass. Wind musical instrument	434,270	Aug. 12	1258	326	52	1011
Heald, John L., Crockett, Cal., assignor to Heald Manufacturing Company, of California. Steam-boiler	424,646	Apr. 1	323	84	51	63
Heald Manufacturing Company. (See Heald, John L., assignor.)						
Heald, William H., Sandwich, Mass. Shaft-support	422,408	Mar. 4	63	17	50	1149
Healy, Caleb E., New London, Ohio. Driving mechanism for cars	431,115	July 1	124	31, 32	52	27
Healy, James, Brooklyn, N. Y. Hand-hook	435,420	Sept. 2	61	20	52	1387
Healy, Michael, Jewett City, Conn. Harness mechanism for looms	432,042	July 15	1580	404	52	323
Hean, B. F., et al. (See Colvin, Robert J., assignor.)						
Heany, Abraham W., Philadelphia, Pa. Hay rake, loader, and tedder	439,948	Nov. 4	486	127	53	703
Heap, Charles. (See Apsley, John, assignor.)						
Heap, Zachery T. (See Slangernp and Heap.)						
Hearn, Damos. (See Busbea and Hearn.)						
Hearn, Edmond A., et al. (See Austin, Thomas J., assignor.)						
Hearn, Orie D., Lebanon, Tenn. Wire-stretcher	418,794	Jan. 7	203	50	50	44
Hearn, Robert B., et al. (See Austin, Thomas J., assignor.)						
Hearn, William J., New York, N. Y. Pump	436,708	Sept. 16	2079	547	52	1785

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Hearne, John, New York, N. Y. Gas-purifier	433,126	July 29	3276	844	52	661
Hearnshaw, Frank. (See Wintermute and Hearnshaw.)						
Hearsey, Henry T. (See Blackledge, Rollin H., assignor.)						
Hearst, Alexander, Peoria, Ill. Corn-planter	431,053	July 1	39	9	52	10
Heartley, George W. (See Taylor, Robert W., assignor.)						
Heath, Albe C., Manchester, N. H. Machine for brushing and cleaning cloth	439,949	Nov. 4	488	127	53	703
Heath, Amasa C., and F. H. White, South Easton, Mass. Rotary cutter-head	421,276	Feb. 11	1257	325	50	811
Heath, Benjamin, Dow City, Iowa. Combined gate hinge, roller, and hanger	420,790	Feb. 4	506	132	50	662
Heath, Fred S., Epsom, N. H. Fountain-pen	423,684	Mar. 18	1996	526	50	1531
Heath, George H. (See Anderson, Josiah B., assignor.)						
Heath, George S. (See Merritt and Heath.)						
Heath, John, Plymouth, Mass. Incandescent-lamp hood	430,645	June 24	2407	586	51	1963
Heath, Laban. (See Huff, Orison, assignor.)						
Heath, Lawrence. (See Martin and Heath.)						
Heath, Mary S. (See Allen, Edgar, assignor.)						
Heath, Ozro C., et al. (See Dart, Albert E., assignor.)						
Heaton Button Fastener Company. (See Hawkins and Woodward, assignors.)						
Heaton, James W., Etowah, Ala. Fender attachment for plows	424,647	Apr. 1	325	84	51	63
Heaton-Peninsular Button Fastener Company. (See Eggleston, Charles H., assignor.)						
Heaton, Rupert, Malaga, Spain. Press for fruit, pulp, or other substances	429,238	June 3	199	49	51	1510
Heavenrich, Carl, et al. (See Lochr, Peter H., assignor.)						
Hebard, Charles S., Pequaming, Mich. Folding landing-net	440,568	Nov. 11	1480	382	53	901
Hebbard, George H. (See Eccleston and Hebbard.)						
Hebendahl, John P. (See Kinney and Hebendahl.)						
Heberling, John, assignor of one-half to M. W. Sprague, Rochester, N. Y. Fountain-ink-stand	425,672	Apr. 15	1896	506	51	386
Heberling, John, assignor of one-half to M. W. Sprague, Rochester, N. Y. Fountain-ink-stand	425,673	Apr. 15	1899	507	51	387
Heberling, John, assignor of one-half to M. W. Sprague, Rochester, N. Y. Fountain-ink-stand	425,674	Apr. 15	1902	507	51	387
Hebert, Henry B., New York, N. Y. Sash-fastener	441,159	Nov. 25	2467	639	53	1109
Hebert, Joseph R., Brooklyn, N. Y. Dress-form	427,510	May 6	728	182	51	956
Hebert Placide, New Iberia, La. Bitters	443,236	Dec. 23	2644	.....	53	1803
Hecht, Myer, New York, N. Y. Ornamenting wooden surfaces	437,648	Sept. 30	3618	946	52	2098
Heckert, William, Findlay, Ohio. Rolling-mill for making seamless tubes	429,623	June 10	786	191 192	51	1633
Heckert, William, Yonkers, N. Y. Valve-gear for gas-engines	425,132	Apr. 8	1073	285	51	216
Heckert, William, Yonkers, assignor to Korting Gas Engine Company, (limited,) New York, N. Y. Lubricating apparatus	425,878	Apr. 15	2195	583	51	443
Heckert, William, Yonkers, assignor to Korting Gas Engine Company, (limited,) New York, N. Y. Igniting device for gas-engines	425,879	Apr. 15	2196	584	51	444
Heckert, William, Yonkers, N. Y., assignor to B. Butterworth, trustee, Cincinnati, Ohio. Chain grip for cable roads	431,658	July 8	977	243 244	52	202
Heckhansen & Weies, Jean. (See Gassen, Paul, assignor.)						
Heckman, John D., Carthage, N. Y. Slide for extension-tables	434,271	Aug. 12	1259	326	52	1011
Heckner, Fritz. (See Hettwig and Heckner.)						
Hedbavny, Anton, assignor to L. Werner, New York, N. Y. Machine for removing water-hairs from pelts. (Reissue)	11,079	May 27	3160	814	51	1464
Hedzes, D. T. (See Fowler, Herbert E., assignor.)						
Hedges, Joseph E., Ashville, Ohio. Attachment for planters	437,595	Sept. 30	3552	927	52	2084
Hedges, Killingworth W., Westminster, England. Composition for bearing-surfaces	441,556	Nov. 25	3117	.....	53	1229
Hedgman, Elward R. (See Villiers-Stead and Hedgman.)						
Hédouin, André. (See Guignard and Hédouin.)						
Heeckstadt, Charles, and A. Moe, Eau Claire, Wis. Dinner-pail	428,097	May 20	1624	412 413	51	1148
Heegn, William C., Chicago, Ill. Station-indicator	440,406	Nov. 11	1211	312	53	852
Heenan, John T., et al. (See Foulds, Thomas, assignor.)						
Heeson, Peter, Pittsburg, Pa. Machine for straightening angle-irons	420,576	Feb. 4	211	54, 55	50	605
Heffernan, James L., Newcomb, Tenn. Cover for saddles	426,934	Apr. 29	3787	989	51	773
Heffernan, James L., Newcomb, Tenn. Securing device for overshoes	438,923	Oct. 21	1932	514	53	379
Heffron, Cassius M., Rochester, N. Y. Paring-machine	423,318	Mar. 11	1456	381 382	50	1420
Heffron, Cassius M., Rochester, N. Y. Apple-slicer	429,624	June 10	790	192	51	1634
Heflebower, Ad M. (See Dunscomb and Heflebower.)						
Hege, Constantine A. (See Emerson and Starbird, assignors.)						
Hegele, Mathew. (See Fox and Hegele.)						
Hegeman, John, Amsterdam, N. Y. Cover for bobbin heads	431,227	July 1	298	74	52	60
Heggelund, Edward C. (See McLean, Horace G., assignor.)						
Heggen, Charles O., assignor to Russell & Company, Massillon, Ohio. Steam-engine	441,160	Nov. 25	2468	639 640	53	1109
Heginbotham Machine Company, Joseph. (See Meier, Herman, assignor.)						
Heginbottom, Samuel H., East Saginaw, Mich. Locomotive-bell-ringing apparatus	440,264	Nov. 11	972	248	53	809
Heigner, Henry, and J. M. Skinner, Toledo, Ohio. Water-filter	437,433	Sept. 30	3307	863	52	2035
Heidelberger, David, New York, N. Y. Cap or bonnet	430,473	June 17	2126	522	51	1902
Heidbrink, Bernard, Austin, Tex. Stem winding and setting watch	433,289	July 29	3509	905	52	710
Heidelmann, Wilhelm, Stuttgart, Germany. Device for feeding envelopes	443,093	Dec. 23	2375	606	53	1751
Heighington, John B. (See Heighington, William and J. B.)						
Heighington, William and J. B., Toronto, Canada. Cricket-bat	442,046	Dec. 2	659	178	53	1391
Heiland, Lawrence, Deiance, Ohio. Fence-post holder	432,043	July 15	1581	404	52	323
Heilborn, Jacob, trustee, et al. (See Berrenberg, Adolph, assignor.)						
Heilig, Frank, et al. (See Sanborn, Edmond B., assignor.)						
Heilmann-Ducommun & Steinen. (See Heilmann-Ducommun, Paul, assignor.)						
Heilmann-Ducommun, Paul, assignor to Heilmann-Ducommun & Steinen, Mülhausen, Germany. Apparatus for steaming woolen fabrics or yarns	439,149	Oct. 28	2280	612	53	453
Heilner & Strauss. (See Kern, Ferdinand, assignor.)						
Heilrath, John, Plymouth, Cal. Two-wheeled vehicle	424,648	Apr. 1	326	85	51	64
Heilrath, John, Plymouth, Cal. Adjustable vehicle-seat	424,649	Apr. 1	327	85	51	64
Heim, Charles J. P., St. Louis, Mo. Cable-grip, &c.	426,935	Apr. 29	3788	989 990	51	773
Heim, Frederick. (See Brill, John, assignor.)						
Heim, Hermann, Ober-Döbling, near Vienna, Austria-Hungary. Fire-place	421,073	Feb. 11	970	249	50	756
Heim, Joseph J., Kansas City, Mo. Bottle-stopper fastening	421,402	Feb. 18	1437	373	50	852
Heimach, W. M., et al. (See Smith, Joseph, assignor.)						
Heiman, Ludwig & Co. (See Stimpson, Edwin B., assignor.)						
Heimerdinger, Henry H., et al. (See Little, Robert H., assignor.)						
Heimsöeth, Bartholomæus, Coblentz, Prussia, Germany. Lock	425,788	Apr. 15	2058	548	51	418

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Heimsoeth, Bartholomaeus, Coblenz, Prussia, Germany. Car-coupling	432,734	July 22	2643	{ 675 676	{ 52	535
Hein, Jens F., Boston, Mass. Camera back-piece	427,321	May 6	447	115	51	899
Hein, Jens F., Boston, Mass. Plate-holder	427,322	May 6	448	116	51	900
Hein, John. (See Joseph and Hein.)						
Heine, August, and N. B. Trask, Silver Creek, N. Y.; said Trask assignor to said Heine. Separating-machine	429,909	June 19	1215	301	51	1716
Heine, Hermann, Milwaukee, Wis., assignor, by mesne assignments, to T. Lamb, Philadelphia, Pa. Tufted fabric and forming the same	433,242	July 29	3441	889	52	696
Heinecke, Martin. (See Sattley and Heinecke.)						
Heineke, Martin, assignor to Sattley Manufacturing Company, Springfield, Ill. Straw-stacker	442,748	Dec. 16	1783	461	53	1626
Heinemann, Adolph, Hagen, Prussia, Germany. Packing-case	430,997	June 24	2967	728	51	2071
Heinemann, Moritz, Bielefeld, Prussia, Germany. Box	426,810	Apr. 29	3624	946	51	741
Heinemann, Theodore P., assignor of one-half to F. T. Roots, Connersville, Ind. Pocket-case	439,401	Oct. 28	2701	720	53	531
Heinig, Frederick E., Louisville, Ky. Wrench	442,526	Mar. 4	233	61	50	1180
Heinig, Frederick E., Louisville, Ky. Shield for button-holes	442,622	Dec. 16	1557	402	53	1583
Heinold, Conrad, Lake, Ill. Knit fabric	430,803	June 24	2671	635	51	2016
Heinrich, Emil, assignor of one-half to G. J. Crosman, Sacramento, Cal. Combined match-box and cigar-punch	443,942	Dec. 30	3755	960	53	2025
Heinrich, Hermann, assignor to Brandt & Wilde Nachfolger, Berlin, Germany. Photographic camera	436,098	Sept. 9	1112	{ 288 289	{ 52	1594
Heinson, Theodore, <i>et al.</i> (See Black, Bernard J., assignor.)						
Heintzelman, Taylor W., Sacramento, Cal. Draw-head	421,495	Feb. 18	1572	407	50	878
Heinz, Adolph, assignor to G. Pickhardt, Bonn, Prussia, Germany. Glass pen	435,969	Sept. 9	914	241	52	1557
Heinz Company, H. J. (See Hoffman, Robert, assignor.)						
Heinz, Peter C., Williamsport, Pa. Steadying device for pressure-gages	440,151	Nov. 11	788	207	53	772
Heinz, William H., Dayton, Ohio. Fountain-brush	427,078	May 6	82	21	51	827
Heinze, Hermann, Chicago, Ill. Skate	433,467	Aug. 5	45	15	52	765
Heinzelman, Andrew, and N. Meyler, Newark, N. J. Machine for bending and cutting metallic roofing-plates	429,809	June 10	1058	260	51	1685
Heiser, William, Buffalo, N. Y. Barrel	421,570	Feb. 18	1685	436	50	899
Heiser, William, Buffalo, N. Y. Wooden vessel	425,032	Apr. 8	929	247	51	188
Heisey, John H., and T. Oliver, Monticello, Iowa. Can-handle	437,199	Sept. 30	2928	762	52	1962
Heiskell, Henry, L. (See Smith and Heiskell.)						
Heiskell, William L., Indianapolis, Ind., and F. E. Drake, Columbus, Ohio. Explosive staff	421,708	Feb. 18	1881	493	50	938
Heiskell, William L., Indianapolis, Ind., and F. E. Drake, Columbus, Ohio. Flash-torch	422,778	Mar. 4	598	153	50	1251
Hoisler, Charles, St. Louis, Mo., assignor to United Gas Improvement Company, Philadelphia, Pa. Manufacturing carbons	428,604	May 27	2388	{ 607 608	{ 51	1315
Hoisler, Charles, St. Louis, Mo., assignor to United Gas Improvement Company, Philadelphia, Pa. Electric cut-out	435,223	Aug. 26	2751	{ 726 727	{ 52	1317
Hoisler, William A., Prescott, Ariz. Bullet	421,932	Feb. 25	2202	576	50	1007
Heisser, Jacob H., <i>et al.</i> (See Spear, Anson R., assignor.)						
Heithersay, William, Petersburg, assignor to himself and E. E. Harrold, Adelaide, South Australia. Reversible plowshare	428,842	May 27	2755	700	51	1385
Heitmeyer, Henry G., Cincinnati, Ohio. Switch-worker	439,506	Oct. 28	2855	759	53	561
Heitz, John B., Rushville, Ill. Manufacture of hammocks	442,116	Dec. 9	771	208	53	1420
Hellbig, Philip, and H. Bertling, Baltimore, Md. Manufacturing anti-corrosive compounds	439,150	Oct. 28	2281	.....	53	453
Held, August S., assignor to Stover Manufacturing Company, Freeport, Ill. Pulley	439,402	Oct. 28	2701	720	53	531
Held, August S., and D. C. Stover, assignors to Stover Manufacturing Company, Freeport, Ill. Sash-pulley	432,406	July 15	2124	546	52	425
Helfenberger, William, assignor to Ellis & Helfenberger, Indianapolis, Ind. Wire-fastener for fence-posts	437,155	Sept. 23	2857	742	52	1941
Helfrich, Henry B., Philadelphia, Pa. Absorbent device for cleaning pens, brushes, &c	442,888	Dec. 16	2032	521	53	1675
Helfrich Saw and Planing Mill Company. (See Bill, John E., assignor.)						
Helios Actien-Gesellschaft für Elektrisches Licht und Telegraphenbau. (See Coerper, Carl, assignor.)						
Hellenberg, Adolph, New York, N. Y. Combined belt and sash	429,910	June 10	1216	301	51	1716
Heller, Alfred B., Reading, Pa. Combined foot-rest and stool	430,947	June 24	2891	711	51	2057
Heller, Alfred B., Reading, Pa. Toy	442,522	Dec. 9	1396	356	53	1543
Heller, Alfred B., Reading, Pa. Spring clasp-strip	442,869	Dec. 16	2033	521	53	1679
Heller, George M., Philadelphia, Pa. Manufacture of eye-bars	424,783	Apr. 1	548	146	51	107
Heller, Jacob, Philadelphia, Pa. Child's bonnet	425,053	Mar. 11	1057	274	50	1344
Heller, Micajah B., Broyles, S. C. Plow	430,123	June 17	1365	389	51	1793
Hellensen, Wilhelm L. F., Copenhagen, Denmark. Dry battery	439,151	Oct. 28	2282	612	53	453
Hellinger, Moritz, Unterschiesfeld, Germany. Structure of buildings	442,375	Dec. 9	1160	302	53	1494
Hellings, John, Philadelphia, Pa. Mechanical movement	430,852	June 24	2750	{ 673 674	{ 51	2030
Hellings, William P., Aurora, Nebr. Mustache-guard	426,723	Apr. 29	3495	914	51	715
Helliwell, Thomas W., Brighouse, England. Glazing-bar for skylights. (Reissue)	11,099	July 29	3705	956	52	750
Helliwell, Thomas W., Brighouse, England. Glazing-bar	439,066	Oct. 21	2149	577	53	423
Hellmuth, Frederick C., Brooklyn, N. Y. Station-indicator	421,709	Feb. 18	1882	494	50	939
Hellner, Louis, New York, N. Y. Stall-floor	419,670	Jan. 21	1532	498	50	325
Hellström, Carl D., Stockholm, Sweden. Separating fats from emulsions	436,133	Sept. 9	1172	306	52	1604
Helm, Nathan B., assignor to Hunt, Helm & Ferris, Harvard, Ill. Clevis and pin	432,735	July 22	2645	676	52	535
Helms, Charles H., assignor to himself and C. N. Goodsell, Poughkeepsie, N. Y. Heel-trimmer	425,321	Apr. 8	1361	363	51	273
Helmsædter, George J., Newark, N. J. Caster	439,777	Nov. 4	219	57	53	651
Helps, James W., Croydon, county of Surrey, England. Device for disjoining mains	422,211	Feb. 25	2605	689	50	1082
Helps, James W., Croydon, county of Surrey, England. Disjoining mains	422,212	Feb. 25	2606	690	50	1082
Helton, John W. (See Hacker, Colby, and Helton.)						
Helvern, Albert J., and W. B. Schwalm, Walton, Ind. Seed-dropping attachment for plant-ers	443,443	Dec. 23	2962	762	53	1864
Helwig, Arthur, Kentish-Town, county of Middlesex, England. Darning-machine	431,583	July 8	851	{ 211 212	{ 52	177
Hemenger, Arthur, Algonac, Mich. Diving-armor	437,779	Oct. 7	163	51	53	34
Hemenway, Edson H., assignor of one-half to H. I. Beharrel, Lowell, Mass. Device for opening and closing doors	426,181	Apr. 22	2669	701	51	543
Hemenway, Frank F. (See Miller, Fred J., assignor.)						
Hemenway, Melville D., San Francisco, Cal. Shafting-hanger	429,723	June 10	933	229	51	1662
Hemingway, Henry N., Auburn, N. Y. Steam-generator and hot-water heater	427,979	May 6	83	22	51	827
Hemingway, Henry N., Auburn, N. Y. Grate	439,006	Oct. 21	2058	551	53	406
Hemingway, Henry N., Auburn, N. Y. Hot-air furnace	443,849	Dec. 30	3612	{ 929 930	{ 53	1999

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Hemm, Henry F., Kendall, Ill. Car-coupling	426,182	Apr. 22	2673	701	51	544
Hempel, Henry A., Gotha, Fla., assignor of one-half to J. A. Dingens, Buffalo, N. Y. Printer's quoin	443,280	Dec. 23	2705	694	53	1815
Hemphill, James, and J. Fawell, Pittsburg, Pa. Ingot-manipulator	424,650	Apr. 1	328	85,86	51	64
Hemphill, James, and J. Fawell, Pittsburg, Pa. Rolling-mill	431,261	July 1	342	85,86	52	70
Hemphill, James, and J. Fawell, Pittsburg, Pa. Hydraulic crane	435,179	Aug. 26	2692	710 711	52	1305
Hemphill, William A., Pittsburg, Pa. Roller for feed-tables	436,525	Sept. 16	1780	469	52	1729
Hems, Jan A., Meran, Austria-Hungary. Brake for bicycles	425,789	Apr. 15	2059	549	51	418
Hemsley, Alexander, Philadelphia, Pa. Apparatus for producing flash-lights for photographing and other purposes	442,224	Dec. 9	933	247	53	1452
Hemsley, Alexander, Philadelphia, Pa., assignor to L. C. Overpeck, Hamilton, Ohio. Apparatus for producing instantaneous flash-light.	426,411	Apr. 22	3023	792	51	615
Henarie, Daniel V. B., <i>et al.</i> (See Leak, Crapo, assignor.)						
Hench, Samuel N., and W. A. Dromgold, York, Pa. Spring-tooth harrow	419,990	Jan. 21	2015	531	50	421
Henckel, George, Chicago, Ill., assignor to Central School Supply House, of Illinois. Anatomical chart	421,833	Feb. 18	2041	539 540	50	967
Heedee, Alonzo, Richmond, Va. Car-brake	420,996	Feb. 11	859	222	50	735
Hendee, George M., Roxbury, Mass. Bicycle	433,249	Mar. 11	1340	349	50	1399
Hendershot, James M., Atchison, Kans. Broom	435,304	Aug. 26	2391	766	52	1341
Henderson, Alonzo P., Hanover, Mass. Centering device	436,526	Sept. 16	1780	470	52	1730
Henderson, Charles C., Jamestown, N. Y. Fire and burglar alarm	432,613	July 22	2430	626 627	52	494
Henderson, Charles F., assignor to S. F. Henderson and D. M. Estey, Owosso, Mich. Pulley	425,322	Apr. 8	1363	363	51	273
Henderson, Daniel M., Baltimore, Md. Calendar	441,067	Nov. 18	2305	597	53	1068
Henderson, George W., <i>et al.</i> (See Adams, James A., assignor.)						
Henderson, Henry T., Keokuk, Iowa. Roll-paper holder and cutter	429,524	June 3	635	156	51	1593
Henderson, Isaac, Vancouver, Canada. Freight-handling machine	431,262	July 1	344	86,87	52	70
Henderson, Isaac W., Chicago, Ill. Map-case	434,507	Aug. 19	1628	427	52	1094
Henderson, Isaac W., Chicago, Ill. Map-case	434,508	Aug. 19	1629	428	52	1095
Henderson, James D. (See Henderson, John A. and J. D.)						
Henderson, John, Jr., Waterbury, Conn. Tumbling-barrel	423,250	Mar. 11	1341	349	50	1399
Henderson, John A. and J. D. Tingley, Iowa. Wire-fence reel	423,764	Mar. 18	2109	556	50	1551
Henderson, John T., Council Bluffs, Iowa. Accordion	419,168	Jan. 7	780	206	50	162
Henderson, John T., assignor of one-half to W. W. Chapman, Council Bluffs, Iowa. Adjustable window-screen	438,544	Oct. 14	1313	355	53	259
Henderson, John W., Philadelphia, Pa., assignor to Electric Car Company of America, of Pennsylvania. Electrically-propelled vehicle	432,237	July 15	1276	482	52	379
Henderson, Joseph C., Troy, N. Y. Revolving fire-box	443,850	Dec. 30	3613	930	55	1999
Henderson, N. H. (See Burton, Frank A., assignor.)						
Henderson, Samuel F., <i>et al.</i> (See Henderson, Charles F., assignor.)						
Henderson, William. (See Newbery, Thomas J., assignor.)						
Henderson, William, Chicago, Ill. Window-sash bar	420,510	Feb. 4	118	29	50	586
Henderson, William A., Malden, Mass. Pipe-clamping device	431,054	July 1	41	9	52	10
Henderson, William B., Crafton, assignor of one-half to J. T. Birch, Pittsburg, Pa. Electric-arc lamp	442,580	Dec. 9	1486	382	53	1561
Henderson, William H., and L. H. Porter, Rockdale, Tex.; said Henderson assignor to said Porter. Brace	435,496	Sept. 2	178	49	52	1409
Henderson, William J., Sycamore, Ga. Reversing-gear for saw-mill carriages	440,152	Nov. 11	788	207	53	772
Hendey, Arthur, Denver, Colo. Governor for steam-engines	439,950	Nov. 4	490	127 128	53	704
Hendey, Arthur, Denver, Colo. Ore-pulverizer	442,074	Dec. 16	2161	556	53	1702
Hendey, Thomas C., assignor of one-half to Coe Brass Manufacturing Company, Torrington, Conn. Swaging-machine	439,951	Nov. 4	491	128	53	704
Hendey, Thomas C., assignor of one-half to Coe Brass Manufacturing Company, Torrington, Conn. Swaging-machine	439,952	Nov. 4	492	128 129	53	704
Hendrick, William L., Boston, Mass. Surgical apparatus	432,614	July 22	2432	627	52	494
Hendricks, Adam C., Martinsburg, W. Va., assignor of one-half to E. E. Crane, Baltimore, Md. Holder for spring-harrow teeth	438,107	Oct. 7	673	183	53	130
Hendricks, Adam C., assignor to A. Fitz, Martinsburg, Va. Gate-latch	440,919	Nov. 18	2070	535	53	1022
Hendricks, David B., Kingston, N. Y. Baling-press	431,166	July 1	200	50	52	42
Hendricks, James B. (See Smith, George W., assignor.)						
Hendricks, William E., Heltonville, Ind. Plow	419,946	Jan. 21	1949	513	50	408
Hendrickson, Henry, Breckenridge, Mo. Combined cane and camp-stool	436,176	Sept. 9	1240	323	52	1616
Hendrie, Strathearn. (See Sill, Richard V. R., assignor.)						
Hendrix, Laron S., Gardner, Mass. Cover for packing-tubs	423,319	Mar. 11	1462	382	50	1421
Hendryx, Andrew B., New Haven, Conn. Chain	429,444	June 3	518	124	51	1572
Hendryx, Andrew B., New Haven, Conn. Chain	429,445	June 3	519	124	51	1572
Hendryx Company, Andrew B. (See Hendryx, Harry E., assignor.)						
Hendryx, Harry E., assignor to A. B. Hendryx Company, New Haven, Conn. Feed-cup for cages	441,956	Dec. 2	507	136	53	1363
Henery, William, West Toronto Junction, assignor of one-half to F. O'Neil, Toronto, Canada. Car-brake	443,364	Dec. 23	2849	733	53	1843
Henis, William G., Philadelphia, Pa. Chimney cowl or ventilator	429,911	June 10	1217	301	51	1716
Henius, Max W., Bridgeport, Conn. Corset-steel clasp	419,439	Jan. 14	1192	316	50	251
Henkel, Frederick. (See Hausburg and Henkel.)						
Henkel, Frederick, assignor of one-half to W. A. Hausburg, Chicago, Ill. Sewer-gas trap for sinks	424,784	Apr. 1	548	146	51	107
Henkel, Frederick, assignor of one-half to W. A. Hausburg, Chicago, Ill. Combined bottle receptacle and stopper	426,811	Apr. 29	3625	946	51	741
Henkel, Frederick, assignor of one-half to C. Grams, Chicago, Ill. Bottle-stopper	427,864	May 13	1268	321	51	1070
Henkel, Silon A., Sr., New Market, Va. Fence-making machine	438,727	Oct. 21	1617	434	53	321
Henkels, Daniel H., Philadelphia, Pa. Coal-chute	424,785	Apr. 1	550	146	51	108
Henkels, Stanislaus V., assignor of one-half to W. H. Wright, Philadelphia, Pa. Rivet	437,434	Sept. 30	3309	863	52	2035
Henkle, Edward A. (See Fowler and Henkle.)						
Henkle Incandescent Gas Burner Company. (See Henkle, Leonard, assignor.)						
Henkle, Leonard, Rochester, N. Y. Lantern	433,652	Aug. 5	315	82	52	817
Henkle, Leonard, Rochester, assignor to C. S. Upton, New York, N. Y. Lamp	435,377	Aug. 26	3009	797	52	1364
Henkle, Leonard, Rochester, assignor to Henkle Incandescent Gas Burner Company, New York, N. Y. Incandescent gas-burner	437,649	Sept. 30	3619	946	52	2098
Henley, Micajah C., Richmond, Ind. Lawn-mower	438,156	Oct. 14	745	204	53	150
Henley, Micajah C. and J. P. Fulgham; said Fulgham assignor to E. R. Fulgham, Richmond, Ind. Oscillating meter	443,711	Dec. 30	3399	873	53	1956

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Henne, Rudolph L. P., Cincinnati, Ohio. Automatic catch for inclined railways.....	425,226	Apr. 8	1221	324	51	247
Henneböhle, Frank, South Chicago, Ill. Pressure-regulating valve and governor.....	419,440	Jan. 14	1193	316	50	251
Hennesy, Thomas F., assignor of one-half to E. Kubitz, Chicago, Ill. Sled-propeller.....	421,933	Feb. 25	2203	577	50	1007
Henney, John W., Freeport, Ill. Running-gear for vehicles.....	440,707	Nov. 13	1715	440	53	956
Hennies, Charles E., Atlanta, Ga. Lock.....	427,865	May 13	1270	321	51	1070
Hennig, Carl G. B., Paterson, N. J. Air-ship.....	430,343	June 17	1938	{ 474 475 }	{ 51 51 }	1865
Henning, August. (See Knebel and Henning.)						
Henning, Benjamin S., New York, N. Y. System of transportation.....	413,718	Jan. 7	96	22	50	21
Henning, Benjamin S., New York, N. Y. Underground railway.....	432,615	July 22	2434	627	52	495
Henning, George C., Washington, D. C. Telescopic packing-case.....	421,496	Feb. 18	1573	407	50	878
Henning, Julius, assignor to himself and F. Wrede, Dresden, Saxony, Germany. Apparatus for manufacturing bottles, &c.....	419,441	Jan. 14	1196	317	50	252
Hennion, George W., Brooklyn, N. Y. Dumb-waiter regulator.....	422,409	Mar. 4	64	17, 18	50	1149
Henrichsen, Frederick J., assignor to Henrichsen Manufacturing Company, Racine, Wis. Broadcast seeder.....	423,997	Mar. 25	2474	657	50	1629
Henrichsen Manufacturing Company. (See Henrichsen, Frederick J., assignor.)						
Heurici, William A. E., Syracuse, N. Y., assignor of one-half to E. E. Sibley, Chelsea, Mass. Ironing-board.....	426,014	Apr. 22	2428	641	51	495
Heurici, William A. E., Syracuse, N. Y., assignor, by mesne assignments, of one-half to E. E. Sibley, Chelsea, Mass. Ironing-machine.....	423,605	May 27	2390	608	51	1315
Heurici, William A. E., Syracuse, N. Y., assignor, by mesne assignments, of one-half to E. E. Sibley, Chelsea, Mass. Ironing-machine.....	426,016	Sept. 9	979	{ 256 257 }	{ 52 52 }	1569
Henry, Frank J., and F. A. Taylor, Kalamazoo, Mich. Spring-tooth-harrow frame.....	434,110	Aug. 12	1005	261	52	963
Henry, Fred H., Wakefield, Mass. Car-seat.....	425,424	Apr. 15	1514	405	51	313
Henry, George C., Burlington, Iowa. Foam for carbonated beverages.....	419,671	Jan. 21	1533	.....	50	325
Henry, George C., Burlington, Iowa. Preparing carbonated beverages.....	436,782	Sept. 23	2212	.....	52	1818
Henry, Guilford W., St. Louis, Mo. Binder.....	431,350	July 1	479	119	52	97
Henry, Homer P., Latham, Mo. Harvesting-machine.....	429,724	June 10	934	{ 229 230 }	{ 51 51 }	1662
Henry, John, assignor of one-half to J. G. Neilson, Ardoch, N. D. Grain-meter.....	418,795	Jan. 7	204	50, 51	50	45
Henry, John, assignor of one-half to J. G. Neilson, Ardoch, N. D. Automatic grain-weigher.....	419,947	Jan. 21	1950	513	50	408
Henry, John, assignor of one-half to J. G. Neilson, Ardoch, N. D. Automatic grain-weigher.....	419,948	Jan. 21	1952	514	50	409
Henry, John C., Kansas City, Mo. Electric railway.....	424,298	Mar. 25	2897	{ 773 774 }	{ 50 50 }	1711
Henry, John C., Kansas City, Mo. Electric-railway car.....	426,379	Apr. 22	2951	{ 775 776 }	{ 51 51 }	602
Henry, John C., New York, N. Y. Electric motor and dynamo.....	426,380	Apr. 22	2955	{ 776 777 }	{ 51 51 }	603
Henry, John S., Manheim, Pa. Cigar-cutter.....	442,252	Dec. 9	972	256	53	1460
Henry, Joseph C. (See Costigan, Joseph P., assignor.)						
Henry, Leroy B., Austiu, Tex. Cultivator.....	421,710	Feb. 18	1885	495	50	939
Henry, Nettie, St. Louis, Mo. Excelsior-cutting machine.....	439,007	Oct. 21	2060	{ 551 552 }	{ 53 53 }	406
Henry, Robert. (See Watts and Henry.)						
Henry, Samuel D., Coon Rapids, Iowa. Self ink-distributer.....	420,940	Feb. 11	775	201	50	720
Hensel Colladay Company. (See Adams, Thomas, assignor.)						
Hensel, John A., St. Paul, Minn. Machine for seaming sheet metal.....	430,124	June 17	1566	{ 389 390 }	{ 51 51 }	1794
Henshaw, Charles E., Medford, Wis. Middlings-purifier.....	432,488	July 15	2252	583	52	452
Henshaw, Fred M., assignor of three-fourths to C. P. Walker, M. J. P. Lacy, and T. W. Davies, Dallas, Tex. Jack-wrench for oiling vehicle-wheels.....	422,779	Mar. 4	599	154	50	1251
Henshaw, George. (See Ainsworth, Strachan, and Henshaw.)						
Henshaw, George H., Brooklyn, N. Y. Means for controlling the shifting action of moving water on land.....	419,121	Jan. 7	703	185	50	148
Henshaw, Rebecca M., Salt Lake City, Utah Ter. Clothes-hook.....	435,827	Sept. 2	691	184	52	1508
Hensley, John E., Allendale, Ill. Hoisting-machine.....	433,002	July 29	3078	789	52	623
Hensley, William S., Cardiff, and W. H. Grindley, Tunstall, England. Pyrometer.....	441,488	Nov. 25	3017	778	53	1209
Hentz, Charles L., et al. (See Hull, Eugene J. C. A., assignor.)						
Hentz, Jacob, assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Bale-tie.....	439,657	Nov. 4	48	14	53	616
Hepburn, Lewis L., assignor to Marlin Fire Arms Company, New Haven, Conn. Breech-loading gun.....	434,062	Aug. 12	907	239	52	943
Hepburn, William A., Ramsbottom, county of Lancaster, England. Filter or strainer.....	418,719	Jan. 7	97	22	50	21
Heppell, Richard W., Dunkirk, N. Y. Apparatus for painting electric wires and their coverings.....	443,237	Dec. 23	2644	679	53	1803
Heppleston, George H. (See Wood and Heppleston.)						
Hepting, John A. P., assignor of two-thirds to A. F. Hawthorn and E. F. Landis, Lancaster, Pa. Block-tackle fire-escape.....	432,044	July 15	1581	405	52	323
Herbert, Allan F. (See Huotley, Charles E., assignor.)						
Herbert, Edwin G., and F. L. York, Ann Arbor, Mich. Miter-box.....	419,772	Jan. 21	1672	444	50	352
Herbert, Francis B., Hoboken, N. J. Sewer-gas excluder for wash-basins.....	427,323	May 6	449	116	51	900
Herbert, John J., Chattanooga, Tenn. Knockdown crate.....	442,225	Dec. 9	935	247	53	1453
Herbert, Michael E., St. Joseph, Mo. Steam-boiler furnace.....	421,863	Feb. 18	2103	552	50	978
Herbert, Peter, Cincinnati, Ohio. Table-leg connection.....	425,948	Apr. 15	2315	614	51	465
Herbig, Tobias, Jasper, Ind. Tongue-support.....	412,226	Dec. 9	936	247	53	1453
Herby, John, assignor of one-half to M. Harris, Jamestown, N. Y. Farm-wagon.....	419,672	Jan. 21	1534	409	50	325
Herby, John, assignor of one-half to M. Harris, Jamestown, N. Y. Wagon-skein.....	419,991	Jan. 21	2016	532	50	421
Herby, John, assignor to M. Harris and W. O. Benedict, Jamestown, N. Y. Making axle-skeins.....	441,098	Nov. 18	2358	611	53	1078
Hercules Iron Works. (See MacDonald, Charles A., assignor.)						
Hercules Iron Works Company, et al. (See Martin, John W., assignor.)						
Herder, Rudolph H., assignor to W. Herder and P. N. Kohlsaat, Chicago, Ill. Shavings for vinegar-generators and for clarifying beer.....	437,902	Oct. 7	346	101	53	67
Herder, Wilhelmine, et al. (See Herder, Rudolph H., assignor.)						
Heredaen Manufacturing Company. (See Furman, Fredric J., assignor.)						
Hering, Albert, assignor to Gormully & Jeffery Manufacturing Company, Chicago, Ill. Vehicle-lantern support.....	443,207	Dec. 23	2597	668	53	1794
Hering, Carl, Philadelphia, Pa. Electrode for secondary batteries.....	429,272	June 3	235	.....	51	1517
Hering, Carl, Philadelphia, Pa. Secondary battery.....	429,273	June 3	237	59	51	1517
Hering, Carl, Philadelphia, Pa. Electrode for secondary batteries.....	429,274	June 3	238	.....	51	1518
Hering, Carl, Philadelphia, Pa. Secondary battery.....	429,912	June 10	1218	302	51	1716
Hering, Carl, Philadelphia, Pa. Secondary battery.....	429,913	June 10	1220	302	51	1717

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Hering, Carl, Philadelphia, Pa. Secondary battery	429,914	June 10	1221	302	51	1717
Hering, Emil G., Cross Plains, Wis. Show stand and rack	440,031	Nov. 4	613	162	53	728
Hering, Johannes M., Honolulu, Sandwich Islands. Farming-machine	428,721	May 27	2580	654	51	1349
Herkner, Henry F. (See Rhome and Herkner.)						
Hern, Joseph, Birmingham, Ala. Ratchet-brace	429,525	June 3	636	156	51	1593
Herman, Adolph E., Terre Haute, Ind. Cab for pall-bearers	421,934	Feb. 25	2204	577	50	1007
Herman, Adolph E., Terre Haute, Ind. Fifth-wheel	426,271	Apr. 22	2799	735	51	571
Herman, Christopher B., Norwich, Kans. Stock-car	425,790	Apr. 15	2060	549	51	419
	428,775	May 27	2656	550	51	1364
Herman, Clifton E., Columbus, Ohio. Oil-can						
Herman, Ernest. (See Kupferle and Herman.)						
Herman, Fred, Fieldon, Ill. Iron for wagon-beds	424,479	Apr. 1	54	16	51	13
Herrmann, Albert, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Coloring-matter. (Reissue)	11,077	May 20	2358		51	1290
Herrmann, Albert, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Coloring-matter. (Reissue)	11,078	May 20	2361		51	1290
Herrmann, Frank, and J. R. B. Janssen, Sterling, Ill. Beer-pumping apparatus	435,694	Sept. 2	496	131	52	1471
Herrmann, Henry, Jersey City, N. J., assignor to B. T. Babbitt, New York, N. Y. Elevator-batchway	425,227	Apr. 8	1223	325	51	248
Herrmann, Henry T., Antigo, Wis. Jewel-box	443,094	Dec. 23	2376	606	53	1751
Herrmans, John, Chicago, Ill. Boat-propeller	435,583	Sept. 2	315	87, 88	52	1435
Herrndon, Thomas H., Birmingham, Ala. Rotary engine	431,462	July 1	660	166	52	133
Herr, Austin, et al. (See Baldwin, George E. D., assignor.)						
Herr, Homer A., Philadelphia, Pa. Cash-register	441,161	Nov. 25	2470	640	53	1109
Herr, Homer A., assignor of one-half to H. S. Friedman, Philadelphia, Pa. Cash register and indicator	421,074	Feb. 11	972	250	50	756
Herr, Homer A., Philadelphia, Pa., assignor to American Cash Register Company. Cash-register	425,949	Apr. 15	2315	614 615	51	465
Herr, Homer A., Philadelphia, Pa., assignor to American Cash Register Company. Cash register and indicator	426,412	Apr. 22	3025	792	51	616
Herr, Martin L., Lancaster, Pa. Hot closet for steam-radiators	420,066	Jan. 23	2136	565	50	452
Herrburger, Joseph, Paris, France. Piano-action	424,202	Mar. 25	2761	736	50	1684
Herrick, Albert B., assignor to Bergmann & Company, New York, N. Y. Electric-current indicator	435,695	Sept. 2	497	131 132	52	1471
Herrick, Charles H., Winchester, Mass. Electric switch	435,093	Aug. 26	2570	678	52	1282
Herrick, Charles H., Winchester, Mass. Lamp holder and switch	435,931	Sept. 9	861	226	52	1547
Herrick, Charles H., Winchester, Mass. Electric switch	440,845	Nov. 18	1950	500	53	999
Herrick, Charles H., Winchester, Mass., assignor to Pettingell, Andrews Company, of Maine. Shade-holder	438,235	Oct. 14	862	233	53	171
Herrick, Charles R., Eureka, Mich. Burial-casket lid	437,492	Sept. 30	3398	890	52	2055
Herrick, Erwin J., M. G. Randall, and W. R. Meach, Grand Rapids, Mich. Reversible basket-stand	419,169	Jan. 7	781	206	50	162
Herrick, Eugene I., Rangeley, Me. Gun with reversible barrels	426,015	Apr. 22	2430	612	51	496
Herrick, Frank, Rhinebeck, N. Y. Egg-tester	423,665	Mar. 18	1997	537	50	1531
Herrick, Frank A., Jackson, Mich. Rack	432,616	July 22	2435	638	52	495
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Boot-tree	437,815	Oct. 7	221	67	53	44
Herrick, Harrison E. (See Gage and Herrick.)						
Herrick, Herbert S., San Francisco, Cal. Dose-measuring bottle	442,088	Dec. 2	721	193	53	1404
Herrick, James A., New York, N. Y. Regenerator-furnace	424,480	Apr. 1	55	16, 17	51	13
Herrick, John I., Manston, Wis. Hand-propelled vehicle	433,202	July 29	3385	875	52	683
Herrick, Loyal A. (See Leete, John W., assignor.)						
Herrick, Whiting M., Sayre, Pa. Oil-cup	440,771	Nov. 18	1825	470	53	976
Herring, Arthur C., Upper Holloway, county of Middlesex, England. Hair-drying appliance	440,153	Nov. 11	790	207	53	773
Herrington, Deroy, Ebenton, Pa. Wagon-brake	440,032	Nov. 4	614	163	53	728
Herrinton, Edward E., assignor, by mesne assignments, to W. T. Stamp, Grand Rapids, Mich. Striking mechanism for door-bells	419,150	Jan. 7	748	198	50	156
Herrinton, Edward E., Grand Rapids, Mich., assignor of one-half to I. C. Smith. Folding bed	425,378	Apr. 8	1441	386	51	288
Herrmann, Albert, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Blue-green dye	422,018	Feb. 25	2312		50	1028
Herrmann, Albert, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Greenish-blue dye	437,989	Oct. 7	488		53	93
Herrmann, Albert, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Blue-green dye. (Reissue)	11,116	Oct. 14	1390		53	274
Herrmann, Jous. (See Blesch and Herrmann.)						
Herron, Charles, Chattanooga, Tenn. Brake-shoe	423,998	Mar. 25	2475	658	50	1629
Herron, Charles, Chattanooga, Tenn. Brake-shoe	423,305	May 20	1943	488	51	1209
Herron, James, and J. Swaden, Dallas, Tex. Figure toy	434,779	Aug. 19	2064	539	52	1178
Herron, James P. (See Morrison and Herron.)						
Hersey Brothers. (See Charnock, John M., assignor.)						
Hersey, Don J., Providence, R. I., assignor of one-half to H. B. Spitz, Boston, Mass. Pipe-wrench	419,854	Jan. 21	1809	478	50	379
Hersey Meter Company. (See Winton, Henry D., assignor.)						
Hersey, Randolph, Montreal, Quebec, Canada. Nail-plate feeder	427,866	May 13	1272	321 322 323	51	1070
Hershberger, Daniel, Huntington, assignor of one-half to J. Ulrich, River, Ind. Device for wiring fence-pickets	424,884	Apr. 1	695	184 163	51	134
Hershey, Benjamin, assignor of one-half to M. Duvall, Erie, Pa. Hose-machine	440,033	Nov. 4	615	164 165	53	728
Hershey, W. O. (See Mendenhall, Clarkson, assignor.)						
Hersom, William J., Stockton, Cal., assignor of one-half to C. D. Harsin. Churn	439,067	Oct. 21	2150	577	53	423
Herty, John T., Boston, Mass. Hanger for trolley-wires	431,973	July 8	1471	372	52	296
Hertzberg, Rafael, Helsingfors, Finland. Spittoon	443,595	Dec. 30	3213	826	53	1922
Herz, Emil, New York, N. Y. Transom-lifter	437,115	Sept. 23	2764	723	52	1926
Herz, Emil, New York, N. Y. Transom-lifter	442,482	Dec. 9	1322	341	53	1527
Herz, Hermann, and B. Terfloth, assignors of seven-sixteenths to E. Croff, Denver, Colo. Pulverizing apparatus	421,571	Feb. 18	1686	436 437	50	899
Herz, Martin, Brooklyn, N. Y. Chair-seat	442,581	Dec. 9	1488	383	53	1561
Hescox, Charles O., Tacoma, Wash. Tool-box	434,780	Aug. 19	2064	539	52	1179

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Hesner, Andrew J., Weaver, Minn. Bag-holder	421,075	Feb. 11	974	250	50	757
Hess, Christian C., Conestoga Center, Pa. Hinge	420,997	Feb. 11	860	222	50	736
Hess, Edwin C., assignor of two-thirds to F. Caverhill, Montreal, Canada, and F. S. Harrison, Newark, N. J. Aural attachment for telephone-receivers	431,810	July 8	1231	307	52	249
Hess Electric Storage Battery Company. (See Morrison, William, assignor.)						
Hess Electric Storage Battery Company. (See Morrison and Schmidt, assignors.)						
Hess, Elmer J., Wyo., and W. L. B. Hawes, assignors to Davis Carriage Company, Cincinnati, Ohio. Jump-seat vehicle	438,884	Oct. 21	1880	499	53	370
Hess, Harry B., St. Louis, Mo. Well-grapple	437,200	Sept. 30	2929	762	52	1962
Hess, John L. (See Scheuritzel and Hess.)						
Hess, Julius, Port Huron, Mich. Digester	434,272	Aug. 12	1260	{ 326 327 }	{ 52 52 }	{ 1011 1011 }
Hess & Morgenthau. (See Hess, Philip, assignor.)						
Hess, Paulus, Iveyville, Iowa. Pruning implement	418,720	Jan. 7	98	22	50	21
Hess, Philip, assignor to Hess & Morgenthau, New York, N. Y. Necktie	435,828	Sept. 2	692	185	52	1509
Hester, John W., Brooklyn, N. Y. Step-ladder	438,157	Oct. 14	747	{ 204 205 }	{ 53 53 }	{ 150 150 }
Hester, Thomas H., Troy, Miss. Seed-planter	423,251	Mar. 11	1343	349	50	1399
Heth, Rudolph E., Early, Iowa. Boot-jack	432,941	July 22	2953	758	52	595
Hetherington, Frederick A., assignor of one-half to T. E. Hibben, Indianapolis, Ind. Photographic-camera shutter	436,855	Sept. 23	2390	624	52	1852
Hettich, Albert H., Chicago, Ill. Producing mosaic work	418,840	Jan. 7	283	69	50	60
Hettwig, Carl, Berlin, and F. Heckner, Braunschweig, Germany. Producing ornamental designs upon wood	439,658	Nov. 4	50	-----	53	616
Heule, Everett J., and D. Cameron, Menasha, Wis. Wood-working machine	433,080	July 29	3200	822	52	646
Heuman, Abraham, New York, N. Y. Means for propelling vessels	432,129	Feb. 25	2481	{ 655 656 }	{ 50 50 }	{ 1058 1058 }
Heupel, Herman A. (See Simpson, Peter G., assignor.)						
Heuser & Co., Franz. (See Rempen, August, assignor.)						
Heussler, Robert H. (See Behn and Koerner, assignors.)						
Hewes, Lester W., deceased, N. M. Hewes, Oak Park, Ill., administratrix. Apparatus for mixing concrete	420,453	Feb. 4	41	8	50	571
Hewes, Nellie M., administratrix. (See Hewes, Lester W.)						
Hewes & Phillips Iron Works. (See Phillips, Franklin, assignor.)						
Hewett, Charles E., Brandon, Vt. Pitman-connection	420,791	Feb. 4	507	133	50	662
Hewett, Ernest M. G., Newton, Mass., assignor to Safety Electric Light Company, of Maine. Electric battery	421,169	Feb. 11	1109	285	50	784
Hewett, Ernest M. G., Newton, Mass., assignor to Safety Electric Light Company, of Maine. Battery compound	435,421	Sept. 2	62	-----	52	1387
Hewitt, George M. (See Duxbury, Robert W., assignor.)						
Hewitt, George W., et al. (See Reckenzaun, Anthony, assignor.)						
Hewitt, Hezekiah, Birmingham, England. Pen-holder	434,781	Aug. 19	2065	540	52	1179
Hewitt, John, Chicago, Ill. Sheet-metal roof-cresting	431,463	July 1	661	166	52	133
Hewitt, Peter C., New York, N. Y. Leaf for fly-books	435,094	Aug. 26	2572	679	52	1282
Hewlett, Maddra J., assignor of one-third to J. Owen, Paducah, Ky. Type-writing machine	439,068	Oct. 21	2151	{ 577 578 }	{ 53 53 }	{ 423 423 }
Hey, Henry T., Philadelphia, Pa. Device for utilizing elevated running streams for motive power	425,791	Apr. 15	2062	550	51	419
Heyden, Fr. von, Nachfolger. (See Gnehm and Schmid, assignors.)						
Heyder, Herrmann, Reichthal, Germany. Toy	439,297	Oct. 28	2548	680	53	503
Heydt, Frederick G., New York, N. Y. Moisture-partition for cigar-boxes	441,557	Nov. 25	3118	800	53	1929
Heyer, Ernst, Scammonville, Kans. Valved bottle-stopper	434,782	Aug. 19	2066	540	52	1179
Heyl, Georg E., Charlottenburg, Prussia, Germany. Making electrodes for secondary batteries	426,724	Apr. 29	3495	-----	51	716
Heymann, A. G., et al. (See Young, Alexander H., assignor.)						
Heyman, Julius M. (See Chappell, George H., assignor.)						
Heyman, Julius M., et al. (See Enholm, Oscar A., assignor.)						
Heyman, Moses J., et al. (See Enholm, Oscar A., assignor.)						
Heymann, Edward and F. W., Boston, Mass. Electric-arc lamp	443,632	Dec. 30	3275	{ 843 844 }	{ 53 53 }	{ 1933 1933 }
Heymann, Edward and F. W., Boston, Mass. Electric-arc lamp	443,633	Dec. 30	3276	{ 844 845 }	{ 53 53 }	{ 1933 1933 }
Heymann, Edward and F. W., Boston, assignors to J. E. Maynadier, Taunton, Mass. Regulator for dynamos	421,048	Feb. 11	936	242	50	750
Heymann, Edward and F. W., Boston, assignors to J. E. Maynadier, trustee, Taunton, Mass. Alternating-current apparatus	427,571	May 13	828	206	51	985
Heymann, Frank W. (See Heymann, Edward and F. W.)						
Heymann, Solomon, and B. Prosser, Fayetteville, Tenn. Car-coupling	421,711	Feb. 18	1886	495	50	939
Heymeier, Gustav, Bremen, Germany. Plane for planing the bottoms of grooves in moldings and ornamental wood-work	420,232	Jan. 28	2407	641	50	503
Heynemann, Lionel. (See Clement, Watriss, and Heynemann.)						
Heynemann, Lionel. (See Watriss and Heynemann.)						
Heynemann, Lionel, San Francisco, Cal. Cable street-railway	419,992	Jan. 21	2017	532	50	421
Heys, John J., assignor of one-half to M. V. Bresnahan, Lynn, Mass. Burnishing-machine	432,874	July 22	2859	732	52	577
Heysinger, Isaac W., Philadelphia, Pa. Spring clamping device	423,054	Mar. 11	1058	274	50	1344
Heysinger, Isaac W., Philadelphia, Pa. Phonograph	440,155	Nov. 11	793	208	53	773
Heysinger, Isaac W., assignor to Philadelphia Novelty Manufacturing Company, Philadelphia, Pa. Hair-crimper and method of manufacture	440,154	Nov. 11	791	208	53	773
Heywood, Charles H., et al. (See Taylor and Bradburn, assignors.)						
Heywood, Charles H., Springfield, Mass. Machine for making and printing envelopes	420,792	Feb. 4	508	{ 133 134 135 }	{ 50 50 50 }	{ 662 662 662 }
Heywood, Charles H., assignor to P. P. Kellogg & Co., Springfield, Mass. Printing-machine	422,883	Mar. 4	781	{ 199 200 200 }	{ 50 50 50 }	{ 1286 1286 1286 }
Heywood, Charles H., assignor to P. P. Kellogg & Co., Springfield, Mass. Mechanism for feeding sheets of paper	428,606	May 27	2391	{ 608 609 }	{ 51 51 }	{ 1315 1315 }
Heywood, George. (See Heywood, William and G.)						
Heywood, William, Manchester, and G. Heywood, Middleton, England. Apparatus for automatically disinfecting water-closets, &c.	439,152	Oct. 28	2283	612	53	453
Hiatt, Thomas, Leesburg, Fla. Orange-wrapping machine	429,759	June 10	987	242	51	1673
Hibbard, Charles B., Palaski, N. Y. Duplex escapement for clocks	436,783	Sept. 23	2214	{ 582 583 }	{ 52 52 }	{ 1818 1818 }
Hibbard, Frank B., Irvington, Nebr. Cow-tail holder	423,999	Mar. 25	2476	658	50	1620

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Hibbard, George E., Chicago, Ill. Rotary gas-engine	424,000	Mar. 25	2476	<div>658 659 660 484</div>	<div>50</div>	1629
Hibbard, James N., Buffalo, N. Y. Device for nailing moldings in panels	440,808	Nov. 18	1882	484	53	987
Hibben, Thomas E. (See Hetherington, Frederick A., assignor.)						
Hibbert, Thomas. (See Coulter and Hibbert.)						
Hibbert, Thomas, Cochran, Ind. Weather-strip	419,949	Jan. 21	1954	514	50	409
Hibbitt, John, Philadelphia, Pa. Instep-supporter	425,133	Apr. 8	1076	285	51	217
Hibschman, August, <i>et al.</i> (See Earnest, George H., assignor.)						
Hickey, Amanda S. (See Byrne, William, assignor.)						
Hickey, John, assignor of two-thirds to E. A. Becker and A. H. Pettit, Buffalo, N. Y. Dis-integrating-machine	430,646	June 24	2408	586	51	1963
Hickey, Michael H., and W. R. Renne, Chicago, Ill. Metallic door-mat	422,780	Mar. 4	600	154	50	1251
Hickey, Thomas J., assignor of one-half to J. M. Kennedy, Jr., Philadelphia, Pa. Tool for working sheet metal	428,811	May 27	2706	686	51	1374
Hickman, Edgar M., assignor to Gale Manufacturing Company, Albion, Mich. Side-hill plow	426,447	Apr. 29	3074	<div>866 867</div>	<div>51</div>	635
Hickman, James S., Hickman, Ill. Seed-dropper	435,829	Sept. 2	693	185	52	1509
Hickman, James S., Hickman, Ill. Combined cultivator and seed-dropper	435,830	Sept. 2	694	185	52	1509
Hickman, James S., Hickman, Ill. Combined cultivator and seeder	435,831	Sept. 2	695	<div>185 186</div>	<div>52</div>	1509
Hickman, Louis C. (See Hallowell and Hickman.)						
Hickman, Wilbur M. (See McCutchen, John B., assignor.)						
Hickmann, Albin, Dachwig, Prussia, Germany. Pneumatic action for organs	442,253	Dec. 9	974	256	53	1460
Hickok, Dewey K., Morrisville, Vt. Clothes-drier	422,410	Mar. 4	65	18	50	1149
Hickok, Henry A., Newark, N. J. Centrolinead	430,647	June 24	2409	587	51	1964
Hickok Manufacturing Company, N. O. (See Bigelow, Lucius S., assignor.)						
Hickok Manufacturing Company, W. O. (See Metzger and Cooper, assignors.)						
Hickok, Stephen O., Allen, Mich. Fruit-gatherer	433,158	Oct. 14	749	205	53	151
Hicks, Benjamin, Vicksburg, Va. Peanut-plauter	423,686	Mar. 18	1998	327	50	1532
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, of West Virginia. Bridge for doorways of cattle-cars	429,760	June 10	990	242	51	1673
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, of West Virginia. Stock-car-door way bridge	429,915	June 10	1222	302	51	1717
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, of West Virginia. Stock-car	429,916	June 10	1222	303	51	1717
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, Chicago, Ill. Cattle-guard for doors of stock-cars	430,948	June 24	2892	711	51	2057
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, Chicago, Ill. Chain for flexible partitions	430,949	June 24	2893	711	51	2057
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, Chicago, Ill. Watering-trough for stock-cars	430,950	June 24	2894	712	51	2057
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, of Chicago, Ill. Stock-car	430,951	June 24	2895	712	51	2058
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, Chicago, Ill. Stock-car	437,596	Sept. 30	3553	927	52	2085
Hicks, Bohn C., Minneapolis, Minn., assignor, by mesne assignments, to Hicks Stock Car Company, Chicago, Ill. Stock-car stall-partition	437,597	Sept. 30	3555	928	52	2085
Hicks, Caleb E., Quincy, Mass. Twine-cutter	442,254	Dec. 9	975	256	53	1461
Hicks, Charles A. (See Merrill, Anson P., assignor.)						
Hicks, Edward E., Salt Point, N. Y. School desk and seat	435,305	Aug. 26	2893	766	52	1342
Hicks, Franklin Z., Rapid City, S. D. Ear and ball	434,829	Aug. 19	2129	557	52	1192
Hicks, James M., administrator. (See Cook, Henry O.)						
Hicks, Lewis C., assignor of two-thirds to J. Gatten and M. Vincent, Onawa, Iowa. Dumping-wagon	441,662	Dec. 2	50	14	53	1271
Hicks, Oliver H., Chicago, Ill. Toilet-paper	421,497	Feb. 18	1574	407	50	879
Hicks, Oliver H., Chicago, Ill., assignor to Morgan Envelope Company, Springfield, Mass. Bundle of toilet or wrapping paper	425,033	Apr. 8	930	247	51	188
Hicks, Oliver H., Chicago, Ill., assignor to Morgan Envelope Company, Springfield, Mass. Package of toilet-paper	441,162	Nov. 25	2473	641	53	1110
Hicks, Oliver H., Chicago, Ill., assignor to Morgan Envelope Company, Springfield, Mass. Bundle of toilet-paper	443,851	Dec. 30	3615	930	53	2000
Hicks Stock Car Company. (See Hicks, Bohn C., assignor.)						
Hicks, Thomas H., Detroit, Mich. Secondary battery	434,444	Aug. 19	1532	400	52	1074
Hicks, Thomas H., Detroit, Mich., assignor to Electrical Invention Company, of Michigan. Electrical railway system	419,673	Jan. 21	1536	409	50	325
Hicks, Thomas H., Detroit, Mich., assignor, by mesne assignments, to Therapeutic Terrestrial Equipoise Company, of Michigan. Therapeutic magnet	420,300	Jan. 28	2511	666	50	522
Hicks, Thomas H., assignor to Electrical Invention Company, Detroit, Mich. Device for measuring electrical currents	426,499	Apr. 29	3151	828	51	650
Hicks, Walter S., Ann Arbor, Mich., assignor to Eureka Manufacturing Company, Baltimore, Md. Tonic beverage	436,477	Sept. 16	1722	.....	52	1719
Hidden, Thomas B., Short Hills, N. J. Sheet-metal can	424,982	Apr. 8	852	226	51	174
Hidden, Thomas C., <i>et al.</i> (See Dart, Albert E., assignor.)						
Hiebert, Claas E., Windom, Minn. Sheaf-carrier	433,924	Aug. 5	712	185	52	896
Hiert, Joseph J., St. Louis, Mo., assignor of one-half to A. S. Garnett, Hot Springs, Ark. Combustible coal-brick	424,299	Mar. 25	2900	.....	50	1711
Higbee, Arthur J., Kearney, Nebr. Check-row corn-planter	426,448	Apr. 29	3076	807	51	635
Higby, Edward H. (See Morsman and Higby.)						
Higgason, Samuel M. (See Cornish and Higgason.)						
Higgin, Thomas, Liverpool, county of Lancaster, assignor, by mesne assignments, to Salt Union, (limited,) London, England. Separating impurities from salt	422,939	Mar. 11	877	229	50	1311
Higginbotham, Charles T., assignor to S. Thomas Clock Company, Thomaston, Conn. Hair-spring stud for watches	440,877	Nov. 18	1996	514	53	1008
Higginbotham, Charles T., assignor to S. Thomas Clock Company, Thomaston, Conn. Stem winding and setting watch	440,878	Nov. 18	1997	514	53	1008
Higginbottom, Lloyd. (See Smith, Goddard, Higginbottom, and Mannoek.)						
Higgins, Benjamin F., and A. Skinner, Oswego, Kans. Weather-strip	420,067	Jan. 28	2137	565	50	453
Higgins, Charles J., Hallowell, Me. Tubular lantern	424,983	Apr. 8	853	226	51	174
Higgins, Charles J., Hallowell, Me. Tubular lantern	433,243	July 29	3442	889	52	696
Higgins, Charles M., Brooklyn, N. Y. Printing or stamping ink	437,780	Oct. 7	164	.....	53	34
Higgins, Charles M., Brooklyn, N. Y. Printing or stamping ink	437,781	Oct. 7	166	53	34

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Higgins, Charles S., Sr. (See Barton, Samuel, assignor.)						
Higgins, Charles W. (See Finley, Leander F., assignor.)						
Higgins, Edwin. (See Patten, James S., assignor.)						
Higgins, Edwin P. (See Doane, Azadore M., assignor.)						
Higgins, George. (See Clark, Newman S., assignor.)						
Higgins, George F., Chicago, Ill. Stove.....	419,122	Jan. 7	704	185	50	148
Higgins, George F., Chicago, Ill. Stove.....	437,692	Oct. 7	22	7	53	7
Higgins, George W., Bunker Hill, Kans. Automatic cover for cable-railway slots.....	420,233	Jan. 28	2408	641	50	503
Higgins, James, Gananoque, Canada. Top-joint for vehicles.....	437,598	Sept. 30	3556	928	52	2085
Higgins, Joseph C., New Brunswick, N. J. Detachable calk for horseshoes.....	439,008	Oct. 21	2061	552	53	406
Higgins, Michael, Braidwood, Ill. Temporary binder.....	438,289	Oct. 14	952	257	53	187
Higgins, Milton P., Worcester, Mass. Furnace charging and discharging apparatus.....	436,856	Sept. 23	2391	624	52	1852
Higgins, Van H. (See Trumble, Henry E., assignor.)						
Higgins, Van H., Chicago, Ill. Car-wheel.....	431,143	July 1	161	41	52	34
Higgins, Werter C., Norwich, Conn. Steam and hot-water generator.....	434,928	Aug. 26	2331	616	52	1237
Higginson, Andrew, Liverpool, county of Lancaster, England. Pulley and block.....	426,535	Apr. 29	3302	{ 839 840 }	51	659
Higginson, Joseph, Jr. (See McConnel and Higginson.)						
Higham, Daniel, Boston, Mass., assignor to Higham Patent Right Company, Rockland, Me. Regulation of arc-light circuits.....	432,310	July 15	1995	{ 509 510 }	52	400
Higham, Daniel, Boston, Mass., assignor to Higham Patent Right Company, Rockland, Me. Regulation of electric arc-light circuits. (Reissue.).....	11,108	Aug. 26	3028	{ 600 601 }	52	1367
Higham Patent Right Company. (See Higham, Daniel, assignor.)						
Higham Patent Right Company. (See Higham, Daniel, assignor.) (Reissue.)						
Highfield, George A., Scranton, Pa. Car-coupling.....	431,659	July 8	979	244	52	202
Hight, Wallace L., Boston, Mass. Aerial-railway transit.....	433,941	Aug. 12	746	{ 194 195 }	52	912
Higinbotom, Charles A. (See Ellicott and Higinbotom.)						
Higinbotom, Charles A., Vandalia, Ill. Pen or pencil holder and supporter.....	420,793	Feb. 4	520	135	50	664
Higinbotom, Charles W., et al. (See Smith, Frederick F., assignor.)						
Higley, Eben N. (See Lent, Howard B., assignor.)						
Higley, Eben N. (See Stevens, John C., assignor.)						
Hilborn, William. (See Gardiner, Robert M., assignor.)						
Hilcher, Edward P., Chicago, Ill. Baker's oven.....	436,134	Sept. 9	1173	306	52	1604
Hild, Henry, Chicago, Ill. Dump-wagon.....	440,034	Nov. 4	621	165	53	730
Hildebrandt, Edwin S., Baltimore, Md., assignor of two-thirds to W. M. Clements, Summit Point, W. Va., and F. M. Hildebrandt, Baltimore, Md. Steam-muffler.....	422,213	Feb. 25	2608	690	50	1082
Hildebrandt, Franklin M., et al. (See Hildebrandt, Edwin S., assignor.)						
Hildner, Christian, et al. (See Trump, John G., assignor.)						
Hildreth, Charles H., Chicago, Ill. Wash-stand.....	419,442	Jan. 14	1198	317	50	252
Hildreth, Francis, Clermont, N. J. Fifth-wheel.....	430,648	June 24	2413	587	51	1965
Hildreth, George, Troy, N. Y. Wire-coiling machine.....	423,252	Mar. 11	1344	350	50	1400
Hildreth, Michael S., Grand Junction, Colo. Derrick.....	430,207	June 17	1674	417	51	1815
Hildreth, Samuel E., assignor to P. Blaisdell & Co., Worcester, Mass. Upright drill.....	426,588	Apr. 29	3282	862	51	675
Hildrup, William T., Jr., Harrisburg, Pa. Refrigerator-car.....	432,828	July 22	2797	715	52	564
Hildrup, William T., Jr., and T. H. Butler, Harrisburg, Pa. Ice-machine and method of operating same.....	427,765	May 13	1129	283	51	1043
Hill, Abraham J., assignor of one-half to L. D. Wood, Charleston, Tex. Hay-press.....	420,685	Feb. 4	363	96	50	635
Hill, Almon F. (See Moore and Hill.)						
Hill, Andrew G., assignor to T. A. Galt and G. S. Tracey, Sterling, Ill. Harrow.....	431,351	July 1	482	{ 119 120 }	52	98
Hill, Andrew L., Decatur, Ill. Hame-fastener.....	443,520	Dec. 30	3089	796	53	1898
Hill, Arthur M., St. Stephen, New Brunswick, Canada. Gaging-rod.....	423,154	Mar. 11	1214	316	50	1374
Hill, Asa G., Stoneham, Mass. Carriage-axle.....	424,203	Mar. 25	2761	736	50	1684
Hill, Asa G., Stoneham, Mass. Carriage-axle box.....	423,199	July 15	1822	469	52	370
Hill, Benjamin B., Philadelphia, Pa. Type-holder.....	420,454	Feb. 4	43	9	50	571
Hill, Benjamin B., Philadelphia, Pa. Hand printing-press.....	433,169	July 29	3338	864	52	674
Hill, Burton W., assignor of one-half to A. B. Lyford and F. J. Kendall, Milford, N. H. Beating-out machine.....	438,810	Oct. 21	1744	468	53	345
Hill, Charles, Portland, Oreg. Clothes-hook.....	434,417	Aug. 12	1492	389	52	1059
Hill, Charles F., Springfield, Wis. Butter-package.....	440,156	Nov. 11	804	209	53	776
Hill, Charles J., Pavilion, N. Y. Nut-lock.....	435,832	Sept. 2	697	186	52	1510
Hill, Charles J., Pavilion, N. Y. Oil-can attachment.....	443,140	Dec. 23	2462	630	53	1766
Hill, Charles S., et al. (See Leighton and Bailey, assignors.)						
Hill, Christian C., Chicago, Ill. Seal-making machine.....	438,844	Oct. 21	1818	{ 484 485 }	53	358
Hill, Christian C., assignor to Hill Manufacturing Company, Chicago, Ill. Perforating-stamp.....	433,003	July 29	3079	790	52	623
Hill, Ebenezer, South Norwalk, Conn. Air-compressor.....	439,876	Nov. 4	371	96	53	680
Hill, Edgar A., et al. (See Hill, Edward A., assignor.)						
Hill, Edward A., Chicago, Ill. Suspender-buckle.....	435,422	Sept. 2	63	20	52	1387
Hill, Edward A., assignor of one-half to J. L. Mallory and E. A. Hill, Chicago, Ill. Grain-door for cars.....	426,183	Apr. 22	2674	702	51	544
Hill, Edward K. (See Hill, Lucian, assignor.)						
Hill, Edwin A., Reading, Mass. Magnetic pen-holder.....	424,786	Apr. 1	551	147	51	108
Hill, Frederick B., assignor of three-fourths to J. Sinclair, London, England. Mercury-pump.....	426,184	Apr. 22	2675	{ 702 703 }	51	545
Hill, Frederick M. (See Irving and Hill.)						
Hill, Frederick W., New York, N. Y. Fur ornament.....	420,794	Feb. 4	520	136	50	664
Hill, George. (See Wood, Charles, assignor.)						
Hill, George J. (See Story, Fox, and Hill.)						
Hill, George P., Alexandria, Va., assignor to Smith & Egge Manufacturing Company, Bridgeport, Conn. Combined tension and take-up device for sewing-machines.....	432,617	July 22	2436	628	52	496
Hill, Gilman C., assignor to Waterbury Brass Company, Waterbury, Conn. Stub-holder.....	427,511	May 6	729	183	51	956
Hill, Harry W. (See Hirt, Louis J., assignor.)						
Hill, Helen M. (See Smith, Charles G., assignor.)						
Hill, Homer C., Clinton, Ill. Sulky.....	429,348	June 3	376	89	51	1543
Hill, Hugo, Detroit, Mich. Folding chair.....	440,952	June 24	2897	712	51	2058
Hill, Hugo, Detroit, Mich. Mail-box.....	435,306	Aug. 26	2894	766	52	1342
Hill, Hugo, Detroit, Mich. Counter-seat.....	435,307	Aug. 26	2895	767	52	1342
Hill, Hugo, assignor of one-third to H. Schroeter, Detroit, Mich. Car-coupling.....	430,953	June 24	2898	713	51	2058
Hill, J. M., et al. (See Bond, Nathan O., assignor.)						
Hill, James. (See Hattersley and Hill.)						
Hill, James B., and W. D. Gohn, Zilwaukee, Mich. Bedstead attachment.....	442,775	Dec. 16	1823	472	53	1636

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Hill, James F., Fleetwood, Pa. Fire-escape.....	432,045	July 15	1583	405	52	323
Hill, James O., Navasota, Tex. Suspension-bridge.....	428,338	May 20	1993	501	51	1219
Hill, John, Columbus, Ga. Automatic fire-extinguisher.....	427,418	May 6	595	148	51	929
Hill, John H. (See Boice, Samuel, assignor.)						
Hill, John J., Chicago, Ill. Railway-switch appliance.....	419,443	Jan. 14	1199	317	50	252
Hill, John J., Chicago, Ill. Railway-switch.....	442,753	Dec. 16	1791	464	53	1628
Hill, John M. (See Somers, William B., assignor.)						
Hill, John T., and J. P. McGuire, Cleveland, Ohio. Core-box.....	439,659	Nov. 4	51	14	53	616
Hill, Joseph, Walworth, W. Smith, Herne Hill, and J. P. O'Donnell, New Malden, county of Surrey, England. Interlocking signal apparatus.....	419,170	Jan. 7	781	206	50	162
Hill, Lucian, assignor of one-half to E. K. Hill, Worcester, Mass. Toy pistol.....	420,068	Jan. 28	2138	207	50	453
Hill Manufacturing Company. (See Hill, Christian C., assignor.)						
Hill, Martin V. B., New Haven, Conn. Pipe-cutter.....	424,710	Apr. 1	424	112	51	84
Hill, Nicholas S., Shillington, Pa. Pump.....	419,197	Jan. 14	828	218	50	178
Hill, Rowland, Jr., Brooklyn, assignor to J. A. Hudson, trustee, New York, N. Y. Game apparatus.....	434,987	Aug. 26	2408	637	52	1252
Hill, Sheldon E., <i>et al.</i> (See Wheeler, Charles G., assignor.)						
Hill, Stephen C., Payne, Ohio. Floor-set.....	440,311	Nov. 11	1059	272	53	823
Hill, Sylvester G. (See Johnson and Hill.)						
Hill, Thomas, Jersey City, N. J. Dumping-cart.....	420,941	Feb. 11	776	201	50	720
Hill, Thomas, Jersey City, N. J. Pedestal for vehicles.....	421,403	Feb. 18	1438	373	50	852
Hill, Thomas C., Garnerville, N. Y. Roof for drying-sheds.....	434,783	Aug. 19	2067	540	52	1179
Hill, Wilford A., and W. F. Foss, Waltham, Mass. Type-writing machine.....	419,522	Jan. 14	1303	348	50	273
Hill, William E., Kalamazoo, Mich. Slab-sawing machine.....	428,732	May 27	2582	654	51	1350
Hill, William E., Kalamazoo, Mich. Log stop and loader.....	431,746	July 8	1129	281	52	230
Hill, William H., and C. W. Bender, Utica, N. Y. Petroleum-car.....	427,867	May 13	1277	323	51	1071
Hill, William T., Indianapolis, Ind. Sporting-trap.....	428,489	May 20	2214	560	51	1262
Hilliard, James P., Fall River, Mass. Waste-picker.....	430,474	June 17	2127	523	51	1902
Hille, Moritz. (See Vogelsang, Otto, assignor.)						
Hiller, Christopher G., <i>et al.</i> (See Newhall, John F., assignor.) (Reissue.)						
Hiller, Edward L. (See Hallbauer and Hiller.)						
Hiller, Henry F., New Bedford, Mass. Bicycle.....	422,781	Mar. 4	602	154	50	1252
Hiller, Louis C., assignor to Meriden Silver Plate Company, Meriden, Conn. Combined back-fastener and support for mirror or picture frames.....	419,605	Jan. 14	1421	381	50	298
Hilles, William S. (See Symington, Thomas H., assignor.)						
Hilliard, Joseph B., Glasgow, Scotland. Appliance for correcting spinal curvature.....	443,764	Dec. 30	3485	894	53	1973
Hiliker, John A., <i>et al.</i> (See Strom, Fredrik E., assignor.)						
Hiliker, John H., New York, N. Y. Ventilating conduits.....	419,993	Jan. 21	2017	532	50	421
Hillman, Herbert & Cooper. (See Hillman, William, assignor.)						
Hillman, William, assignor to Hillman, Herbert & Cooper, (limited), Coventry, county of Warwick, England. Velocipede.....	430,019	June 10	1388	345	51	1749
Hills, George E., Troy, assignor to J. K. P. Pine, Lansingburg, N. Y. Machine for cutting collar or cuff blanks.....	427,572	May 13	830	206	51	985
Hills, William W., and O. M. Jurgenson, Evans, Mich. Device for distributing paris-green on plants.....	422,782	Mar. 4	603	154	50	1252
Hillstrom, Alfred F., East Union, Minn. Device for transmitting motion.....	425,543	Apr. 15	1690	451	51	346
Hillstrom, C. O. (See Hillstrom, John A., assignor.)						
Hillstrom, Charles O., Chesterton, Ind. Mechanism for testing reed-organs.....	437,201	Sept. 30	2930	763	52	1963
Hillstrom, John A., assignor to C. O. Hillstrom, Chesterton, Ind. Stop-action for organs.....	420,998	Feb. 11	861	223	50	736
Hillyer, George, Atlanta, Ga. Water-cooler.....	431,464	July 1	662	166	52	133
Hilt, George L. (See Ransom, George F., assignor.)						
Hilton, Edwin D., assignor of one-half to W. Bamford, Paterson, N. J. Loom.....	425,379	Apr. 8	1443	386	51	289
Hilton, George A. (See Stiver and Hilton.)						
Hilton, John, Fort Atkinson, Wis. Steam-generating attachment for gas or gasoline burn-ers.....	442,317	Dec. 9	1072	281	53	1478
Hilyer, Andrew F., Washington, D. C. Water-evaporator attachment for hot-air regis-ters.....	435,095	Aug. 26	2572	679	52	1283
Hilyer, Andrew F., Washington, D. C. Evaporator for hot-air registers.....	438,159	Oct. 14	750	205	53	151
Himelberger, Jacob, Holt, Mich. Fire-escape.....	434,709	Aug. 19	1969	511	52	1159
Himelspark, George. (See Leech and Himelspark.)						
Himes, George B., Manhattan, Kans. Horse-collar fastener.....	431,465	July 1	664	166	52	134
Himmell, Joseph E., Palmyra, Mo. Hame-clasp.....	420,381	Jan. 28	2624	697	50	543
Himrod, Charles. (See Hopkins, Harvey L., assignor.)						
Himrod, William G., Havre de Grace, assignor of one-half to H. H. and W. E. Klinefelter, Baltimore, Md. Shaft-coupling for vehicles.....	429,275	June 3	239	59	51	1518
Hinchliff, Charles N., and H. E. Hall, Spangle, Wash. Header-brake.....	429,917	June 10	1223	363	51	1718
Hinchliffe, William, Nashville, Tenn., assignor of one-half to G. Draper & Sons, Hope-dale, Mass. Support for spinning-spindles.....	433,897	Aug. 5	679	176	52	889
Hinchman, Andrew L., Lowell, W. Va. Stock-hitching device.....	443,964	Dec. 30	3791	966	53	2032
Hinckley, Henry D., assignor of one-half to J. G. Rich, Hartford, Conn. Automatic sell-ing-machine.....	433,004	July 29	3081	790	52	624
Hinckley, Henry D., assignor to W. L. Tomlinson and J. G. Rich, Hartford, Conn. Coin-controlled torsional grip-testing machine.....	421,712	Feb. 18	1887	495	50	940
Hinckley, Howard, Trenton, N. J. Indicator for doors.....	424,112	Mar. 25	2640	703	50	1660
Hind, Arthur Wyke, near Bradford, county of York, England. Weaving double pile fabrics.....	431,466	July 1	665	167	52	134
Hinden, Mathias J., assignor to J. King, Cleveland, Ohio. Spectacle-gage.....	437,030	Sept. 23	2646	692	52	1903
Hindman, James P., Olathe, Kans. Adjustable chair.....	435,224	Aug. 26	2752	727	52	1318
Hindman, James P., Olathe, Kans. Sleeping-car.....	441,558	Nov. 25	3118	801	53	1229
Hinds, Charles H., New York, N. Y. Electric gas-lighter.....	426,381	Apr. 22	2957	777	51	603
Hinds, Franklin P., Spencer, assignor to Wire Goods Company, Worcester, Mass. Wire-cloth.....	422,214	Feb. 25	2609	690	50	1082
Hinds, Franklin P., assignor to Wire Goods Company, Worcester, Mass. Making wire dish-cloths.....	442,436	Dec. 9	1254	324	53	1514
Hinds, Leonard. (See Cook and Hinds.)						
Hine, Adelbert P., assignor to Coe Brass Manufacturing Company, Torrington, Conn. Scrap-cutter for sheet-metal-edging machines.....	438,845	Oct. 21	1822	485	53	358
Hine, Adelbert P., assignor to Coe Brass Manufacturing Company, Torrington, Conn. Bridle attachment for sheet-metal rolls.....	438,846	Oct. 21	1824	486	53	359
Hine, Charles M., New York, N. Y., assignor to Standard Plaiter Company, (limited), Pitts-burg, Pa. Plaiting-machine.....	420,382	Jan. 28	2625	697	50	543

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Hine, Charles M., New York, N. Y., assignor to Standard Plaiter Company, (limited,) Pittsburg, Pa. Plaiting-machine	422,215	Feb. 25	2610	691	50	1083
Hine, James W., Jamestown, N. Y. Adjustable shelving	433,622	Aug. 5	266	71	52	809
Hines, John W. (See Smith, Thomas J., assignor.)						
Hingher, Joseph. (See Latschar, Christian, assignor.)						
Hinkel, Friedrich, New York, N. Y. Gas-bracket	442,523	Dec. 9	1397	357	53	1542
Hinkle, Carl R., Sullivan, Ind. Bill or paper file	439,507	Oct. 28	2857	760	53	561
Hinkle, Charles E., and E. Ransom, Flint, Mich. Woven-wire mattress	419,950	Jan. 21	1955	514	50	409
Hinkle, Philip, San Francisco, Cal. Ore-feeder	420,424	Jan. 28	2681	{ 710 711 }	50	554
Hinkley, George F. (See Hoogerzeil and Hinkley.)						
Hinkley, George M., assignor of one-half to W. W. Allis, Milwaukee, Wis. Saw-mill dog.	419,046	Jan. 7	596	153	50	126
Hinkley, George M., and R. Schofield; said Schofield assignor to W. W. Allis, Milwaukee, Wis. Offsetting saw-mill carriage	433,621	Aug. 5	356	91	52	825
Hinks, Harry D., Birmingham, England. Lamp-extinguisher	437,782	Oct. 7	168	52	53	34
Hinks, Harry D., Birmingham, England. Extinguishing mechanism for lamps	442,760	Dec. 16	1799	466	53	1630
Hinks, Joseph, Birmingham, England. Extinguishing mechanism for lamps	442,761	Dec. 16	1800	467	53	1630
Hinman, Wilbur S., assignor of one-half to J. H. Shay, Streator, Ill. Wagon-jack	429,686	June 10	877	214	51	1651
Hinote, E. T. (See Moomaw, Henry E., assignor.)						
Hinphrey, James J., assignor of one-half to B. B. Matthews, Bound Brook, N. J. Coupling for electric wires	437,116	Sept. 23	2765	723	52	1926
Hirrichs, Otto H., Jr. (See Flint, George H., assignor.)						
Hinson, James A., Des Moines, Iowa. Car-coupling	421,404	Feb. 18	1440	373	50	853
Hinson, James A., Des Moines, Iowa. Draw-bar attachment for railway-cars	427,990	May 13	1464	371	51	1107
Hinson, James A., Des Moines, Iowa. Friction-buffer for railway-cars	439,748	Nov. 4	175	45, 46	53	642
Hinson, James A., Des Moines, Iowa. Thill-coupling	439,778	Nov. 4	220	58	53	651
Hinton, Eugene H., New York, N. Y. Sleigh-brake	431,352	July 1	486	120	52	99
Hinton, William B., Smithville, Ga. Trace for single harness	424,984	Apr. 8	855	227	51	174
Hinze, William. (See Rauhut, Johan F., assignor.)						
Hipkins, Stephen, Jr. (See Morton, Blankensop, and Hipkins.)						
Hipkins, Stephen, Jr., Martin's Ferry, Ohio. Glass-press	442,890	Dec. 16	2034	522	53	1675
Hipwell, C. G., et al. (See Jorgensen, Axel, assignor.)						
Hipwell, John P., Philadelphia, Pa. Circular-knitting machine	438,885	Oct. 21	1881	{ 499 500 }	53	370
Hipwell, Thomas, Allegheny, assignor to Pittsburgh Brass Company, Pittsburg, Pa. Hasp and hanger	428,607	May 27	2394	609	51	1316
Hipwell, Thomas, Allegheny, assignor to Pittsburgh Brass Company, Pittsburg, Pa. Liquid-measure indicator	439,508	Oct. 28	2858	760	53	562
Hipwell, Thomas, Allegheny, assignor to Pittsburgh Brass Company, Pittsburg, Pa. Lamp	439,594	Oct. 28	2981	791	53	586
Hipwell, Thomas, assignor to Pittsburgh Brass Company, Allegheny, Pa. Lamp-hanger	443,521	Dec. 30	3090	797	53	1899
Hirt, Wilhelm, Berlin, Germany. Piano	441,559	Nov. 25	3120	801	53	1229
Hird, James, Goff, Pa. Traction-cable grip	436,955	Sept. 23	2541	665	52	1881
Hirons, John, assignor of one-half to M. V. B. Holms, Wellington, Kans. Railway-rail joint.	427,512	May 6	730	183	51	956
Hirsch, Abraham, Jersey City, N. J. Salt-box	434,083	Aug. 12	956	251	52	953
Hirsch, David. (See Mayer, Max, assignor.)						
Hirsch, Isaac, Chicago, Ill. Rolls for making table-cutlery	438,374	Oct. 14	1073	{ 292 293 }	53	211
Hirsch, Philip O. Grand Island, Nebr. Gate	426,725	Apr. 29	3496	914	51	716
Hirschfeld, Louis. (See Morvay, Bernhard, assignor.)						
Hirschler, Siegfried, Worms, Germany. Spreader and discharger for malt-kilns	432,706	July 22	2605	666	52	527
Hirsh, Morris M. (See Mossop, William F., assignor.)						
Hirshfeld, Jacob, New York, N. Y. Outing-belt	439,244	Oct. 28	2444	656	53	484
Hirshfeld, Jacob, New York, N. Y., assignor of one-half to A. G. Spalding & Brothers, Chicago, Ill. Buckle	433,005	July 29	3083	791	52	624
Hirshheimer, Albert, La Crosse, Wis. Colter	436,478	Sept. 16	1722	454	52	1719
Hirshheimer, Albert, and C. M. Mueller, La Crosse, Wis. Machine for bending wood	426,641	Apr. 29	3362	{ 881 882 }	51	690
Hirst, Anson, Sharpsville, Pa. Apparatus for steering wheeled vehicles	440,035	Nov. 4	624	165	53	730
Hirst, Charles S., Philadelphia, Pa. Pontice-holder	432,798	July 22	2759	706	52	556
Hirst, John, Philadelphia, Pa. Plumber's vise	432,829	July 22	2798	715	52	564
Hirst, Walter V. (See Leach and Hirst.)						
Hirt, Louis J., Boston, Mass., assignor to H. W. Hill, Cleveland, Ohio. Friction-clutch	429,446	June 3	520	125	51	1572
Hirt, Louis J., Boston, Mass., assignor to H. W. Hill, Cleveland, Ohio. Friction-clutch	434,445	Aug. 19	1533	400	52	1074
Hise, Philip, Cincinnati, Ohio. Stirrup	435,932	Sept. 9	862	226	52	1547
Hise, Philip, Cincinnati, Ohio. Saddler's knife	436,479	Sept. 16	1724	454	52	1719
Hisley, Stephen T., and J. A. Munday, assignors to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Machine for forming clasp-tongues	418,915	Jan. 7	420	{ 103 104 }	50	88
Hitch, John E. (See Irwin, Mill, and Hitch.)						
Hitchcock, Charles A., et al. (See Burnley, William, assignor.)						
Hitchcock, Charles A., North East, assignor of one-half to S. A. Davenport, Erie, Pa. Galvanic battery	430,075	June 10	1484	368	51	1768
Hitchcock, George H., Danville, Ill. Adjustable stuffing-box for sliding rods	442,047	Dec. 2	660	178	53	1392
Hitchcock, Howard, Reinbeck, Iowa. Draft-equalizer	428,608	May 27	2395	609	51	1316
Hitchcock Manufacturing Company. (See McKee, John L., assignor.)						
Hitchcock, William W., Los Angeles, Cal. Key-fastener	426,016	Apr. 22	2431	642	51	496
Hitchcock, William W., Los Angeles, Cal. Hypodermic syringe	426,017	Apr. 22	2431	642	51	496
Hite, Kidder M. (See Hite, William F., assignor.)						
Hite, William F., assignor to K. M. Hite, Gainesville, Va. Truck	442,891	Dec. 16	2038	523	53	1676
Hiteschew, William H., Johnstown, assignor of one-half to J. B. Staumbagh, Altoona, Pa. Kitchen-cabinet	431,974	July 8	1471	372	52	257
Hitt, Addison W. (See McClellan and Hitt.)						
Hitt, Adrian, assignor of one-half to A. A. Thompson, Jersey City, N. J. Clock-winding mechanism	424,418	Mar. 25	3123	829	50	1755
Hitt, Marcellus M., assignor to Sheffield Land, Iron, and Coal Company, Sheffield, Ala. Harness-saddle	425,175	Apr. 8	1154	304	51	233
Hitt, Marcellus M., assignor to T. J. Matthews, Sheffield, Ala. Harness-saddle	425,792	Apr. 15	2063	550	51	419
Hjelte, Adolf, assignor to himself, J. P. Johnson, and P. A. Lind, Chicago, Ill. Steam-engine	435,970	Sept. 9	914	241	52	1557
Headley, George M., and S. A. Bemis, Springfield, Mass. Brake for railway-cars	427,080	May 6	83	22	51	828
Headley, Miles S. (See Zeigler, William R., assignor.)						
Hoag, Chester R., assignor to Harrison & Hoag, Newark, N. J. Device for distributing size-marks	435,999	Sept. 9	958	251	52	1566
Hoag, Winfrey V., Salisbury, Ill. Stump-extractor	429,761	June 10	991	243	51	1674
Hoagland, John B., assignor of one-half to W. M. Cassetty, Nashville, Tenn. Box-fastener	423,155	Mar. 11	1215	316	50	1374

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Hoar, James B. (See Clement, Charles H., assignor.)						
Hoar, Joseph A. (See Broun, Fredric M., assignor.)						
Hobart, David, Madison, Me. Sectional tubular tunnel	439,841	Nov. 4	316	79	53	670
Hobart, Robert D., Denver, and M. Ahearn, Leadville, Colo. Rock-drill	439,275	Oct. 28	2496	668	53	493
Hobbs, Alice L., Kalamazoo, Mich. Hair-bang	431,892	July 8	1352	341	52	272
Hobbs, George P., assignor to Nail City Lantern Company, Wheeling, W. Va. Lantern	428,047	May 13	1550	392	51	1124
Hobbs, George P., assignor to Nail City Lantern Company, Wheeling, W. Va. Lantern	442,437	Dec. 9	1236	324	53	1514
Hobbs, Horatio. (See Gordon, Edward F., assignor.)						
Hobbs, Marmaduke W., Richmond, Ind. Inhaling-instrument	422,411	Mar. 4	65	18	50	1150
Hobbs, Robert S. (See Oliver and Brooks, assignors.)						
Hobbs, Warren D., et al., trustees. (See Day, George W., assignor.)						
Hobbs, William H., Barnesville, Ohio. Washing-machine	428,911	May 27	2862	732	51	1407
Hobby, Vincent M., New York, N. Y. Manufacture of filaments for incandescent lamps	435,660	Sept. 2	443	118	52	1459
Hobday, Thomas W., East Boston, Mass. Dress-form	427,991	May 13	1466	372	51	1107
Hobson, Arthur E., Hartford, and G. W. Hull, Wallingford, Conn. Hydraulic shaping-press	429,349	June 3	377	89	51	1543
Hobson, Charles H., Mount Carmel, Pa. Lamp-carrier for miners' caps	442,185	Dec. 9	878	234	53	1442
Hobson, Charles H., assignor of one-half to W. Curnow, Mount Carmel, Pa. Switch	437,156	Sept. 23	2858	742 743	52	1942
Hochhausen, William, Brooklyn, N. Y. Electric snap-switch	437,359	Sept. 30	3187	831	52	2010
Hochhausen, William, Brooklyn, N. Y. Dynamo-electric machine	437,360	Sept. 30	3188	831 832	52	2011
Hock, Jakob, Deggendorf, Bavaria, Germany. Coin-counter	442,892	Dec. 16	2041	523 524	53	1677
Hockett, Aaron L., Jonesborough, Ind. Breech-loading gun	435,833	Sept. 2	698	187	52	1510
Hockett, Pleasant, Colorado Springs, Colo. Double intermittent grip-gearing	430,020	June 10	1389	345	51	1750
Hockett, Pleasant, Hutchinson, Kans. Reversible grip-gearing	430,021	June 10	1391	346	51	1750
Hockin, Robert, Pictou, Nova Scotia, Canada. Fishway	437,202	Sept. 30	2930	763	52	1963
Hockman, Jacob, Waynesborough, Pa. Vehicle-pole	426,500	Apr. 29	3152	829	51	650
Hockman, Jacob, Waynesborough, Pa. Vehicle-pole	439,153	Oct. 28	2284	613	53	454
Hodge, Chester A. (See Benoit, Fredrick, assignor.)						
Hodge Manufacturing Company. (See Hogue, Lovren E., assignor.)						
Hodge, Thomas B., Providence, R. I. Buttoner	438,751	Oct. 21	1663	445	53	329
Hodge, William, Easton, Pa. Extension-table	440,356	Nov. 11	1118	287	53	834
Hodges, Charles F., et al. (See Stewart, Joseph H., assignor.)						
Hodges, George S., Orchard Lake, Mich., and J. M. Tracy, New York, N. Y. Water-color paint	430,250	June 17	1759		51	1831
Hodges, Henry C., Detroit, Mich. Car construction	429,200	Jan. 28	2358	626	50	494
Hodges, Henry C., Detroit, Mich. Composite beam	420,201	Jan. 28	2359	627	50	494
Hodges, John M., et al. (See Stewart, Joseph H., assignor.)						
Hodges, Nathaniel D. C., Plainfield, N. J. Protecting buildings from lightning	443,048	Dec. 16	2274	583	53	1724
Hodges, Thomas J., and A. J. Isaacks, Ashville, Ala. Car-coupling	439,800	Nov. 4	254	64	53	658
Hodgkins, Edward R., assignor of two-thirds to J. E. Sudler, Baltimore, Md. Making phosphatic fertilizers	423,320	Mar. 11	1463		50	1422
Hodgkins, George H., Peabody, Mass. Burglar-alarm	429,762	June 10	992	243	51	1674
Hodgman, Frank S., assignor to Lozier & Yost Bicycle Manufacturing Company, Toledo, Ohio. Bearing for bicycles	420,722	Feb. 4	409	109	50	645
Hodgman Rubber Company. (See Dusenberry, Charles, Jr., assignor.)						
Hodgson, Harry C., Bedford, and F. Dracup, Shipley, county of York, England. Loom	432,046	July 15	1584	405 406	52	324
Hodgson, John G. (See Jordan and Hodgson.)						
Hodgson, John G. (See Norton and Hodgson.)						
Hodgson, John G., Maywood, Ill. Cap for cans	434,868	Aug. 19	2193	574	52	1204
Hodgson, John G., assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Soldering-machine	422,412	Mar. 4	67	18, 19	50	1150
Hodgson, John G., assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Crimping-machine	436,784	Sept. 23	2215	583	52	1819
Hodgson, John G., assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Machine for soldering vent-holes in can-caps	436,785	Sept. 23	2217	584 585	52	1819
Hodgson, Mark, Leadville, Colo. Circular sawing machine	436,420	Sept. 16	1629	429	52	1700
Hodgson, Samuel, Medway, Mass. Scouring or dyeing	419,331	Jan. 14	1030	272 273	50	218
Hodgson, William, New York, and J. C. Brown, Brooklyn, N. Y. Gas-burner	430,853	June 21	2752	674	51	2030
Hodsdon, Charles F. (See Isberg, Hans A., assignor.)						
Hodskinson, John H., Salem, Mass. Railway-crossing	430,383	June 17	1994	492 493	51	1877
Hoe & Co., R. (See Crowell, Luther C., assignor.)						
Hoefler, Frederick W., Freeport, Ill. Sash-cord guide	425,940	Apr. 15	2296	607	51	461
Hoefler, Frederick W., assignor to C. Morgan, A. Baumgarten, and E. H. Morgan, Freeport, Ill. Spring-hinge	443,078	Dec. 16	2333	596	53	1735
Hoeflie, Frank F., Meridian, Miss. Rail-joint	443,965	Dec. 30	3794	967	53	2032
Hoeflie, Francis L., assignor to C. H. Irwin, Wilmington, Ohio. Auger	430,344	June 17	1939	475	51	1866
Hoegren, Anders G. (See Berthean and Hoegren.)						
Hoelderlin, Theodore, Brooklyn, N. Y. Machine for dropping confectionery	443,281	Dec. 23	2706	694 695	53	1815
Hoell, Ole E. O., Chicago, Ill. Atomizer	436,580	Sept. 16	1887	496	52	1748
Hoelzel, Charles, New Orleans, La. Rice or grain pounder	420,383	Jan. 28	2627	697	50	543
Hoeneman, Franklin P. and W. A., New York, N. Y. Medical battery	429,447	June 3	522	125	51	1573
Hoeneman, William A. (See Hoeneman, Franklin P. and W. A.)						
Hoenny, Adolph J. (See Standing and Hoenny.)						
Hoerle, Frederick, Jr., Allegheny, Pa. Screw-tap	428,490	May 20	2216	560	51	1262
Hoerle, William M., Allegheny, assignor to Pittsburgh Brass Company, Pittsburg, Pa. Central-draft lamp	432,311	July 15	1998	510	52	401
Hoerle, William M., assignor to Pittsburgh Brass Company, Allegheny, Pa. Lamp	432,489	July 15	2254	583	52	453
Hoerle, William M., Cleveland, Ohio, assignor to Pittsburgh Brass Company, Allegheny, Pa. Wick-raiser for lamps	435,357	Aug. 26	2979	790	52	1358
Hoey, David G., Glasgow, county of Lanark, Scotland. Apparatus for ventilating halls, rooms, or other interiors	420,796	Feb. 4	522	136	50	664
Hoey, John J., Providence, R. I. Carding-engine	420,795	Feb. 4	521	136	50	664
Hofbauer, Michael, Philadelphia, Pa. Meat-cutter	441,663	Dec. 2	51	14	53	1271
Hofbauer, Michael, Philadelphia, Pa. Meat-cutter	441,664	Dec. 2	53	14, 15	53	1272
Hofe, Julius vom, Brooklyn, N. Y. Fishing-reel	430,032	June 10	1393	346	51	1750
Höfel, Ewald, Lugan, Germany. Walking-cane, &c	442,048	Dec. 2	660	178	53	1392

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Hofele, Ferdinand W., New York, assignor, by mesne assignments, to E. L. Allen, Pawling, N. Y. Mail-bag fastener	424,419	Mar. 25	3124	829	50	1755
Hoff, John, Owing's Mills, Md. Thill-coupling	439,245	Oct. 28	2445	656	53	484
Hoffer, Allen D., <i>et al.</i> (See Colvin, Robert J., assignor.)						
Hoffman, Anton B. (See Danforth, George E., assignor.)						
Hoffman, Edmond H., Newark, N. J. Sign-stretcher	435,696	Sept. 2	498	132	52	1471
Hoffman, Edward T., deceased, Summunduwot, Kans.; A. J. Bates administrator. Dirt-loading machine	424,300	Mar. 25	2901	{ 774 775 }	{ 50	1711
Hoffman, Ferdinand J. A., Milwaukee, Wis. Fire-escape tower	440,827	Nov. 18	1922	{ 493 494 }	{ 53	993
Hoffman, Frederick W. (See Braun, Carl, assignor.)						
Hoffman, George, Buffalo, N. Y. Automatic device for removing water from cellars	424,553	Apr. 1	183	51	51	38
Hoffman, Henry F. (See Langer, Gotthold, assignor.)						
Hoffman, Horace J., Chicago, Ill., assignor, by mesne assignments, to Fenton Metallic Manufacturing Company, of New York. Storage-case for hooks, &c	437,833	Oct. 7	246	75	53	49
Hoffman, Jacob. (See Goodyear, Robert B., assignor.)						
Hoffman, John A., Millersville, Ohio. Door-check	424,063	Mar. 25	2568	686	50	1646
Hoffman, Joseph, Hoboken, N. J. Apparatus for grinding wet materials	429,625	June 10	791	193	51	1634
Hoffman, Joseph, Hoboken, N. J. Toy	435,423	Sept. 2	64	20	52	1387
Hoffman, Orville S., assignor to E. W. Gillett, Chicago, Ill. Machine for making yeast-cakes	418,841	Jan. 7	284	69, 70	50	60
Hoffman, Peter, Fort Branch, Ind. Voting apparatus	435,225	Aug. 26	2754	{ 727 728 }	{ 52	1318
Hoffman, Ralph. (See Morden, William S., assignor.)						
Hoffman, Ralph. (See Morden and Hoffman.)						
Hoffman, Robert, assignor to H. J. Heinz Company, Pittsburg, Pa. Bung for pickle-barrels	429,448	June 3	523	126	51	1573
Hoffman, Ronulus J., <i>et al.</i> (See Jones, Charles E., assignor.)						
Hoffman, Ross J., Binghamton, N. Y. Feed-water regulator	434,784	Aug. 19	2068	540	52	1180
Hoffmann, Erdmann, <i>et al.</i> (See Black, Bernard J., assignor.)						
Hoffmann, Frederick W., New York, N. Y. Cigar-cutting machine	443,676	Dec. 30	3346	861	53	1947
Hoffmann, Henry, Manning, Iowa. Show-case	436,135	Sept. 9	1175	307	52	1605
Hoffmann, Meinhard, and A. Weinberg, Mainknr, near Frankfort-on-the-Main, assignors to L. Cassella & Co., Frankfort-on-the-Main, Germany. Blue dye	442,680	Dec. 16	1639	.....	53	1600
Hoffmann, Otto C. (See Sweet, Hoffmann, and Sanderson.)						
Hofheimer, Maurice, New York, N. Y. Cloth-cutting machine	425,572	Apr. 15	1728	464	51	354
Hofheimer, Max, Philadelphia, Pa. Game-counter	431,893	July 8	1353	341	52	273
Höfinghoff, Emil H., Barmen, Prussia, Germany. Key-board for musical instruments	426,812	Apr. 29	3627	946	51	741
Hofman, John. (See Rogers and Hofman.)						
Hofman, John, Rochester, N. Y. Show-case corner	424,554	Apr. 1	184	51	51	38
Hofman, John, Rochester, N. Y. Shoe-rest for display-frames	424,555	Apr. 1	185	51	51	38
Hofman, Louis. (See Sostmann, John B., assignor.)						
Hofmann, Adolph W., Brooklyn, assignor to Robbins & Appleton, New York, N. Y. Means for ornamenting watch-case centers and other like articles	435,834	Sept. 2	701	187	52	1511
Hofmann, Adolph W., Brooklyn, assignor to Robbins & Appleton, New York, N. Y. Ornamenting watch-case centers and other like articles	435,835	Sept. 2	703	188	52	1511
Hofmann, Adolph W., Brooklyn, assignor to Robbins & Appleton, New York, N. Y. Method of and means for ornamenting watch-case backs and covers and other like articles	435,836	Sept. 2	704	{ 188 189 }	{ 52	1511
Hofmann, John, Jr., Asherville, assignor of one-half to G. Stearley, Clay County, Ind. Combination table and quilting-frame	443,079	Dec. 16	2334	596	53	1735
Hogaboom, George C. (See Ream, Theodore J., assignor.)						
Hogan Engineering Company. (See Hogan, John J., assignor.)						
Hogan, Hugh F., Albion, Ind. Refrigerator-car	439,509	Oct. 28	2860	{ 760 761 }	{ 53	562
Hogan, John B., assignor to himself and O. W. Welch, North Adams, Mass. Beer-faucet	439,510	Oct. 28	2862	761	53	562
Hogan, John J., Brooklyn, assignor to Hogan Engineering Company, New York, N. Y. Boiler	425,425	Apr. 15	1515	406	51	313
Hogan, John J., Brooklyn, assignor to Hogan Engineering Company, New York, N. Y. Sectional boiler	425,426	Apr. 15	1517	{ 406 407 }	{ 51	313
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Boiler with vertical sections	425,941	Apr. 15	2298	608	51	461
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Water-jacketed boiler	425,942	Apr. 15	2300	609	51	462
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Water-leg fire-box	425,943	Apr. 15	2303	610	51	463
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Boiler with trapped circulation	425,944	Apr. 15	2305	611	51	463
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Compound boiler	425,945	Apr. 15	2308	{ 611 612 }	{ 51	464
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Boiler for radiator systems	425,946	Apr. 15	2311	612	51	464
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Fire-brick lining for furnaces	425,947	Apr. 15	2312	{ 613 614 }	{ 51	464
Hogan, John J., Brooklyn, N. Y., assignor to Hogan Engineering Company, of New York. Internal coupling for heating-radiators	434,710	Aug. 19	1970	512	52	1159
Hogan, Thomas F. (See Aman, Leo, assignor.)						
Hogan, Thomas J., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Air-brake	433,127	July 29	3277	{ 844 845 }	{ 52	662
Hogan, Thomas J., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Air-brake	433,594	Aug. 5	228	60	52	800
Hogan, Thomas J., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Air-brake	433,595	Aug. 5	231	61	52	801
Hogel, Hascal A., Syracuse, N. Y. Drier for grain, seed, &c	431,055	July 1	42	9, 10	52	10
Hogeland, Alexander, Lincoln, Neb. Elevator for water, sand, &c	436,036	Sept. 9	1017	265	52	1577
Hogeland, Israel, Indianapolis, Ind., assignor of one-half to F. B. Bangs, Chicago, Ill. Churn	436,662	Sept. 16	2015	526	52	1772
Hogue, Charles C., Corvallis, Ore. Water-wheel	432,875	July 22	2860	732	52	577
Hogue, James W., assignor of one-half to F. T. Hopkins, Washington, D. C. Water-closet	429,853	June 10	1126	279	51	1699
Hogue, Lovren E., assignor to Hodge Manufacturing Company, Greenville, Pa. Injector	430,923	June 10	1393	347	51	1751
Hogue, Parker P., Pittsburg, Pa. Injector	436,601	Sept. 16	1910	502	52	1752
Hogue, William J., La Otto, Ind. Windmill	419,123	Jan. 7	705	186	50	148
Hohenstein, John G., Gowanda, N. Y. Adjustable fastening for tool-handles	435,647	Sept. 2	422	112	52	1454
Hohman, Joseph A., and C. E. Cunningham, Baltimore, Md. Overalls	432,669	July 22	2539	651	52	514
Hohnbach, Robert, Jr. (See Ternes and Hohnbach.)						
Hohnstedt, George L., Urbana, Ohio. Safety attachment	423,687	Mar. 18	2000	527	50	1532

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Hohnstein, William, St. Louis, Mo. Metal folding rule	439,511	Oct. 28	2863	761	53	562
Hoke, Henry E., Chambersburg, Pa. Car-door fastener	427,419	May 6	597	149	51	930
Hoke, Quinton J., assignor to himself and P. R. Bratton, Yorkville, S. C. Car-coupling	425,509	Apr. 15	1636	436	51	336
Hoke, Quinton J., assignor to himself and S. L. Davidson, Yorkville, S. C. Exhaust-steam nozzle	436,527	Sept. 16	1781	470	52	1730
Hoke, Quinton J., assignor of one-half to P. R. Bratton and J. R. Lindsay, Yorkville, S. C. Means for controlling the movements of railway-trains	438,160	Oct. 14	751	205 206	53	151
Holbrook, Edward H., Jr. (See Lloyd, Marshall B., assignor.)						
Holbrook, Frederick A., Evanston, assignor to A. H. Andrews & Company, Chicago, Ill. Seat and desk	423,055	Mar. 11	1061	275	50	1345
Holcomb, Milo H., Pierson, Mich. Whiffletree-hook	423,321	Mar. 11	1464	383	50	1422
Holcombe, Alfred G., assignor to Electric Signal Manufacturing Company, New York, N. Y. Electrical communicating system	420,384	Jan. 28	2628	698	50	543
Holcombe, Alfred G., Long Island City, assignor to Electric Signal Manufacturing Company, New York, N. Y. Electrical communicating system	432,618	July 22	2438	628	52	496
Holcombe, Alfred G., Long Island City, assignor to Electric Signal Manufacturing Company, New York, N. Y. Call-box for electrical signaling systems	432,619	July 22	2440	629	52	496
Holcombe, Alfred G., Long Island City, assignor of one-half to C. L. Browne, New York, N. Y. Apparatus for covering electric wires	435,629	Sept. 2	394	106	52	1449
Holden, Charles L., assignor to Knight & Jilson, Indianapolis, Ind. Gas-fuel burner	419,444	Jan. 14	1200	318	50	253
Holden, Charles M., and H. B. Bopp, New Orleans, La. Open movable kettle for melting saccharine matter, &c.	432,620	July 22	2442	629 630	52	497
Holden, De Witt, Franklin, Tenn. Anti-rattler for thill-couplings	421,713	Feb. 18	1889	496	50	940
Holden, Everett P., Pricetown, Ohio. Vehicle-spring	422,784	Mar. 4	604	155	50	1252
Holden, Harry, and R. G. Brooke, Salford, county of Lancaster, assignors to G. F. G. Hooper, Westminster, England. Injector	419,047	Jan. 7	597	153 154	50	126
Holden, Harry, and R. G. Brooke, Salford, county of Lancaster, assignors to G. F. G. Hooper, Westminster, England. Injector	419,124	Jan. 7	706	186	50	148
Holden, Henry P. (See Danforth, Roderick F., assignor.)						
Holdenman, Fred, Bowling Green, Ohio. Closure for fruit-jars	420,511	Feb. 4	120	30	50	587
Holdegre Manufacturing Company. (See Whitcomb, Daniel C. D., assignor.)						
Holgate, George H., Philadelphia, Pa. Binary fluid	421,076	Feb. 11	974	250	50	757
Holgate, Henry, Innisfil, Ontario, Canada. Tie-plate for railways	436,709	Sept. 16	2020	547	52	1786
Holibaugh, Hiram A., Marlborough, Ohio. Fence	441,873	Dec. 2	385	101	53	1340
Holinger, Arnold. (See Frey, August A., assignor.)						
Holladay, Edgar C., New Market, Iowa. Cultivator-fender	432,047	July 15	1590	466 407	52	324
Holladay, John M., Holladay, Va. Ax-head	419,523	Jan. 14	1305	349	50	274
Holland, Albert L., assignor of one-half to R. H. Branton, Minneapolis, Minn. Hydrocarbon generator and burner	430,854	June 24	2753	674	51	2030
Holland, Alfred A. (See Funk and Zeiher, assignors.)						
Holland, Charles L., Revere, assignor of one-half to J. E. Graham, Salem, Mass. Razor-strop	431,696	July 8	1052	263	52	214
Holland, Daniel A., assignor to himself and T. F. Bishop, Boston, Mass. Nipple-holder	441,007	Nov. 18	2022	569	53	1048
Holland, James M., Mount Pleasant, Iowa. Road-grader	442,975	Dec. 16	2163	557	53	1702
Holland, John, Cincinnati, Ohio. Fountain-pen	426,843	Apr. 29	3628	947	51	741
Holland, John N., Pueblo, Colo. Land-leveler	425,793	Apr. 15	2064	551	51	430
Holland, John P., Passaic, N. J. Cartridge for ordnance	420,623	Feb. 4	281	75	50	619
Holland, Luther W., assignor of one-half to J. McGwin, Fulton, Mo. Cutter-bar	439,276	Oct. 28	2498	669	53	493
Holland, Martin. (See Ward, Frank T., assignor.)						
Holland, Wallace S., Pasadena, Cal. Sash or blind holder	432,799	July 22	2759	706	52	556
Holland, William W., Fair Play, S. C. Journal-bearing	419,445	Jan. 14	1201	318	50	253
Hollaender, Alva L., et al. (See Monto, Joseph, assignor.) (Reissue.)						
Hollar, Gordon C., Bethany, Mo. Rotary engine	437,892	Oct. 7	329	97	53	65
Hollar, William H., Elizabeth, N. J., and F. S. Holmes, Malden, Mass., assignors to J. W. Torrey, Merchantville, N. J. Electric safe-lock	438,236	Oct. 14	863	233 234	53	171
Holloway, William, Gilroy, Cal. Shaft for vehicles	426,726	Apr. 29	3498	915	51	716
Holleman, William D. (See Wallace and Holleman.)						
Hollenbeck, Sullivan D., Oneida, N. Y. Lathe-chuck	423,253	Mar. 11	1347	351	50	1400
Hollensbe, Henry. (See Kelly, James M., assignor.)						
Hollensbe, Henry, Kingston, Ind. Wire fence	429,032	May 27	3044	785	51	1441
Holler, Georg, Blossburg, assignor of one-half to C. H. Philpott, Raton, N. Mex. Ter. Jaw-trap	430,231	June 17	1726	429	51	1825
Hollerith, Herman, St. Louis, Mo. Electrical calculating system	430,804	June 24	2672	655 656	51	2016
Holley, Clarence E., Fort Fairfield, Me. Wagon-brake	422,940	Mar. 11	878	229 230	50	1311
Holliday, John, Brooklyn, assignor to himself and E. N. Dickerson, New York, N. Y. Making alkaline salts of antimony	421,935	Feb. 25	2205		50	1007
Holliday, Junius A., Hamilton, Mo. Building the car-tracks of railways	438,687	Oct. 21	1546	417	53	307
Holliday, Robert, Huddersfield, England. Producing azo colors on cotton or other vegetable fiber	439,953	Nov. 4	494		53	704
Holliday, William, Sanborn, N. D. Band-cutter and feeder	430,954	June 24	2899	713	51	2058
Holliday's Sons, Read. (See Kendall, Edward D., assignor.)						
Hollings, John C., Boston, Mass. Shield or protector for electric conductors of combined gas and electric fixtures	419,674	Jan. 21	1537	409	50	326
Hollingshead, William B., Bronxville, assignor of one-half to S. H. Carney, New York, N. Y. Secondary battery	422,216	Feb. 25	2614	692	50	1083
Hollingshead, William B., Bronxville, assignor of one-half to S. H. Carney, New York, N. Y. Secondary-battery plate	434,869	Aug. 19	2193	574	52	1204
Hollingshead, William B., Bronxville, assignor of one-half to S. H. Carney, New York, N. Y. Storage-battery	436,602	Sept. 16	1911	502	52	1752
Hollingshead, William B., Bronxville, assignor of one-half to S. H. Carney, New York, N. Y. Secondary battery	439,594	Oct. 28	2983	792	53	586
Hollingshead, William B., Bronxville, N. Y., assignor to J. G. Batterson, Hartford, Conn. Electroplating-bath for copper	427,513	May 6	732		51	956
Hollingsworth, Aquila W., West Liberty, Iowa. Thill-coupling	423,765	Mar. 18	2110	557	50	1552
Hollingsworth, Charles M., Rockford, Ill. Vaporizing liquid hydrocarbons and supplying the vapor to burners	420,797	Feb. 4	524	136	50	664
Hollingsworth, Charles M., Rockford, Ill. Apparatus for vaporizing liquid hydrocarbons and supplying the vapor to burners	421,834	Feb. 18	2043	541	50	968
Hollingsworth, Charles M., Cleveland, Ohio. Oil-feeding device for vapor-stoves	443,765	Dec. 30	3486	894	53	1973
Hollingworth, Louis, Providence, R. I. Drip-pan for looms	429,918	June 10	1224	303	51	1718
Hollingworth, Edward, Dobcross, near Huddersfield, England, assignor to Knowles Loom Works, Worcester, Mass. Shedding mechanism for looms	443,444	Dec. 23	2964	762 763	53	1865

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Hollingworth, James, Dobcross, county of York, England. Milling-machine	432,529	July 22	2321	599	52	473
Hollinshead, Reuben P., Morrison, Ill. Mustache-guard	435,748	Sept. 2	566	151	52	1484
Hollis, Washington, Pembroke, Ky. Power-transmitter	436,081	Sept. 9	1091	282	52	1590
Hollis, William J. (See Martin, Jerome W., assignor.)						
Hollister, George A., <i>et al.</i> (See Young, William F., assignor.)						
Hollister, Herschel H., and T. H. Hull, Scranton, Pa. Harrow	434,711	Aug. 19	1971	512	52	1159
Hollister, William. (See Wardman and Hollister.)						
Hollon, Daniel P. (See Reed, Francis O., assignor.)						
Holloway, Philip J., Winnington, England. Apparatus for replacing belts upon pulleys ..	440,862	Nov. 18	1975	509	53	1004
Holloway, Wilbur F., Cuyahoga Falls, Ohio. Folding book-holder	441,560	Nov. 25	3120	801	53	1230
Holloway, Wilbur F., Cuyahoga Falls, Ohio. Book-holder	441,561	Nov. 25	3121	802	53	1230
Hollsberg, H. F. (See Godfrey, William L., assignor.)						
Hollweide, Charles, assignor of one-half to A. S. Bridges, St. Louis, Mo. Pen-holder	437,361	Sept. 30	3194	833	52	2012
Holly, Samuel S. (See Forbes and Holly.)						
Holman, Frank, Brooklyn, N. Y. Reflector for incandescent lamps	422,592	Mar. 4	334	83	50	1200
Holman, Jesse T. (See Chambers, William H., assignor.)						
Holman, Theodore. (See Reiz, Nikolaus, assignor.)						
Holman, William L. (See Bates and Holman.)						
Holman, William L., assignor of one-half to T. A. Roberts and P. H. Sullivan, Renovo, Pa. } Brick-pressing machine	436,894	Sept. 23	2450	{ 640 641 }	{ 52	1864
Holmes, Arnold B. (See Gale, George F., assignor.)						
Holmes, Arnold B., Boston, and G. F. Gale, Winthrop, Mass. Key-socket or switch for incandescent electric lamps	427,514	May 6	732	183	51	957
Holmes, Benjamin F., assignor to American Live Stock Express Company, New York, N. Y. } Stock-car	422,413	Mar. 4	68	19	50	1150
Holmes, Booth & Haydens. (See Hayden and Dikeman, assignors.)						
Holmes, Booth & Haydens. (See Jenkins, Nicholas, assignor.)						
Holmes, Booth & Haydens. (See Limont, Alexander H., assignor.)						
Holmes, Booth & Haydens. (See Place, James F., assignor.)						
Holmes, Buckley H., and J. H. Ralston, Goshen, Ind. Type-cleaning device for type-writ- ing machines	443,830	Dec. 30	3594	924	53	1995
Holmes, Charles E., Haverhill, assignor of one-half to F. H. Page, Newtonville, Mass. } Lawn-mower	425,794	Apr. 15	2065	551	51	420
Holmes, Daniel M., Arlington, N. J. Archery-bow	428,912	May 27	2864	732	51	1407
Holmes, Edmund R., Tokio, Japan. Piano.	421,134	Feb. 11	1056	{ 271 272 }	{ 50	773
Holmes, Edward O., Malden, Mass. Steam-boiler furnace	428,609	May 27	2396	609	51	1316
Holmes, Fred H., Dedham, Mass. Spring for spring-beds and furniture	419,253	Jan. 14	912	241	50	195
Holmes, Frederick S. (See Hollar and Holmes.)						
Holmes, George A., Dayton, Ohio. Violin case	425,427	Apr. 15	1521	407	51	314
Holmes & Harris. (See Harris, William H., assignor.)						
Holmes, Helen V., Chicago, Ill. Toy gun	438,237	Oct. 14	867	234	53	172
Holmes, Herbert E., West Springfield, and C. F. Grosvenor, Ludlow, Mass. Electric safety device for elevators	443,282	Dec. 23	2709	695	53	1815
Holmes, Herbert E., West Springfield, and C. F. Grosvenor, Ludlow, Mass. Electric safety device for elevators	443,283	Dec. 23	2711	696	53	1815
Holmes, John, <i>et al.</i> (See Paul, George D., assignor.)						
Holmes, John M., Glens Falls, N. Y. Mop-head	420,798	Feb. 4	526	137	50	665
Holmes, M. V. B. (See Hood, Hiram Q., assignor.)						
Holmes, Milo P., San Francisco, Cal. Lifting-jack	434,712	Aug. 19	1972	512	52	1160
Holmes, S. Perry, and H. Sieben, Burlington, Iowa. Steam-boiler furnace	430,955	June 24	2001	{ 713 714 }	{ 51	2059
Holmes, Thomas, Brooklyn, N. Y. Embalming-syringe	425,134	Apr. 8	1076	286	51	217
Holmes, Thomas, Chelsea, Mich. Nut-cracker	425,428	Apr. 15	1522	407	51	314
Holmes, Thomas H., Philadelphia, Pa. Regulating-valve	436,177	Sept. 9	1242	324	52	1617
Holmes, Walter H. (See Swabel, William, assignor.)						
Holmes, Watson M., Hoosick Falls, N. Y. Grain-binder	422,414	Mar. 4	72	20, 21	50	1151
Holmes Wood Working Machinery Department, E. & B. (See Crafts, Francis H., as- signor.)						
Holmgreen, Richard J., Muskegon, Mich. Machine for turning broom-handles	422,053	Feb. 25	2361	{ 623 624 625 }	{ 50	1037
Holmgren, Peter F., Brooklyn, N. Y. Compound vibrating-piston engine	430,288	June 17	1852	454	51	1848
Holmgren, Peter F., assignor of one-half to J. Carlson, Brooklyn, N. Y. Vibrating-piston steam-engine	440,569	Nov. 11	1482	382	53	902
Holmquist, August, assignor to C. H. Durphy, Chicago, Ill. Horse-nail-finishing machine. ..	430,736	June 24	2559	{ 626 627 }	{ 51	1993
Holmquist, August, assignor to C. H. Durphy, Chicago, Ill. Milling-machine	442,681	Dec. 16	1640	422	53	1600
Holmquist, August, assignor to himself and C. H. Durphy, Chicago, Ill. Feed-screw and nut for the same	439,660	Nov. 4	51	14	53	616
Holmquist, Victor, Chicago, Ill. Extension-ladder	427,992	May 13	1468	372	51	1108
Holmquist, Victor, Chicago, Ill. Extension-ladder	431,353	July 1	487	121	52	99
Holms, Martin V. B. (See Hiron, John, assignor.)						
Holmström, Carl, and P. Nordeufelt, assignors to Maxim-Nordenfelt Guns and Ammuni- tion Company, (limited), Westminster, England. Quick-firing gun	427,081	May 6	85	23	51	828
Holsclaw, Wilford H., assignor to B. F. Avery & Sons, Louisville, Ky. Cotton-seed planter. ..	435,749	Sept. 2	567	152	52	1485
Holsclaw, Wilford H., assignor to B. F. Avery & Sons, Louisville, Ky. Combined cotton- seed and corn planter	435,750	Sept. 2	570	{ 152 153 }	{ 52	1485
Holsey, Theodric M. (See Lesueur and Holsey.)						
Holsinger, Samuel L. (See Bacon and Holsinger.)						
Holst, Martin, Chicago, Ill. Moistening device	422,078	Feb. 25	2400	634	50	1043
Holston, Frank V., Bayfield, Wis. Logging-railway	426,727	Apr. 29	3499	915	51	716
Holt, Benjamin, Stockton, Cal. Thrashing-machine	420,512	Feb. 4	121	30	50	587
Holt, Benjamin, Camden, N. J., and A. W. Wrightson, Philadelphia, Pa. Circular-knitting machine	424,787	Apr. 1	552	{ 147 148 }	{ 51	108
Holt, Frank P. (See Sleeper and Miller, assignors.)						
Holt, George A., deceased, Oakland, Cal.; M. E. Holt, administratrix. Electrical indicat- ing apparatus	418,871	Jan. 7	332	81	50	70
Holt, Joseph, Cradley Heath, county of Stafford, England, assignor to D. Round & Son, Cleveland, Ohio. Differential pulley-block	428,675	May 27	2499	635	51	1334
Holt, Mary E., administratrix. (See Holt, George A.)						
Holt, Noah W., Manchester, Mich. Separating-machine	422,785	Mar. 4	606	{ 155 156 }	{ 50	1253
Holt, Noah W., Manchester, Mich. Separating-machine	422,941	Mar. 11	880	230	50	1312

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Holt, Noah W., Manchester, Mich. Separating-machine.....	422,942	Mar. 11	881	{ 231 232 233 }	50	1312
Holt, Noah W., Manchester, Mich. Separating-machine.....	422,943	Mar. 11	887	{ 232 233 234 }	50	1313
Holt, Noah W., Manchester, Mich. Separator-machine.....	440,634	Nov. 18	1591	{ 409 410 411 }	53	932
Holt, Noah W., Manchester, assignor to G. T. Smith Middlings Purifier Co., Jackson, Mich. Roller-mill.....	440,157	Nov. 11	805	{ 209 210 }	53	777
Holt, Oliver G., Louisville, Ky. Ink for printing, lithographing, &c.....	424,556	Apr. 1	187	.....	51	38
Holt, Oliver G., Louisville, Ky. Printing, &c.....	424,557	Apr. 1	187	.....	51	39
Holt, Samuel J., and D. Kinney, West Plains, Mo. Rotary engine.....	436,663	Sept. 16	2016	{ 526 527 }	52	1773
Holt, Silas H., Afton, Iowa. Wagon body or rack elevator.....	435,497	Sept. 2	179	50	52	1410
Holt, Thomas, Midland Park, N. J. Terry-loom.....	441,303	Nov. 25	2727	707	53	1154
Holt, William, Milwaukee, Wis. Clothes-drier.....	441,562	Nov. 25	3122	802	53	1230
Holtcamp, Charles W. (See Bartlett, Leroy S., assignor.)						
Holth, Severin C. A., assignor to J. A. Gardner, Chicago, Ill. Tractor.....	437,759	Oct. 7	127	{ 38 39 40 41 42 43 }	53	27
Holtman, Nels A. (See Johnson and Holtman.)						
Holton, Clark E., et al. (See Sheets and Goforth, assignors.)						
Holton, Jay R., et al. (See Sheets and Goforth, assignors.)						
Holtzer, Charles W., Brookline, Mass. Annunciator.....	441,304	Nov. 25	2734	708	53	1155
Holtzman, James O., Hagerstown, Md. Horse-detacher.....	433,344	July 29	3583	924	52	724
Holz, Frederick, assignor to Cincinnati Milling Machine Company, Cincinnati, Ohio. Milling-machine.....	432,621	July 22	2445	{ 630 631 632 }	52	497
Holz, Frederick, assignor to Cincinnati Milling Machine Company, Cincinnati, Ohio. Cutter-grinder.....	439,154	Oct. 28	2225	{ 613 614 }	53	454
Holz, Louis F., assignor of one-half to J. M. Le Count, Hartford, Wis. Oar-lock.....	429,919	June 10	1225	303	51	1718
Holzmann, Ernest, assignor of one-half to A. H. Dirkes, New York, N. Y. Fishing-reel.....	422,786	Mar. 4	610	157	50	1253
Homan, Gilson. (See Snyder and Homan.)						
Homan, Nathaniel E., et al. (See Myers, Phares S., assignor.)						
Homan, William C., assignor to E. Miller & Company, Meriden, Conn. Lamp-standard.....	424,711	Apr. 1	425	112	51	84
Homan, William C., assignor to E. Miller & Company, Meriden, Conn. Wick-adjusting device.....	428,170	May 20	1724	436	51	1167
Homan, William C., assignor to E. Miller & Company, Meriden, Conn. Wick-adjusting device.....	434,929	Aug. 26	2333	616	52	1237
Homan, William C., assignor to E. Miller & Company, Meriden, Conn. Lamp-burner.....	442,524	Dec. 9	1398	357	53	1542
Home Novelty Manufacturing Company, et al. (See Webster, George L., assignor.)						
Homes, William, Malden, Mass. Machine for pressing brick.....	424,204	Mar. 25	2762	737	50	1684
Homolka, Benno, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Blue dye.....	418,916	Jan. 7	423	.....	50	88
Honsber, Edwin H. (See MacMurtrie and Honsber.)						
Honsaker, Peter J., Jr., and G. F. Seiser, Port Royal, Ky. Press.....	430,737	June 24	2564	628	51	1994
Honey, Horace D., assignor of one-half to E. N. Martineau, Holyoke, Mass. Book.....	436,758	Sept. 16	2168	570	52	1802
Honey, Horace D., assignor to National Blank Book Company, Holyoke, Mass. Invoice or scrap book.....	437,493	Sept. 30	3399	890	52	2055
Honeyman, Henry W., assignor to Granger Foundry and Machine Company, Providence, R. I. Tapping-machine.....	437,157	Sept. 23	2859	743	52	1942
Hood, George H. (See Seiders and Hood.)						
Hood, Harrison P., Indianapolis, Ind. Valve.....	434,598	Aug. 19	1767	462	52	1122
Hood, Harrison P., and F. A. Jacob, assignors to E. J. Robison, B. Carr, and H. M. La Follette, Indianapolis, Ind. Wire-stretcher.....	442,893	Dec. 16	2043	524	53	1677
Hood, Hiram Q., assignor of one-half to M. V. B. Holmes, Wellington, Kans. Washing-machine.....	420,011	Jan. 21	2047	540	50	426
Hood, John, and S. H. Reynolds, Boston, Mass. Dental bracket.....	420,069	Jan. 28	2139	566	50	453
Hoogerzeil, Peter, Jr., and G. F. Hinkley, Beverly, Mass. Stove-oven.....	418,721	Jan. 7	99	23	50	22
Hooker & Co., Truman. (See Oliver, Doctor F., assignor.)						
Hooker, James J., Cincinnati, Ohio. Wrapping-twine holder.....	428,561	May 20	2312	587	51	1281
Hooker, John D., Los Angeles, Cal. Means for coating metal pipes.....	425,675	Apr. 15	1904	.....	51	388
Hooker, William D., Chicago, Ill. Double-cylinder steam-engine.....	436,710	Sept. 16	2080	{ 547 548 }	52	1786
Hooks, Bentley R., Waco, Tex. Car-coupling.....	437,117	Sept. 23	2767	723	52	1927
Hooks, George W., Hook's Switch, Tex. Wrench.....	433,786	Aug. 5	520	135	52	857
Hoop, George D., Jackson, Ohio. Lightning-arrester.....	436,238	Sept. 9	1331	347	52	1634
Hoop, Robert, assignor of one-half to A. Scott, Wilmington, Ohio. Sweat-pad fastener.....	442,117	Dec. '9	771	208	53	1421
Hooper, George F. G. (See Holden and Brooke, assignors.)						
Hooper, Henry O., Eureka, Cal. Latch and lock combined.....	420,600	Feb. 4	245	65	50	612
Hooper, Henry O., San Francisco, Cal. Type-writing-machine attachment.....	427,688	May 13	998	251	51	1018
Hooper, Henry O., San Francisco, Cal. Lock.....	440,846	Nov. 18	1952	501	53	999
Hooper, Irvin G. (See Coolbaugh and Hooper.)						
Hooper, Josephus, Louisville, Ky. Window-bead fastener.....	443,852	Dec. 30	3616	{ 930 931 }	53	2000
Hooper, Thomas, and S. G. Moore, Birmingham, county of Warwick, England. Discharging pen-holder.....	420,799	Feb. 4	528	137	50	665
Hooper, Wilson & Co. (See Wilson, William R., assignor.)						
Hoopes, Clement R., Ogontz, Pa. Valve.....	435,630	Sept. 2	397	107	52	1449
Hoopes, Louis H. (See Mitchell, Joseph, assignor.)						
Hoops, Henry W., Jr., Brooklyn, N. Y. Channel-piece for cigars.....	428,394	May 20	2092	525	51	1240
Hoops, Henry W., Jr., Brooklyn, N. Y. Funnel.....	435,096	Aug. 26	2573	679	52	1283
Hoops, William, et al. (See Swegles, John, assignor.)						
Hoos, William L. (See Erny, Subers, and Hoos.)						
Hooton, Henry. (See Reynolds, Hooton, and Busby.)						
Hooton, James M., Avenger, Tex. Lumber-drier.....	420,686	Feb. 4	364	96	50	635
Hoover, Charles C., Ashland, Pa. Hinge for stove or other doors.....	442,376	Dec. 9	1161	302	53	1495
Hoover, Charles H., Galesburg, Ill. Dampening-machine.....	436,480	Sept. 16	1725	455	52	1719
Hoover, Elias W., Chicago, Ill. Dust-arrester.....	432,200	July 15	1824	469	52	370
Hoover & Gamble. (See Brown, Robert, assignor.)						
Hoover, Mollie E., et al. (See Arnold, Sidney, assignor.)						
Hoover, Walt. (See Edwards, Hiram, assignor.)						
Hoover, William, et al. (See Trump, John G., assignor.)						
Hope, Amabel G. E., Wayland, Mass. Table for berths of vessels.....	427,573	May 13	833	208	51	986

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Hope, John, Jr., Providence, R. I. Latch.....	431,845	July 8	1286	323	52	260
Hope, John H. (See Anderson and Hope.)						
Hope, John T. (See Hope, Luke J. and J. T.)						
Hope, John T. and L. J., and L. C. Alexander, Kansas City, Mo. Rotary fan for ventilation.	420,156	Jan. 28	2280	604	50	481
Hope, Luke J. (See Hope and Alexander.)						
Hope, Luke J. and J. T., Kansas City, Mo.; said Luke J. Hope assignor to said J. T. Hope. Refrigerator-car.....	434,388	Aug. 12	1425	374	52	1046
Hope, Samuel W., Dover, Del. Corn-harvester.....	423,766	Mar. 18	2111	557	50	1552
Hopedale Elastic Fabric Company. (See Lapworth, William, assignor.)						
Hopedale Machine Company. (See Whitmore, Fred A., assignor.)						
Hopkins, Albert N., Duluth, Minn. Car-coupling.....	429,920	June 10	1226	304	51	1718
Hopkins, Andrew J., Rochester, N. Y. Pump.....	433,406	July 29	3662	946	52	740
Hopkins, Cabel B., Louisville, Ky. Method of and means for sealing locks.....	442,049	Dec. 2	661	178 179	53	1392
Hopkins, Charles E., assignor of one-half to J. W. Sweely, Williamsport, Pa. Machine for sawing stereotype-plates.....	432,407	July 15	2125	546	52	425
Hopkins, Charles W., <i>et al.</i> (See Armington and Briggs, assignors.)						
Hopkins & Dickinson Manufacturing Company. (See Lincoln, Thomas, assignor.)						
Hopkins & Dickinson Manufacturing Company. (See Schade, John, assignor.)						
Hopkins, Frank T. (See Hogue, James W., assignor.)						
Hopkins, Harvey L., assignor to E. McCord, Chicago, Ill. Pitman-connection.....	421,715	Feb. 18	1890	496 497	50	940
Hopkins, Harvey L., assignor to C. Himrod, Chicago, Ill. Automatic adjuster for bearing-boxes.....	441,797	Dec. 2	265	71	53	1316
Hopkins, Ira K., Semper, Colo. Draft-equalizer.....	434,901	Aug. 19	2265	594	52	1218
Hopkins, James D., Midway, Ky. Sash-holder.....	421,714	Feb. 18	1890	496	50	940
Hopkins, John W., Seymour, Mo. Means for operating churns.....	422,217	Feb. 25	2615	692	50	1084
Hopkins, Leonard V., Maxwell, Ind. Bee-hive.....	427,993	May 13	1470	373	51	1108
Hopkins, Samuel S., <i>et al.</i> (See Armington and Briggs, assignors.)						
Hopkins, Stephen, Jr., Rome, N. Y. Lubricant.....	428,610	May 27	2397		51	1316
Hopkins, William E. (See Ruston, Hopkins, and Ruston.)						
Hopkins, William P., Catasauqua, Pa. Manufacturing iron.....	438,436	Oct. 14	1161	314	53	228
Hopkinson, Frederick and L. C., Doncaster, county of York, England. Velocipede.....	432,312	July 15	2000	511 512	52	401
Hopkinson, Leonard C. (See Hopkinson, Frederick and L. C.)						
Hoppe, Edward F. (See Knox, George F., assignor.)						
Hoppe, Otto. (See Bonhack and Hoppe.)						
Hopper, Henry S., Detroit, Mich. Air-brake mechanism.....	430,024	June 10	1394	347 348	51	1751
Hopper, Henry S., Detroit, Mich. Guard for lathes or other machinery.....	433,984	Aug. 12	813	212	52	923
Hopper, John L., Shelbina, Mo. Disintegrating refractory ores.....	437,990	Oct. 7	489		53	93
Hoppes, John J., Springfield, Ohio. System of purifying water.....	419,446	Jan. 14	1202	318	50	253
Hoppes, John J., Springfield, Ohio. Electric contact device.....	436,874	Sept. 23	2421	631 632	52	1858
Hopson, Richard C., Saginaw, Mich. Electric trolley switch and trip.....	442,623	Dec. 16	1558	403	53	1583
Hora, Frank, Odebolt, Iowa. Horse-collar fastening.....	426,501	Apr. 29	3154	829	51	650
Horan, John J., Long Island City, N. Y. Feed-regulator.....	420,385	Jan. 28	2631	698	50	544
Horan, Patrick H., Boston, Mass. Apparatus for cutting altar-bread or wafers.....	443,766	Dec. 30	3488	894	53	1974
Horen, Thomas F. (See Smith and Horen.)						
Horey, John, and C. Marsh, Rosendale, Wis. Land-roller.....	426,018	Apr. 22	2433	643	51	496
Horn, Brannen & Forsythe Manufacturing Company. (See Horn, Herman, assignor.)						
Horn, Herman, Philadelphia, Pa., assignor to Horn, Brannen & Forsythe Manufacturing Company, of Pennsylvania. Extension-chandelier.....	420,270	Jan. 28	2470	656	50	514
Horn, Thomas D. (See Fegeley, William A., assignor.)						
Horn, William H., Bellefontaine, Ohio. Cultivator and pulverizer.....	435,584	Sept. 2	316	88	52	1436
Hornal, Colin. (See Hornal, Peter and C.)						
Hornal, Peter and C., St. Louis, Mo. Car-door fastener.....	425,323	Apr. 8	1364	364	51	274
Hornbostel, Charles, Brooklyn, N. Y. Production of chlorine gas.....	423,868	Mar. 18	2263	597	50	1582
Horne, Augustus P. (See Piper, Orin, assignor.)						
Horne, John H., Lawrence, Mass. Paper-pulp-refining engine.....	428,913	May 27	2864	732	51	1407
Horne, John H., Lawrence, Mass. Mechanism for transmitting power.....	443,080	Dec. 16	2335	596	53	1735
Horne, Samuel E., assignor of three-fourths to L. F. Laing, W. W. Ogden, and S. M. Hay, Toronto, Ontario, Canada. Printer's galley.....	423,559	Mar. 18	1804	476	50	1494
Horne Vacuum Company. (See Horne, William L., assignor.)						
Horne, William L., Meriden, assignor to Horne Vacuum Company, Hartford, Conn. Alcoholic distillation.....	419,332	Jan. 14	1033		50	218
Horner, Charles H., Xenia, Ohio. Bridle-bit.....	442,266	Dec. 9	990	261	53	1464
Horner, Oscar A., assignor of one-half to R. B. Emerson, Eureka, Cal. Gun-sight.....	434,785	Aug. 19	2070	541	52	1180
Horner, Simpson R., <i>et al.</i> (See Kurtz, John A., assignor.)						
Hornish, Frank W., assignor to Mechanical Boiler Cleaner and Manufacturing Company, Mattoon, Ill. Boiler-cleaner.....	426,019	Apr. 22	2433	643 644	51	496
Horr, William W., Lansing, Mich. Attachment for pumps.....	426,814	Apr. 29	3629	947	51	741
Horr, William W., Lansing, Mich. Attachment for pumps.....	441,489	Nov. 25	3021	779	53	1210
Horral, William A., assignor to H. H. Hyatt, Washington, Ind. Treating wood and fiber.	443,238	Dec. 23	2646		53	1804
Horral, William A., assignor of two-thirds to J. C. Billheimer and F. M. Myers, Washington, Ind. Mail-bag fastener.....	435,895	Sept. 2	808	214	52	1531
Horrell, Leo F. (See Kelly and Horrell.)						
Horrocks, George, Tewksbury, assignor to Atherton Machine Company, Lowell, Mass. Opener and picker for cotton, &c.....	441,760	Dec. 2	210	55	53	1304
Horry, William S., New York, N. Y., and A. Kitson, assignors to Kitson Gaslight Improvement Company, Philadelphia, Pa. Carbureting-lamp.....	430,778	June 24	2638	647	51	2009
Horsey, George F., Utica, assignor, by mesne assignments, to A. Dolge, Dolgeville, N. Y. Manufacture of pads for cleaning and polishing the teeth.....	419,675	Jan. 21	1539	410	50	326
Horsfall, William, Leeds, county of York, England, assignor to W. Garlick, Jr., and W. B. Colville, Calcutta, India. Furnace.....	429,626	June 10	793	193	51	1635
Horsfall, William, Camp Road Mills, county of York, England, assignor to W. Garlick, Jr., and W. B. Colville, Calcutta, India. Furnace.....	435,837	Sept. 2	707	189	52	1512
Horsman, Edward I. (See Burge, John H. H., assignor.)						
Horsman, Edward I. (See Hales, Henry W., assignor.)						
Horsman, Edward I., Jr., Brooklyn, N. Y. Parlor-tennis.....	442,438	Dec. 9	1256	325	53	1514
Horstmann, Ferdinand O., assignor to himself and W. Horstmann, Philadelphia, Pa. Masquerade-suit.....	433,732	Aug. 5	430	110	52	839
Horstmann, Walter. (See Horstmann, Ferdinand O., assignor.)						
Hortman, Isaac A., Philadelphia, Pa. Brush attachment.....	428,491	May 20	2217	560	51	1262

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Horton, Charles B., Newark, N. Y. Shoe-fastening	439,661	Nov. 4	52	15	53	616
Horton, Erastus J., <i>et al.</i> (See Raymond, Silas H., assignor.)						
Horton, Hilon R., assignor of one-half to M. F. Williams, St. Louis, Mo. Friction-clutch pulley	428,048	May 13	1551	392	51	1124
Horton, James A., Reading, Mass. Box-stay machine	442,582	Dec. 9	1489	³⁸³ 384	53	1561
Horton, James A., Reading, Mass., assignor to C. F. Baker. Wire-nail machine	423,254	Mar. 11	1349	³⁵¹ 352	50	1400
Horton, James M., and M. M. Levison, Chicago, Ill. Velocipede-handle	421,277	Feb. 11	1259	325	50	811
Horton, James M., and M. M. Levison, Chicago, Ill. Velocipede-handle	421,936	Feb. 25	2205	577	50	1007
Horton, Nathan C. (See Graham, Thomas R., assignor.)						
Horton, Numon N., Kansas City, Mo. Velocipede	431,894	July 8	1354	342	52	273
Horton, Numon N., Kansas City, Mo. Bicycle	431,895	July 8	1355	³⁴² 343	52	273
Horton, Numon N., Kansas City, Mo. Vehicle-wheel	431,896	July 8	1356	343	52	274
Horton, Numon N., Kansas City, Mo. Bicycle	436,239	Sept. 9	1332	348	52	1635
Hosch, Ferdinand, Brooklyn, N. Y. Fur-robe-cleaning machine	418,842	Jan. 7	288	70	50	61
Hose, William T., assignor to L. Levi, New York, N. Y. Sewing-machine and plaiting attachment therefor	438,811	Oct. 21	1746	469	53	346
Hosea, Lewis M., Cincinnati, Ohio. Hydraulic valve	423,255	Mar. 11	1353	352	50	1401
Hosea, Lewis M., Cincinnati, Ohio. Hydraulic valve	423,256	Mar. 11	1356	353	50	1401
Hosea, Lewis M., Cincinnati, Ohio. Elevator-valve-controlling mechanism	430,125	June 17	1568	390	51	1794
Hosford, Thomas S., Highfield, county of Surrey, England. Boat-lowering apparatus	426,449	Apr. 29	3077	807	51	635
Hosier, Joshua R., Hampton, Va. Car-axle lubricator	427,994	May 13	1471	373	51	1108
Hosking, Alfred, Auckland, New Zealand. Tellurian	427,868	May 13	1279	324	51	1071
Hoskins, Clanmar P., <i>et al.</i> (See Backus, Clarence G., assignor.)						
Hoskins, William H. (See Cooley, Franklin S., assignor.)						
Hoskins, William S., Brookhaven, Miss. Wrench	419,254	Jan. 14	913	241	50	195
Hosmer, Frank H. (See Dowst and Hosmer.)						
Hosmer, James S., Gloversville, N. Y. Attaching reed-lining to hat-sweats	427,995	May 13	1472	374	51	1109
Hoss, Abraham D. (See Hoss, Leonidas R. and A. D.)						
Hoss, George W., Baldwin, Kans. Newspaper-file	426,272	Apr. 22	2800	736	51	571
Hoss, Leonidas R. and A. D., Deer Lodge City, Mont. Printer's galley	423,156	Mar. 11	1216	316	50	1375
Hossler, Latayette, <i>et al.</i> (See Richard, William, assignor.)						
Hostetler, Edward D., Goshen, Ind. Feed-roller mechanism	428,886	Oct. 21	1886	500	53	370
Hotaling, Ambrose, Brooklyn, N. Y. Door-opener	427,082	May 6	87	23	51	828
Hotchkiss, Wright S., Wichita, Kans. Concrete-mixing machine	441,563	Nov. 25	3124	⁸⁰² 803	53	1230
Hotchkiss, Albert G., New York, N. Y. Automatic lubricating apparatus for foil-mills	425,795	Apr. 15	2067	552	51	420
Hotchkiss, Benjamin B., deceased, Paris, France; M. H. Hotchkiss and W. C. Gulliver, administrators, and assignors to Hotchkiss Ordnance Company, London, England. Gun-carriage	428,209	May 20	1777	449	51	1177
Hotchkiss, Clarence F., Binghamton, N. Y. Carving-machine	441,087	Nov. 18	2340	⁶⁰⁵ 606	53	1075
Hotchkiss, Edward S. (See Morris, George M., assignor.)						
Hotchkiss, Frank S. (See Fishel and Hotchkiss.)						
Hotchkiss, Frederick G., Brooklyn, N. Y. Paper box	440,758	Nov. 18	1800	465	53	972
Hotchkiss, Joseph V., Jay, Ind. Pulling device	436,000	Sept. 9	961	251	52	1566
Hotchkiss, Maria H., <i>et al.</i> , administrators. (See Hotchkiss, Benjamin B.)						
Hotchkiss Ordnance Company. (See Hotchkiss, Benjamin B., assignor.)						
Hotchkiss Ordnance Company. (See Very, Edward W., assignor.)						
Hottel, Robert L., Cedarville, Cal. Middlings-purifier	432,876	July 22	2861	⁷³³ 734	52	577
Hottman, Charles W., assignor of two-thirds to J. Eppler and J. Klenk, Philadelphia, Pa. Mixing-machine	426,619	Apr. 29	3330	873	51	685
Houck, George O. (See Dice and Houck.)						
Houck, Lafayette, Birdsborough, Pa. Permutation-lock	429,092	May 27	3135	808	51	1459
Houck, Thomas J., assignor of one-half to J. T. Wood, Baltimore, Md. Electric communication with railway-trains	428,562	May 20	2313	⁵⁸⁷ 588	51	1281
Hough, Arthur H. (See Fitz Gerald and Hough.)						
Hough, Azel C., South Butler, N. Y. Automatic regulator for windmills	437,783	Oct. 7	168	52, 53	53	34
Hough, Jacob B., Waynesville, assignor of one-half to L. M. Barrett, Spring Valley, Ohio. Apparatus for burning liquid fuel	422,884	Mar. 4	785	²⁰⁰ 201	50	1286
Hough, John D., Lowville, N. Y. Spring-back for road-carts	427,083	May 6	87	24	51	829
Hough, William M., Upper Sandusky, Ohio. Filter	423,767	Mar. 18	2113	557	50	1552
Houghtaling, William, Bridgeport, Conn. Lathe	434,930	Aug. 26	2333	617	52	1237
Houghton, Charles, trustee. (See Butler, Warren T., assignor.)						
Houghton & Dutton. (See Jeffery, Edwin A., assignor.)						
Houghton, Edward L., <i>et al.</i> (See Beairto, Henry B., assignor.)						
Houghton, Hadwin, New York, N. Y. Combined cap and plug	431,056	July 1	43	10	52	10
Houghton, Henry S., Coldbrook Springs, Mass. Heating-furnace	438,887	Oct. 21	1887	500	53	371
Houghton, John Q. A., Baltimore, Md. Button-hole sewing-machine	438,812	Oct. 21	1748	⁴⁷⁰ 471 472	53	346
Houghton, Lewis T., and A. A. Barker, Worcester, Mass. Snow-guard	432,408	July 15	2127	546	52	426
Houghton, Samuel H., assignor of one-half to Gale & Dickson, Harvard, Mass. Egg-carrier	429,854	June 10	1127	279	51	1699
Houghton, Stephen C., assignor of one-half to L. C. Branch, San Francisco, Cal. Adjustable seat-back	439,403	Oct. 28	2703	720	53	532
Houghton, Thomas, assignor to J. H. Bromley, Philadelphia, Pa. Reflector	427,996	May 13	1473	374	51	1109
Houk, Robert H., Morris, Ill. Tanner's tool	440,240	Nov. 11	937	241	53	803
Houlahan, Thomas, St. Louis, Mo. Can filling and packing machine	424,885	Apr. 1	697	¹⁸⁴ 185	51	134
Houlehan, James, Chicago, Ill. Type-writing machine	442,318	Dec. 9	1073	281	53	1478
Houlehan, James, Chicago, Ill. Type-writing machine	442,583	Dec. 9	1492	384	53	1562
House, Francis E. (See Campbell and House.)						
House, James A., Bridgeport, Conn. Punch and making the same	430,315	June 17	1892	464	51	1857
House, James A., Bridgeport, Conn. Embroidering attachment for sewing-machines	435,062	Aug. 26	2523	666	52	1273
House, James A., Bridgeport, Conn. Check-punch	435,063	Aug. 26	2524	⁶⁶⁶ 667	52	1273
House, James A., Bridgeport, Conn. Manufacture of dies	443,767	Dec. 30	3490	894	53	1974
House, John, assignor of three-fourths to W. H. Waddell, Lexington, C. L. Cooke, W. L. Walters, Sr., and W. L. Walters, Jr., W. T. Patton, I. N. McFarland, and D. E. Everitt, Staunton, Va. Scenic advertising medium	435,064	Aug. 26	2528	668	52	1274
House, John H., Wilton, N. C. Mechanism for operating churns	440,158	Nov. 11	809	210	53	778

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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House, Reuben E., Anstin, Pa. Curtain-bracket	434,665	Aug. 19	1892	494	52	1146
Houser, William M., St. Louis, Mo. Clip for stubs	421,278	Feb. 11	1259	325	50	811
Houston, Calch F. (See Wood and Houston.)						
Houston, George A., Beloit, Wis. Car-beater	432,238	July 15	1877	483	52	379
Houston, George A., Beloit, Wis. Car-beater	432,239	July 15	1879	483	52	380
Houston, James D., Minerva, Ohio. Automatic drinking-fountain	437,031	Sept. 23	2647	692	52	1903
Houston, John, assignor to Burr & Houston Company, Brooklyn, N. Y. Radiator	431,975	July 8	1472	372	52	297
Houston, John, assignor to Burr & Houston Company, Brooklyn, N. Y. Forming radiators	431,976	July 8	1474	373	52	297
Houston, Samuel F. (See McNulty, Jefferson D., assignor.)						
Houze, Luke, assignor of two-thirds to C. Foster and L. Mambourg, Fostoria, Ohio. Furnace for melting glass	434,184	Aug. 12	1118	290	52	985
Houze, Luke, assignor of two-thirds to C. Foster and L. Mambourg, Fostoria, Ohio. Glass-melting furnace	434,931	Aug. 26	2335	617	52	1238
Hovell, Thomas M., Elstree, county of Herts, England. Animal-trap	426,668	Apr. 29	3396	892	51	697
Hover, William, Freeport, Ill. Lock	426,273	Apr. 22	2801	736	51	572
Hovermale, Jefferson D., assignor of one-half to J. S. Sharp, Sharpsburg, Ky. Door-spring	435,498	Sept. 2	181	50	52	1410
Hovey, Byron S., and W. H. Drake, Stockville, Nebr. Churn	425,429	Apr. 15	1522	408	51	314
Hovey, Joseph, Florida, Ohio. Swinging straw-stacker	420,301	Jan. 28	2512	666	50	522
How, Fred B., Boston, Mass. Cylinder-cock	434,870	Aug. 19	2194	575	52	1204
Howard, Albert. (See Carr, Rufus B., assignor.)						
Howard, Alfred E., Burnside, Conn. Checkrein attachment	428,914	May 27	2866	733	51	1407
Howard, Benjamin C., Baltimore, Md. Electric beater	427,574	May 13	833	208	51	966
Howard, Byron S., Winchester, N. H. Potato-digger	439,758	Nov. 4	187	49, 50	53	645
Howard, Charles D., assignor to Howard Furnace Company, Syracuse, N. Y. Draft-regulator	439,595	Oct. 28	2983	792	53	587
Howard, David R., Baltimore, Md. Corn-harvester	434,273	Aug. 12	1262	327	52	1012
Howard, Elijah L., Hingham, assignor to Corrugated Wire Fastening Company, Boston, Mass. Pointing mechanism for nailing-machines	426,274	Apr. 22	2802	736	51	572
Howard, Elijah L., Hingham, assignor to Corrugated Wire Fastening Company, Boston, Mass. Driving-spring for nailing-machines	434,274	Aug. 12	1263	398	52	1012
Howard Furnace Company. (See Howard, Charles D., assignor.)						
Howard, Harlan S., Madison, Wis. Seeding-machine	427,420	May 6	599	149	51	930
Howard, Harlan S., Madison, Wis. Pulverizer	440,036	Nov. 4	627	166	53	730
Howard, Harlan S., Madison, Wis. Disk barrow	442,050	Dec. 2	663	179	53	1393
Howard, Henry, Phenix, R. I. Ball-bearing	439,877	Nov. 4	372	96	53	680
Howard, Hiram. (See Whitney and Howard.)						
Howard, Hugh, Henryellen, Ala. Automatic pump-governor	420,687	Feb. 4	365	97	50	635
Howard, James, New York, N. Y. Valve for controlling pressure	431,660	July 8	980	244	52	203
Howard, John F., et al. (See Strang, Lew K., assignor.)						
Howard, John H., Jr., Chicago, Ill. Picture-frame	433,864	Aug. 5	633	164	52	880
Howard, John W., et al. (See Solano, Renaldo, assignor.)						
Howard, Joseph P., New York, N. Y. Bangle	428,339	May 20	1995	502	51	1220
Howard, Josephus, Boston, Mass. Nut-lock	433,128	July 29	3282	845	52	662
Howard, Lyman D., et al. (See Rhoads, Frank B., assignor.)						
Howard Manufacturing Company. (See Thompson, Walter C., assignor.)						
Howard, Mendel, New York, N. Y., assignor of one-half to J. E. Campbell, Hamilton, Ohio, and Q. Corwine, New Rochelle, N. Y. Matrix-making machine	441,564	Nov. 25	3128	803	53	1231
Howard, Octave P., Rockland, Me. Bush-hammer	430,649	June 24	2415	588	51	1965
Howard, Ryker J., assignor of one-half to J. W. Tamplin, La Junta, Colo. Tender-gato	422,527	Mar. 4	234	61	50	1180
Howard, Samuel. (See Hall, Charles, assignor.)						
Howard & Son. (See Howard, Stephen C., assignor.)						
Howard & Son. (See Whiting, William F., assignor.)						
Howard & Son. (See Whitney and Howard, assignors.)						
Howard, Stephen C., assignor to Howard & Son, Providence, R. I. Button	427,172	May 6	230	58	51	857
Howard, Thomas, et al. (See McArthur, Peter, assignor.)						
Howard Watch and Clock Company, E. (See Learned, William B., assignor.)						
Howard, Wilbur W. (See Chater, William, assignor.)						
Howard, William H., Lowell, Mass., assignor to Waukenhose Company, of Maine. Board for finishing stockings	425,796	Apr. 15	2068	552	51	421
Howatt, David E., Hyde Park, N. Y. Water-beater or low-pressure steam-boiler	431,354	July 1	488	121	52	99
Howatt, David E., Hyde Park, N. Y. Sectional water-beater	431,355	July 1	490	121	52	100
Howbridge, Charles, Friendship, N. Y. Auger-handle	435,751	Sept. 2	573	153	52	1485
Howcroft, Frederick, London, England. Message-cabinet	442,439	Dec. 9	1257	325	53	1514
Howe, Audley B., et al. (See Behemerith, Lewis E., assignor.)						
Howe, Benjamin J. C., assignor to Howe Pump and Engine Company, Indianapolis, Ind. Fire-extinguisher	443,983	Dec. 30	3829	975	53	2039
Howe, C. Fred. (See Ricker, Reuben H., assignor.)						
Howe, Charles W. (See Goodrich, George, assignor.)						
Howe, Edwin N., Forest, Ohio. Means for printing backgrounds	427,766	May 13	1132	284	51	1044
Howe, Edwin N., Forest, Ohio. Background for photographs	439,512	Oct. 28	2864	761	53	563
Howe, Eugene L., Cleveland, Ohio. Window-ventilator	424,113	Mar. 25	2642	704	50	1661
Howe, Eugene L., Cleveland, Ohio. Manufacture of breast-strap slides	441,842	Dec. 2	335	89	53	1329
Howe, Eugene L., assignor to Eberhard Manufacturing Company, Cleveland, Ohio. Carriage-step	419,198	Jan. 14	830	219	50	178
Howe, Eugene L., assignor to Eberhard Manufacturing Company, Cleveland, Ohio. Multiple metal loop for harness	419,951	Jan. 21	1956	515	50	409
Howe, Eugene L., assignor to Eberhard Manufacturing Company, Cleveland, Ohio. Clip-cockeye	434,045	Aug. 12	886	274	52	938
Howe, Frank P. (See Povall and Howe.)						
Howe, Frank W., Petoskey, Mich. Universal exercising-machine	435,180	Aug. 26	2694	711	52	1306
Howe, George H., Hoosick Falls, N. Y. Band-twister	430,650	June 24	2416	583	51	1965
Howe, Hezekiah, Cortland, N. Y. Heating and ventilating range	419,125	Jan. 7	708	187	50	149
Howe, Jasper, Tacoma, Wash. Shipping receipt-book	436,786	Sept. 23	2220	585	52	1820
Howe, John B., Danbury, Conn. Mechanism for ironing hat-brims	419,255	Jan. 14	913	242	50	195
Howe, Oziel A., Chicago, Ill. Invalid-bedstead	426,669	Apr. 29	3398	893	51	698

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Howe, Patrick, assignor to I. Fenno, R. D. Goodwin, C. M. Blake, Boston, A. K. Tolman, Newton, and H. G. Hartshorne, Wakefield, Mass. Cloth-cutting machine.....	423,056	Mar. 11	1062	275	50	1345
Howe, Patrick, assignor to I. Fenno, R. D. Goodwin, C. M. Blake, Boston, A. K. Tolman, Newton, and H. G. Hartshorne, Wakefield, Mass. Cloth-cutting machine.....	441,243	Nov. 25	2629	{ 681 682 }	{ 53 53 }	{ 1136 1136 }
Howe Pump and Engine Company. (See Howe, Benjamin J. C., assignor.)						
Howe Scale Company, of 1886. (See Pearsons, Fillmore A., assignor.)						
Howe, Thomas B., Scranton, Pa. Bottle-fastening.....	422,415	Mar. 4	76	21	50	1151
Howe, Thomas B., Scranton, Pa., assignor of one-half to L. B. Halsey, New York, N. Y. Butter-jar.....	423,928	Mar. 25	2369	630	50	1669
Howe, Warren B., Chicago, Ill. Process of and apparatus for applying paraffine to paper.....	437,435	Sept. 30	3309	864	52	2036
Howe, Willis C. (See Hanck, Thomas, assignor.)						
Howe, Willis C., Evansville, Ind. Spindle for vehicles.....	426,815	Apr. 29	3631	947	51	742
Howe, Willis C., Evansville, Ind. Curtain-fixture.....	440,742	Nov. 18	1763	454	53	966
Howell, Elizabeth E., Maryville, Mo. Accordion-plaiting machine.....	422,787	Mar. 4	612	157	50	1254
Howell, Frederick W., assignor to M. T. Howell, Buffalo, N. Y. Roller-mill.....	439,596	Oct. 28	2984	{ 792 793 }	{ 53 53 }	{ 587 587 }
Howell, Frederick W., assignor to M. T. Howell, Buffalo, N. Y. Cockle-separator.....	442,051	Dec. 2	668	{ 180 181 }	{ 53 53 }	{ 1393 1393 }
Howell, George B., Philadelphia, Pa. Water-closet.....	430,855	June 24	2755	675	51	2031
Howell, George W., assignor to Howell Wheel Company, Covington, Ky. Wheel.....	420,343	Jan. 28	2569	682	50	533
Howell, Herbert, Boston, Mass. Caster.....	426,020	Apr. 22	2435	644	51	497
Howell, John B., Locust, Nebr. Bed-slat support.....	434,132	Aug. 12	1043	269	52	969
Howell, John W., Newark, assignor to Edison Lamp Company, Harrison, N. J. Electrical indicator.....	435,896	Sept. 2	809	215	52	1531
Howell, Margaret T. (See Howell, Frederick W., assignor.)						
Howell, Morgan H., and E. C. Simmons, Dennings, Pa. Molding-machine for plastic material.....	419,676	Jan. 21	1540	{ 410 411 }	{ 50 50 }	{ 326 326 }
Howell Wheel Company. (See Howell, George W., assignor.)						
Howell, William G., Philadelphia, Pa. Combined cold-rolling and polishing machine.....	424,985	Apr. 8	856	227	51	174
Howell, William G., Philadelphia, Pa. Hollow shafting.....	425,324	Apr. 8	1365	364	51	274
Howell, William G., Philadelphia, Pa. Mill for rolling wide bars or plates.....	425,880	Apr. 15	2197	584	51	444
Howell, William J., Flushing, N. Y. Apparatus for producing indented type-impressions.....	423,688	Mar. 18	2001	{ 527 528 529 }	{ 50 50 }	{ 1532 1532 1532 }
Howell, William J., Flushing, N. Y. Apparatus for producing indented type-impressions.....	423,689	Mar. 18	2008	{ 529 530 531 }	{ 50 50 }	{ 1533 1533 1533 }
Howell, William J., Detroit, Mich. Book-holder for musical instruments.....	431,356	July 1	492	122	52	100
Howells, William H., Bridgeport, Ohio. Apparatus for reducing railway-rails.....	425,073	Apr. 8	987	265	51	199
Howells, William H., Bridgeport, Ohio. Reducing railway-rails.....	425,881	Apr. 15	2198	{ 584 585 }	{ 51 51 }	{ 444 444 }
Howenstein, Eugene M., Nappanee, Ind. Thill-coupling.....	423,892	Mar. 18	2301	607	50	1589
Hoyer, J. M., Jr. (See Hurd, George H., assignor.)						
Hoves, McIntosh, et al. (See Lanbo, Godfried, assignor.) (Reissue)						
Hoves, Simeon. (See Bailey, Edgar G., assignor.)						
Howey, William J., New York, N. Y. Electric detecting apparatus for coin-actuated boxes.....	420,070	Jan. 28	2141	566	50	453
Howieson, Peter, assignor of one-half to S. S. Whittelsey, Malone, N. Y. Producing cylindrical surfaces.....	439,819	Nov. 4	250	71	53	662
Howland, Ephraim, Pontiac, Mich. Portable steam-engine.....	443,481	Dec. 23	3032	779	53	1878
Howland, George B., Pontiac, Ill. Grain-meter.....	429,589	June 3	738	178	51	1614
Howland, George B., Pontiac, Ill. Gate for swinging-bridge approaches.....	434,932	Aug. 26	2336	617	52	1238
Howland, Oliver A., Toronto, Ontario, Canada. Store-service apparatus.....	425,430	Apr. 15	1524	408	51	314
Howland, Samuel H., New York, N. Y. Heel-gouging machine.....	433,468	Aug. 5	47	15	52	766
Howland, William H., Bergenfield, N. J. Crushing and pulverizing machine.....	434,786	Aug. 19	2070	541	52	1180
Howser, Henry J., Daley, Mich. Fence-post.....	429,627	June 10	795	194	51	1635
Hoxie, Benjamin W., Hartford, Conn., assignor of one-half to L. A. Hoxie, Buckingham, Conn. Blind-stop.....	430,956	June 24	2903	714	51	2059
Hoxie, Lydia A. (See Hoxie, Benjamin W., assignor.)						
Hoy, Albert H., Racine, Wis. Galvanic battery.....	441,843	Dec. 2	337	90	53	1329
Hoy, Philo E. (See Flora and Hoy.)						
Hoyer, Margaret, Rixford, Pa. Baby-walker.....	443,853	Dec. 30	3617	931	53	2000
Hoyle, Henry. (See Whitley, Thomson, and Hoyle.)						
Hoyle, John V. B., et al. (See Peters, Charles C., assignor.)						
Hoyle, Joshua, and J. Harrison, Oldham, England. Speed-governor.....	439,513	Oct. 28	2865	762	53	563
Hoyt, Adrian H., Manchester, N. H., assignor, by mesne assignments, of one-half to Whitney Electric Manufacturing Company, Columbus, Ohio. Indicatorium.....	422,885	Mar. 4	786	201	50	1286
Hoyt Brim Shaping Company. (See Hoyt, Lucius H., assignor.)						
Hoyt, Charles N., Brooklyn, N. Y. Game apparatus.....	441,099	Nov. 18	2359	{ 611 612 }	{ 53 53 }	{ 1079 1079 }
Hoyt, Charles N., Brooklyn, assignor to McLoughlin Brothers, New York, N. Y. Game.....	436,310	Sept. 9	1434	374	52	1656
Hoyt, Clarence P., Canon City, Colo. Velocipede.....	424,986	Apr. 8	857	227	51	174
Hoyt, Dennis A., St. Cloud, Minn. Lawn-sprinkler.....	437,118	Sept. 23	2769	723	52	1927
Hoyt, Dennis A., St. Cloud, Minn. Lawn-sprinkler.....	440,159	Nov. 11	810	210	53	778
Hoyt, Edwin, Jr., Grand Rapids, Mich. Book-case.....	433,345	July 29	3584	924	52	724
Hoyt, Fred J., Chicago, Ill. Coin and check counter.....	420,271	Jan. 28	2472	656	50	515
Hoyt, Fred J., Chicago, Ill. Railway-tie.....	423,929	Mar. 25	2370	630	50	1609
Hoyt, Fred J., Chicago, Ill. Railway-switch mechanism.....	431,357	July 1	494	{ 122 123 }	{ 52 52 }	{ 100 100 }
Hoyt, Frederick J., Chicago, Ill. Car-axle.....	420,624	Feb. 4	293	75	50	619
Hoyt, John C., Utica, N. Y. Toy.....	440,160	Nov. 11	811	210	53	778
Hoyt, Lewis S., Boston, Mass. Adjustable trolley and guard for electric wires.....	440,106	Nov. 4	715	190	53	748
Hoyt, Lucius H., assignor to Hoyt Brim Shaping Company, Danbury, Conn. Machine for shaping hat-brims.....	430,523	June 17	2200	541	51	1916
Hoyt, Lucius H., assignor to Hoyt Brim Shaping Company, Danbury, Conn. Apparatus for shaping hat-brims.....	431,228	July 1	298	74	52	60
Hoyt, Montville, Jamaica, N. Y. Pedal-bar for velocipedes.....	439,779	Nov. 4	222	58	53	652
Hoyt, Montville, assignor to himself and G. R. Bidwell, Jamaica, N. Y. Handle for velocipedes.....	436,978	Sept. 23	2572	672	52	1887
Hoyt, Will F., Dowagiac, Mich. Wheel-bearing.....	442,118	Dec. 9	772	208	53	1421
Hoyt, William E. (See Madison, Frank S., assignor.)						
Hubbatt, William, North Platte, Nebr. Fire-escape.....	432,877	July 22	2863	734	52	577
Hubbard, Arthur O., assignor to S. S. Hunter, Parker, Minn. Wheel.....	435,358	Aug. 26	2980	790	52	1358
Hubbard, Frank G., Milwaukee, Wis. Lubricator.....	442,624	Dec. 16	1559	403	53	1584
Hubbard, George K., Fort Wayne, Ind. Section-press.....	430,475	June 17	2128	523	51	1902

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
Hubbard, George M., assignor to W. and E. T. Fitch, New Haven, Conn. Buckle-guard.	421,716	Feb. 18	1893	497	50	940
Hubbard, George M., assignor to W. & E. T. Fitch, New Haven, Conn. Snap-hook	437,991	Oct. 7	490	139	53	93
Hubbard, George M., assignor to W. & E. T. Fitch, New Haven, Conn. Snap-hook	438,375	Oct. 14	1074	293	53	212
Hubbard, George W., Windsor, Vt. Nippers	441,844	Dec. 2	339	90	53	1330
Hubbard, Henry, Barnard, Mo. Automatic stock-waterer.	436,083	Sept. 9	1092	282	52	1590
Hubbard, Henry H., <i>et al.</i> (See Abshagen, Ernest, assignor.)						
Hubbard, Henry M., <i>et al.</i> (See Abshagen, Ernest, assignor.)						
Hubbard, John. (See Miesse, Americus, assignor.)						
Hubbard, Jobu U., Oakland, Me. Machine for forming ax-poles	427,689	May 13	999	251	51	1018
Hubbard, Moses G., Philadelphia, Pa. Torsion-spring	423,157	Mar. 11	1217	317	50	1375
Hubbard, Moses G., Philadelphia, Pa. Car-truck	423,158	Mar. 11	1218	317	50	1375
Hubbard, Moses G., Chicago, Ill. Vehicle-spring	423,159	Mar. 11	1220	318	50	1376
Hubbard, Walter. (See Reast, Frederick, assignor.)						
Hubbard, William H. (See Macumar, William, assignor.)						
Hubbard, William H., <i>et al.</i> (See Abshagen, Ernest, assignor.)						
Hubbell, Charles J., New York, N. Y. Galvanic battery	435,346	Aug. 26	2959	785	52	1354
Hubbell, Harvey, Bridgeport, Conn. Roll-paper holder and cutter	424,788	Apr. 1	556	148	51	109
Hubbell, James D. (See Ward, William M., assignor.)						
Hubbell, Martin, Mount Kisco, N. Y. Metal railway-tie	438,583	Oct. 14	1371	372	53	271
Hubbell, Myron R., Wolcott, Vt. Car-coupling	432,830	July 22	2799	715 716	52	564
Hubbs, Charles L., <i>et al.</i> (See Bibikov, Nicholas A., assignor.)						
Hubbs, Charles L., <i>et al.</i> (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Hubel, Frederick A. (See Reinhold, Frank J., assignor.)						
Huber, Berthold, assignor to Huber Printing Press Company, Taunton, Mass. Cushioning apparatus for printing-presses	420,012	Jan. 21	2048	540	50	426
Huber, Berthold, assignor to Huber Printing Press Company, Taunton, Mass. Cylinder printing-press	432,800	July 22	2760	706	52	556
Huber, Edward, Marion, Ohio. Truck for cars	422,079	Feb. 25	2401	635	50	1044
Huber, Edward, Marion, Ohio. Lubricator	427,575	May 13	835	209	51	986
Huber, Edward, Marion, Ohio. T-bolt	438,161	Oct. 14	1753	206	53	151
Huber, Joseph H., Greensburg, Pa. Shade for incandescent electric lights	419,524	Jan. 14	1306	349	50	274
Huber, Louis C., Louisville, Ky. Carburetor	423,257	Mar. 11	1357	353	50	1402
Huber Printing Press Company. (See Huber, Berthold, assignor.)						
Hubinger, John C., Keokuk, Iowa. Apparatus for heating water and generating steam by electricity	421,498	Feb. 18	1575	407	50	879
Hubinger, John C., Keokuk, Iowa. Heating water and generating steam by electricity	421,499	Feb. 18	1578	408	50	879
Hubler, Piatt W. (See Gaither, Charles T., assignor.)						
Hübner, Arthur. (See Hübner, Otto and A.)						
Hübner, Emil, New York, N. Y. Bolt-heading device	427,324	May 6	450	116	51	900
Hübner, Otto and A., Breslau, Germany. Hat-sweat	433,985	Aug. 12	814	212	52	923
Huck, Andrew, Lowell, Ohio. Scythe	437,346	Sept. 30	3154	825	52	2005
Hucke, William P., <i>et al.</i> (See Barker, Henry C., assignor.)						
Huckins, Frank S., assignor of one-half to J. N. Burton, Dixon, Mo. Portable-fence machine	420,800	Feb. 4	529	137	50	665
Huckins, Irving W., Philadelphia, Pa. Envelope-blank-gumming machine	434,446	Aug. 19	1535	400 401	52	1075
Huddleston, Harry, Liberty, Ind. Wheel-hub	426,816	Apr. 29	3632	947	51	742
Hudelson, John W., Knightstown, Ind. Gate	433,346	July 29	3585	924	52	725
Hudler, Robert, Allegheny, Pa. Lightning-arrester for fire-alarm boxes	437,397	Sept. 30	3243	845	52	2022
Hudler, Charles L., Hermitage, Mo. Swinging gate	436,421	Sept. 16	1630	420	52	1701
Hudnut, Benjamin G., Terre Haute, Ind. Corn-product	430,289	June 17	1854	455	51	1849
Hudnut, Benjamin G., Terre Haute, Ind. Flaked corn product	430,290	June 17	1855	455	51	1849
Hudson, Charles E., Leominster, Mass. Tool for fastening hose to couplings	420,272	Jan. 28	2473	657	50	515
Hudson, Charles E., Upton, county of Essex, England. Feed-water heater	426,123	Apr. 22	2554	679	51	526
Hudson, Emma C., Seattle, Wash. Slate-sponge	433,787	Aug. 5	522	136	52	858
Hudson, James, Newtown, Ind. Device for plastering	422,528	Mar. 4	235	61	50	1181
Hudson, James A., trustee. (See Hill, Rowland, Jr., assignor.)						
Hudson, John E., Cayuga, N. D. Harvester-reel	432,048	July 15	1592	407	52	325
Hudson, Orvis D., Minneapolis, Minn. Clothes-wringer	425,074	Apr. 8	980	265	51	199
Hudson, Richard, assignor of one-half to J. R. Galloway, Washington, D. C. Shutter-bower	432,801	July 22	2761	707	52	556
Hudson, William E., assignor of one-half to E. Jackson, Washington, D. C. Harness-tug	428,915	May 27	2867	733	51	1408
Hueffelmann, Henry W. (See Requarth and Hueffelmann.)						
Huehn, Frederick A., Chicago, Ill. Combination match-safe	419,952	Jan. 21	1956	515	50	409
Huey, Vernon C., Reading Centre, N. Y. Fence-post	430,126	June 17	1570	390	51	1795
Hufey, Robert P., Miles City, Mont. Endless-chain water-elevator	427,997	May 13	1475	374	51	1109
Huff, Andrew D., Denver, assignor of one-fourth to A. B. Case, Leadville, Colo. Revolving fortification for coast defense	435,631	Sept. 2	398	107	52	1450
Huff, Charles. (See Schneider, Hippolyte, assignor.)						
Huff, Charles D., Dallas, Pa. Thill-coupling	433,347	July 29	3586	925	52	725
Huff, Orison, Boston, assignor to L. Heath, Revere, Mass. Reading-glass	439,514	Oct. 28	2866	762	53	563
Huffman, Hiram, Arcadia, Ohio. Fence	425,882	Apr. 15	2200	585	51	445
Huffman, Joseph. (See Pike and Huffman.)						
Huffman, Orlando, Friend, Nebr. Barbed metallic fence	442,525	Dec. 9	1400	357	53	1543
Huffman, Samuel, Niota, Kans. Fly-trap	438,108	Oct. 7	673	183	53	130
Hufford, Frank L., Arcata, Cal. Ax-head	424,205	Mar. 25	2764	737	50	1685
Huger & Hoffmann. (See Plaul, Oscar, assignor.)						
Huggin, Benjamin B. (See Garrett and Huggin.)						
Hughes, Albert J. and W. J., Lisbon, N. D. Hay-loader	433,865	Aug. 5	634	164 165	52	881
Hughes, Charles D., assignor to A. S. French, Brooklyn, N. Y. Brush-making machine	429,921	June 10	1227	304	51	1719
Hughes, Charles D., assignor to A. S. French, Brooklyn, N. Y. Brush	435,838	Sept. 2	708	189	52	1512
Hughes, Edward W. M., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Metallic door	420,513	Feb. 4	122	30	50	587
Hughes, Fred C., Detroit, Mich. Telephone-support	437,927	Oct. 7	339	110	53	74
Hughes, George H., <i>et al.</i> (See Hughes, Willard C., assignor.)						
Hughes, George M., Troy, Ohio. Guide for spring-bolsters	429,449	June 3	524	126	51	1573
Hughes, Henry A., Rio Grande, N. J. Diffusion for sorghum-cane, &c	423,930	Mar. 25	2370	631	50	1609
Hughes, Henry A., Rio Grande, N. J. Swinging crane	431,116	July 1	125	32	52	27
Hughes, Henry A., Rio Grande, N. J. Shredding apparatus for cane	443,522	Dec. 30	3091	797	53	1899
Hughes, Henry A., Rio Grande, N. J. Shredding apparatus for cane, &c	443,523	Dec. 30	3092	797	53	1899
Hughes, James, <i>et al.</i> (See Baldwin, George E. D., assignor.)						
Hughes, James, Bridgeport, Conn. Car-coupling	429,194	June 3	134	33	51	1496
Hughes, John Z., Mahanoy City, Pa. Bottle-stopper	436,058	Sept. 9	1050	273	52	1583

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Hughes, Martin B., <i>et al.</i> (See Norton, James W., assignor.)						
Hughes, Patrick K., Wilkes-Barré, Pa. Machine for turning axles	442,119	Dec. 9	773	{ 208 209 }	53	1421
Hughes, Samuel, Charleston, S. C. Piston-rod packing	423,160	Mar. 11	1321	318	50	1376
Hughes, Samuel, Charleston, S. C. Grinding-mill	438,723	Oct. 21	1619	435	53	321
Hughes, Samuel, Charleston, S. C. Grinding-mill	438,729	Oct. 21	1622	{ 435 436 }	53	322
Hughes, Samuel, Lindsay, Ontario, Canada. Ventilating railway-cars and carriages	433,942	Aug. 12	748	195	52	913
Hughes, Smith E., assignor of one-half to M. D. Baldy, Philadelphia, Pa. Air-pumping apparatus	423,768	Mar. 18	2114	558	50	1552
Hughes, Thomas P. (See Felton, Charles, assignor.)						
Hughes, Willard C., assignor of two-thirds to J. Wicks and G. H. Hughes, Utica, N. Y. Flushing device for water-closets, &c.	434,020	Aug. 12	853	225	52	931
Hughes, William B., Philadelphia, Pa. Mechanism for supporting and moving riveting-machines	423,428	Mar. 18	1616	{ 424 425 }	50	1459
Hughes, William B., Philadelphia, Pa. Machine for drilling and reaming	429,526	June 3	637	{ 156 157 }	51	1594
Hughes, William E., Washington, D. C. Flask for foundry practice	436,628	Sept. 16	1949	512	52	1760
Hughes, William H., and J. O. Cope, Philadelphia, Pa. Oil-waste can	420,273	Jan. 28	2474	657	50	515
Hughes, William J. (See Hughes, Albert J. and W. J.)						
Hughes, Marshall J., New York, N. Y. Combined furnace and hot-water casting-box	442,440	Dec. 9	1261	326	53	1515
Hughes, William D. (See Erny, Subers, and Hoos, assignors.)						
Hugo, Trevanion W. (See Hutchinson and Hugo.)						
Hugus, Priscilla S. (See Richardson, Julius C., assignor.)						
Huhn, James C., L. D. Ramsey, and J. H. Huhn, Smithfield, Pa. Wagon	418,796	Jan. 7	207	51	50	45
Huhn, John H. (See Huhn, Ramsey, and Huhn.)						
Hühnermann, Christoph B., Wackersleben, Germany. Pipe-coupling	437,845	Oct. 7	263	79	53	52
Hulett, George H., Cleveland, Ohio. Tramway-carriage	440,809	Nov. 18	1885	484	53	987
Hulett, Walter C., Omaha, Nebr. Hydrocarbon-stove	436,240	Sept. 9	1335	349	52	1635
Hull, Abijah H., Superior, Nebr. Corn-planting attachment	422,416	Mar. 4	77	21	50	1152
Hull, Abijah H., Odebolt, Iowa. Automatic check-row corn-planter	442,682	Dec. 16	1642	423	53	1601
Hull, Dallas, <i>et al.</i> (See Richard, William, assignor.)						
Hull, Eugene J. C. A., Baltimore, Md., assignor of two-thirds to C. L. Hentz and D. W. Field, Philadelphia, Pa. Train-stopping device	442,584	Dec. 9	1493	385	53	1502
Hull, Gordon W. (See Hobson and Hull.)						
Hull, J. A. T., <i>et al.</i> (See Fike and Huffman, assignors.)						
Hull, John, assignor of one-half to Z. Robinson, Elkhart, Ind. Wrench	432,409	July 15	2128	547	52	426
Hull, John S., Baltimore, Md. Apparatus for burning hydrocarbon oil	436,918	Sept. 23	2496	653	52	1872
Hull, John W. (See Hamilton and Hull.)						
Hull, Thomas H. (See Hollister and Hull.)						
Hull, Tom G., London, England. Watch-bracelet	442,377	Dec. 9	1162	303	53	1495
Hull, Uzal, and W. W. McEwan, assignors to New York Wood Fibre Company, Belvidere, N. J. Machine for making paper pulps	440,594	Nov. 11	1531	395	53	910
Hull, William S., and J. C. Anderson, Sheffield, Ala. Rail support, grip, and conductor	431,846	July 8	1287	323	52	260
Hüller, Ernst, Nuremberg, Bavaria, Germany. Tool-handle	419,953	Jan. 21	1959	515	50	410
Hult, Carl A., Denver, Colo., and O. W. Hult, New York, N. Y. Centrifugal cream-separator	426,275	Apr. 22	2803	{ 736 737 }	51	572
Hult, Oscar W. (See Hult, Carl A. and O. W.)						
Hultgren, William H., assignor of one-half to H. A. Beidler, Chicago, Ill. Valve for hydraulic elevators	420,801	Feb. 4	530	{ 138 139 }	50	665
Hultgren, William H., assignor of one-half to H. A. Beidler, Chicago, Ill. Safety-valve for hydraulic elevators	443,208	Dec. 23	2598	{ 668 669 }	53	1795
Humaston, John L., Terre Haute, Ind. Suspending apparatus for slaughtering	431,358	July 1	494	123	52	100
Humbert, Henry, Brooklyn, N. Y. Electric motor	432,707	July 22	2605	666	52	527
Humbert, Isaac S., Staunton, Va. Nut-lock	418,949	Jan. 7	468	116	50	98
Humerickhouse, Jonathan, and J. Kraus, Elwood, Ind. Car-coupling	435,661	Sept. 2	444	118	52	1459
Hummel, Adolph G., New York, and F. A. Graham, Brooklyn, N. Y. Telegraphy	442,808	Dec. 16	1881	485	53	1646
Hummel, David, Jr. (See Bergh, Waldemar, assignor.)						
Hummel, James H., Mount Vernon, N. Y. Weather-strip	426,936	Apr. 29	3791	990	51	774
Hummel, James H., Mount Vernon, N. Y. Weather-strip	426,937	Apr. 29	3792	991	51	774
Hummel, John. (See Finch and Hummel.)						
Hummel, Ludwig, New York, N. Y. Satchel-frame	441,957	Dec. 2	508	136	53	1364
Humphrey, Abraham S., Poughkeepsie, N. Y., assignor to G. W. Storm, Newark, N. J. Elevator	434,599	Aug. 19	1768	462	52	1122
Humphrey, Arthur L., Colorado City, Colo. Car-axle box	441,762	Dec. 2	213	56	53	1305
Humphrey, Henry H. (See Parker and Temple, assignors.)						
Humphrey, John, assignor to Humphrey Turbine Company, Akron, Ohio. Turbine water-wheel	428,049	May 13	1552	393	51	1124
Humphrey, Tamar G., Hill City, Kans. Vapor-bath	441,761	Dec. 2	211	56	53	1305
Humphrey Turbine Company. (See Humphrey, John, assignor.)						
Humphreys, Edward, Williamsport, Pa. Lubricator	423,057	Mar. 11	1063	275	50	1345
Humphreys, James W., Iroquois, Ill. Ditching-machine	436,241	Sept. 9	1337	349	52	1636
Humphreys, William P., assignor, by mesne assignments, to A. M. Stincen, San Francisco, Cal. Joint-connection for suction-pipes and protectors of dredgers	433,943	Aug. 12	749	195	52	913
Hundhausen, Ernest H. (See Hundhausen, Rudolf, assignor.)						
Hundhausen, Rudolf, Charlottenburg, near Berlin, Germany, assignor to E. H. Hundhausen, New York, N. Y. Counting device	423,690	Mar. 18	2014	531	50	1534
Hunkeler, Joseph, deceased, St. Louis, Mo., J. Hunkeler, Jr., administrator. Fly-trap	433,348	July 29	3557	925	52	725
Hunking, Charles D., New York, N. Y. Hot-water draft-tube	438,813	Oct. 21	1762	472	53	349
Hunlock, John G., Wyoming, Pa. Plate or connector for connecting railway-joints	429,628	June 10	796	194	51	1635
Hunn, Albert B. (See Forkel and Hunn.)						
Hunt, Albert, <i>et al.</i> (See Jobs, Spencer C., assignor.)						
Hunt, Almon, Atlantic, Iowa. Draft-equalizer	421,279	Feb. 11	1260	325	50	812
Hunt, Almon, Atlantic, Iowa. Draft-equalizer	424,987	Apr. 8	858	228	51	175
Hunt, Arthur M., and C. A. Fowler, Bellevue, Iowa. Thill-coupling	419,773	Jan. 21	1674	444	50	352
Hunt, Benjamin F., Enfaula, Indian Ter. Folding chair	438,924	Oct. 21	1933	515	53	380
Hunt, Charles A., <i>et al.</i> (See Knobelspies, Rudolph, assignor.)						
Hunt, Charles M., Irena, Mo. Flood or water gate	427,084	May 6	88	24	51	829
Hunt, Charles W., West New Brighton, N. Y. Hoisting apparatus	429,450	June 3	525	126	51	1573
Hunt, Charles W., West New Brighton, N. Y. Hoisting apparatus	442,286	Dec. 9	1023	270	53	1469
Hunt, Charles W., West New Brighton, N. Y. Conveying apparatus	442,976	Dec. 16	2166	557	53	1703
Hunt, Charles W., West New Brighton, N. Y. Driving mechanism for cars on inclined railways	443,768	Dec. 30	3491	895	53	1974
Hunt, Charles W., West New Brighton, assignor to C. W. Hunt Company, New York, N. Y. Car for coke	425,797	Apr. 15	2069	552	51	421

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Hunt, Charles W., West New Brighton, assignor to C. W. Hunt Company, New York, N. Y. } Mechanism for measuring coal.....	428,916	May 27	2868	{ 733 734	{ 51	1408
Hunt, Charles W., West New Brighton, assignor to C. W. Hunt Company, New York, N. Y. } Valve-gear for steam-engines.....	437,928	Oct. 7	390	111	53	75
Hunt, Charles W., West New Brighton, assignor to C. W. Hunt Company, New York, N. Y. } Conveyer for coke.....	438,376	Oct. 14	1076	293	53	212
Hunt, Charles W., West New Brighton, assignor to C. W. Hunt Company, New York, N. Y. } Feed-regulator.....	438,377	Oct. 14	1077	294	53	212
Hunt, Charles W., assignor to McCaslin Machine Company, West New Brighton, N. Y. } Driving mechanism for endless-chain conveyers.....	425,798	Apr. 15	2070	553	51	421
Hunt Company, C. W. (See Hunt, Charles W., assignor.)						
Hunt, Doctor F., Elberton, Wash. } Wheel-cultivator.....	441,414	Nov. 25	2899	747	53	1188
Hunt, Edgar O., Melrose, Mass. } Automatic flush-tank.....	435,039	Aug. 26	2491	658	52	1267
Hunt, Edmund S., Weymouth, Mass. } Tool for crimping or closing the ends of paper cases.....	438,268	Oct. 14	919	249	53	181
Hunt, Frank M., Round Oak, Ga. } Lawn-mower.....	434,787	Aug. 19	2072	542	52	1180
Hunt, Franklin B., Richmond, Ind., assignor of one-half to F. E. Tasker, Washington, D. C. } Plow.....	429,451	June 3	526	126	51	1574
Hunt, Franklin B., Richmond, Ind., assignor of one-half to L. C. Allen, Washington, D. C. } Bicycle.....	443,482	Dec. 23	3033	780	53	1878
Hunt, Franklin B., Richmond, Ind., assignor to L. C. Allen, Washington, D. C. } Bicycle.....	443,721	Dec. 30	3415	877	53	1959
Hunt, George G., Bristol, assignor to Plano Manufacturing Company, Chicago, Ill. } Har- vester.....	428,275	May 20	1892	476	51	1200
Hunt, George W., and A. E. Rich, Brooklyn, N. Y. } Incandescent-lamp socket.....	442,287	Dec. 9	1024	270	53	1469
Hunt, Harmon F., Trumbull, Ohio. } Automatic railway safety-signal.....	438,625	Oct. 21	1446	389	53	290
Hunt, Helm & Ferris. (See Ferris, Henry L., assignor.)						
Hunt, Helm & Ferris. (See Helm, Nathan B., assignor.)						
Hunt, Henry C., Newark, N. J. } Trunk-catch.....	423,607	Mar. 18	1868	492	50	1506
Hunt, Herbert E., Pittsburg, Pa. } Protecting-plate for grip-cars.....	419,677	Jan. 21	1543	411	50	327
Hunt, John C., Concord, Mass. } Button-detacher.....	421,717	Feb. 18	1894	497	50	940
Hunt, Julius F., Romulus, and F. A. Rappleye, Farmer Village, assignors of three-fourths to H. P. Van Dusen, Newark, N. Y. } Fruit-box.....	420,157	Jan. 28	2281	604	50	481
Hunt, Richard, Liverpool, England. } Refining fat oils.....	439,515	Oct. 28	2867	762	53	563
Hunt, William L., South Bend, Ind. } Wagon-seat.....	442,977	Dec. 16	2167	557	53	1703
Hunt, William L., South Bend, Ind. } Wagon-seat support.....	442,978	Dec. 16	2168	558	53	1703
Hunter, Albert, and A. D. Stansbury, Colliers, W. Va. } Chain link and splice.....	432,622	July 22	2447	631	52	498
Hunter, Andrew, Milwaukee, Wis. } Dust arresting and collecting device.....	419,954	Jan. 21	1960	515	50	410
Hunter, Andrew, Milwaukee, Wis. } Scalping and grading device.....	420,723	Feb. 4	410	{ 109 110	{ 50	645
Hunter, Andrew, Milwaukee, Wis. } Scalping and grading device.....	430,802	Feb. 4	536	139	50	666
Hunter, Andrew, Milwaukee, Wis. } Scalping and grading device.....	420,803	Feb. 4	539	139	50	666
Hunter, Andrew, Milwaukee, Wis. } Device for scalping wheat-breaks, &c.....	423,258	Mar. 11	1358	353	50	1402
Hunter, Andrew, Milwaukee, Wis. } Base-ball score-card.....	441,415	Nov. 25	2900	748	53	1188
Hunter, Charles W., Memphis, Tenn. } Hoisting-machine.....	435,839	Sept. 2	709	190	52	1512
Hunter, George E., and F. H. Corthell, Elgin, assignors to Elgin National Watch Company, Chicago, Ill. } Adjusting watches.....	437,203	Sept. 30	2931	{ 763 764	{ 52	1963
Hunter, George E., and F. H. Corthell, Elgin, assignors to Elgin National Watch Company, Chicago, Ill. } Adjusting watches.....	437,204	Sept. 30	2933	{ 764 765	{ 52	1963
Hunter, George E., and F. H. Corthell, Elgin, assignors to Elgin National Watch Company, Chicago, Ill. } Apparatus for adjusting watches.....	437,205	Sept. 30	2935	766	52	1964
Hunter, George E., and F. H. Corthell, Elgin, assignors to Elgin National Watch Company, Chicago, Ill. } Apparatus for adjusting watches.....	437,206	Sept. 30	2938	{ 767 768	{ 52	1964
Hunter, George S., Black Hawk, and J. Sheerer, Beaver Falls, Pa. } Automatic brake for vehicles.....	425,075	Apr. 8	990	265	51	200
Hunter, James, assignor to Dilworth, Porter & Company, Limited, Pittsburg, Pa. } Rolling- mill.....	437,893	Oct. 7	331	97	53	65
Hunter, James C., et al. (See Tuerk, Frederick W., Jr., assignor.)						
Hunter, James H., Buenos Ayres, Argentine Republic. } Apparatus for stoning fruit.....	439,155	Oct. 28	2287	614	53	455
Hunter, John, et al. (See Tuerk, Frederick W., Jr., assignor.)						
Hunter, John S., Chicago, Ill. } Coupling.....	442,809	Dec. 16	1883	485	53	1647
Hunter, John W., Macon, Miss. } Baling-press.....	433,469	Aug. 5	49	15	52	766
Hunter, John W., and T. N. Lakin, Owanecco, Ill. } Hay-loader.....	431,585	July 8	856	213	52	178
Hunter, Maynard D., Louisiana, Mo. } Gate.....	438,378	Oct. 14	1078	294	53	212
Hunter, Robert B., assignor of two-thirds to C. L. Benton, Mattawan, Mich. } School desk and seat.....	421,405	Feb. 18	1442	374	50	853
Hunter, Rudolph M., Philadelphia, Pa. } Electrically-propelled vehicle.....	418,893	Jan. 7	379	92	50	79
Hunter, Rudolph M., Philadelphia, Pa. } Electric-railway car.....	424,206	Mar. 25	2765	737	50	1685
Hunter, Rudolph M., Philadelphia, Pa. } Electrically-propelled vehicle.....	424,207	Mar. 25	2766	738	50	1685
Hunter, Rudolph M., Philadelphia, Pa. } Electric railway-car.....	425,077	Apr. 8	993	266	51	200
Hunter, Rudolph M., Philadelphia, Pa. } Electrically-propelled car.....	425,883	Apr. 15	2201	585	51	445
Hunter, Rudolph M., Philadelphia, Pa. } Electrically-propelled vehicle.....	432,136	July 15	1733	445	52	353
Hunter, Rudolph M., Philadelphia, Pa. } Electric railway.....	432,623	July 22	2448	631	52	498
Hunter, Rudolph M., Philadelphia, Pa. } Electric railway.....	434,390	Aug. 12	1435	375	52	1048
Hunter, Rudolph M., Philadelphia, Pa. } Electric railway.....	435,879	Sept. 2	780	207	52	1525
Hunter, Rudolph M., Philadelphia, Pa. } Electrically-propelled vehicle.....	441,305	Nov. 25	2736	708	53	1155
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	429,687	June 10	878	214	51	1651
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	431,720	July 8	1089	271	52	222
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	433,170	July 29	3339	864	52	674
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	434,147	Aug. 12	1062	274	52	973
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	434,871	Aug. 19	2196	575	52	1205
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	437,158	Sept. 23	2861	744	52	1942
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	439,070	Oct. 21	2156	578	53	424
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	439,662	Nov. 4	53	15	53	617
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Electric railway.....	440,596	Nov. 11	1535	396	53	911
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. } Contact device for electric cars.....	440,597	Nov. 11	1537	396	53	912

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Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. Electrically-propelled vehicle.	441,565	Nov. 25	3129	804	53	1231
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. Electric railway.	443,451	Dec. 23	2978	766	53	1867
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. Electric railway.	443,452	Dec. 23	2980	766	53	1868
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. Traction and brake device for electric railways.	443,661	Dec. 30	3314	854	53	1940
Hunter, Rudolph M., assignor to Electric Car Company of America, Philadelphia, Pa. Traction and brake device for electric railways.	443,677	Dec. 30	3347	861	53	1947
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, Boston, Mass. Operating electric railways.	424,607	Apr. 1	262	70	51	53
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	424,928	Apr. 1	763	203	51	148
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electrical transmission of power.	427,515	May 6	734	183	51	957
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	428,210	May 20	1780	449	51	1178
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	429,093	May 27	3136	808	51	1459
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric motor.	429,094	May 27	3138	808	51	1459
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	430,025	June 10	1398	348	51	1752
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	430,580	June 17	2281	560	51	1930
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	431,519	July 1	748	187	52	149
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	431,977	July 8	1476	377	52	297
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	432,049	July 15	1594	407	52	325
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	432,752	July 22	2678	686	52	541
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	432,753	July 22	2681	686	52	541
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	433,407	July 29	3664	947	52	741
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	433,408	July 29	3665	947	52	741
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electrically-propelled vehicle.	434,148	Aug. 12	1065	274	52	974
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	434,275	Aug. 12	1264	328	52	1012
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Current-collecting device for electric cars.	434,276	Aug. 12	1265	328	52	1012
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	434,389	Aug. 12	1427	374	52	1046
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	434,391	Aug. 12	1437	375	52	1049
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	435,662	Sept. 2	446	119	52	1460
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.	438,847	Oct. 21	1826	486	53	359
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Conduit for electric railways.	439,597	Oct. 28	2988	793	53	587
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	425,076	Apr. 8	991	266	51	200
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electrically-propelled vehicle.	426,382	Apr. 22	2958	777	51	603
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	428,098	May 20	1625	413	51	1148
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	428,211	May 20	1783	450	51	1179
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	430,076	June 10	1485	369	51	1768
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	430,208	June 17	1675	417	51	1815
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	434,030	Aug. 12	864	228	52	934
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	439,069	Oct. 21	2154	578	53	423
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.	440,595	Nov. 11	1532	395	53	910
Hunter, Samuel C., Holton, Kans. Meat-tenderer.	440,635	Nov. 18	1595	411	53	933
Hunter, Susan S. (See Hubbard, Arthur O., assignor.)						
Hunter, Thomas H. (See Moreland, Henry J., assignor.)						
Hunter, William G., et al. (See Smith, George F., assignor.)						
Hunter, William N., Pleasant Ridge, Ohio. Sash-fastener.	421,077	Feb. 11	975	250	50	757
Hunter, William R., Afton, Iowa. Mechanical motor.	434,447	Aug. 19	1539	401	52	1075
Huntington, Charles W., Baltimore, Md. Ceiling-block connector.	434,509	Aug. 19	1631	428	52	1095
Huntington, Charles W., Baltimore, Md. Electric switch.	435,424	Sept. 2	64	21	52	1387
Huntington, Charles W., assignor to W. A. Aiken, Norwich, Conn. Adjustable joint for display-frames.	437,650	Sept. 30	3621	946	52	2099
Huntington, Frank A., San Francisco, Cal. Crushing-mill.	419,256	Jan. 14	915	242	50	196
Huntington, Frank A., San Francisco, Cal. Crushing-mill.	427,690	May 13	1001	252	51	1018
Huntley, Abiel D., Patten, Me. Twine or cord holder.	428,340	May 20	1996	502	51	1220
Huntley, Charles E., assignor of one-half to A. F. Herbert, Ionia, Mich. Locomotive exhaust-pipe.	420,643	Feb. 4	312	81	50	625
Huntley, Cranson & Hammond. (See Huntley, William W., assignor.)						
Huntley, Hoesa H., assignor of one-half to M. Rooney, Quincy, Ill. Mechanical movement.	433,568	Aug. 5	189	50	52	793
Huntley, William W., assignor, by mesne assignments, to Huntley, Cranson & Hammond, Silver Creek, N. Y. Device for operating the shaking-shoes of grain-scourers, &c.	436,581	Sept. 16	1888	496	52	1748
Huntoon, William W., and A. F. Perkins, South Norridgewock, Me. Horse neck-poke.	439,598	Oct. 28	2990	794	53	588

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Huntsman, Calvin, Chicago, Ill. Saw-set	441,100	Nov. 18	2361	612	53	1079
Hunzinger, George, New York, N. Y. Combined chair and table	433,623	Aug. 5	268	71	52	809
Huot, Emma M., Lewiston, Me. Dress-skirt chart	433,203	July 29	3388	876	52	684
Huppmann-Valbella, Jeanne von, New York, N. Y. Nursing-bottle holder	442,585	Dec. 9	1496	385	53	1563
Hurd, George H., assignor of one-half to J. M. Hower, Jr., Cleveland, Ohio. Respirator for firemen	428,611	May 27	2397	610	51	1316
Hurd, George L., New York, N. Y. Sleigh-runner for wheeled vehicles	426,450	Apr. 29	3078	808	51	636
Hurd, James F., Clear Lake, Minn. Corn-husking and fodder-preparing machine	436,136	Sept. 9	1177	308	52	1605
Hurd, Judson B., San Antonio, Tex. Hoeing-machine	430,209	June 17	1677	417	51	1815
Hurd, Judson B., and H. H. McLane, San Antonio, Tex. Cultivator and cotton-chopper ..	419,333	Jan. 14	1034	273	50	218
Hurd, Judson B., and H. H. McLane, San Antonio, Tex. Disk-hoe and cotton-chopper ..	419,586	Jan. 14	1386	371	50	292
Hurd, William F., Detroit, Mich. Saw	422,788	Mar. 4	613	157	50	1254
Hurford, Oliver P., Chicago, Ill. Drive chain	443,769	Dec. 30	3492	895	53	1975
Hurlburt, Edward. (See Benjamin, Dana H., assignor.)						
Hurlbut, Daniel N., New York, N. Y. Machine for manufacturing tubing	441,845	Dec. 2	340	90, 91	53	1330
Hurlbut, Daniel N., New York, N. Y. Paper tube	441,846	Dec. 2	346	91	53	1332
Hurlbut, George H., Belvidere, Ill. Camera	440,228	Nov. 11	919	236	53	800
Hurlbut, Rufus H., Sudbury, Mass. Attachment for lathes	427,869	May 13	1280	324	51	1072
Hurlbut, Samuel C., West Hartford, assignor, by mesne assignments, to Type Writing Machine Company, Hartford, Conn. Type-writing machine	441,062	Nov. 18	2306	597	53	1068
Hurley, Daniel, assignor to C. Cooper, Bennington, Vt. Straight-knitting machine	435,181	Aug. 26	2697	712	52	1306
Hurley, John A., Erie, Pa. Flue-cleaner	418,722	Jan. 7	100	23	50	22
Hurley, John S., and E. H. Taylor, assignors to M. Hurley, Lynn, Mass. Thill-tug	431,467	July 1	667	167	52	134
Hurley, Michael. (See Hurley and Taylor, assignors.)						
Hurley, Robert E., Chicago, Ill. Track-laying apparatus	428,276	May 20	1894	476	51	1200
Hurley, Robert E., Chicago, Ill. Track-laying apparatus	436,037	Sept. 9	1018	477	52	1577
Hurst, David, Mansfield, Ohio. Steam generator and furnace	423,518	Mar. 18	1744	400	50	1484
Hurst, David, Mansfield, Ohio. Steam-generator	439,663	Nov. 4	59	15	53	618
Hurst, Frederick, Toronto, Canada. Thill-coupling	433,290	July 29	3511	906	52	710
Hurst, Josiah N., et al. (See Botsford, Frederick G., assignor.)						
Hurst, Richard T., assignor of one-eighth to J. H. Hamilton, Detroit, Mich. Tank for water-closets	422,417	Mar. 4	80	22	50	1152
Hurtig, John F., St. Louis, Mo. Carriage-door	430,026	June 10	1400	348	51	1752
Husband, James. (See Van Vestrant, Ludovic, assignor.)						
Huse, Warren D. (See Bugbee, Almon C., assignor.)						
Huse, Warren D. (See Carr, Charles F., assignor.)						
Huse, Warren D., and C. F. Carr, Laconia, N. H.; said Carr assignor to said Huse. Circular-knitting machine	419,151	Jan. 7	749	198	50	156
Huse, Warren D., and C. F. Carr, Laconia, N. H.; said Carr assignor to said Huse. Circular-knitting machine	422,593	Mar. 4	335	83, 84	50	1200
Hussey, Albert M. (See Graham, Nathan M., assignor.)						
Hussey, Charles A., Fort Bidwell, Cal. Cartridge-shell reloader	434,339	Aug. 12	1353	353	52	1032
Hussey, Charles A., assignor to Crosby Electric Company, New York, N. Y. Porous cup for galvanic batteries	439,516	Oct. 28	2868	763	53	564
Hussey, Elisha C., assignor of one-half to J. N. Hussey, Philadelphia, Pa. Frame for window-screens, &c	420,724	Feb. 4	413	110	50	645
Hussey, John N. (See Hussey, Elisha C., assignor.)						
Hussey, John W., Brooklyn, N. Y., and E. Woodward, Somerville, Mass. Machine for varnishing and polishing moldings	425,034	Apr. 8	931	247	51	188
Hussey, Levi assignor of one-half to T. Hatch, New York, N. Y., and S. D. Brewer, Bergen Point, N. J. Back-pressure valve	419,447	Jan. 14	1204	248	50	253
Husted, Peter V. (See Taylor and Hard, assignors.)						
Huston, William H., assignor of one-half to F. A. Gordon, Mexico, Mo. Combined nut-wrench and tool	439,071	Oct. 21	2157	578	53	424
Huston, William J., assignor of two-thirds to T. N. Subers and J. G. Sharp, Philadelphia, Pa. Car-coupling	438,925	Oct. 21	1934	515	53	380
Hutchings, Frederick J., Oak Glen, Ill. Oscillating steam-engine	428,776	May 27	2658	674	51	1365
Hutchings, Henry T., Boston, Mass. Mast-hoop	419,448	Jan. 14	1205	319	50	253
Hutchings, John T. (See Wilson & Hutchings.)						
Hutchins, Carleton B., Detroit, Mich. Device for preventing the spreading of railway-rails. ..	441,416	Nov. 25	2901	748	53	1188
Hutchins, Carleton B., Detroit, Mich. Passenger-car ventilator	442,120	Dec. 9	774	205	53	1421
Hutchins, Carleton B., Detroit, Mich. Metallic passenger-car	442,894	Dec. 16	2043	524	53	1677
Hutchins, Elmer N., assignor to M. E. Kanaly, Somerville, Mass. Door-hanger	435,499	Sept. 2	181	50	52	1410
Hutchins, Frank W., Warren, Ohio. Photographic camera	434,046	Aug. 12	886	234	52	938
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Harness mechanism for looms	431,263	July 1	347	87	52	71
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Loom for weaving carpets and rugs	437,894	Oct. 7	333	97, 98	53	65
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Take-up mechanism for looms	438,269	Oct. 14	920	249	53	181
Hutchins, Jonas, Kendallville, Ind. Wire-tightener	438,730	Oct. 21	1624	436	53	322
Hutchins, Richard L., Wilmington, N. C. Tool for painters and decorators	431,586	July 8	858	213	52	179
Hutchinson, Alfred B., Brooklyn, and E. F. Antenrieth, New York, assignors to Glen Cove Machine Company, (limited), Brooklyn, N. Y. Planing-machine	420,202	Jan. 28	2361	627	50	494
Hutchinson, Christopher C. (See Johnson and Hutchinson.)						
Hutchinson, John, et al. (See Parrish, Myron W., assignor.)						
Hutchinson, John B., Columbia, Pa. Wagon-brake	441,008	Nov. 18	2203	570	53	1048
Hutchinson, Julius M., Kalamazoo, Mich. Pitman-connection	428,612	May 27	2399	610	51	1317
Hutchinson, Robert H., New York, N. Y. Shirt	428,099	May 20	1629	413	51	1150
Hutchinson, Robert H., New York, N. Y. Glove-fastening	428,100	May 20	1631	414	51	1150
Hutchinson, Robert M., Boston, assignor of one-half to E. N. Cummings, Lynn, Mass. Piano-action	419,678	Jan. 21	1544	412	50	327
Hutchinson, Thomas C., and T. W. Hugo, Duluth, Minn. Power-transmitter	440,477	Nov. 11	1331	343	53	874
Hutchinson, Warren B. (See Hutchinson, William F., assignor.)						
Hutchinson, William F., Lynn, Mass., assignor to W. B. Hutchinson, Passaic, N. J. Tooth-pick machine	433,788	Aug. 5	522	136	52	858

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Hutchinson, William H., and H. A. Cables, Rochester, N. Y. Tuft-button.....	432,878	July 22	2866	734	52	578
Hutchinson, William H., and H. A. Cables, Rochester, N. Y. Machine for making tufts } or buttons }.....	440,708	Nov. 18	1716	{ 440 441	{ 53	956
Hutchinson, William H., and H. A. Cables, Rochester, N. Y. Machine for making tufts } or buttons }.....	440,709	Nov. 18	1720	441	53	957
Hutchinson, William H., and H. A. Cables, Rochester, N. Y. Tuft.....	440,710	Nov. 18	1722	442	53	957
Hutchinson, William J., and T. A. Mitchell, Washington, D. C., assignors of two-thirds to J. A. Bealmeare, Baltimore, Md. Bolt-lock for railway-joints.....	423,560	Mar. 18	1805	476	50	1495
Hutchison, James, Newark, N. J. Steaming apparatus for tapestry-yarn.....	442,483	Dec. 9	1323	341	53	1528
Hutchison, James B., Butte City, Mont. Condenser for steam-engines.....	439,664	Nov. 4	60	16	53	618
Hutchison, Joseph, Glasgow, county of Lanark, Scotland. Type-writing machine.....	425,799	Apr. 15	2072	{ 553 554	{ 51	422
Hutchison, Robert, Prestwick, county of Ayr, Scotland. Lubricant.....	432,313	July 15	2002	.....	52	401
Huth, Alfred H., Ennismore Gardens, county of Middlesex, England. Type-writing machine.....	427,173	May 6	230	{ 58 59 60	{ 51	857
Hutt, James W., assignor of one-third to W. R. Draper, Toronto, Canada. Machine for the manufacture of paper boxes.....	440,570	Nov. 11	1484	383	53	902
Huttenlocher, Gottlieb H., Des Moines, Iowa. Key-fastener.....	429,239	June 3	200	49	51	1510
Hutter, George, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Corner manger.....	439,298	Oct. 28	2548	681	53	503
Hutton, Milton C., assignor of one-half to S. H. Weatherford, Georgetown, Tex. Attachment for chairs.....	422,080	Feb. 25	2402	635	50	1044
Hutton, Milton C., Georgetown, assignor of one-half to J. H. Fanbion and J. Phipps, Williamson County, Tex. Trunk-fastening.....	440,636	Nov. 18	1596	411	53	934
Hyatt & Smith Manufacturing Company. (See Smith, Wright D., assignor.)						
Hyatt, Harry. (See Wellman and Hyatt.)						
Hyatt, Henry H. (See Horrall, William A., assignor.)						
Hyatt, Isaac U. (See Stausbury and Hyatt.)						
Hyatt, John W., Newark, N. J. Disintegrating-machine.....	423,870	Mar. 18	2269	598	50	1582
Hyatt, John W., Newark, N. J. Filter of porous fabric.....	425,431	Apr. 15	1526	408	51	315
Hyatt, John W., Newark, N. J. Beer-filtering apparatus.....	426,995	Apr. 29	3880	1013	51	790
Hyatt, John W., Newark, N. J. Roll for roller-bearings.....	428,492	May 20	2218	561	51	1262
Hyatt, John W., Newark, N. J. Strainer.....	429,688	June 10	882	214	51	1652
Hyatt, John W., Newark, N. J. Wooden roller.....	434,185	Aug. 12	1119	{ 290 291	{ 52	985
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Water-proof collar or cuff.....	419,257	Jan. 14	916	242	50	196
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Collar or cuff.....	419,258	Jan. 14	919	242	50	196
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Apparel collar or cuff.....	419,259	Jan. 14	920	243	50	196
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Cuff.....	419,260	Jan. 14	922	243	50	197
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Water-proof paper collar or cuff.....	419,261	Jan. 14	923	243	50	197
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Water-proof collar or cuff.....	419,262	Jan. 14	924	243	50	197
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, New York, N. Y. Collar or cuff.....	419,263	Jan. 14	925	244	50	197
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company of New York. Collar or cuff.....	422,303	Feb. 25	2758	727	50	1109
Hyatt, John W., Newark, N. J., assignor to Celluloid Manufacturing Company, of New York. Waterproof collar or cuff.....	436,787	Sept. 23	2221	585	52	1820
Hyatt, John W., assignor to American Extractor Company, Newark, N. J. Apparatus for making fluid extracts.....	423,869	Mar. 18	2265	{ 597 598	{ 50	1582
Hyatt, John W., Newark, N. J., assignor to American Extractor Company, of New Jersey. Disintegrating-machine.....	427,686	May 13	995	251	51	1017
Hyatt, John W., assignor to Newark Filtering Company, Newark, N. J. Filtration. (Re-issue.).....	11,072	Apr. 15	2351	623	51	473
Hyatt, John W., assignor to Newark Filtering Company, Newark, N. J. Filtration. (Re-issue.).....	11,073	Apr. 15	2353	{ 623 624	{ 51	473
Hyatt, John W., assignor to Hyatt Pure Water Company, Newark, N. J. Automatic reagent-feeder.....	434,392	Aug. 12	1439	375	52	1049
Hyatt Pure Water Company. (See Hyatt, John W., assignor.)						
Hyde, Albert A., Wichita, Kans. Boot or shoe scraper.....	435,500	Sept. 2	183	51	52	1410
Hyde, Alphonso M., assignor to West Haven Buckle Company, West Haven, Conn. Snap-hook.....	430,384	June 17	1996	493	51	1877
Hyde, Andrew B., Pomfret Centre, Conn. Fountain-pen.....	426,021	Apr. 22	2436	644	51	497
Hyde, Arunah W. (See Coomes and Hyde.)						
Hyde, Edward A., Washington, D. C. Gun.....	422,347	Feb. 25	2829	746	50	1123
Hyde, Gustavus A., Jr., East Saginaw, Mich. Overflow-gate and liquid-separator.....	428,613	May 27	2400	610	51	1317
Hyde, Henry D., et al., trustees. (See Day, George W., assignor.)						
Hyde, Isaac P., Southbridge, Mass. Shoe-knife.....	430,651	June 24	2422	590	51	1966
Hyde, John W. (See Kint and Hyde.)						
Hyde, Spyars S., Monroe, Wis. Bridle.....	419,955	Jan. 21	1962	516	50	411
Hyde, Theophilus R., Jr., assignor to Scovill Manufacturing Company, Waterbury, Conn. Glove-fastener.....	436,137	Sept. 9	1180	308	52	1605
Hyde, Wesley M., New Waterford, Ohio, assignor of one-half to J. E. Johnston, Allegheny, Pa. Fence-tool.....	440,598	Nov. 11	1538	396	53	912
Hydraulic Elevator Company. (See Foster, Charles E., assignor.)						
Hydraulic Elevator Company. (See Hale and Bassett, assignors.)						
Hydraulic Elevator Company. (See Otis, Charles R., assignor.)						
Hydraulic Press Brick Company. (See Graves, Willis N., assignor.)						
Hydro-Pneumatic Manufacturing Company. (See Powers, Jay W., assignor.)						
Hyer, Robert S. (See Graves and Hyer.)						
Hyer, Robert S., Georgetown, Tex. Plow.....	430,027	June 10	1404	349	51	1753
Hyer, Walter E., Newburg, N. Y. Regulator for electric motors.....	441,665	Dec. 2	55	15	53	1272
Hyland, Joseph, assignor of one-third to A. E. Mason, Charlevoix, Mich. Tube and pipe cutter, beader, and expander.....	441,566	Nov. 25	3131	804	53	1232
Hyndman, William G., Cincinnati, Ohio. Device for folding sheet-metal plates.....	422,944	Mar. 11	890	233	50	1314
Hynes, Martin, Boston, Mass. Electrical annunciator-drop.....	425,078	Apr. 8	995	266	51	201
Hyslop, John, Jr., Abington, Mass. Nailing-machine.....	429,527	June 3	641	{ 157 158	{ 51	1594

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Hyslop, John, Jr., Abington, Mass. Nailing-machine.....	429,528	June 3	646	{ 158 159 }	51	1595
Ibbotson, Alfred B., Sheffield, England. Manufacture of lock-nuts for screw-bolts.....	426,185	Apr. 22	2680	{ 703 704 }	51	545
Iddings, Henry A., and J. P. Megeath, Omaha, Nebr. Type-writer scale.....	433,789	Aug. 5	523	136	52	858
Ide, Albert L. (See Capps, Frank L., assignor.)						
Ide, Albert L., Springfield, Ill. Steam-engine.....	441,364	Nov. 25	2809	{ 726 727 }	53	1169
Ide, Ferdinand F., Peoria, Ill. Device for securing dials to watches.....	419,525	Jan. 14	1307	349	50	274
Ide, Ferdinand F., Peoria, Ill. Watch-demagnetizer.....	429,033	May 27	3045	786	51	1441
Ide, Fred B., assignor to H. A. Merritt, Troy, N. Y. Making cuffs.....	442,319	Dec. 9	1075	{ 281 282 }	53	1478
Ideal Rubber Company. (See Eggers, Anton C., assignor.) (Reissue.)						
Ihde, Fredrick C., assignor to P. Ryan, Toronto, Ontario, Canada. Belt-coupling.....	423,769	Mar. 18	2116	558	50	1553
Ihne, Frederick W., assignor of one-half to E. H. Bonton, Kansas City, Mo. Grinding-mill.....	429,529	June 3	651	159	51	1596
Iles, Gilbert C., Fredericktown, Ohio. Saw.....	424,301	Mar. 25	2903	775	50	1712
Iles, Henry J., Birmingham, Conn. Window-curtain fixture.....	437,436	Sept. 30	3315	864	52	2036
Ilges, Irwin A. (See Ilges and Earnest, assignors.)						
Ilges, Jeremiah K., Tremont, and G. H. Earnest, Springfield; said Ilges assignor and said Earnest assignor of one-sixth to I. A. Ilges, Tremont, Ohio. Fodder-binder.....	430,385	June 17	1996	493	51	1877
Illing, Karl, Zwickau, Germany. Respirator.....	443,191	Dec. 23	2563	658	53	1787
Illingworth, George M. (See Eberle, Adam, assignor.)						
Illingworth, John, Batley, county of York, England. Apparatus for carbonizing vegetable fibers.....	430,127	June 17	1571	{ 390 391 }	51	1795
Illingworth, John, Newark, N. J. Method of and apparatus for casting ingots.....	439,780	Nov. 4	222	58	53	652
Illingworth, Joshua, and A. M. Baker, Cleveland, Ohio. Brake mechanism for electric street-cars.....	434,063	Aug. 12	914	240	52	944
Illinois Malleable Iron Company. (See Anderson, Anton G., assignor.)						
Illinois Steel Company. (See Smith, Pettigrew, and Garrett, assignors.)						
Ilsey, Silas A. (See Mungiven, James M., assignor.)						
Imandt, Christian, New York, N. Y. Frame for drying lace curtains.....	419,449	Jan. 14	1206	319	50	254
Imbrie, Charlotte M., New York, N. Y. Spool-case.....	421,280	Feb. 11	1262	326	50	812
Imlay, Charles G., Camden, N. J. Bottle-stopper and fastener.....	427,576	May 13	836	209	51	986
Imler, Eli W., Nelson, Nebr. Door-check.....	435,236	Aug. 26	2756	728	52	1318
Improved Screw Cork Company. (See Davidson, Henry, assignor.)						
Indianapolis Fence Company. (See Darnell, Calvin F., assignor.)						
Infreville, Georges d', New York, N. Y. Zinc electrode for galvanic batteries.....	422,925	Mar. 11	857	{ 223 224 }	50	1308
Ingalls, Frederic C., Utica, N. Y. Car.....	439,781	Nov. 4	226	59	53	652
Ingalls, Horace S., Melrose, assignor of one-half to J. F. & C. G. Warren & Co., Worcester, Mass. Boiler-tube scraper and cleaner.....	442,320	Dec. 9	1076	282	53	1479
Ingalls, William A., Providence, R. I. Machine for making wire-and-picket fences.....	430,524	June 17	2202	{ 541 542 }	51	1916
Ingalsbe, Orin. (See Smith and Wilson, assignors.)						
Ingells, James, Alba, Mich. Churn.....	422,019	Feb. 25	2313	{ 610 611 }	50	1028
Ingersoll, Charles H., New York, N. Y. Suction supporting device.....	435,752	Sept. 2	574	153	52	1486
Ingersoll, Hubert, Green Valley, Ill. Corn-husker.....	423,770	Mar. 18	2116	{ 558 559 }	50	1553
Ingersoll, Oliver R., Brooklyn, N. Y. Boat.....	421,170	Feb. 11	1109	285	50	784
Ingersoll, Robert H., New York, N. Y. Type-writing machine.....	429,195	June 3	136	33	51	1497
Ingersoll, Simon, assignor of two-thirds to E. T. Bromfield, Glenbrook, Conn. Hand rock-drill.....	431,144	July 1	162	41, 42	52	34
Ingham, Thomas, Cheetham, county of Lancaster, England. Dyeing.....	433,790	Aug. 5	526		52	859
Ingham, Aaron G., Omaha, Nebr. Pneumatic railway-signal.....	423,477	Mar. 18	1686	445	50	1473
Inglis, James, Montreal, Canada. Water-slide.....	435,227	Aug. 26	2757	728	52	1318
Ingold, Eugene, Pittsburg, Pa. Mining-machine.....	419,199	Jan. 14	830	219	50	178
Ingraham, Arnold A., New York, N. Y. Commutator for electric motors.....	427,235	May 6	327	84	51	875
Ingraham, Arnold A., New York, N. Y. Electrically-propelled vehicle.....	428,917	May 27	2870	734	51	1408
Ingraham, Arthur J., et al. (See Backus, Clarence G., assignor.)						
Ingraham, Charles W., Eight Mile, Oreg. Vapor-burner.....	441,763	Dec. 2	214	56	53	1305
Ingram, Charles C., and W. S. Kellogg, Little Rock, Ark. Cotton-press.....	435,119	Aug. 26	2607	690	52	1289
Ingram, Frederick F., Detroit, Mich. Bag-lock.....	437,760	Oct. 7	136	43	53	28
Ingram, James, Lawrence, Mass. Buffer for picker-staffs of looms.....	443,524	Dec. 30	3094	797	53	1899
Ingram, Nathan D. (See Chapman and Ingrain.)						
Ingram, Nathan D., Holyoke, Mass. Button.....	437,992	Oct. 7	491	139	53	93
Ingram, Nathan D., and E. M. Chapman, Holyoke, Mass. Button.....	422,789	Mar. 4	614	157	50	1254
Inloes, William H. (See Van Brown, Lewis, assignor.)						
Inman, David W., Stelvideo, Ohio. Harrow.....	421,572	Feb. 18	1688	437	50	899
Inman, John L., Putnam, Conn. Band and cord twisting machine.....	426,383	Apr. 22	2961	{ 777 778 }	51	604
Instantaneous Water Heating Company. (See Bernstein, Samuel, assignor.)						
Insulito Manufacturing Company. (See Roebuck, Thomas G., assignor.)						
Insulito Manufacturing Company. (See Swan, Alfred, assignor.)						
Intelligent Can Company. (See Spear, Ephraim W., assignor.)						
Interchangeable Tool Company. (See Hall, Thomas G., assignor.)						
Interior Conduit and Insulation Company. (See Greenfield, Edwin T., assignor.)						
Interior Conduit and Insulation Company. (See Greenfield and Nagle, assignors.)						
Interior Conduit and Insulation Company. (See Johnson, Edward H., assignor.)						
International Manufacturing Association. (See Morrell, Henry L., assignor.)						
International Portelectric Company. (See Williams, John T., assignor.)						
International Watch Company, of J. Rauschenbach. (See Rauschenbach, Johann, assignor.)						
International Water and Sewage Purification Company. (See Candy, Frank, assignor.)						
International Wine Company. (See Götter, Hermann, assignor.)						
Interstate Fire Alarm Company. (See Ruddick, John J., assignor.)						
Interstate Ventilator Refrigerator Car Company. (See Wood, Albert A., assignor.)						
Invention Company. (See Vanderhoef, George N., assignor.)						
Invisible Hinge Company. (See Slane, McGuire, assignor.)						
Invisible Hitching Post Company. (See Reed, Eli S., assignor.)						
Irby, William R. (See Josselin, Louis, assignor.)						
Ireland, David M., and C. R. Bradley, Waterbury, Conn. Harness-rosette.....	425,228	Apr. 8	1223	325	51	248
Irgens, Jacob, Palisade, S. D. Rock-drilling machine.....	422,130	Feb. 25	2482	656	50	1058
Irish, Charles S. (See Lewis and Irish.)						
Irish Electric Company. (See Irish, William E., assignor.)						
Irish, George W., Grand Ledge, Mich. Road-cart.....	433,171	July 29	3341	864	52	675

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Irish, Rolon C., Augusta, Me., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	441,666	Dec. 2	56	15	53	1272
Irish, William E., assignor to Irish Electric Company, Cleveland, Ohio. Galvanic battery	419,774	Jan. 21	1675	{ 444 445 }	50	352
Irlbacker, John, Buffalo, N. Y. Apparatus for extracting hops	428,101	May 20	1633	444	51	1150
Irmen, John M., Atlantic, Iowa. Watch-makers' calipers	439,156	Oct. 28	2289	615	53	455
Iron Clad Manufacturing Company. (See McIntire, William C., assignor.)						
Irvin & Kepner. (See Belyea, James C., assignor.)						
Irvine, Henry E., et al. (See Elkins, William H., assignor.)						
Irvine, John S., Charlotte, N. C. Baby walker and protector	438,478	Oct. 14	1221	331	53	240
Irvine, Robert L., Nevada, Mo. Fare-collecting apparatus	426,817	Apr. 29	3633	948	51	742
Irvine, William, Muskoka Falls, Ontario, assignor of one-half to J. H. Parkinson, Brace-bridge, Canada. Horse-collar	434,277	Aug. 12	1267	329	52	1013
Irving, Frank K., and F. M. Hill, Brooklyn, assignors of one-third to T. W. Bayaud, New York, N. Y. Electrolyte for galvanic batteries	436,001	Sept. 9	962	252	52	1566
Irwin, Charles H. (See Hoeft, Francis I., assignor.)						
Irwin, Charles H., F. Mill, and J. E. Hitch, Wilmington, Ohio; said Mill and Hitch assign-ors to said Irwin. Boring machine	427,325	May 6	452	117	51	900
Irwin, Charles W. (See Tinning, Frank T. and W. K. S., assignors.)						
Irwin, John H., trustee. (See Voelker, William L., assignor.)						
Irwin, John H., Morton, Pa. Portable electric lamp	429,172	June 3	99	24	51	1491
Irwin, John H., Morton, Pa. Telephone	430,128	June 17	1572	391	51	1795
Irwin, William J., Hoboken, N. J., assignor to McLoughlin Brothers, New York, N. Y. Game	435,065	Aug. 26	2529	668	52	1275
Isaac, Thomas, Sacramento, Cal. Calipers or dividers	426,502	Apr. 29	3154	829	51	650
Isaacks, Andrew J. (See Hodges and Isaacks.)						
Isaacs, Percy A. (See de Cordova and Isaacs.)						
Isbell, Benjamin F., Schoolcraft, and L. T. Wilcox, Jackson, Mich. Door-hanger	436,311	Sept. 9	1435	374	52	1657
Isberg, Hans A., Long Island City, assignor to C. F. Hodsdon, New York, N. Y. Portable wooden booth	442,979	Dec. 16	2168	558	53	1703
Isele, John, San Diego, Cal. Spring-motor	434,964	Aug. 12	916	240	52	944
Iselin, Charles, and D. Callahan, Riverside, Cal. Remedy for asthma	437,599	Sept. 30	3557	.....	52	2085
Isenberg, Jacob M., assignor of one-half to S. B. Isenberg, Mines, Pa. Grip for cars of in- clined roads	426,276	Apr. 22	2805	737	51	572
Isenberg, Jacob M., assignor of one-half to S. B. Isenberg, Mines, Pa. Gripping device for cars for inclined railways	437,993	Oct. 7	493	140	53	93
Isenberg, Rolandis, and S. Alloway, Altoona, Pa. Car-brake	418,723	Jan. 7	101	23	50	22
Isenberg, Samuel B. (See Isenberg, Jacob M., assignor.)						
Isett, Willson J. (See Reed, James W., assignor.)						
Ish, James T., San Francisco, Cal. Fruit-pitting machine	436,629	Sept. 16	1951	512	52	1760
Iske, Albert. (See Iske, Anthony and A.)						
Iske, Anthony and A., Lancaster, Pa. Heat-alarm	434,872	Aug. 19	2199	576	52	1205
Iske, Anthony and A., assignors to I. L. Landis, Lancaster, Pa. Cash-carrier	424,789	Apr. 1	558	{ 148 149 }	51	109
Iske, Anthony and A., assignors to I. L. Landis, Lancaster, Pa. Cash-car	423,102	May 20	1635	414	51	1150
Israel, Earl H., St. Louis, Mo. Water-closet	434,340	Aug. 12	1354	{ 353 354 }	52	1032
Insti, Johann A. W., assignor of nine-sixteenths to C. Kerrison, Jr., E. Kersten, A. F. C. Cramer, and H. L. P. McCormick, Charleston, S. C. Rain-water conductor	421,281	Feb. 11	1262	326	50	812
Ives, Blakeslee & Williams Company. (See Lancaster, James H., assignor.)						
Ives, Charles D., et al. (See Baldwin, Ransom G., assignor.)						
Ives, Edward B., assignor to J. M. Seymour, New York, N. Y. Telegraphy	442,267	Dec. 9	991	{ 261 262 }	53	1464
Ives, Frederic E., Philadelphia, Pa. Composite heliochromy	432,530	July 22	2321	600	52	473
Ives, George H., Mystic River, Conn. Drill-chuck	421,718	Feb. 18	1896	498	50	941
Ivey, Eli G., and M. McMichael, Buena Vista, Ga. Flood-gate	439,517	Oct. 28	2869	763	53	564
Ivey, James B., Macon, Ga. Automatic recording-signal for railways	422,790	Mar. 4	616	158	50	1254
Iverson, Blakeman & Co. (See Gilbert, Adelbert L., assignor.)						
Iverson, Blakeman & Co. (See Somers, Daniel M., assignor.)						
Ivory, James W. (See Elliott, Walter S., assignor.)						
Ivory, James W., Philadelphia, Pa. Dental-matrix retainer	424,790	Apr. 1	561	149	51	109
Ivory, James W., Philadelphia, Pa. Rubber-dam clamp	435,228	Aug. 26	2758	728	52	1319
Ivory, James W., and A. Wayne, Philadelphia, Pa.; said Wayne assignor to said Ivory. Teeth-separator	436,603	Sept. 16	1912	502	52	1752
Iwanowitsch, Richard, Penzing, near Vienna, assignor of two-thirds to C. Peklinger, Floridsdorf, and M. Karder, Vienna, Austria-Hungary. Safety-valve	427,264	May 6	370	96	51	883
Izard, William H., Belton, Tex. Band-cutter and feeder	439,277	Oct. 28	2499	{ 669 670 }	53	493
Jablonsky, Edmund A. (See Conekin, Dawson, assignor.)						
Jacker, Maximilian, Chicago, Ill. Machine for making candy chains	425,611	Apr. 15	1796	{ 481 482 }	51	366
Jackman, David K., Poughkeepsie, N. Y. Nut-lock	434,933	Aug. 26	2338	618	52	1238
Jackman, Lemuel N. (See Rundquist and Jackman.)						
Jackson, Abner A., and C. M. Neal, Corsicana, Tex. Paint compound	432,240	July 15	1881	.....	52	380
Jackson, Abram W., New York, N. Y., assignor to De Groot Electric Company, of New York. Electro-therapeutic appliance	431,978	July 8	1477	373	52	297
Jackson, Albert L. (See Aschenbach, George H., assignor.)						
Jackson, Amariah W., Chicago, Ill. Air-brake hose-coupling	434,873	Aug. 19	2201	576	52	1206
Jackson, Byron, San Francisco, Cal. Centrifugal pump	440,252	Nov. 11	954	245	53	806
Jackson, Calvin, Jacksonwald, Pa. Motor-sled	423,161	Mar. 11	1223	318	50	1376
Jackson, Calvin, Jacksonwald, Pa. Coil-clasp	433,791	Aug. 5	528	{ 136 137 }	52	859
Jackson, Elias, Mastodon, Miss. Cotton-chopper	443,049	Dec. 16	2275	584	53	1725
Jackson, Emanuel. (See Hudson, William E., assignor.)						
Jackson, Franklin, et al. (See Newberry and Sharp, assignors.)						
Jackson, George B., Three Rivers, Mich. Stand-pipe for supplying water to locomotives.	426,124	Apr. 22	2585	680	51	526
Jackson, George C. (See Smith, Gabriel S., assignor.)						
Jackson, George F. (See Searles, Jackson, and Gnstlin.)						
Jackson, George F., et al. (See Rand, Allen S., assignor.)						
Jackson, Hampton E., Wilson, Ohio. Wagon-bed raiser	423,771	Mar. 18	2121	560	50	1554
Jackson, James, Manchester, England. Apparatus for connecting flexible tubes or hose	442,121	Dec. 9	775	209	53	1421
Jackson, James M., Five Points, Ala. Planter	443,596	Dec. 30	3214	826	53	1922
Jackson, James W. (See Parnall, Alfred N., assignor.)						
Jackson, John C., and H. Whitcomb, Philadelphia, Pa. Belt-shifter	430,345	June 17	1940	475	51	1866

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Jackson, John C., and H. Whitcomb, Pencoyd, Pa. Belt-shifter.....	442,227	Dec. 9	937	247	53	1453
Jackson, John S., Jr., Bath, Me. Snatch-block.....	430,023	June 10	1404	349	51	1753
Jackson, John W., Sharpsville, Pa. Oil-can.....	421,282	Feb. 11	1263	326	50	812
Jackson, John W., Ochlochnee, Ga. Plow.....	422,418	Mar. 4	81	22	50	1153
Jackson, Lewis P., Hartford City, Ind. Paper-trimming knife.....	440,879	Nov. 18	2001	515	53	1009
Jackson, Lewis P., assignor of one-half to W. H. Campbell and W. S. Brannum, Hartford City, Ind. Paper-trimming machine.....	439,954	Nov. 4	494	129	53	704
Jackson, Manethio C., Denver, Colo. Baling-press.....	429,240	June 3	200	50	51	1510
Jackson Manufacturing Company, (See Hambay, James T., assignor.)						
Jackson, Milton, assignor to D. K. Miller Lock Company, Philadelphia, Pa. Combination-finder for locks.....	427,421	May 6	601	150	51	930
Jackson, Peter H., San Francisco, Cal. Basement and sidewalk construction.....	437,895	Oct. 7	336	98, 99	53	65
Jackson, Richard H. (See Nobes and Jackson.)						
Jackson, Rolly W., Hume, Ill. Water-tank.....	434,448	Aug. 19	1540	{ 401 402 }	52	1076
Jackson, Theodore L., and J. Reese, Boone, Iowa. Machine for sifting sand.....	420,455	Feb. 4	43	9	50	572
Jackson, Thomas B., Belmont, Ohio. Fire-place heater.....	427,767	May 13	1133	284	51	1044
Jackson, Wallace E., and L. A. Platt, assignors to Patent Button Company, Waterbury, Conn. Button.....	429,530	June 3	652	160	51	1596
Jackson, Walter M., New York, N. Y. Ferrule. (Reissue).....	11,114	Oct. 7	703	191	53	136
Jackson, Wesley E., et al. (See McKnight, Henry F., assignor.)						
Jackson, Wilfred H., et al. (See Nightengale, William O., assignor.)						
Jackson, William, Allegheny, assignor to Pittsburgh Tubular Steel Whiffletree Company, Pittsburg, Pa. Machine for applying fittings and trimmings on tubular articles.....	425,510	Apr. 15	1638	437	51	337
Jackson, William H., et al. (See Rndell, Commodore D., assignor.)						
Jacob, Frank A. (See Hood and Jacob.)						
Jacob, Jeffrey. (See Gentry, John W., assignor.)						
Jacob, Oscar, Saginaw, Mich. Combined baby chair and walker.....	434,713	Aug. 19	1973	512	52	1160
Jacobs, Abraham C., Kendall, Wis. Horse-collar.....	440,571	Nov. 11	1485	384	53	903
Jacobs, Arthur I. (See Reynolds and Jacobs.)						
Jacobs, Arthur I., Hartford, Conn. Machine for gathering signatures.....	433,569	Aug. 5	190	50, 51	52	793
Jacobs, Arthur I., assignor to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine.....	435,605	Sept. 2	342	95	52	1441
Jacobs, Benjamin T., Stapleton, N. Y. Liniment-pad.....	437,994	Oct. 7	494	140	53	94
Jacobs, Charles M. (See Marshall, Robert, assignor.)						
Jacobs, Edwin T. (See Lake, Jacobs, and Smith.)						
Jacobs, Elias, Petaluma, Cal. Safety-pocket for garments.....	437,903	Oct. 7	347	101	53	67
Jacobs, Gabriel A., Red Creek, N. Y. Window-screen.....	421,719	Feb. 18	1897	498	50	941
Jacobs, Gabriel A., Red Creek, N. Y. Shovel-plow.....	425,079	Apr. 8	996	267	51	201
Jacobs, George T. (See Ford and Jacobs.)						
Jacobs, Henry E., Milwaukee, Wis. Automatic fire-alarm.....	431,979	July 8	1477	373	52	297
Jacobs, Henry L., and T. H. Stagg, assignors to Kilbourne & Jacobs Manufacturing Company, Columbus, Ohio. Road-scraper.....	432,942	July 22	2956	758	52	595
Jacobs, Jacob, New York, N. Y. Illuminating-tile.....	422,218	Feb. 25	2615	692	50	1084
Jacobs, Jacob, New York, N. Y. Illuminating-tile.....	424,302	Mar. 25	2903	776	50	1712
Jacobs, Jacob, New York, N. Y. Illuminating-tile.....	428,493	May 20	2219	561	51	1262
Jacobs, Jacob, New York, N. Y. Illuminating-tile.....	431,468	July 1	668	168	52	134
Jacobs, Jacob, New York, N. Y. Illuminating-tile.....	436,083	Sept. 9	1093	{ 282 283 }	52	1591
Jacobs, Jacob, New York, N. Y. Ventilating vault-cover.....	436,084	Sept. 9	1094	283	52	1591
Jacobs, John H., Marquette, Mich. Saw-blade for stone-sawing machines.....	428,395	May 20	2093	525	51	1240
Jacobs, John L. (See Butzel and Jacobs.)						
Jacobs, Maurice, assignor to McLoughlin Brothers, New York, N. Y. Game apparatus.....	433,624	Aug. 5	2688	72	52	809
Jacobs, Solomon J., New York, N. Y. Means for attaching and detaching electric-lamp bulbs.....	431,721	July 8	1092	272	52	223
Jacobs, Solomon J., New York, N. Y. Electric signal for cable railways.....	435,097	Aug. 26	2574	{ 679 680 }	52	1283
Jacobs, William E., Columbus, Ohio. Whiffletree.....	424,208	Mar. 25	2768	738	50	1686
Jacobson, Carl J., Brooklyn, N. Y. Wood-plane.....	420,386	Jan. 28	2632	699	50	544
Jacobson, Peter N., Jr. (See McIntyre, Daniel C., assignor.)						
Jacobson, Axel E., Oshkosh, Wis. Folding bed.....	428,212	May 20	1784	450	51	1179
Jacobson, John, Woburn, Mass. Carving-machine.....	429,213	June 3	164	39	51	1502
Jacobus, Roswell D., Little Falls, N. J. Wear-iron for carriages.....	436,907	Sept. 23	2471	644	52	1868
Jacoby, Augusta, Langhorne, Pa. Griddle.....	434,788	Aug. 19	2073	542	52	1180
Jacoby, William H., Minneapolis, Minn. Railway-car.....	439,404	Oct. 28	2703	{ 720 721 }	53	532
Jacques, William E., and G. R. Emmett, Attleborough, assignors to H. C. Wirt, Boston, Mass. Ceiling-block.....	434,186	Aug. 12	1121	291	52	985
Jacques, William W. (See Day, George W., assignor.)						
Jacquiu, Charles, Syracuse, N. Y. Shaft-hanger.....	422,020	Feb. 25	2314	611	50	1028
Jaack, Emilie, Brooklyn, N. Y. Bed for zinc printing-plates.....	423,691	Mar. 18	2616	532	50	1534
Jaeger, Christian, New York, N. Y. Album.....	423,410	July 15	2129	547	52	426
Jaeger, Christian, New York, N. Y. Album.....	423,411	July 15	2130	547	52	426
Jaeger, Gustav L., New York, N. Y. Machine for applying corner-stays to boxes.....	438,545	Oct. 14	1314	{ 355 356 357 }	53	259
Jaeger, Gustav L., New York, N. Y. Machine for applying corner-stays to boxes.....	438,546	Oct. 14	1315	{ 356 357 358 }	53	260
Jaeger, Gustav L., New York, N. Y. Machine for applying corner-stays to boxes.....	438,547	Oct. 14	1317	{ 357 358 359 }	53	260
Jaeger, Gustav L., New York, N. Y. Blotting-paper.....	439,405	Oct. 28	2705	722	53	532
Jaeger, Gustav L., New York, N. Y. Machine for applying fastening-strips to boxes.....	442,526	Dec. 9	1400	{ 357 358 359 }	53	1543
Jaeger, Herman J., Brooklyn, N. Y. Exhaust apparatus for incandescent-lamp globes.....	422,219	Feb. 25	2616	{ 692 693 706 707 }	50	1084
Jaegle, William C., Hicksville, N. Y., assignor to National Vulcan Burner Company, Jersey City, N. J. Injector-burner for hydrocarbon oil.....	420,411	Jan. 28	2664	706	50	551
Jaenicke, Adolph, Davenport, Iowa. Thill-coupling.....	430,129	June 17	1573	391	51	1795
Jaenicke, Adolph, Davenport, Iowa. Vehicle-seat lock.....	433,081	July 29	3203	823	52	647
Jaffray, David S., Chicago, Ill. Horseshoe.....	421,562	Mar. 11	1225	319	50	1376
Jahant, Augustus, Akron, Ohio. Furnace for heating purposes.....	441,567	Nov. 25	3133	805	53	1232
Jameison, William, Saratoga Springs, N. Y. Compression ball-cock.....	421,573	Feb. 18	1690	437	50	900
James, Abner C., Pomona, Cal. Shoe-lacer.....	422,131	Feb. 25	2484	656	50	1059
James, Benjamin F., Springfield, Mass. Journal-box.....	433,525	Aug. 5	121	35	52	780
James, Burwell H., North Yakima, Wash. Kitchen-cabinet.....	436,481	Sept. 16	1736	455	52	1719

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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James, Christopher R., Jersey City, N. J. Cut-off valve	425,176	Apr. 8	1155	{ 304 305 763 764 }	51	233
James, Christopher R., Jersey City, N. J. Machine for making upholsterers' springs	439,518	Oct. 28	2870	{ 763 764 }	53	564
James, Cullen H., Oakland, Cal. Device for tapping sheet-metal vessels	423,429	Mar. 18	1617	425	50	1460
James, David B., San Francisco, Cal. Plate or pan lifter	435,563	Sept. 2	281	78	52	1430
James, David B., San Francisco, Cal. Miner's candlestick	442,186	Dec. 9	878	234	53	1442
James, Frank, New York, N. Y. Umbrella or parasol	433,733	Aug. 5	430	110	52	839
James, George B. (See Richards, Walter S., assignor.)						
James, George C., Cincinnati, Ohio. Throw-off mechanism for printing-presses	441,562	Nov. 25	3135	805	53	1232
James, Harvey H., Ottawa, Kans. Combined milking-stool and salt-hox	433,585	Sept. 2	317	88	52	1434
James, Howard K., Cincinnati, Ohio. Cushion-roll for carriage-seats	434,789	Aug. 19	2074	542	52	1181
James, Jack W., Cuba, Tenn. Device for converting motion	423,322	Mar. 11	1465	383	50	1422
James, Jack W., Cuba, Tenn. Mowing-machine	441,069	Nov. 18	2310	598	53	1069
James, Jack W., Cuba, Tenn. Velocipede	442,980	Dec. 16	2170	558	53	1704
James, James R., Philadelphia, Pa. Rail-bending tool	426,277	Apr. 22	2806	737	51	573
James, Lindorf H., Vanceburg, Ky. Means for operating churns	436,604	Sept. 16	1913	502	52	1752
James, Thomas, Braddock, Pa. Apparatus for marking rails, &c	422,594	Mar. 4	336	84	50	1200
James, Thomas, Braddock, Pa. Apparatus for making hollow metal articles	442,895	Dec. 16	2046	525	53	1678
James, William, Columbus, Ohio. Hand-stamp	422,220	Feb. 25	2618	693	50	1084
James, William, Adelaide, South Australia. Harness-machine	443,678	Dec. 30	3349	862	53	1947
James, William, Adelaide, South Australia. Harness-machine	443,679	Dec. 30	3351	862	53	1948
James, William, Brooklyn, assignor to Nathan Manufacturing Company, New York, N. Y. Lubricator	442,321	Dec. 9	1077	282	53	1479
James, William, Brooklyn, assignor to Nathan Manufacturing Company, New York, N. Y. Lubricator	442,322	Dec. 9	1078	283	53	1479
James, William A., assignor of one-half to Wilkin Manufacturing Company, Milwaukee, Wis. Molder's flask	443,704	Dec. 30	3391	871	53	1955
James, William H. (See Saxon and James.)						
James, William H., Pittston, Pa. Drilling-machine	418,950	Jan. 7	469	{ 116 117 }	50	98
Jameson, William A., Niagara Falls, N. Y. Animal-trap	419,587	Jan. 14	1387	372	50	292
Jameson, Jacob S. (See White, Patrick F., assignor.)						
Jamison, Curtis A., Kendall Creek, Pa. Gas-pressure regulator	428,843	May 27	2756	700	51	1385
Jamison, William T., assignor to L. A. Gasaway, Kansas City, Mo. Combined book and slate	440,037	Nov. 4	628	166	53	731
Jandrey, Edward E., Neenah, Wis. Case for holding and exhibiting oil-cloths, &c	431,587	July 8	859	214	52	179
Jandus, William, Cleveland, Ohio, and J. McCarthy, Chicago, Ill. Blank and file for placing it thereon	424,001	Mar. 25	2481	{ 660 661 }	50	1630
James, Heman D., Cleveland, Ohio. Sash-fastener	424,064	Mar. 25	2569	687	50	1647
Janney, Eli H. (See Shinn, James W., assignor.)						
Janssen, John R. B. (See Hermann and Janssen.)						
Jantz, Gustav H., Cincinnati, Ohio. Clothes-wringer	432,624	July 22	2450	631	52	498
Janus, Virginia, New York, N. Y. Head-dress	436,038	Sept. 9	1022	266	52	1578
Japhet, Charles A., Winchester, Kans. Churn	426,186	Apr. 22	2683	705	51	546
Jagues, Oliver P., Warsaw, Ind. Ice-tool	425,325	Apr. 8	1366	364	51	274
Jarboe, Walter S., assignor to G. W. Simonds, Pittsburg, Pa. Device for lifting plate-glass	438,584	Oct. 14	1373	372	53	271
Jardine, Joseph B., San Francisco, Cal. Apparatus for reducing bituminous rock, &c	428,251	May 20	1852	465	51	1192
Jardus, Joseph B., San Francisco, Cal. Apparatus for reducing, laying, and rolling bituminous rock, asphalt, &c	442,441	Dec. 9	1262	326	53	1515
Jarecki Manufacturing Company. (See Williams, James C., assignor.)						
Jarman, Thomas M., London, England. Oil-fume furnace	440,038	Nov. 4	629	167	53	731
Jarmuth, Henry, Chicago, Ill. Packing-box for fly-paper	428,277	May 20	1895	478	51	1201
Jarrell, Benjamin, Lee's Creek, Ohio. Boat	428,213	May 20	1785	450	51	1179
Jarrell, Edwin, assignor of one-fourth to J. W. and H. W. McMunn, Harper, Kans. Vehicle-spring	419,956	Jan. 21	1964	516	50	411
Jarrett, George L., Des Moines, Iowa. Grain steamer and drier for mills	430,652	June 24	2433	590	51	1966
Jarvis, Edward A., Paterson, N. J. Power-transmitting device	436,017	Sept. 9	981	257	52	1570
Jarvis, John G. (See Kipper and Jarvis.)						
Jarvis, Oscar F., assignor of one-third to J. F. Weddendorf, St. Louis, Mo. Ice-cutting implement	428,563	May 20	2315	588	51	1281
Jarvis, Samuel, assignor of one-half to S. Gillis, Bryan, Ohio. Wire-and-picket-fence machine	433,792	Aug. 5	529	137	52	859
Jarvis, William, et al. (See Gathright, John R., assignor.)						
Jasper, Wilhelm, New York, N. Y. Velocipede	426,384	Apr. 22	2974	779	51	607
Jauch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Central-draft lamp	421,171	Feb. 11	1110	285	50	784
Jauch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Lamp-shade holder	425,800	Apr. 15	2075	554	51	422
Jauch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Central-draft lamp	427,870	May 13	1281	324	51	1072
Jauch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Central-draft lamp	431,359	July 1	496	123	52	101
Jaworsky, John, Brooklyn, N. Y. Brace for piano-string frames	423,163	Mar. 11	1227	319	50	1377
Jay, Jean M. N., New York, N. Y. Oil-can	423,164	Mar. 11	1228	319	50	1377
Jaycox, Clarence G., Albion, Nebr. Strainer for pumps	442,052	Dec. 2	670	181	53	1394
Jayne, Harry W., Philadelphia, Pa. Mold for plastic material	422,221	Feb. 25	2619	693	50	1084
Jaynes, Alfonso L., Buffalo, N. Y. Time-recorder	428,103	May 20	1637	415	51	1151
Jeançon, John A., Newport, Ky. Electro-depositing aluminum	436,895	Sept. 23	2452	.....	52	1865
Jeanne, Paul. (See Kaas and Jeanne.)						
Jeavons, Alfred E. (See Luthe and Jeavons.)						
Jeavons, William R., assignor of one-half to J. A. Lannert, Cleveland, Ohio. Vapor-burner	438,548	Oct. 14	1319	358	53	261
Jebens, Friederich, Ratzeburg, Prussia, Germany. Floating lock	423,561	Mar. 18	1806	{ 476 477 }	50	1495
Jenel, Adolf, Breslau, Germany. Wagon-brake	441,874	Dec. 2	386	101	53	1341
Jefferies, Daniel P., and A. W. Grant, Springfield, Ohio. Top-support for children's carriages	438,238	Oct. 14	868	235	53	172
Jefferies, Charles A., Birmingham, Ala. Tool for turning crank-pins	438,731	Oct. 21	1626	436	53	322
Jefferies, Andrew, Wauwatosa, Wis. Rein-holder	435,501	Sept. 2	184	51	52	1410
Jefferies, Clarence L., Manchester, N. H. Electric-light hanger	428,723	May 27	2583	655	51	1350
Jefferies, William A., Mulberry, Ark. Fire-escape	440,161	Nov. 11	812	211	53	778

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Jefferson, Charles B. (See Taylor and Jefferson.)						
Jefferson Glass Company. (See Buttler, William, assignor.)						
Jefferson, John B. H., <i>et al.</i> (See Reed, George T., assignor.)						
Jefferson, John C., and J. T. Pullon, Leeds, county of York, England. Elevated single-rail railway	419,450	Jan. 14	1207	{ 319 320 }	50	254
Jefferson, John T., assignor of one-half to B. L. Lankford, Annapolis, Md. Reversible scissors	439,323	Oct. 28	2583	689	53	509
Jefferson, Rollin, Columbus, Ga. Plow-fender	435,586	Sept. 2	318	88	52	1436
Jefferson, William, Mills, Tex. Lamp-holder	438,162	Oct. 14	754	206	53	151
Jeffery, David H., New York, N. Y. Spring-bed	426,022	Apr. 22	2438	{ 644 645 }	51	497
Jeffery, Edwin A., assignor of one-half to Houghton & Dutton, Boston, Mass. Easel	425,177	Apr. 8	1157	305	51	234
Jeffery, John, and J. Simpson, Sheffield, assignors to S. Fox & Company, Limited, Stocksbridge Works, England. Frame of umbrella	433,625	Aug. 5	270	72	52	809
Jeffery, Thomas B., <i>et al.</i> (See Cottle, Luther M., assignor.)						
Jeffery, Thomas B., Chicago, Ill. Velocipede	434,449	Aug. 19	1541	402	52	1076
Jeffery, Thomas B., Chicago, Ill. Velocipede	441,417	Nov. 25	2902	748	53	1188
Jeffrey, John H., Crescent City, Cal. Device for lifting goods from shelves	420,725	Feb. 4	414	110	50	645
Jeffrey, Joseph A. (See Dierdorf, Henry B., assignor.)						
Jeffrey, Joseph A. (See Miller, Charles W., assignor.)						
Jeffrey, Joseph A. (See Sheldrick, David J., assignor.)						
Jeffrey, Joseph A. (See Taplin, John L., assignor.)						
Jeffreys, Lemuel A. (See Williams, Henry B., assignor.)						
Jeffries, Thomas W., Sydney, New South Wales. Attachment for weighing-instruments	426,818	Apr. 29	3636	949	51	743
Jeffries, Thomas W., Sydney, New South Wales. Life-saving apparatus	439,157	Oct. 28	2290	615	53	455
Jeffry, Jos. A. (See Shildrick, David J., assignor.)						
Jenkins, Thomas B. (See Swope, Martin T., assignor.)						
Jenison, William T. (See Reitter, Charles W., assignor.) (Reissue)						
Jenking, George R., assignor of one-half to H. H. Cushing, Detroit, Mich. Moistening-roller	435,606	Sept. 2	344	96	52	1441
Jenkins, Charles, Boston, Mass. Valve	427,326	May 6	454	117	51	901
Jenkins, David, Sheboygan, Wis. Tilting-chair iron	418,917	Jan. 7	423	104	50	88
Jenkins, David, assignor to Jenkins Machine Company, Sheboygan, Wis. Wood-bending press	437,904	Oct. 7	348	101	53	68
Jenkins, Isaac G., and J. H. Bishop, assignors to R. C. Jenkins, Oswego, N. Y. Sash-fastener	428,306	May 20	1943	488	51	1209
Jenkins, James. (See Turner and Jenkins.)						
Jenkins, Joel, Montclair, N. J. Shield for safety-pins	421,720	Feb. 18	1898	498	50	941
Jenkins, Joel, Montclair, N. J. Suspender-buckle	442,921	Dec. 16	2172	559	53	1704
Jenkins, John J., assignor to W. Corey, Manchester, N. H. Machine for providing knitting-machine needles with latches	432,802	July 22	2762	{ 707 708 }	52	557
Jenkins, John J., assignor to W. Corey, Manchester, N. H. Machine for providing knitting-machine needles with latches	432,943	July 22	2958	{ 753 759 760 }	52	595
Jenkins, Joseph W., Seddon, Ala. Railway-truck	431,057	July 1	43	10	52	10
Jenkins, Lancaster Z., Philadelphia, Pa. Paint or other brush	431,264	July 1	349	87	52	71
Jenkins Machine Company. (See Jenkins, David, assignor.)						
Jenkins, Marion R., Browning, Mo. Hay-rake	438,316	Oct. 14	989	267	53	195
Jenkins, Nettie E., Auburn, N. Y. Complexion-mask	441,009	Nov. 18	2205	570	53	1049
Jenkins, Nicholas, Waterbury, Conn., assignor to Holmes, Booth & Haydens, New York, N. Y. Shade-support	443,525	Dec. 30	3095	798	53	1900
Jenkins, Rebecca C. (See Jenkins and Bishop, assignors.)						
Jenkins, Samuel B., assignor to G. G. Quiney and E. Willard, Boston, Mass. Game-counter	436,896	Sept. 23	2454	641	52	1865
Jenkins, Wilton F. (See Black and Jenkins.)						
Jenkins, Wilton F., <i>et al.</i> (See Black, Bernard J., assignor.)						
Jenkinson, Samuel, Rochester, N. Y. Sash-balance	432,137	July 15	1735	445	52	353
Jenks, Charles W., Chicago, Ill. Gas or oil heating-stove	428,104	May 20	1640	416	51	1151
Jenks, Francis M., <i>et al.</i> (See Burke, Stephen L., assignor.)						
Jenks, Henry E., Fenton, Ill. Station-indicator	439,009	Oct. 21	2063	552	53	406
Jenks, Robert H. (See Crow, Bennington F., assignor.)						
Jenks, William A., <i>et al.</i> (See Burke, Stephen L., assignor.)						
Jenks, William J., New York, N. Y. Electrical cut-out	428,564	May 20	2317	588	51	1282
Jenks, William J., Nyack, N. Y. Fusible cut-out	433,682	Aug. 5	358	92	52	826
Jenks, William J., Nyack, N. Y. Electric cut-out	437,362	Sept. 30	3195	833	52	2012
Jenne, Chancy R., Fort Wayne, Ind. Animal-trap	442,228	Dec. 9	938	248	53	1453
Jenne, William R., Ilion, assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Screw-locking device	423,772	Mar. 18	2123	560	50	1554
Jenness, Charles L. (See Avery, Frederick C., assignor.)						
Jenness, Orlando, Boston, Mass. Brush	430,077	June 10	1489	369	51	1769
Jenney, Charles D., Indianapolis, Ind. Armature	432,419	Mar. 4	83	22	50	1153
Jenney, Charles D., Indianapolis, Ind. Dynamo-electric machine	424,065	Mar. 25	2570	687	50	1647
Jenni, Thomas, Allegheny, Pa. Pencil-sharpener	426,125	Apr. 22	2587	680	51	527
Jennings, A. G. (See Schwalbach, Edward, Jr., assignor.)						
Jennings, Benjamin F. K. (See King and Jennings.)						
Jennings, Byron, San José, Cal. Conduit electric railway	432,670	July 22	2540	651	52	515
Jennings, Byron, San José, Cal. Conduit electric railway	432,944	July 22	2963	760	52	596
Jennings, John, Hillsdale, Mich. Swinging and sliding gate	434,510	Aug. 19	1632	428	52	1095
Jennings, Noah D. (See Dial, Robert, assignor.)						
Jennings, Owen, Homer, La. Car-coupling	431,145	July 1	165	42	52	35
Jennings, Robert W., Jr., <i>et al.</i> (See Arnold, Will F., assignor.)						
Jennings, Simeon H., Deep River, Conn. Tool-box	428,396	May 20	2094	526	51	1240
Jennings, Simeon H., Deep River, Conn. Boiler	430,856	June 24	2756	675	51	2031
Jennings, Simeon H., Deep River, Conn. Auger-bit	433,683	Aug. 5	361	92	52	826
Jennings, Wellington M., Buffalo, N. Y. Injector oil-burner	422,222	Feb. 25	2620	693	50	1085
Jensen Can Filling Machine Company. (See Jensen, Mathias, assignor.)						
Jensen, Carl, Chicago, Ill. Cough remedy	440,039	Nov. 4	630	.....	53	731
Jensen, Heinrich J. E., assignor of one-half to E. F. G. Busch, Hamburg, Germany. Filtering apparatus	424,303	Mar. 25	2904	776	50	1712
Jensen, James, Park Place, Ark. Breech-loading gun	418,951	Jan. 7	471	117	50	99
Jensen, Jens C., Denmark, Kans. Head-protecting respirator	437,995	Oct. 7	495	140	53	94
Jensen, Mathias, assignor of one-half to Jensen Can Filling Machine Company, Astoria, Oreg. Soldering can-bodies	435,840	Sept. 2	711	{ 190 191 }	52	1512
Jensen, Mathias, assignor to Jensen Can Filling Machine Company, Astoria, Oreg. Soldering-machine	438,926	Oct. 21	1935	{ 515 516 }	53	380

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Jensen, Mathias, assignor of one-half to Jensen Can Filling Machine Company, Astoria, Oreg. Can-body-making machine	442,484	Dec. 9	1324	{ 342 343 344 }	53	1528
Jensen, Mathias, assignor of one-half to Jensen Can Filling Machine Company, Astoria, Oreg. Seaming-machine	443,445	Dec. 23	2965	{ 763 764 }	53	1865
Jensen, Niels, Minneapolis, Minn. Plumb-level	433,570	Aug. 5	193	51	52	793
Jensen, Rasmus P., Kasson, Minn. Combined bevel, gage, and trammel	421,500	Feb. 18	1531	408	50	879
Jensik, Joseph, and C. Stell, Chicago, Ill. Perforating-wheel	424,676	Apr. 1	368	97	51	71
Jerome, Edgar, New York, N. Y. Toilet-paper	440,828	Nov. 18	1926	494	53	994
Jerome, Samuel B., New York, N. Y. Heating device	431,588	July 8	860	214	52	179
Jessop, Jonathan, <i>et al.</i> (See Spangler, Jacob W., assignor.)						
Jessop, Jonathan, York, Pa. Hand nailing implement	428,105	May 20	1641	416	51	1152
Jett, John, San Francisco, Cal. Bicycle	433,172	July 29	3342	865	52	675
Jett, John, Glen Blair, Cal. Velocipede	433,173	July 29	3345	865	52	676
Jewell, Charles E., Toronto, Ontario, Canada, assignor to Office Specialty Manufacturing Company, Rochester, N. Y. Re-enforcing press-copies	429,855	June 10	1128	279	51	1699
Jewell, Charles E., Chicago, Ill., and M. R. Jewell, Rochester, N. Y. Ruler	443,652	Dec. 30	3304	852	53	1939
Jewell, Charles E., Chicago, Ill., and M. R. Jewell, Rochester, N. Y. Ruler	443,653	Dec. 30	3305	852	53	1939
Jewell, Edward R., Weeping Water, Nebr. Harrow	433,204	July 29	3390	876	52	684
Jewell, Ira H., <i>et al.</i> (See Jewell, Omar H., assignor.)						
Jewell, Major R. (See Jewell, Charles E. and M. R.)						
Jewell, Major R., assignor to Office Specialty Manufacturing Company, Rochester, N. Y. File-box	421,072	Feb. 11	976	251	50	758
Jewell, Major R., assignor to Office Specialty Manufacturing Company, Rochester, N. Y. Paper-filing cabinet	427,998	May 13	1475	375	51	1110
Jewell, Major R., assignor to Schlicht & Field Company, Rochester, N. Y. Shelf-bracket	425,326	Apr. 8	1366	365	51	274
Jewell, Omar H., Chicago, Ill. Filter	423,430	Mar. 18	1619	425	50	1460
Jewell, Omar H., assignor to I. H. and W. M. Jewell, Chicago, Ill. Strainer for suction-pipes of pumps	419,606	Jan. 14	1422	381	50	298
Jewell, Omar H. and W. M., Chicago, Ill. Chemical feeder	423,773	Mar. 18	2123	560	50	1555
Jewell, Omar H. and W. M., Chicago, Ill. Filter	425,573	Apr. 15	1730	{ 464 465 }	51	354
Jewell, Omar H. and W. M., Chicago, Ill. Filtering apparatus	431,229	July 1	301	74, 75	52	61
Jewell, Omar H. and W. M., Chicago, Ill. Water-purifying apparatus	434,666	Aug. 19	1893	494	52	1146
Jewell, Omar H. and W. M., Chicago, Ill. Sirup-filter	435,971	Sept. 9	916	242	52	1557
Jewell, Omar H. and W. M., Chicago, Ill. Chemical-feeder for filters	440,162	Nov. 11	813	211	53	779
Jewell, Omar H. and W. M., Chicago, Ill. Strainer	441,667	Dec. 2	57	16	53	1273
Jewell, Robert, London, England. Apparatus for controlling and registering liquids drawn through cocks	442,053	Dec. 2	671	181	53	1394
Jewell, Robert, London, England. Apparatus for controlling and registering the delivery of bottles	443,365	Dec. 23	2850	733	53	1843
Jewell, William M. (See Jewell, Omar H. and W. M.)						
Jewell, William M., <i>et al.</i> (See Jewell, Omar H., assignor.)						
Jewell, William M., Chicago, Ill. Filtering apparatus	427,236	May 6	328	85	51	875
Jewett, Abel P. (See Mathews, William F., assignor.)						
Jewett, Charles G., Howell, Mich. Damper-regulator	427,327	May 6	456	117	51	901
Jewett & Co., Sherman S. (See Graves, John J., assignor.)						
Jewett & Co., Sherman S. (See Walthers, Charles F., assignor.)						
Jewett & Company, Sherman S. (See Graves, John J., assignor.)						
Jewett, Josiah, Buffalo, N. Y. Oven for stoves	436,788	Sept. 23	2222	585	52	1820
Jewett, Luther K., Boston, Mass., assignor to Jewett Supply Company, Portland, Me. Anti-friction support for cars	427,691	May 13	1003	{ 252 253 }	51	1019
Jewett, Luther K., Boston, Mass., assignor to Jewett Supply Company, Portland, Me. Side bearing for car-bodies	427,692	May 13	1005	253	51	1019
Jewett, Luther K., Boston, Mass., assignor to Jewett Supply Company, Portland, Me. Anti-friction bearing	427,693	May 13	1007	{ 253 254 }	51	1020
Jewett, Luther K., Boston, Mass., assignor to Jewett Supply Company, Portland, Me. Anti-friction bearing	440,711	Nov. 18	1723	442	53	957
Jewett Supply Company. (See Jewett, Luther K., assignor.)						
Jincks, Melvin, Cohocton, N. Y. Buck-saw	418,981	Jan. 7	510	127	50	107
Jiran, Charles G., Chicago, Ill. Electric signal for velocipedes	436,979	Sept. 23	2573	673	52	1887
Jlinsky, Michael, Charlottenburg, Prussia, Germany. Petroleum-lamp for photographic purposes	426,023	Apr. 22	2440	645	51	497
Jeb, William, Columbus, Ohio. Coal-mining machine	427,871	May 13	1282	{ 324 325 }	51	1072
Jobbins, William F. (See Van Ruymbke, Joseph, assignor.)						
Jobes, Spencer C., assignor of one-fourth to G. S. Savage and A. Hunt, Quincy, Ill. Roll-paper holder and cutter	436,789	Sept. 23	2224	586	52	1821
Jobes, Winfield S., West Leisenring, Pa. Brake for vehicles	424,677	Apr. 1	369	97	51	71
Joel, Isaac. (See Sacco, Joseph, assignor.)						
Joergensen, Niels, New York, N. Y. Auxiliary car-seat	426,278	Apr. 22	2808	737	51	573
Johannes, Ira H., Washington, D. C. Alloy	443,943	Dec. 30	3755	53	2025	
Johanson, Carl E., Boston, Mass. Permutation-lock	420,625	Feb. 4	284	75	50	619
Johanson, Guy R., Longdale, Va. Lock-trimming	427,423	May 6	602	150	51	931
Johanson, Nils J., assignor of one-half to W. S. Bullock, Ocala, Fla. Trace-carrier	427,422	May 6	602	150	51	931
Johanson, Ossian L. W., Trollhattan, Sweden. Climbing apparatus	428,812	May 27	2708	687	51	1374
Johns, Henry W., New York, N. Y. Boiler or pipe covering	433,470	Aug. 5	50	16	52	766
Johns, Henry W., New York, N. Y. Non-conducting covering	433,471	Aug. 5	51	16	52	766
Johns, Henry W., New York, N. Y. Non-conducting covering	433,472	Aug. 5	51	16	52	766
Johns, Henry W., New York, N. Y. Non-conducting covering	433,473	Aug. 5	52	16	52	766
Johns, Henry W., New York, N. Y. Non-conducting sheet or mass	441,163	Nov. 25	2474	53	1110	
Johns, Henry W., New York, N. Y. Fireproofing compound	441,164	Nov. 25	2475	53	1110	
Johns, Henry W., New York, N. Y. Non-conducting covering	441,165	Nov. 25	2475	53	1110	
Johns, James A. (See Snow and Johns.)						
Johns, John B. and R., Findlay, Ohio. Making bottles	432,412	July 15	2131	547	52	426
Johns, Paris C., Martinsville, Ind. Type-case stand	435,587	Sept. 2	319	89	52	1436
Johns, Robert. (See Johns, John B. and R.)						
Johns, W. B. (See Putrow, John B., assignor.)						
Johns, Will R., assignor of one-half to G. W. Midgley, Rockford, Ill. Screw-driver	422,791	Mar. 4	621	158	50	1256
Johns, William M., and D. P. Slattery, St. Louis, Mo. Car-brake	430,957	June 24	2903	714	51	2059
Johnson, Albert C., Wilmington, Del. Feed device for ore-roasting furnaces	418,952	Jan. 7	472	117	50	99
Johnson, Albert E., Putnam, Conn. Shoe-knife	430,186	June 17	1647	410	51	1809
Johnson, Alfred W., New Brunswick, N. J. Four-wheeled vehicle	437,600	Sept. 30	3557	928	52	2085
Johnson, Allen G., assignor of one-half to A. G. Steele, Boston, Ga. Vehicle-shaft	429,810	June 10	1059	261	51	1685

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Johnson, Andrew C., <i>et al.</i> (See Griffith, William A., assignor.)						
Johnson, Anna, <i>et al.</i> (See Carlson, Carl, assignor.)						
Johnson, Arthur H., Rahway, N. J. Railway switch and signal mechanism	421,283	Feb. 11	1264	{ 326 327 }	50	812
Johnson, Axel, Oakland, assignor to Marshall Improved Window Furniture Company, San Francisco, Cal. Sash-balance	433,596	Aug. 5	234	61	52	801
Johnson, Bernt M., and J. Reichert, Racine, Wis. Bridle-bit	422,529	Mar. 4	236	62	50	1181
Johnson, Bernt M., and J. Reichert, Racine, Wis. Combined breast-strap slide and snap	431,589	July 8	802	214	52	180
Johnson, Caleb S., Beaufort, S. C. Cistern	437,601	Sept. 30	3558	928	52	2086
Johnson, Charles, Thorold, Ontario, Canada. Sod-cutter	420,071	Jan. 28	2143	567	50	454
Johnson, Charles A., Bridgeport, Conn. Die for cutting screw-threads	427,872	May 13	1285	{ 325 326 }	51	1073
Johnson, Charles C., Springfield, assignor to E. Arms, Bellows Falls, Vt. Automatic sprinkler	423,608	Mar. 18	1869	493	50	1506
Johnson, Charles E., Watertown, N. Y. Paper-making machine	421,574	Feb. 18	1690	438	50	900
Johnson, Charles L., Augusta, Ga., assignor of three-fourths to G. N. Barnes, C. G. Harmon, and C. H. Ames, Corry, Pa. Rocking-chair	421,284	Feb. 11	1267	327	50	813
Johnson, Charles M., and E. Bailey; said Bailey assignor of one-half to L. E. Sherwood, Algona, Iowa. Adjustable screen for thrashing-machines	426,589	Apr. 29	3285	862	51	676
Johnson Company. (See Berriman, Richard, assignor.)						
Johnson Company. (See Brown, William M., assignor.)						
Johnson Company. (See Entwisle, Edward B., assignor.)						
Johnson Company. (See Pratt, Mason D., assignor.)						
Johnson Company. (See Reilly, Francis P., assignor.)						
Johnson Company. (See Suppes, Max M., assignor.)						
Johnson, Daniel, Kansas City, Mo. Grass-receiver for lawn-mowers	429,629	June 10	797	194	51	1636
Johnson, David, Chicago, Ill. Apparatus for graining	437,437	Sept. 30	3316	865	52	2036
Johnson, De Wirt, Warsaw, N. Y. Device for locking and tapping beer or other barrels	435,933	Sept. 9	863	226	52	1548
Johnson, Delbert E., Atlanta, Ga. Means for the electrical propulsion of vehicles	418,843	Jan. 7	289	70, 71	50	61
Johnson, Delbert E., Atlanta, Ga. Conduit for electric railways	420,804	Feb. 4	541	140	50	667
Johnson, Donald, West Superior, Wis. Door	437,438	Sept. 30	3317	865	52	2037
Johnson, Duwayne E., Farlington, Kans. Oil-can	432,736	July 22	2646	676	52	535
Johnson, Edward C., administrator. (See Gage, Charles W. and A. S.)						
Johnson, Edward C., Macon, Ga., and T. M. Johnson, Keokuk, Iowa. Governor for steam-pumps	429,570	June 3	708	172	51	1608
Johnson, Edward H. (See Bergmann, Sigmund, assignor.)						
Johnson, Edward H. (See Capek, John V., assignor.)						
Johnson, Edward H., New York, N. Y. Power-transmitting device	431,811	July 8	1232	308	52	249
Johnson, Edward H., New York, N. Y. Dynamo	431,812	July 8	1237	308	52	250
Johnson, Edward H., New York, N. Y. Electric-current regulator	435,899	Sept. 2	814	216	52	1532
Johnson, Edward H., New York, N. Y. Telephone	443,526	Dec. 30	3096	798	53	1900
Johnson, Edward H., assignor to Interior Conduit and Insulation Company, New York, N. Y. Electrical controlling and operating apparatus	435,897	Sept. 2	811	215	52	1532
Johnson, Edward H., assignor to Interior Conduit and Insulation Company, New York, N. Y. Electric controlling and operating device	435,898	Sept. 2	813	215	52	1532
Johnson, Edward H., assignor to Bergmann & Company, New York, N. Y. Switch	443,606	Dec. 30	3231	831	53	1925
Johnson, Edward W., Olean, N. Y. File	438,270	Oct. 14	923	249	53	181
Johnson, Edward W., Olean, N. Y. Holder for files	438,271	Oct. 14	923	250	53	181
Johnson, Edward W., New York, N. Y., assignor to Coe Brass Manufacturing Company, Torrington, Conn. Mold	440,810	Nov. 18	1887	{ 485 486 }	53	988
Johnson, Edwin L., New York, N. Y. Meal from cotton-seed and method of making	421,575	Feb. 18	1692	438	50	900
Johnson Electric Service Company. (See Johnson, Warren S., assignor.)						
Johnson, Elery, Cincinnati, Ohio. Paper-guide and envelope-holder	433,944	Aug. 12	750	195	52	913
Johnson, Elmer E., assignor of one-half to J. H. Ausman, Herkimer, N. Y. Trace-fastener	429,452	June 3	528	127	51	1574
Johnson, Emery W. (See Stowell, Elery, assignor.)						
Johnson, Enos H., Chicago, Ill. Steam-engine	428,106	May 20	1643	{ 416 417 }	51	1152
Johnson, Enos H., Chicago, Ill. Piston-rod connection for steam-engines	433,986	Aug. 12	814	213	52	924
Johnson, Ephraim S., Yonkers, N. Y. Fountain-pen feeder	440,712	Nov. 18	1724	442	53	958
Johnson, Everell A., Brady Island, Nebr. Corn-planter	429,532	June 3	655	160	51	1596
Johnson, Frank A., <i>et al.</i> (See Whittingham, David L., assignor.)						
Johnson, Frank A., Denver, Colo. Carriage lamp or lantern	427,038	Apr. 29	3930	1024	51	801
Johnson, Frank B., Flatbush, assignor to National Finance Company, Brooklyn, N. Y. Treadle	424,444	Mar. 25	3166	840	50	1763
Johnson, Frank G., New York, N. Y. Means for preventing longitudinal movement of rails of railways	437,301	Sept. 30	3085	808	52	1992
Johnson, Frank R., New York, N. Y. Longitudinal railway-rail holder	437,302	Sept. 30	3086	808	52	1992
Johnson, Fred L., East Dubuque, Ill. Link-lifter	422,021	Feb. 25	2316	611	50	1028
Johnson, Frederick, Brooklyn, assignor to Edison Machine Works, Schenectady, N. Y. Electric-lighting system	425,801	Apr. 15	2077	555	51	422
Johnson, Frederick C., <i>et al.</i> (See Toucey, Ferris D., assignor.)						
Johnson, George A., Boston, Mass. Plate for secondary batteries	420,234	Jan. 28	2409	641	50	504
Johnson, George D., La Grange, Ohio. Milk-cooler	443,854	Dec. 30	3617	931	53	2000
Johnson, George E., Aulander, N. C. Logging-car	423,531	July 22	2324	600	52	473
Johnson, George H., Fitchburg, Mass. Semaphore-signal device	434,084	Aug. 12	957	251	52	954
Johnson, George W., assignor of one-third to C. H. Coulson, Womer, Kans. Muzzle	435,308	Aug. 26	2896	767	52	1343
Johnson, Gustavus J., Chicago, Ill. Sewer-pipe cap	443,680	Dec. 30	3353	862	53	1943
Johnson, Harriet, Brooklyn, N. Y. Wash-tub	426,536	Apr. 29	3204	840	51	659
Johnson, Henry, Washington, D. C. Bill-file	426,996	Apr. 29	3831	1014	51	791
Johnson, Henry, Rahway, N. J. Detector-bar clip	441,798	Dec. 2	267	71	53	1316
Johnson, Henry, Rahway, N. J. Anti-friction guide for signal-rods	442,810	Dec. 16	1884	485	53	1647
Johnson, Henry H., and S. G. Hill, London, England; said Hill assignor to said Johnson. Rubber-dam clamp	420,876	Feb. 4	663	172	50	690
Johnson, Henry L., Reading, Pa. Sharpener for edge-tools	435,697	Sept. 2	499	132	52	1471
Johnson, Henry W. (See Purdy, Charles H., assignor.)						
Johnson, Herbert L., London, county of Middlesex, England. Hatter's measure	424,481	Apr. 1	58	17, 18	51	14
Johnson, Iver. (See Hanson, Olaus, assignor.)						
Johnson, Iver. (See Hanson and Lobben, assignors.)						
Johnson, James. (See Lash and Johnson.)						
Johnson, James, Pittsburg, Pa. Reducing ore	441,166	Nov. 25	2477		53	1110
Johnson, James, Neenah, Wis., assignor of one-half to S. Smith, Cambridge, Mass. Oil filter or separator	442,896	Dec. 16	2046	525	53	1678
Johnson, James T. (See Wantling and Johnson.)						
Johnson, John, Martling, Ala. Railway pump-motor	425,327	Apr. 8	1368	365	51	275

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Johnson, John A., Madison, Wis. Reversible cultivator-shovel.....	423,774	Mar. 18	2125	561	50	1555
Johnson, John A., Madison, Wis. Reversible cultivator-shovel.....	423,775	Mar. 18	2126	561	50	1555
Johnson, John A., Manistee, Mich. Ventilated boot or shoe.....	434,341	Aug. 12	1356	354	52	1032
Johnson, John A., St. Paul, Minn., assignor of one-half to J. S. Pierson, Trempealeau, Wis. Railway-switch.....	431,360	July 1	498	124	52	101
Johnson, John A., assignor of one-half to J. S. Pierson, Trempealeau, Wis. Three-way switch.....	431,520	July 1	750	187	52	150
Johnson, John A., Madison, and T. G. Mandt, Stoughton, Wis. Vehicle-axle.....	423,776	Mar. 18	2127	561	50	1555
Johnson, John E. and O. M., Chicago, Ill. Dust-collector.....	430,072	Jan. 28	2144	567	50	454
Johnson, John H., Orange, Tex. Kiln.....	419,334	Jan. 14	1036	274	50	219
Johnson, John H., Dover, N. H. Key-hole guard.....	433,291	July 29	3511	906	52	710
Johnson, John I., assignor to E. Miller & Company, Meriden, Conn. Hanging lamp.....	424,712	Apr. 1	426	113	51	84
Johnson, John M., Prosperity, S. C. Seed-planter and fertilizer-distributor.....	428,341	May 20	1997	503	51	1220
Johnson, John P., <i>et al.</i> (See Hjelt, Adolf, assignor.).....						
Johnson, John T., Esmond, S. D. Halter-tie.....	437,693	Oct. 7	23	7	53	7
Johnson, John W. (See Forrey, George J., assignor.).....						
Johnson, John W. (See Martin, Drake, and Johnson.).....						
Johnson, Jonathan, and E. H. Packer, Lowell, Mass. Fender for stove-pipes.....	420,999	Feb. 11	862	223	50	736
Johnson, Jonathan, and E. H. Packer, Lowell, Mass. Radiator.....	421,000	Feb. 11	863	223	50	736
Johnson, Joseph B. (See Connell and Johnson.).....						
Johnson, Joseph R. (See Buttz, Frank C., assignor.).....						
Johnson, Joseph R., New York, N. Y. School-seat.....	424,713	Apr. 1	427	113	51	84
Johnson, Joseph S. (See Freeman and McCanley, assignors.).....						
Johnson, Lewis P., and C. J. R. Bergstrom, St. Paul, Minn. Device for the protection of bank-tellers.....	441,668	Dec. 2	58	16	53	1273
Johnson, Lewis W. (See Burke, Stephen E., assignor.).....						
Johnson, Louis K., and A. A. Low, Brooklyn, assignors to Alden Type Machine Company, New York, N. Y. Type-distributing machine.....	421,001	Feb. 11	863	{ 223 224 225 }	{ 50 }	736
Johnson, Louis K., and A. A. Low, Brooklyn, assignors to Alden Type Machine Company, New York, N. Y. Type-distributing apparatus.....	435,564	Sept. 2	281	78, 79	52	1430
Johnson, Louis K., and A. A. Low, Brooklyn, assignors to Alden Type Machine Company, New York, N. Y. Type-distributing apparatus.....	436,039	Sept. 9	1023	{ 266 267 }	{ 52 }	1578
Johnson & Lund. (See Lund, Oliver, assignor.).....						
Johnson, Marion L. (See Millidge and Johnson.).....						
Johnson, Martin A., Stoughton, Wis. Axle and skein.....	437,398	Sept. 30	3245	{ 845 846 320 321 }	{ 52 }	2022
Johnson, Moses C., assignor to W. N. Woodruff, Hartford, Conn. Milling-machine.....	419,451	Jan. 14	1209	{ 846 320 321 }	{ 50 }	254
Johnson, Nels J., Grafton, N. D. Drill attachment for broadcast seeders.....	421,501	Feb. 18	1583	408	50	879
Johnson, Nicholas, Merriam, Kans. Latch.....	426,938	Apr. 29	3793	991	51	774
Johnson, O. M., <i>et al.</i> (See Samuelson, Andrew G., assignor.).....						
Johnson, Olaf M. (See Johnson, John E. and O. M.).....						
Johnson, Oliver, assignor of two-thirds to W. P. Somers and M. Sloan, Kingston, Pa. Stay-bolt cutter.....	429,571	June 3	708	172	51	1608
Johnson, Oscar, Lindsborg, and N. A. Holtman, Suolan, Kans.; said Holtman assignor to said Johnson. Horse-power apparatus.....	429,382	June 3	432	{ 101 102 }	{ 51 }	1553
Johnson, Oscar E., Seney, Mich. Log-rolling apparatus.....	420,387	Jan. 28	2634	699	50	544
Johnson, Peter, Wauconda, Ill. Game.....	425,100	Apr. 8	1022	273	51	206
Johnson, Robert M., Philadelphia, Pa. Hook.....	426,451	Apr. 29	3079	808	51	636
Johnson, Robert M., Philadelphia, Pa. Chain-hook.....	441,490	Nov. 25	3023	779	53	1210
Johnson, Robert M., Sigourney, Iowa. Stop-clock.....	429,132	June 3	38	9	51	1479
Johnson, Robert W., New Brunswick, N. J. Glue compound.....	426,187	Apr. 22	2685	51	51	546
Johnson, Robert W., Elizabeth, N. J. Manufacture of surgical bandages.....	426,590	Apr. 29	3286	51	51	676
Johnson, Samuel H., and C. C. Hutchinson, Stratford, county of Essex, England. Construction of filter-presses.....	419,775	Jan. 21	1676	445	50	353
Johnson Steel Street Rail Company. (See Baldwin, George E., assignor.).....						
Johnson Steel Street Rail Company. (See Du Pont, Alfred V., assignor.).....						
Johnson, Teresa M. (See Johnson, Edward C., assignor.).....						
Johnson, Theodore, Alexandria, Minn. Fire-alarm system.....	424,558	Apr. 1	188	51, 52	51	39
Johnson, Thomas, A. Hanson, and N. Whiteley, Huddersfield, county of York, England. Child's carriage.....	425,612	Apr. 15	1799	482	51	367
Johnson, Thomas E. (See Warnick and Cunningham, assignors.).....						
Johnson, Thomas E. (See Wright, William H. H., assignor.).....						
Johnson, Tom L. (See Harris, Samuel, assignor.).....						
Johnson, Tom L., Cleveland, Ohio. Turn-table.....	427,328	May 6	457	118	51	901
Johnson, Warren S., Milwaukee, Wis. Water-heating apparatus.....	434,111	Aug. 12	1005	{ 261 262 }	{ 52 }	963
Johnson, Warren S., Whitewater, assignor of one-half to W. Plankinton, Milwaukee, Wis. Apparatus for charging and discharging secondary batteries.....	420,906	Feb. 4	715	{ 184 185 }	{ 50 }	698
Johnson, Warren S., assignor to Johnson Electric Service Company, Milwaukee, Wis. Pipe-coupling.....	423,323	Mar. 11	1466	383	50	1422
Johnson, William. (See Lee and Johnson.).....						
Johnson, William, Leeds, England. Brick-machine.....	439,158	Oct. 28	2292	{ 615 616 }	{ 53 }	456
Johnson, William A., and J. N. Smith, Toronto, Ontario, Canada. Secondary battery.....	423,324	Mar. 11	1467	384	50	1422
Johnson, William H. (See Granger and Johnson.).....						
Johnson, William H., Racine Junction, Wis. Forging-machine.....	430,029	June 10	1405	349	51	1753
Johnson, William H., Westborough, Mass. Adjustable binding device for milk-cans.....	430,326	June 17	1998	493	51	1878
Johnson, William H., and J. B. Granger, Delhi, N. Y. Hame-fastener.....	425,080	Apr. 8	997	267	51	201
Johnson, William H., and T. Kruse, Indianapolis, Ind. Dry closet.....	440,895	Nov. 18	2024	521	53	1014
Johnson, William O., Peedee, Tex. Evaporator.....	442,122	Dec. 9	777	{ 209 210 }	{ 53 }	1422
Johnston, Allen, Ottumwa, Iowa. Tuck-marking attachment for sewing-machines.....	427,999	May 13	1476	375	51	1116
Johnston, Allen, Ottumwa, Iowa. Machine for grinding cntlery-handles.....	433,526	Aug. 5	121	35	52	780
Johnston, Andrew L., Richmond, Va. Automatic disconnector for overhead conductors.....	435,080	Aug. 26	2575	680	52	1283
Johnston, Arthur S., Waterford, N. Y. Letter-box.....	429,922	June 10	1230	305	51	1719
Johnston, Austin S., deceased, Chicago, Ill.; M. R. Johnston, administratrix. Inhaler.....	422,420	Mar. 4	85	22	50	1153
Johnston, Austin S., deceased, Englewood, Ill.; M. R. Johnston, administratrix. Whiffle-tree.....	423,519	Mar. 18	1745	460	50	1485
Johnston Car Seat Company. (See Emmert, Joseph S., assignor.).....						
Johnston Car Seat Company. (See Gillfillan, Essington N., assignor.).....						
Johnston Car Seat Company. (See Gillfillan and Emmert, assignors.).....						
Johnston, David J., assignor of one-fifth to G. M. Verrall, Toronto, Ontario, Canada. Cash-drawer and sales-recorder.....	427,424	May 6	603	{ 150 151 }	{ 51 }	931

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Johnston, Edward D., New York, N. Y. Mortar-mixing apparatus	440,478	Nov. 11	1332	344	53	874
Johnston, Edward P., Washington, D. C. Heating-drum	428,756	May 27	2632	666	51	1360
Johnston, Frank J., Sacramento, Cal. Gate	428,777	May 27	2659	674	51	1365
Johnston, George, Detroit, Mich. Eyeglass-frame	420,662	Feb. 4	332	86	50	629
Johnston, George W. (See Knowles, Daniel, assignor.)						
Johnston Harvester Company, (See Pridmore, Edward, assignor.)						
Johnston, Hector M., Eau Claire, Wis. Pump	419,957	Jan. 21	1965	516	50	411
Johnston, Horace G., Salina, Kans. Apparatus for operating diamond drills in mines	435,648	Sept. 2	423	113	52	1455
Johnston, James, Bradford, Pa. Knife	433,793	Aug. 5	530	137	52	860
Johnston, James G., Denver, Colo. Method of and apparatus for manufacturing secondary-battery electrodes	442,187	Dec. 9	879	235	53	1442
Johnston, James J., Columbiana, Ohio. Air-heating attachment for lamps	433,474	Aug. 5	54	17	52	767
Johnston, James W. (See Busch and Johnston.)						
Johnston, John, New York, N. Y. Safety-latch for elevator-doors	425,802	Apr. 15	2078	555	51	422
Johnston, John, Neenah, Wis. Flour-bolt. (Reissue)	11,117	Oct. 14	1391	{ 376 377 }	{ 53 53 }	{ 274 274 }
Johnston, John E. (See Hyde, Wesley M., assignor.)						
Johnston, John W. (See Early and Johnston.)						
Johnston, Marietta R., administratrix. (See Johnston, Austin S.)						
Johnston, Samuel, assignor of one-half to E. H. Morton, Livingston, Ga. Fertilizer-distributor	439,955	Nov. 4	495	129	53	705
Johnston, Thomas, Newburg, N. Y. Handle for lawn-mowers	443,855	Dec. 30	3618	{ 931 932 }	{ 53 53 }	{ 2000 2000 }
Johnston, Thomas A., London, England. Backing for stone for lithographic purposes	433,349	July 29	3588	925	52	725
Johnston, Thomas H. (See Barringer and Johnston.)						
Johnston, Walter, Detroit, assignor of one-half to H. P. Glover, Ypsilanti, Mich. Blank for paper boxes	422,792	Mar. 4	622	158	50	1256
Johnstone, Charles E., Oxford, England. Game	429,531	June 3	654	160	51	1596
Johnstone, James, New York, N. Y. Saw-set	438,927	Oct. 21	1939	{ 516 517 }	{ 53 53 }	{ 381 381 }
Johum, Francis P., Brooklyn, N. Y. Tailor's measure	419,452	Jan. 14	1211	321	50	255
Joliet Clock Manufacturing Company. (See Lindenau, Erick W., assignor.)						
Joliet Steel Company. (See Pettigrew, Charles, assignor.)						
Joliet Steel Company. (See Smith and Garrett, assignors.)						
Jolly, John M., Marlin, Tex. Leather-dressing	441,010	Nov. 18	2206	.....	53	1049
Jolly, Mathias, Troy, assignor of two-thirds to M. P. Thayer, Lansingburg, and M. E. Hart, Troy, N. Y. Oil-can	433,244	July 29	3444	890	52	697
Joncas, Louis, Auburn, Me. Seam-pressing machine	443,917	Dec. 30	3709	949	53	2017
Jones, Albert W. (See Leeman and Jones.)						
Jones, Alfred J. (See Jones, James and A. J.)						
Jones, Alfred, and W. Scaver, St. Louis, Mo. Street or station indicator	433,205	July 29	3391	876	52	685
Jones, Alfred W., et al. (See Hatch, Adin A., assignor.)						
Jones, Allen R., Milwaukee, Wis. Steam-boiler furnace	436,138	Sept. 9	1181	309	52	1605
Jones, Ansel B., Cleveland, Ohio. Electrical clock	419,776	Jan. 21	1678	445	50	353
Jones, Arthur E., assignor to American Pin Company, Waterbury, Conn. Curtain-rod fixture	438,109	Oct. 7	674	183	53	130
Jones, Arthur W., Boston, Mass. Friction-clutch	427,085	May 6	89	24	51	829
Jones, Augustus H., assignor to Meriden Bronze Company, Meriden, Conn. Hanging lamp	424,714	Apr. 1	428	114	51	84
Jones, Benjamin F. (See Wise and Jones.)						
Jones, Benjamin F., et al. (See Cullens, John T., assignor.)						
Jones, Benjamin F., et al. (See Hatch, Adin A., assignor.)						
Jones, Cad, et al. (See Hartiss, Milford B., assignor.)						
Jones, Charles, Derby, county of Derby, England. Carbonizing steel	420,539	Feb. 4	158	.....	50	594
Jones, Charles A., and C. L. Bothwell, La Grange, Ind. Swinging chair	419,152	Jan. 7	751	199	50	157
Jones, Charles E., South Rutland, N. Y. Sled-brake	411,167	Nov. 25	2478	641	53	1111
Jones, Charles E., Dallas, Tex. Gage for job-printing presses	442,255	Dec. 9	976	256	53	1461
Jones, Charles E., assignor of two-thirds to W. J. Flanagan and R. J. Hoffman, Florence, Ala. Lock	441,875	Dec. 2	388	101	53	1341
Jones, Charles W., London, Ontario, Canada. Spindle-driving mechanism for spinning-machines	418,797	Jan. 7	208	51	50	45
Jones, Charles W., London, Ontario, Canada. Spindle-driving band tension-regulating device for spinning-machines	427,425	May 6	605	151	51	931
Jones, Charles W., Johnsonville, Miss. Railway-car	426,385	Apr. 22	2975	779	51	607
Jones, Clinton J., New Philadelphia, Ohio. Perforated pulley	440,040	Nov. 4	631	107	53	731
Jones, Daniel F., San Francisco, Cal. Safety-plug for wash-basins	426,939	Apr. 29	3794	991	51	774
Jones, Daniel W., Salt Lake City, Utah Ter. Side-saddle	421,406	Feb. 18	1444	374	50	853
Jones, David A., et al. (See Demme, Charles F., assignor.)						
Jones, David D., Santa Clara, Cal. Fruit-grader	424,002	Mar. 25	2483	661	50	1630
Jones, David D., assignor to W. C. Anderson, San José, Cal. Fruit-dipping apparatus	439,072	Oct. 21	2159	579	53	425
Jones, Davis B. (See Gosney and Jones.)						
Jones, Edward B., Shawville, Ill. Stove-pipe collar, clamp, and cover	424,304	Mar. 25	2906	777	50	1712
Jones, Edward C. (See Greenough, Jones, and Addicks.)						
Jones, Edward C., Boston, Mass. Safety device for gas or air pipes	424,305	Mar. 25	2908	777	50	1713
Jones, Edward P., and E. R. Williams, Girard, Ohio. Damper	421,576	Feb. 18	1693	438	50	901
Jones, Elgin W. (See Nason, Joseph H., assignor.)						
Jones, Erastus N., assignor of one-half to T. McAvity, St. John, New Brunswick, Canada. Car-coupling	421,285	Feb. 11	1267	327	50	813
Jones, Evan and J. A., Pittsburg, Pa. Machine for pressing and blowing glassware	436,790	Sept. 23	2226	586	52	1821
Jones, Floyd, Pompton Plains, N. J. Puzzle	430,030	June 10	1406	350	51	1753
Jones, Forrest R., Kearney, Nebr., assignor of one-half to J. G. White, New York, N. Y. Coupling for electric wires	436,857	Sept. 23	2392	624	52	1852
Jones, Francis W., New York, N. Y. Quadruplex relay	424,209	Mar. 25	2769	733	50	1686
Jones, Francis W., New York, N. Y. Telegraph-transmitter	425,511	Apr. 15	1642	437	51	337
Jones, Francis W., New York, N. Y. Quadruplex telegraphy	426,591	Apr. 29	3287	862	51	676
Jones, Francis W., New York, N. Y. Duplex and quadruplex telegraph	426,619	Apr. 29	3638	949	51	743
Jones, Francis W., New York, N. Y. Dynamo-telegraphy	433,082	July 29	3204	{ 823 824 }	{ 52 52 }	{ 647 647 }
Jones, Francis W., New York, N. Y. Telegraph-circuit	441,847	Dec. 2	347	91, 92	53	1332
Jones, Francis W., New York, N. Y. Apparatus for automatically grounding or cutting out of circuit exposed electrical conductors	443,527	Dec. 30	3098	798	53	1900
Jones, Frank, Morse, Kans. Disinfecting trees, &c.	440,612	Nov. 11	1537	.....	53	916
Jones, Frank, Morse, Kans. Insecticide	441,306	Nov. 25	2738	.....	53	1156
Jones, Frank E. (See Burrows and Jones.)						
Jones, George F. (See Armstrong, William J., assignor.)						
Jones, George H., and W. A. Sanders, Beaver City, Nebr. Hand-stamp	443,831	Dec. 30	3595	924	53	1995

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Jones, George M., Greensburg, Pa., assignor of one-half to J. T. Kelly, Brooklyn, N. Y. Pipe-hanger	422,945	Mar. 11	891	233	50	1314
Jones, Harry J., assignor of one-half to F. Marsch, Philadelphia, Pa. Bung and hush	441,418	Nov. 25	2905	749	53	1189
Jones, Harry L., Geneva, Ill. Corn-barvester	429,311	June 3	317	75	51	1531
Jones, Harry T., assignor to M. Bensinger, Chicago, Ill. Cash register and indicator	427,086	May 6	90	24, 25	51	829
Jones, Harvey F., Carlyle, Ill. Combined roller and drill	436,664	Sept. 16	2018	527	52	1773
Jones, Henry A. (See Marcy and Jones.)						
Jones, Hiram, Detroit, Mich. Trolley-covering for electric railways	441,764	Dec. 2	216	57	53	1306
Jones, Horace K., Hartford, Conn. Treating metals	427,768	May 13	1133	284	51	1044
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Machine for rolling screw-threads	419,777	Jan. 21	1680	446	50	353
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Die for swaging screw-threads	425,035	Apr. 8	936	249	51	189
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Manufacture of carpenters' squares	436,759	Sept. 16	2169	570	52	1802
Jones, Hugh F., assignor to Webster, Camp & Lane Machine Company, Akron, Ohio. Valve gear	423,165	Mar. 11	1229	320	50	1377
Jones, Jacob H., Pittsburg, Pa. Pencil-sharpener	429,689	June 10	883	214	51	1653
Jones, James and A. J., Thorold, Ontario, Canada. Grinding-mill	423,223	Feb. 25	2621	694	50	1085
Jones, James H., assignor to Emerson, Talcott & Company, Rockford, Ill. Seeding-machine	429,572	June 3	709	172	51	1608
Jones, James H., assignor to Emerson, Talcott & Company, Rockford, Ill. Riding-cultivator	431,980	July 8	1479	374	52	298
Jones, James H., assignor to Emerson, Talcott & Company, Rockford, Ill. Walking-cultivator	431,981	July 8	1481	374	52	298
Jones, James W., New York, N. Y. Anchor-alarm and tide-tell-tale	423,166	Mar. 11	1331	320	50	1378
Jones, James W., New York, N. Y. Bilge-water alarm	427,873	May 13	1290	326	51	1074
Jones, John (See Brennan, Jones and Goldthwait.)						
Jones, John, Elkhart, Ind. Railway-crossing	425,803	Apr. 15	2079	555	51	423
Jones, John, New York, N. Y., assignor of two-thirds to C. P. Stevens, Denver, Colo. Trolley-switch for electric railways	443,081	Dec. 16	2337	596	53	1736
Jones, John A. (See Jones, Evan and J. A.)						
Jones, John A., et al. (See Spangler, Jacob W., assignor.)						
Jones, John A., York, Pa. Machine for assorting or sizing fruit	430,031	June 10	1407	350	51	1753
Jones, John A., York, Pa. Machine for assorting and sizing fruits, &c.	442,288	Dec. 9	1025	270	53	1469
Jones, John B., et al. (See Wagemann, Edmund, assignor.)						
Jones, John C., Napa, Cal. Fermenting-tank wine-strainer	441,419	Nov. 25	2906	749	53	1189
Jones, John E., New York, N. Y. Weather-strip	435,841	Sept. 2	713	191	52	1513
Jones, John P., assignor of one-half to J. W. Chrysler, Chicago, Ill. Rod-packing	443,918	Dec. 30	3710	949	53	2017
Jones, John R. (See Ralston and Jones.)						
Jones, John T., et al. (See Krutsch, Willis W. and A., assignors.)						
Jones, John T., Utica, N. Y. Feeding mechanism for sewing-machines	420,073	Jan. 28	2144	567	50	454
Jones, John T., Utica, N. Y. Twine-holder	435,425	Sept. 2	65	21	52	1387
Jones, John W., Utica, N. Y. Cloth-board	420,344	Jan. 28	2576	682	50	533
Jones, John W., Utica, N. Y. Cloth-board machine	433,626	Aug. 5	271	72	52	809
Jones, John W., Fayetteville, Tenn. Liniment	422,946	Mar. 11	893	233	50	1314
Jones, John W., and D. J. Noonan, St. John, Canada. Shingle-tying machine	443,255	Dec. 23	2666	684	53	1807
Jones, Joseph M., Paris, Ky. Paper cover	421,028	Feb. 11	904	233	50	744
Jones, Joseph M., Paris, Ky. Fastener for paper	434,047	Aug. 12	888	234	52	939
Jones, Joshua, Auburn Park, Ill. Adjustable funnel	427,874	May 13	1291	326	51	1074
Jones, Joshua R. (See Sutter, Joseph, assignor.)						
Jones, Joshua W., Harrisburg, Pa. Book-binder's and printer's dry-pressing, sheet-tying, smashing, and tableting machine	427,426	May 6	606	151	51	931
Jones, Joshua W., Harrisburg, Pa. Copying-press	435,309	Aug. 26	2896	767	52	1343
Jones & Lamson Machine Company. (See Hartness, James, assignor.)						
Jones, Lorenzo D., assignor of one-half to L. M. Thiers, Kenosha, Wis. Rosette for harness	423,325	Mar. 11	1467	384	50	1422
Jones, Lyman M., and J. Wedlake, assignors to A. Harris Son & Company, Limited, Brantford, Canada. Mower	442,811	Dec. 16	1885	486	53	1647
Jones, Marshall N., Abilene, Kans. Roll-paper holder and cutter	441,669	Dec. 2	59	16	53	1273
Jones, Marshall N., Abilene, Kans. Cloth-measuring machine	443,528	Dec. 30	3101	799	53	1901
Jones, Mary S. (See Jones, Thomas, assignor.)						
Jones, Melville D., Somerville, Mass. Hose-coupling	431,167	July 1	203	50	52	42
Jones, Nathaniel S., et al. (See Odell, John B., assignor.)						
Jones, Paul, Coeymans, and J. E. Burlingham, New Baltimore, N. Y. Street-sweeping machine	436,499	Sept. 16	1745	460	52	1723
Jones, Philip. (See Edwards, Lewis, and Jones.)						
Jones, Philip L., New Haven, W. Va. Metallic basket	420,577	Feb. 4	212	55	50	606
Jones, Ralph A., Detroit, Mich. Speed-indicator	427,875	May 13	1292	326	51	1074
Jones, Reuben, Atlanta, Ga. Plant-fender for plows	437,651	Sept. 30	3622	947	52	2099
Jones, Richard B., et al. (See Wetherell, George F., assignor.)						
Jones, Robert V., assignor of two-thirds to W. A. Schleicher and F. C. Lehmann, Cleveland, Ohio. Meat-cutter	430,316	June 17	1894	464	51	1857
Jones, Robert W., et al. (See Bowman, William H., assignor.)						
Jones, Samuel G., Brockton, Mass. Saddle-pad	429,353	Oct. 28	2625	700	53	518
Jones, Sophia B., Atlanta, Ga. Barrel-trunk	432,138	July 15	1736	446	52	353
Jones, Thomas, Chicago, Ill. Compound plaster	421,172	Feb. 11	1112	50	50	784
Jones, Thomas, assignor to M. S. Jones, Denver, Colo. Manufacturing relief geographical maps or globes	431,469	July 1	669	135	52	135
Jones, Thomas E., Cincinnati, Ohio. Fluid-ejector	419,126	Jan. 7	710	187	50	149
Jones, Thomas F., Rowena, S. D. Singletree for vehicles	432,532	July 22	2324	600	52	474
Jones, Thomas V., Decatur, Ill. Staple-driver	420,074	Jan. 28	2146	568	50	455
Jones, Trevannion A., Dublin, Iowa. Vehicle running gear	426,126	Apr. 22	2588	681	51	527
Jones, Virgil S. (See Garber, Joseph A., assignor.)						
Jones, W. Davidson, Amsterdam, N. Y. Apparatus for dyeing	430,877	Feb. 4	665	172	50	690
Jones, Walter F., et al. (See Waters, Benjamin E., assignor.)						
Jones, Walter S., Lynn, assignor to J. Q. A. Whittemore, Boston, Mass. Heel-nailing machine	441,420	Nov. 25	2907	749	53	1189
Jones, Wilbur F., assignor to H. Carlton, Baltimore, Md. Molding-machine	442,054	Dec. 2	674	182	53	1394
Jones, William, San Francisco, Cal. Limekiln	437,494	Sept. 30	3400	890	52	2055
Jones, William E. (See O'Neill, John, assignor.)						
Jones, William F., Columbia, S. C., assignor of one-half to R. N. Lowrance. Combination-gage	426,997	Apr. 29	3883	1014	51	791

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Jones, William G., Jr., <i>et al.</i> (See Richards, Philip, assignor.)						
Jones, William H., Hartford, Conn. Pencil-sharpener	433,684	Aug. 5	362	92	52	826
Jones, William J., Franklinville, N. Y. Cap for oil or other vessels	420,688	Feb. 4	367	97	50	636
Jones, Willis, Buffalo, N. Y. Vehicle-axle	428,107	May 20	1644	417	51	1153
Jones, Willis, assignor to Buffalo Patent Axle and Wheel Company, Buffalo, N. Y. Vehicle-axle	421,002	Feb. 11	870	225	50	738
Jones, Willis C., and J. G. D. Mack, Cincinnati, Ohio. Table	439,159	Oct. 28	2293	616	53	456
Jones, Willis C., and J. G. D. Mack, Cincinnati, assignors to Black & Clawson Company, Hamilton, Ohio. Paper-winding machine	431,771	July 8	1163	289 } 290 }	52	236
Jones, Willis E., Alba, Mich. Screw-cutting tap	439,956	Nov. 4	496	129	53	705
Jones, Woodruff & Co. (See Shaffer, Charles H., assignor.)						
Jones, Worick O., Portland, Me. Setting for steam-boilers	427,694	May 13	1009	254	51	1020
Jones, Zachariah F., Scottsville, Va. Wagon-body	434,342	Aug. 12	1358	355	52	1033
Jenson, Charles A. (See Schmidt and Jenson.)						
Jopling, James, What Cheer, Iowa. Coal-hoist	442,442	Dec. 9	1264	326 } 327 }	53	1516
Jordan, Arvill S., Waltham, Me. Window-grate	419,048	Jan. 7	598	154	50	126
Jordan, Charles A. (See Warren and Jordan.)						
Jordan, Edward B. (See Craigie, Edward H., assignor.)						
Jordan, Elmer C., Sacramento, Cal. Circulator and feed-water heater	422,793	Mar. 4	622	159	50	1256
Jordan, Frank W., Tacony, Pa. Machine for compressing tablets	438,763	Oct. 21	1677	450 } 451 }	53	332
Jordan, George C., assignor to Railway Station Indicator Company, Staunton, Va. Station-indicator	433,856	Dec. 30	3619	932 } 933 }	53	2000
Jordan, Henry W., New York, N. Y. Hook or catch	436,242	Sept. 9	1338	350	52	1636
Jordan, John, <i>et al.</i> (See Trump, John G., assignor.)						
Jordan, John H., Dec, Ark. Motor for churns	438,888	Oct. 21	1888	501	53	371
Jordan, John S. (See Eller and Jordan.)						
Jordan, Lorenzo A., Central Falls, and S. O. Meader, Saylesville, R. I. Pencil-sharpener	426,940	Apr. 29	3795	991	51	775
Jordan, Lyman, B., Malden, Mass. Sash-stop	433,945	Aug. 12	752	196	52	913
Jordan, Perry L., Garvin, Tex. Combined cotton chopper and cultivator	420,235	Jan. 28	2411	642	50	504
Jordan, Peter, assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Can-body-making machine	436,792	Sept. 23	2234	589 } 590 } 591 }	52	1822
Jordan, Peter, and J. G. Hodgson, assignors to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Can-body-making machine	436,791	Sept. 23	2228	586 } 587 } 588 }	52	1821
Jordan, Thomas B., Los Angeles, Cal. Fruit-picker's knife	443,178	Dec. 23	2526	646	53	1779
Jordan, Thomas N., Mobile, Ala. Log-carrier	433,627	Aug. 5	274	73	52	810
Jordan, Thomas R., London, England. Apparatus for the extraction of metals from their ores	438,479	Oct. 14	1222	331 } 332 }	53	241
Jordan, Thomas R., London, England. Ore-crusher	440,572	Nov. 11	1486	384	53	903
Jordan, Thomas R., London, England. Crushing or pulverizing ores, &c.	442,055	Dec. 2	676	182	53	1395
Jordan, William E., and F. A. Maribew, Orange, Mass. Device for rounding up circular saws	436,059	Sept. 9	1052	273	52	1584
Jordan, William P., Washington, D. C. Hoisting and transporting mechanism	434,278	Aug. 12	1268	329	52	1013
Jordon, George C., <i>et al.</i> (See Smith and Fox, assignors.)						
Jorgensen, Axel, assignor of one-half to O. E. Pearson, Des Moines, and C. G. Hipwell, Davenport, Iowa. Apparatus for mixing liquids	439,010	Oct. 21	2063	552	53	406
Jørgensen, Erik. (See Krag and Jørgensen.)						
Jory, John G., <i>et al.</i> (See Diffenderfer, John K. E., assignor.)						
Josef, Edward E., Buffalo, N. Y. Clamp for molders' flasks, &c.	424,988	Apr. 8	859	228	51	175
Joseph, Frank, and J. Hein, Jasper, Ind. Flexible cover for cylinder or roll top desks	425,432	Apr. 15	1528	409	51	315
Joseph, Gustav, Bielitz, Austria-Hungary. Machine for cleaning cotton	437,303	Sept. 30	3087	808 } 809 }	52	1992
Joslin, Charles M., Northville, Mich. Spring air-gun	439,246	Oct. 28	2446	656	53	484
Joslin, Isaac R., deceased, (L. Joslin, administratrix,) New York, and C. M. Thompson, Brooklyn, N. Y. Apparatus for making compound lumber	422,794	Mar. 4	623	159 } 160 }	50	1256
Joslin, Isaac R., deceased, (L. Joslin, administratrix,) New York, and C. M. Thompson, Brooklyn, N. Y. Apparatus for making compound lumber	422,795	Mar. 4	626	160	50	1257
Joslin, Laurinda, administratrix. (See Joslin and Thompson.)						
Josselin, Louis, assignor to W. R. Irby, New Orleans, La. Cigarette-machine	421,721	Feb. 18	1899	499	50	941
Josz, César F., Brussels, Belgium. Ornamenting plates	439,160	Oct. 28	2295	551	53	456
Jouet, Joseph, New Orleans, La. Shutter-fastener	425,884	Apr. 15	2203	585	51	445
Jowett, William. (See Spencer, George, assignor.)						
Joy, William, Northfleet, assignor to H. Peters, Wouldham, England. Feeding cement-kilns	434,830	Aug. 19	2130	.....	52	1192
Joyce, Maurice, Washington, D. C. Stereotype-block	435,753	Sept. 2	575	154	52	1486
Jucker, Jacob, Manchester, county of Lancaster, England. Loom	422,224	Feb. 25	2622	694 } 695 }	50	1085
Judd, E. C., <i>et al.</i> (See Coy and Paul, assignors.)						
Judd, Edward C., <i>et al.</i> (See Gordon, William, assignor.)						
Judd, Fred W., Cleveland, Ohio. Handle for kitchen utensils	429,453	June 3	529	127	51	1574
Judd, Fred W., assignor to Avery Stamping Company, Cleveland, Ohio. Kettle	441,421	Nov. 25	2209	750	53	1190
Judd, James L. (See Ward and Judd.)						
Judd, Theodore F., and C. A. Mallory, Danbury, Conn. Apparatus for forming nap-bats.	424,791	Apr. 1	562	149	51	109
Judevine, Henry W., Edgar Springs, Mo. Whisk-broom fastener	423,167	Mar. 11	1233	321	50	1378
Judge, John, and J. Sullivan, Fall River, Mass. Device for operating yarn-separators in spinning-machines	432,201	July 15	1825	469	52	370
Judson, Egbert, San Francisco, Cal. Dynamite	420,626	Feb. 4	255	.....	50	619
Judson, Freeand W., Cleveland, Ohio. Running-gear for street-cars	425,380	Apr. 8	1447	387	51	289
Judsen, J. Edwin. (See Whipple, Nathan F., assignor.)						
Judson Pneumatic Street Railway Company. (See Judson, Whitecomb L., assignor.)						
Judson, Whitecomb L., Minneapolis, Minn. Street-railway	423,871	Mar. 18	2271	599 } 600 }	50	1583
Judson, Whitecomb L., Minneapolis, Minn. Street-railway	423,872	Mar. 18	2273	600	50	1584
Judson, Whitecomb L., assignor to Judson Pneumatic Street Railway Company, Minneapolis, Minn. Reheating device for compressed air	420,878	Feb. 4	667	173	50	690
Judson, Whitecomb L., assignor to Judson Pneumatic Street Railway Company, Minneapolis, Minn. Universal joint	423,562	Mar. 18	1808	477	50	1495
Judy, Noah H., Circleville, W. Va. Saddle-bags	433,083	July 29	3209	824 } 825 }	52	648
Juenemann, Julius E., Washington, D. C. Bracket for curtain-rollers	434,714	Aug. 19	1974	513	52	1160
Juengst, Charles A., Croton Falls, N. Y. Shaping and slotting machine	436,139	Sept. 9	1183	309	52	1606

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Juergens, Frank H., Hutchinson, Minn. Egg-tester	431,591	July 8	863	215	52	180
Juergens, Frederick A., assignor to Niagara Stamping and Tool Company, Buffalo, N. Y. Sheet-metal folder	421,722	Feb. 18	1901	499	50	941
Julian, William H., and J. B. Guillaume, Springfield, Ohio. assignors to C. E. Wolfkill, A. S. Knapp, Indianapolis, Ind., and P. F. Fish, Springfield, Ohio. Screw	429,241	June 3	202	50	51	1511
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Cork-puller	422,348	Feb. 25	2832	746	50	1123
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Lemon cutter and squeezer	426,188	Apr. 22	2685	705	51	546
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Meat-cutter	426,413	Apr. 22	3029	792	51	617
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Cork-puller	428,000	May 13	1479	375	51	1110
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Shaking apparatus	432,241	July 15	1881	484	52	380
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Meat-cutting machine	432,242	July 15	1882	484	52	381
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Ice-shaving machine	435,359	Aug. 26	2980	790	52	1358
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Swing	437,694	Oct. 7	24	8	53	7
Jull, Samuel T., assignor of one-half to F. T. Fish, Meadville, Pa. Grater	437,695	Oct. 7	25	8	53	8
Jump, James S., and J. Bullenger, Kansas, Ohio. Clothes-drier	440,429	Nov. 11	1263	327	53	860
Jung, Peter, Perham, Minn. Music-leaf turner	425,178	Apr. 8	1157	305	51	234
Jungerman Brothers. (See Christie, William R., assignor.)						
Junkins, Jeathro E., Upper Sandusky, Ohio. Barrel-truck and tilting device	436,040	Sept. 9	1028	268	52	1579
Junkins, Leander D., Somerville, Mass. Monkey-wrench attachment	432,945	July 22	2965	760	52	596
Jurgenson, Ove M. (See Hills and Jurgenson.)						
Jury, Frederick H., New York, N. Y. Window	424,306	Mar. 25	2909	777	50	1713
Jury, Richard H., et al. (See Cavalli, Giosef A., assignor.)						
Justesen, Chris, Audubon, Iowa. Feed-trough	423,777	Mar. 18	2129	561	50	1555
Justi, Henry D. (See Nütz, George W., assignor.)						
Justi, Henry D., Philadelphia, Pa. Heating apparatus	424,210	Mar. 25	2771	739	50	1686
Justice, Elihu P., Greenville, Ill. Ratchet nut-wrench	429,034	May 27	3046	786	51	1442
Justice, Philip S. (See Shelton, William V., assignor.)						
Justin, Joel G., Syracuse, assignor of one-half to M. Delano, W. H. Patten, and G. De Witt, Canastota, N. Y. Shell for high explosives	424,482	Apr. 1	60	18	51	14
Kaas, William M., Newark, and P. Jeanne, Jersey City, N. J. Ring	424,211	Mar. 25	2772	739	50	1686
Kade, Charles, Chicago, Ill. Rocking-chair attachment	418,724	Jan. 7	101	23	50	22
Kaestner, Charles, Chicago, Ill. Mashing-machine	421,577	Feb. 18	1694	{ 439 } 440	50	901
Kaffenberger, Gustav, assignor to Central Paper and Fiber Company, Cleveland, Ohio. Paper-winding machine	424,608	Apr. 1	264	70	51	54
Kaffenberger, Gustav, assignor to Central Paper and Fiber Company, Cleveland, Ohio. Paper-slitting machine	437,896	Oct. 7	338	99	53	66
Kahlenberg, William R., Two Rivers, Wis. Liquid-mixer	419,200	Jan. 14	833	219	50	179
Kahler, Charles P. K., Baltimore, Md. Surface-water-drainage connection	428,342	May 20	1999	503	51	1221
Kahlo, Henry, et al. (See Smith, Wesley, assignor.)						
Kahn, Myrtill. (See Lauch and Kahn.)						
Kahn, Myrtill, Elberfeld, Prussia, Germany. Making azo dyes	425,885	Apr. 15	2204	.....	51	445
Kahnweiler, David, New York, N. Y. Life-raft	421,578	Feb. 18	1697	440	50	901
Kaighin, Charles J. (See Birch, William H., assignor.)						
Kail, Oscar, Uhrichsville, Ohio. Brick-kiln	440,041	Nov. 4	632	167	53	731
Kain, David F., Albion, Ind. Two-wheeled vehicle	421,579	Feb. 18	1698	{ 440 } 441	50	901
Kainer, Frederick, Chicago, Ill. Transom-lifter	441,670	Dec. 2	62	17	53	1274
Kaiser, Charles. (See Beardslee, Kaiser, and Russell.)						
Kaiser, Ferdinand P., St. Louis, Mo. Ear-muffle	437,602	Sept. 30	3559	929	52	2086
Kaiser, Fredrick, Knoxville, Tenn. Ammonia-still	442,025	Dec. 16	1560	403	53	1584
Kaiser, Gustav, Chemnitz, Germany. Apparatus for drying pasteboard, &c.	442,229	Dec. 9	939	248	53	1453
Kaiser, Jacob, St. Louis, Mo. Door or shutter straightener	430,032	June 10	1411	351	51	1754
Kalamazoo Knitting Company. (See Sedmihradsky, Adolf, assignor.)						
Kalbach, Harry M., Ashland, Pa. Lightning-arrester	437,363	Sept. 30	3197	833	52	2012
Kalbach, Morgan D., Lebanon, Pa. Car-coupling	422,796	Mar. 4	627	161	50	1257
Kalbe, Eugen, Berlin, Germany. Accordion	429,763	June 10	994	243	51	1674
Kaley, John A., Carson City, Mich. Privy-seat	428,001	May 13	1480	376	51	1111
Kalle & Co. (See Paal, Carl, assignor.)						
Kallen, Peter, Fort Wayne, Ind. Churn	419,127	Jan. 7	711	187	50	149
Kalloch, Bradford K. (See Shaw, Floyd L., assignor.)						
Kamak, Max, New York, N. Y. Suspension device	423,326	Mar. 11	1468	384	50	1422
Kammer, John von der, assignor of one-half to J. W. Packard, New York, N. Y. Magnetic circuit-closer	426,024	Apr. 22	2442	645	51	498
Kammeyer, Carl E., Eau Claire, Wis. Fuse-box	429,133	June 3	40	9	51	1480
Kammeyer, Carl E., Eau Claire, Wis. Induction-coil or transformer	432,050	July 15	1596	408	52	325
Kampfe, Frederick, et al. (See Eigen, Benno v., assignor.)						
Kampfe, Otto, et al. (See Eigen, Benno v., assignor.)						
Kampfe, Richard, et al. (See Eigen, Benno v., assignor.)						
Kampfe, William, and J. Nagengast, Bayonne, N. J. Adjustable croze	438,480	Oct. 14	1224	332	53	241
Kanally, Morris E. (See Hutchins, Elmer N., assignor.)						
Kane, John. (See Harvey and Kane.)						
Kane, Simon L. (See Kaye, Kane, and Yates.)						
Kane, Thomas. (See Daniels and Kane.)						
Kane, William E. (See Weidaw and Kane.)						
Kane, William E., and F. T. Weidaw, Syracuse, assignors of one-third to W. F. Morris, Baldwinsville, N. Y. Hub-boring machine	422,358	Feb. 25	2847	751	50	1126
Kangley, John, Streator, Ill. Mining-machine	435,426	Sept. 2	66	21, 22	52	1388
Kangley, Patrick, Randalia, Iowa. Gage for corn-planters	443,832	Dec. 30	3596	924	53	1995
Kanneberg, A. C. (See Bonbrake, Lewis S., assignor.)						
Kansas City Elevator Manufacturing Company. (See Turner, Allen and F. E., assignors.)						
Kansas City Packing and Chase Refrigerating Company. (See Chase, Andrew J., assignor.)						
Kanter, Max. (See Dreifoos, Emanuel B., assignor.)						
Kantner, Washington C., Reading, Pa. Game apparatus	436,980	Sept. 23	2575	673	52	1888
Kaplan, Godfrey J., Owatonna, Minn. Draft-equalizer	429,035	May 27	3047	786	51	1442
Karder, Magdalena, et al. (See Iwanowitsch, Richard, assignor.)						
Karelsen's Sons, E. (See Appleton, Charles J., assignor.)						
Karn, Edwin B., Anherst, S. D. Band-cutter and feeder	422,839	Mar. 4	699	180	50	1271
Karr, Henry C., Washington, D. C. Electric-circuit closer for clocks	428,676	May 27	2499	636	51	1334
Karr, James P., Monticello, Ind. Removing incrustation from boiler-tubes	420,689	Feb. 4	367	97	50	626
Karr, James P., Monticello, Ind. Apparatus for removing incrustation from boiler-tubes ..	421,135	Feb. 11	1058	272	50	774

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Karshner, Daniel W., Tiffin, Ohio. Saw-jointer	440,163	Nov. 11	815	211	53	779
Kasch, Friedrich W., Austin, Tex. Wrench	433,794	Aug. 5	531	137	52	860
Kaseberg, William H., Wasco, Oreg. Vehicle-brake	437,834	Oct. 7	248	76	53	49
Kassner, Georg, Breslau, Germany. Producing plumbates of alkaline earths	430,653	June 24	2424		51	1967
Katherman, Charles W., Williamsport, Pa. Clothes-hook	434,343	Aug. 12	1359	355	52	1033
Katzenberg, Jacob, New York, N. Y. Suspender	422,132	Feb. 25	2484	657	50	1059
Katzenberg, Jacob, New York, N. Y. Suspenders	441,491	Nov. 25	3023	779	53	1210
Katzenberg, Milton. (See Schlereth and Katzenberg.)						
Katzenstein, Leopold. (See Paterson and Cumming, assignors.)						
Kauffer, Hale P., et al. (See Wilson, Thomas H., assignor.)						
Kauffmann, Ferdinand E., Elizabeth, N. J. Spoke-socket	422,797	Mar. 4	629	161	50	1257
Kaufman, Samuel. (See Sheck, Abraham H., assignor.)						
Kaufmann & Brothers, J. (See Melaney, William H., assignor.)						
Kaufmann, Hermann, Milwaukee, Wis. Receptacle for garbage	431,058	July 1	45	10	52	11
Kaufmann, Jacob, Capac, Mich. Mower	439,278	Oct. 28	2502	670	53	494
Kaufmann, John R., Waterloo, Ontario, Canada. Seat for vehicles	422,225	Feb. 25	2624	695	50	1085
Kaufmann, Kaufmann, Newark, N. J. Traveling bag or satchel	421,079	Feb. 11	978	251	50	758
Kavanagh, Jeremiah, Wenham, Mass. Apparatus for planing ice cakes	428,565	May 20	2320	589	51	1282
Kavel, August W., Milwaukee, Wis. Fish-scaler	441,244	Nov. 25	2631	682	53	1136
Kay, Henry E., Fall River, Mass. Grinding-machine	437,996	Oct. 7	496	140	53	94
Kay, William A., Honea Path, S. C. Signal	425,613	Apr. 15	1801	483	51	368
Kay, William V., Chicago, Ill. Nail	418,844	Jan. 7	293	71	50	62
Kaye, Edward, Water Cure, Pa. Glass-melting pot	426,820	Apr. 29	3640	949	51	744
Kaye, Frederick H., S. L. Kane, and W. A. Yates, Vine Grove, Ky. Car-coupling	418,894	Jan. 7	381	93	50	86
Kaylor, Edward, Pittsburg, assignor of one-fourth to I. M. Popp, Braddock, Pa. Car-coupling	435,360	Aug. 26	2981	791	52	1359
Kaylor, John S., Bismarck, Ill. Telegraph-key	427,876	May 13	1293	327	51	1074
Kayser, William J., assignor of two-thirds to I. Leiser and W. Geuder, Milwaukee, Wis. Fly-trap	431,361	July 1	500	124	52	101
Kayser, William J., assignor to Western Ventilating and Chimney Cap Company, Milwaukee, Wis. Chimney cap and ventilator	441,101	Nov. 18	2362	612	53	1079
Keach, Clovis E., Mapleville, R. I. Construction of highways	443,320	Dec. 23	2782	714	53	1829
Keach, Wilham H., Providence, R. I. Fishing-reel	426,279	Apr. 22	2809	738	51	573
Kealy, James P., New Haven, Conn. Automatic pressure lubricator	421,003	Feb. 11	871	225	50	738
Kean & Lines. (See Lines and Bronson, assignors.)						
Keane, John, San Francisco, Cal. Wind-guard	424,212	Mar. 25	2773	739	50	1687
Keane, Joseph T., Chicago, Ill. Mat for bar wash-basins	442,626	Dec. 16	1562	403	53	1584
Kearney, John, Louisville, Ky. Guard for trap-doors	427,427	May 6	609	152	51	932
Kearns, Thomas A., South Auburn, Nebr. Gate	435,347	Aug. 26	2961	785	52	1355
Keasley, Eli, Philadelphia, Pa. Feeder for carding-machines	437,304	Sept. 30	3088	809	52	1993
Keasey, Theron D., Toledo, Ohio. Pulley	436,582	Sept. 16	1889	496	52	1748
Keating, John M. (See Rhoads, John N., assignor.)						
Keating, Robert M., Springfield, Mass. Velocipede	420,805	Feb. 4	544	140	50	667
Keating, Robert M., Springfield, Mass. Velocipede	426,670	Apr. 29	3399	894	51	698
Keating, Thomas F., New York, N. Y., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock	420,553	Feb. 4	186	48	50	601
Keats, Charles H. (See Keats, John and C. H.)						
Keats, John, Bagnall, near Stoke-upon-Trent, England. Apparatus for winding thread	440,811	Nov. 18	1889	486	53	988
Keats, John, Bagnall, near Stoke-upon-Trent, England. Holder for thread	440,812	Nov. 18	1892	487	53	988
Keats, John and C. H., Stafford, England. Sole-trimmer	437,857	Oct. 7	279	84	53	55
Keats, Socrates, Toess, Switzerland. Tool for trimming soles	437,858	Oct. 7	281	84	53	55
Keavy, Thomas E., Cleveland, Ohio, assignor of two-thirds to A. Ely and G. F. Denning, Baltimore, Md. Combined cigar-cutter and match holder and ignitor	424,307	Mar. 25	2911	777	50	1713
Keck, Christian. (See Christie and Keck.)						
Keef, Calvin. (See Harrison and Keef.)						
Keefer, William B. (See Shinn, John, assignor.)						
Keefer, William B., Philadelphia, Pa. Ingrain carpet fabric	419,855	Jan. 21	1810	479	50	379
Keefer, William B., Philadelphia, Pa. Ingrain carpet fabric	424,308	Mar. 25	2914	778	50	1714
Keefer, William B., Philadelphia, Pa. Ingrain carpet fabric	443,095	Dec. 23	2377	607	53	1751
Keeler, Calvin, Hobart, N. Y. Pattern device for making re-enforce button-holes	423,327	Mar. 11	1469	384	50	1423
Keeler, Isaac, et al. (See Lefebvre, Henry, assignor.)						
Keeley, David H., Ottawa, Canada. Telegraph-circuit	440,164	Nov. 11	816	212	53	779
Keeley, David H., Ottawa, Canada. Multiplex telegraphy	440,165	Nov. 11	820	212	53	780
Keeling, Squire, Springfield, assignor of one-half to T. J. Condon, Sangamon County, Ill. Clothes-line prop.	443,618	Dec. 30	3247	834	53	1928
Keen & Hagerty. (See Wagandt, Charles L., assignor.)						
Keen, Orlando, Allentown, Pa. Harness-saddle	442,188	Dec. 9	881	235	53	1442
Keenan, Ellis, Jr., Buffalo, N. Y. Molding-machine	442,123	Dec. 9	779	210	53	1422
Keene, Philip, Moline, Ill. Spreader attachment	440,637	Nov. 18	1597	411	53	934
Keene, Samuel D., Providence, R. I., assignor to J. H. and H. W. Wilson, Cornholme, England. Bobbin	427,877	May 13	1294	327	51	1075
Keene, T. Austin. (See Fowler, George B., assignor.)						
Keener, Edwin T., Moberly, Mo. Shutter-worker	437,603	Sept. 30	3560	929	52	2086
Keeney, Benjamin F., Quercus Grove, Ind. Broadcast hand-seeder	429,454	June 3	530	127	51	1574
Keeney, Gordon J., King Fisher, Oklahoma Ter. Fender for vehicle-wheels	431,362	July 1	501	124	52	101
Keep, W. J., et al. (See Soper, Robert W., assignor.)						
Keep, William H., assignor of one-half to S. A. Hathaway, Stockton, Cal. Windmill	419,526	Jan. 14	1308	349	50	274
Keep, William J., Detroit, Mich., assignor to Lamson & Sessions Company, Cleveland, Ohio. Nut for mica-frame bolts	421,723	Feb. 18	1902	499	50	942
Keeran, Manalens G., Bloomington, Ill. Car-seat	425,328	Apr. 8	1370	366	51	275
Kehm, Edward, and H. Meyer, Chicago, Ill. Cigar-lighter	419,856	Jan. 21	1811	479	50	379
Kehr, Cyrus. (See Newell and Kehr.)						
Kehr, Cyrus, Winnetka, Ill. Means for recording moving cars	434,085	Aug. 12	958	251	52	954
Kehr, Cyrus, Lakeside, Ill. Automatic fire-extinguisher	437,846	Oct. 7	264	80	53	52
Keidel, John, Friedenau, near Berlin, Germany. Heating-stove	423,931	Mar. 25	2372	631	50	1610
Keitel, Fred W., Jr., assignor to Scanlon & Co., Louisville, Ky. Fire-place back or lining	438,732	Oct. 21	1627	437	53	323
Keitel, Friedrich, Louisville, Ky. Adjustable blower for stoves	424,559	Apr. 1	190	52	51	39
Keil, Francis, New York, N. Y. Latch and lock combined	442,982	Dec. 16	2173	559	53	1704
Keil, George T., Washington, D. C. Clock striking mechanism	429,455	June 3	531	127	51	1575

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Keiller, Alexander, Gothenburg, Sweden, assignor to T. Lange, Brieg, Prussia, Germany. Making zinc sulphide.	425,081	Apr. 8	999	-----	51	202
Keiller, James, Gothenburg, Sweden. Circulating device for steam-boilers.	432,879	July 22	2867	735	52	578
Keiper, Henry B., Lancaster, Pa. Dished forge-pan.	423,168	Mar. 11	1234	321	50	1378
Keiper, Henry B., Lancaster, Pa. Car-beater.	443,770	Dec. 30	3493	{ 895 896 }	53	1975
Keiser, Andrew, Prophetstown, Ill. Sand-hand.	440,357	Nov. 11	1120	288	53	834
Koiser, Florenz, assignor of one-half to R. Riegner, Pottstown, Pa. Measuring-faucet.	422,530	Mar. 4	237	62	50	1181
Keitel, Adolph. (See Deeves and Gauthreaux, assignors.)						
Keith, C. V., et al. (See Haldeman, Charles, assignor.)						
Keith, Constance S., Boston, Mass. Grate.	441,307	Nov. 25	2738	708	53	1156
Keith, Eli, Hagerstown, Ind. Washing-machine.	420,302	Jan. 28	2514	667	50	522
Keith, Ethan B., assignor of one-half to C. D. Towne, Galesburg, Mich. Grain-carrier.	425,229	Apr. 8	1224	325	51	248
Keith, Franklin, et al. (See Phillips, Russell, assignor.)						
Keith, Frederick M., Boston, Mass. Refrigerator.	432,803	July 22	2766	708	52	558
Keith, James, London, England. Damper for chimney-flues.	440,229	Nov. 11	922	237	53	800
Keith, Jehu F. (See Willis and Keith.)						
Keith, Myron L., Brockton, Mass. Welted boot or shoe.	442,897	Dec. 16	2049	526	53	1678
Keith, Thomas K. (See Foss and Keith.)						
Keithley, Herbert R., Denver, Colo. Electric railway.	433,409	July 29	3667	947	52	742
Keithley, Willie C., assignor of one-half to J. Farnham, San Francisco, Cal. Adjustable picture-frame hanger.	440,599	Nov. 11	1539	397	53	913
Keizer, David A., Winnipeg, Canada. Magazine-pencil.	442,754	Dec. 16	1792	464	53	1628
Kelland, John. (See Miller, Martin S., assignor.)						
Keller, Charles, et al. (See Backus, Stephen, assignor.)						
Keller, Chauncy F., assignor of one-half to F. Buchanan, Lima, Ohio. Electric-arc lamp.	429,573	June 3	710	173	51	1609
Keller, George J., Osceola, Nebr. Till-lock.	421,266	Feb. 11	1269	{ 327 328 }	50	813
Keller, George J., Osceola, Nebr. Till-lock.	421,287	Feb. 11	1271	328	50	814
Keller, George J., Osceola, Nebr. Alarm-lock.	422,421	Mar. 4	86	23	50	1153
Keller, George J., Osceola, Nebr. Knockdown table.	423,250	Mar. 11	1360	353	50	1402
Keller, George J., Osceola, Nebr. Alarm-lock.	423,328	Mar. 11	1470	385	50	1423
Keller, George J., Osceola, Nebr. Alarm-lock.	424,886	Apr. 1	700	{ 185 186 }	51	135
Keller, George J., Osceola, Nebr. Till-lock.	430,525	June 17	2204	542	51	1917
Keller, George J., Osceola, Nebr. Submerged metallic pump.	438,163	Oct. 14	755	206	53	152
Keller, Henry. (See Ellis, George H., assignor.)						
Keller, Isaac B., Steelton, Pa. Collar for flannel shirts.	422,054	Feb. 25	2366	626	50	1037
Keller, Jacob B. (See Spangler, Harrison D., assignor.)						
Keller, Jeremiah, assignor to O. Kromer, Sandusky, Ohio. Grain-binding harvester.	441,168	Nov. 25	2479	{ 641 642 }	53	1111
Keller, John, New York, N. Y. Theater-ticket.	426,503	Apr. 29	3155	829	51	651
Keller, Moses A., Batavia, N. Y., assignor to Aultman, Miller & Company, Akron, Ohio. Knot-tying mechanism for grain-binders.	422,798	Mar. 4	629	{ 161 162 }	50	1257
Keller, Peter, Chicago, Ill. Carburetor.	431,059	July 1	46	11	52	11
Kellerstrass, Ernest, Excelsior Springs, Mo. Churn.	430,654	June 24	2425	590	51	1967
Kelley, David, and J. J. Cox, Weedman, Ill. Bolster-plate.	430,291	June 17	1855	455	51	1849
Kelley, Dennis, and M. C. Parkhurst, Somerville, Mass. Electrical transmitter and indicator.	437,859	Oct. 7	282	85	53	55
Kelley, Edward W. (See Norton, James J., assignor.)						
Kelley, Ernest F. (See Andrews and Kelley.)						
Kelley, George W., Goshen, Ind. Carpet-sweeper.	424,309	Mar. 25	2916	778	50	1714
Kelley, George W., assignor to C. C. Latta and G. L. Lamb, Goshen, Ind. Toy spring-gun.	437,605	Sept. 30	3563	930	52	2087
Kelley, Harry E., Niagara Falls, assignor to Oneida Community, (limited,) Kenwood, N. Y. Animal-trap.	419,453	Jan. 14	1212	321	50	255
Kelley, Harry E., Niagara Falls, assignor to Oneida Community, (limited,) Kenwood, N. Y. Metallic ring.	423,260	Mar. 11	1362	354	50	1402
Kelley, Harry E., Niagara Falls, assignor to Oneida Community, (limited,) Kenwood, N. Y. Snap-hook.	430,857	June 24	2756	675	51	2031
Kelley, Harry E., Niagara Falls, assignor to Oneida Community, Limited, Kenwood, N. Y. Animal-trap.	433,245	July 29	3445	890	52	697
Kelley, Harry E., Niagara Falls, assignor to Oneida Community, (limited,) Community, N. Y. Animal-trap.	424,792	Apr. 1	564	150	51	110
Kelley, Harvey, Cuba, N. Y. Ditching-machine.	423,329	Mar. 11	1471	{ 385 386 }	50	1423
Kelley, James, Richmond, Ind. Wire-and-picket-fence machine.	431,772	July 8	1165	{ 290 291 }	52	236
Kelley, James P., et al. (See Best, Edward, assignor.)						
Kelley, John I., Springfield, Mass. Guiding and gaging implement for masons.	441,492	Nov. 25	3024	{ 779 780 }	53	1210
Kelley, Peter F., Denver, Colo. Grass-receptacle for lawn-mowers.	421,370	Feb. 11	1389	358	50	834
Kelley, Samuel E., assignor to Payton & Kelley, Providence, R. I. Eyeglass-holder.	421,099	Feb. 11	1010	258	50	764
Kelley, Thomas W., Brooklyn, assignor to Butler & Kelley, New York, N. Y. Paper-binder.	434,393	Aug. 12	1440	376	52	1049
Kelley, Zeno, Yarmouth, Mass. Welt-tension-regulating device for looms.	420,644	Feb. 4	313	81	50	625
Kelliher, Alfred T., Bethel, Me. Hoisting-machine.	428,108	May 20	1645	417	51	1153
Kelliher, Frederick H. (See Taylor and Kelliher.)						
Kelliher, Frederick H., assignor to N. W. Taylor, Cleveland, Ohio. Machine for making paper bags.	439,842	Nov. 4	317	80	53	670
Kelliher, Frederick H., assignor to N. W. Taylor, Cleveland, Ohio. Machine for making paper bags.	439,843	Nov. 4	320	81, 82	53	670
Kelling, Max, New York, N. Y. Fire-proof door.	425,804	Apr. 15	2080	556	51	423
Kellner, Henry, Danbury, Conn. Pail-holder for faucets.	443,771	Dec. 30	3495	896	53	1975
Kellogg, Charles, Findlay, Ohio. Mandrel for rolling seamless tubes.	424,213	Mar. 25	2774	{ 739 740 }	50	1687
Kellogg, Charles, Findlay, Ohio. Machine for rolling tubes.	439,878	Nov. 4	374	97, 98	53	680
Kellogg, Charles W. (See Sprague and Kellogg.)						
Kellogg, Clarence V. (See Benedict, Heman A., assignor.)						
Kellogg, Clement A., Rogers, Ohio. Grinding attachment for mowing-machines.	419,527	Jan. 14	1308	350	50	274
Kellogg & Co., P. P. (See Heywood, Charles H., assignor.)						
Kellogg, Edwin M., Delavan, Wis., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Sheaf-carrier.	420,274	Jan. 28	2475	{ 657 658 }	50	515
Kellogg, Edwin M., Delavan, Wis., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder.	422,947	Mar. 11	893	{ 234 235 }	50	1314

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Kellogg, Ernst A., and W. W. Cox, Kansas City, Mo. Automatic cable-railway crossing	442,704	Dec. 16	1689	433	53	1609
Kellogg, John E., Council Bluffs, Iowa. Clothes-line apparatus	439,957	Nov. 4	497	130	53	705
Kellogg, Martha E., Battle Creek, Mich. Tailor's measure	435,182	Aug. 26	2700	713	52	1307
Kellogg, Milo G., Hyde Park, Ill. Multiple switch-board	424,310	Mar. 25	2918	779	50	1717
Kellogg, Milo G., Chicago, Ill. Multiple switch-board for telephone-exchanges	427,087	May 6	91	25, 26	51	829
Kellogg, Warren T., assignor to Empire Portable Forge Company, Lansingburg, N. Y. Mechanism for converting motion	443,284	Dec. 23	2714	696	53	1816
Kellogg, William S. (See Ingram and Kellogg.)						
Kells, Charles E., Jr., New Orleans, La. Electro-magnetic clutch	443,772	Dec. 30	3496	{ 896 897 }	{ 53 53 }	1975
Kells, Herbert, Astoria, N. Y. Clamp	420,236	Jan. 28	2412	642	50	504
Kelly, Charles J., Providence, R. I. Banjo	437,604	Sept. 30	3561	929	52	2086
Kelly, E. S. (See Wells, Frank R., assignor.)						
Kelly, Edward K., New York, N. Y. Clasp	435,099	Aug. 26	2577	680	52	1283
Kelly, Fergus, Birmingham, Conn., assignor to Osborne & Cheesman Company, of Connecticut. Cast-off for suspender-buckles	419,528	Jan. 14	1309	350	50	275
Kelly, Frank, and W. A. Williams, San Francisco, Cal. Plasterer's tool	437,860	Oct. 7	285	85	53	56
Kelly, Frederick M., et al. (See Stein, Samuel P., assignor.)						
Kelly, George, Chicago, Ill. Method of and machine for making flat coiled springs	426,386	Apr. 22	2977	779	51	607
Kelly, George, Chicago, Ill. Metallic lathing	439,728	Nov. 4	149	39	53	637
Kelly, George J. (See Smith and Kelly.)						
Kelly, Helen. (See Kelly, William H., assignor.)						
Kelly, Henry P., San Francisco, Cal. Fifth-wheel	419,679	Jan. 21	1547	412	50	328
Kelly, James. (See Kelly, John, assignor.)						
Kelly, James, assignor of one-half to E. Dougherty, San Diego, Cal. Transom-lifter	419,680	Jan. 21	1548	413	50	328
Kelly, James, assignor of one-half to E. Dougherty, San Diego, Cal. Transom-lifter	419,681	Jan. 21	1548	413	50	328
Kelly, James, assignor of one-half to E. Dougherty, San Diego, Cal. Vent-stopper for ordnance	426,592	Apr. 29	3289	863	51	677
Kelly, James, assignor of one-half to E. Dougherty, San Diego, Cal. Device for laying guns at any angle	426,593	Apr. 29	3289	863	51	677
Kelly, James M., assignor to H. Hollensbe, Kingston, Ind. Fence-wire tightener	423,382	Mar. 11	1540	405	50	1434
Kelly, James R. F. (See Edwards and Kelly.)						
Kelly, John, Chicago, Ill. Water-closet	428,278	May 20	1897	478	51	1201
Kelly, John, Chicago, Ill. Valve device	433,628	Aug. 5	275	73	52	810
Kelly, John, assignor of one-half to J. Kelly, Chicago, Ill. Flushing apparatus for water-closets	441,799	Dec. 2	268	71	53	1316
Kelly, John, and L. F. Horrell, Red Bud, Ill. Plow-doubletree	425,676	Apr. 15	1905	507	51	389
Kelly, John, and L. F. Horrell, Red Bud, Ill. Wagon-doubletree	425,677	Apr. 15	1905	507	51	388
Kelly, John B., Pleasant Home, Oreg. Pneumatic railway	436,946	Sept. 23	2529	662	52	1879
Kelly, John E., Highland Station, Mich. Potato-digger	438,688	Oct. 21	1548	417	53	308
Kelly, John T. (See Jones, George M., assignor.)						
Kelly, Joseph, Pittsfield, Mass. Switch-operating device for railway-cars	427,577	May 13	837	209	51	987
Kelly, Joseph P., San Francisco, Cal. Railway-rail joint	428,757	May 27	2633	667	51	1360
Kelly, Peter J., Auburn, N. Y. Boiler-feeder	426,564	Sept. 16	1853	488	52	1742
Kelly, Thomas, New York, N. Y. Easel-album	436,243	Sept. 9	1340	350	52	1637
Kelly, Thomas, New York, N. Y. Album	440,479	Nov. 11	1334	345	53	875
Kelly, William E., New Brunswick, N. J. Header for steam-boilers	423,932	Mar. 25	2373	{ 631 632 }	{ 50 50 }	1610
Kelly, William H., New York, N. Y. Game	431,363	July 1	502	124	52	102
Kelly, William H., Warren, R. I. Valve	443,833	Dec. 30	3597	924	53	1995
Kelly, William H., assignor to H. Kelly, New York, N. Y. Cigar-lighter	419,454	Jan. 14	1213	322	50	255
Kelly, William J., et al. (See Wilson, William H., assignor.)						
Kelsea, George K., Detroit, Mich. Axle-box lid	433,987	Aug. 12	815	213	52	924
Kelsea, Joseph N., Antrim, N. H., assignor to E. I. K. Noyes, Cambridge, Mass. Spool	427,329	May 6	459	118	51	902
Kelsey, Charles D., Des Moines, Iowa. Sash-fastener	434,086	Aug. 12	960	252	52	955
Kelsey, Clifford S., New York, N. Y. Station-indicator	435,427	Sept. 2	72	23	52	1389
Kelsey, Duane J., New Haven, Conn. Protractor	433,084	July 29	3211	825	52	618
Kelso, Robert, Philadelphia, Pa. Binding for flags, &c	421,724	Feb. 18	1902	500	50	942
Kelty, Gibbons L. (See Carver, James W., assignor.)						
Kenmer, Charles T., Cleveland, Ohio. Preparing surfaces for the foundation of decorated removable films	437,305	Sept. 30	3089	.....	52	1993
Kemp, Charles E. (See Kemp, Clarence M. and C. E.)						
Kemp, Clarence M. and C. E., Baltimore, Md. Pipe-cutter	439,407	Oct. 28	2708	722	53	533
Kemp, Clarence M., and A. Bixby, Baltimore, Md.; said Bixby assignor to said Kemp. Voting-machine and toy bank	439,406	Oct. 28	2706	722	53	532
Kemp, Frank P., Contoocook, N. H. Hitching-strap	441,843	Dec. 2	350	92	53	1332
Kemp, Joseph S., Syracuse, N. Y. Fertilizer-distributer	425,512	Apr. 15	1643	{ 437 438 439 }	{ 51 51 51 }	337
Kemp, Lee J., Ridgeway, Mo. Car-coupling	428,918	May 27	2871	734	51	1408
Kemper, Ernest G., Burlington, Iowa. Stone-saw	439,247	Oct. 28	2447	656	53	484
Kempshall, Eleazer. (See Goodwin, Nelson J., assignor.)						
Kempshall, Eleazer, New Britain, Conn. Gas-burner	436,760	Sept. 16	2170	570	52	1802
Kempster, Daniel E., Boston, Mass. Fluid-pressure motor	424,609	Apr. 1	265	70	51	54
Kempster, Daniel E., Boston, Mass. Manufacture of horseshoe-nails and nail-blanks	427,030	Apr. 29	3933	{ 1025 1026 786 787 }	{ 51 51 51 51 }	802
Kempster, Daniel E., Boston, Mass. Die for use in making horseshoe-nails	429,036	May 27	3048	{ 438 439 276 277 }	{ 51 51 52 52 }	1442
Kempster, Daniel E., Boston, Mass. Steam-engine	436,068	Sept. 9	1065	608	52	1586
Kempster, Daniel E., Boston, Mass. Steam-actuated valve	436,830	Sept. 23	2309	608	52	1837
Kempton, Green R. B., Westham, county of Essex, England. Laundry-blue	436,504	Apr. 29	3156	.....	51	651
Kendall, Alfred L., Brooklyn, assignor to W. Stanley, New York, N. Y. Device for forming pin-holes in cast metal	431,982	July 8	1482	374	52	299
Kendall, Amos M., Chicago, Ill. Car-brake	418,725	Jan. 7	102	24	50	22
Kendall, Benjamin F., Jefferson, Pa. Force-pump	430,251	June 17	1760	437	51	1831
Kendall, Edward D., Brooklyn, N. Y., assignor to R. Holliday's Sons. Sulphonating ros-aniline	421,049	Feb. 11	937	.....	50	750
Kendall, Festus W., Swartwood, N. Y. Liquid-distributer	422,799	Mar. 4	631	162	50	1258
Kendall, Festus W., Swartwood, N. Y. Crate	422,800	Mar. 4	633	162	50	1259
Kendall, Fred J., et al. (See Hill, Burton W., assignor.)						
Kendall, George, Baltimore, Md. Sash-holder	428,397	May 20	2095	526	51	1240
Kendall, George D. and W. F., assignors to A. C. Goodenough, Rochester, N. Y. Handle-bar for bicycles	440,312	Nov. 11	1060	273	53	823

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Kendall, George H. (See Kidder and Kendall.)						
Kendall, Henry D., Enosburg Falls, Vt. Siding-strip	430,187	June 17	1648	410	51	1810
Kendall, John A., Maysville, Mo. Measuring-faucet	419,778	Jan. 21	1684	447	50	354
Kendall, Josiah B. (See Ethridge, Martin V. B., assignor.)						
Kendall, Olindus F. (See Kinder, Arthur H., assignor.)						
Kendall, William F. (See Kendall, George D. and W. F.)						
Kendrick, Frank C., Jefferson County, Colo. Tape-reel	421,835	Feb. 18	2045	541	50	968
Kendrick, Hiland H., Fulton, N. Y. Straw-cutter	419,455	Jan. 14	1214	322	50	255
Kendrick, Hiland H., Fulton, N. Y. Frictional grip-clutch	434,934	Aug. 26	2339	618	52	1239
Kendrick, Hiland H., Fulton, N. Y. Straw-cutter	435,972	Sept. 9	918	242	52	1558
Kendrick, Melvin G., Jefferson County, Colo. Windmill	421,580	Feb. 18	1699	441	50	902
Kendrick, William F., assignor of one-half to H. L. Glass, Winfield, Iowa. Mop-wringing attachment for pails	434,344	Aug. 12	1360	355	52	1033
Kennard, Baltis H., Jr., Baltimore, Md. Attachment for banjos	421,173	Feb. 11	1113	286	50	784
Kennedy, Burr A., Chicago, Ill. Harvester	434,021	Aug. 12	854	225	52	931
Kennedy, Charles D., California City, Cal. Machine for making shells	439,820	Nov. 4	282	71, 72	53	663
Kennedy, Charles W. (See Maurino, Henry Q., assignor.)						
Kennedy, Charles W., et al. (See Groswith, Henry, assignor.)						
Kennedy, Charles W., assignor to Kennedy-Groswith Electric Company, Philadelphia, Pa. Electrode for secondary batteries	441,959	Dec. 2	513	137	53	1364
Kennedy, Charles W., and H. Groswith, assignors to Kennedy-Groswith Electric Company, Philadelphia, Pa. Secondary battery	441,958	Dec. 2	510	136, 137	53	1364
Kennedy, David, Waco, Tex. Cotton-seed planter	433,350	July 29	3590	926	52	726
Kennedy-Groswith Electric Company. (See Groswith, Henry, assignor.)						
Kennedy-Groswith Electric Company. (See Kennedy, Charles W., assignor.)						
Kennedy-Groswith Electric Company. (See Kennedy and Groswith, assignors.)						
Kennedy, Henry J., Camden, N. J. Guide-eye for cloth-washing machines	443,285	Dec. 23	2716	697	53	1816
Kennedy, Henry R., New York, N. Y. Type-writing machine	437,119	Sept. 23	2770	724, 725	52	1927
Kennedy, Horace G., Denver, Colo. Bell-cord coupling	440,094	Nov. 4	697	186	53	745
Kennedy, Hugh. (See Haigh, Joseph P., assignor.)						
Kennedy, Hugh, Sharpsburg, Pa. Hot-blast stove	429,725	June 10	936	230	51	1663
Kennedy, James J., Kansas City, Mo. Sacramental case	439,519	Oct. 28	2874	764, 765	53	565
Kennedy, James M. R., Shepherd, Mich. Grate for burning sawdust, &c.	421,288	Feb. 11	1272	328	50	814
Kennedy, John, Birmingham, assignor to Osborne & Cheesman Company, Ansonia, Conn. Snap-hook	422,801	Mar. 4	634	163	50	1559
Kennedy, John, assignor of one-half to Florence Silk Company, Paterson, N. J. Loom	435,565	Sept. 2	286	80	52	1431
Kennedy, John A., Jr. (See Murphy and Kennedy.)						
Kennedy, John C., Detroit, Mich. Apparatus for medicating, compressing, and administering air	422,802	Mar. 4	636	163	50	1259
Kennedy, John C., Detroit, Mich. Apparatus for ozonizing air	430,387	June 17	1999	494	51	1878
Kennedy, John J. (See Morton, Henry, assignor.)						
Kennedy, John J., West Hoboken, N. J. Glove	432,708	July 22	2607	667	52	528
Kennedy, John M., Jr. (See Hickey, Thomas J., assignor.)						
Kennedy, John V. (See Van Wie, Peter G., assignor.)						
Kennedy, Joseph, administrator. (See Groom, Patrick W.)						
Kennedy, Julian. (See Forter and Kennedy.)						
Kennedy, Julian, Latrobe, Pa. Hydraulic motor	423,563	Mar. 18	1809	477	50	1475
Kennedy, Julian, Latrobe, Pa. Tire-rolling machine	432,625	July 22	2451	632	52	498
Kennedy, Julian, Latrobe, Pa. Hammer-frame	442,898	Dec. 16	2050	526	53	1678
Kennedy, Julian, Latrobe, Pa. Forging apparatus	442,899	Dec. 16	2051	527	53	1679
Kennedy, Martin, assignor to United States Rolling Stock Company, Chicago, Ill. Die for coupling-links	422,279	May 20	1898	478, 479	51	1201
Kennedy, Michael, Philadelphia, Pa. Inking and cleaning device for stamping or printing machines	443,529	Dec. 30	3103	799	53	1901
Kennedy, Patrick, Jr., Brooklyn, N. Y. Coin-actuated device	432,163	July 15	1770	455	52	360
Kennedy, Patrick, Jr., C. J. Diss, Brooklyn, and W. W. Rosenfield, New York, N. Y., assignors to Amusement Machine Company, of New Jersey. Rotating toy	442,683	Dec. 16	1647	423	53	1602
Kennedy, Samuel V., assignor to W. Deering & Company, Chicago, Ill. Mowing-machine	437,696	Oct. 7	25	8	53	8
Kennedy, Stephen D. (See Ward, Randolph G., assignor.)						
Kennedy, Thomas, Philadelphia, Pa. Wool-combing machine	421,725	Feb. 18	1903	500	50	942
Kennedy, Thomas A., Martinsville, assignor of one-half to J. E. West, Fairland, Ind. Mail-pouch fastener	424,420	Mar. 25	3125	830	50	1755
Kennedy, William H., Etua, Pa. Method of and apparatus for the production of mineral wool	436,244	Sept. 9	1341	350	52	1637
Kennedy, William J., Jersey City, N. J. Steam-boiler	423,692	Mar. 18	2016	532	50	1534
Kennelly, Arthur E., Orange, assignor to T. A. Edison, Llewellyn Park, N. J. Making electrolytic meters	419,264	Jan. 14	926	244	50	198
Kennelly, James, Hartford, Conn. Vehicle-wheel	429,075	Jan. 28	2147	568	50	455
Kennett, John R., Syracuse, N. Y. Buckle	440,313	Nov. 11	1061	273	53	823
Kenney, Charles T., East St. Louis, Ill. Drawer-check	441,308	Nov. 25	2739	708	53	1156
Kenney, James A., Westport, S. D. Plow-elever	437,032	Sept. 23	2648	692	52	1903
Kenney, Michael T., Brooklyn, N. Y. Elevator	423,564	Mar. 18	1810	477	50	1495
Kenney, Theodore C., Scottdale, Pa. Friction-clutch	419,958	Jan. 21	1966	516, 517	50	412
Kenney, Thomas M., Cambridge, Mass. Velocipede	431,060	July 1	46	11	52	11
Kenney, Thomas M., Cambridge, Mass. Velocipede	431,061	July 1	48	11	52	11
Kenney, Thomas M., Cambridge, Mass. Tape measure	443,681	Dec. 30	3355	863	53	1948
Kenney, Thomas M., assignor of one-half to C. Bullock, Cambridge, Mass. Ball-bearing	437,997	Oct. 7	500	141	53	94
Kenney, Thomas M., assignor of one-half to C. Bullock, Cambridge, Mass. Wheel	437,998	Oct. 7	501	141	53	95
Kent, Artemas A., assignor of one-half to J. J. Cherrie, San José, Cal. Machine for pitting fruit	420,806	Feb. 4	549	140, 141, 145	50	668
Kent, Artemas A., assignor of one-half to J. J. Cherrie, San José, Cal. Machine for pitting fruit, &c.	420,907	Feb. 4	719	185, 186	50	699
Kent, Artemas A., assignor of one-half to J. J. Cherrie, San José, Cal. Lawn-sprinkler	423,778	Mar. 18	2129	562	50	1556
Kent, Frank T., Syracuse, N. Y. Automatic feed-water regulator for steam-boilers	443,577	Dec. 30	3185	818, 819	53	1916
Kent, Frederick R., Baltimore, Md. Feed-trough	432,671	July 22	2542	651	52	515
Kent, George R., assignor to A. F. Ransom, Burlington, Wis. Vender's wagon	432,533	July 22	2325	600	52	474
Kent, Henry A., et al. (See Cullens, John T., assignor.)						
Kent, John, London, England. Arc lamp	439,011	Oct. 21	2065	553	53	407
Kent, Prentiss J., and W. F. Bancroft, Worcester, Mass. Wire-nail machine	439,665	Nov. 4	61	16, 17	53	619
Kent, Walter G., London, England. Rotary water-meter	429,923	June 10	1231	305	51	1719

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Kent, Walter G., and H. S. Price, London, England. Piston.....	443,857	Dec. 30	3623.	933	53	2001
Kenton Lock Manufacturing Company. (See Perkins, Floyd N., assignor.)						
Kenyon, Bertrand P. (See Billings and Kenyon.)						
Kenyon, Jacob G., Port Kenyon, Cal. Vehicle-axle.....	430,317	June 17	1896	465	51	1858
Kenyon, Rinaldo S., trustee, <i>et al.</i> (See McArthur, James, assignor.)						
Kenyon, William T., New Britain, Conn. Bolt.....	429,630	June 10	799	195	51	1636
Kepp, Ferdinand, Allegheny, Pa. Molding-machine.....	432,243	July 15	1883	484	52	381
Kerbaugh, Minor C., assignor to J. W. Douglass, Philadelphia, Pa. Roofing fabric.....	427,174	May 6	233	60	51	857
Kerckhoffs, Antoine J., New York, N. Y. Link for bracelets, chains, necklaces, &c.....	421,136	Feb. 11	1060	272	50	774
Kern, Adolph. (See Selchiting and Smith, assignors.)						
Kern, Amiah J., Bellevue, Ohio. Cultivator.....	421,726	Feb. 18	1905	{ 500 501 }	{ 50 }	942
Kern, Amiah J., Bellevue, Ohio. Cultivator shovel.....	429,037	May 27	3054	787	51	1443
Kern, Emil E. D., York, Pa. Fire-proof window casing and frame.....	431,025	June 24	3014	740	51	2080
Kern, Ferdinand, Newark, N. J., assignor of three-fourths to Heilner & Strass, New York, N. Y. Bobbin-retaining device for sewing-machines.....	436,002	Sept. 9	962	252	52	1567
Kern, James M., Morgantown, W. Va. Door-secrer.....	438,626	Oct. 21	1447	389	53	290
Kern, James S., assignor to J. L. Branson, Philadelphia, Pa. Circular-knitting machine.....	432,051	July 15	1597	408	52	326
Kern, Phaon J., Frankfort, Ind. Vehicle-spring.....	432,880	July 22	2868	735	52	578
Kern, William, St. Louis, Mo. Combined razor-depository and call-bell.....	420,345	Jan. 28	2571	682	50	533
Kernan, Francis, Jr. (See Landers and Kernan.)						
Kernan Furnace Company. (See Owens, William J., assignor.)						
Kerns, Edward J., Worcester, Mass. Rowing apparatus.....	421,080	Feb. 11	978	251	50	758
Kerns, Edward J., Worcester, Mass. Exercising-machine.....	435,934	Sept. 9	863	227	52	1548
Kerns, James C., Buffalo, Mo. Animal-trap.....	432,139	July 15	1737	446	52	354
Kerns, Thomas J., assignor to P. Snyder and F. A. Brooks, North Adams, Mass. Vessel for cooling liquid.....	437,999	Oct. 7	502	141	53	95
Kerp, Wilhelm J., assignor of one-half to D. Klotz, Fort Wayne, Ind. Temporary binder.....	436,356	Sept. 16	1516	{ 395 396 }	{ 52 }	1680
Kerr Bag Manufacturing Company. (See Kerr, William H., assignor.)						
Kerr, George, assignor of two-thirds to C. L. Case and L. E. Wood, Fall River, Mass. Let-off motion for looms.....	420,158	Jan. 28	2283	605	50	481
Kerr, J. L. C., <i>et al.</i> (See Taliaferro, Eilbeck H., assignor.)						
Kerr, James, Sr., Corsicana, Tex. Fence.....	429,038	May 27	3055	787	51	1443
Kerr, James B. (See Batcheller and Kerr.)						
Kerr, John, West Haven, Mich. Toy.....	439,801	Nov. 4	255	65	53	658
Kerr, John B. (See Lanpher, Charles W., assignor.)						
Kerr, Nathaniel B. (See Harrington, John H., assignor.)						
Kerr, Robert, <i>et al.</i> (See Robertson, James C., assignor.)						
Kerr, Robert E., <i>et al.</i> (See Robertson, James C., assignor.)						
Kerr, Thomas B., Kansas City, Kans. Rock-drill.....	430,292	June 17	1857	455	51	1849
Kerr, William H., assignor to Kerr Bag Manufacturing Company, Concord, N. C. Printing-apparatus.....	443,050	Dec. 16	2276	584	53	1725
Kerrihard, Edward W. (See Cole and Kerrihard.)						
Kerrison, Charles, Jr., <i>et al.</i> (See Iusti, Johann A. W., assignor.)						
Kerry, Charles T., <i>et al.</i> (See Barnes, Cortez E., assignor.)						
Kersey, Robert H., Lebanon, Ind. Boiler feeder and regulator.....	439,749	Nov. 4	177	46	53	642
Kershaw, James, London, England. Watch-pocket fastener.....	442,056	Dec. 2	678	183	53	1395
Kerslake, Seabourne F., Turner's Falls, Mass. Friction-clutch.....	436,140	Sept. 9	1184	309	52	1606
Kerstein, Max, assignor of one-half to R. Furgang, Boston, Mass. Device for automatically insulating broken wire.....	438,814	Oct. 21	1764	472	53	349
Kersten, Emil, <i>et al.</i> (See Iusti, Johann A. W., assignor.)						
Kerstetter, Thomas J., Fern, Pa. Vehicle-seat.....	429,533	June 3	656	161	51	1597
Kesling, Perry. (See Mahaffie and Kesling.)						
Kesner & Co. (See Brenowitz, Abraham, assignor.)						
Kessler, Adolf, Jr. (See Glass, Johann, assignor.)						
Kessler, John, Sr., <i>et al.</i> (See Smith, George F., assignor.)						
Kessler, Richard Y., Edinburg, Ill. Tilting gate.....	437,861	Oct. 7	286	86	53	56
Kessler, William, Lafayette, Ind. Insulator for electric conductors.....	440,042	Nov. 4	633	168	53	732
Kestner, John P., Cincinnati, Ohio. Fish-hook.....	422,226	Feb. 25	2625	695	50	1085
Ketcham, Charles E., Manteo, N. C., assignor of one-half to I. A. Ketcham, Brooklyn, N. Y. Fish-trap.....	441,070	Nov. 18	2313	{ 598 599 }	{ 53 }	1070
Ketcham, Isaac A. (See Ketcham, Charles E., assignor.)						
Ketcham, Valentine H., <i>et al.</i> (See Billingslea, Alvah M. F., assignor.)						
Ketchum, Landon, Saugatuck, Conn. Gas-stove.....	439,729	Nov. 4	150	39	53	637
Ketchum, Oliver W., Toronto, Ontario, Canada. Steam-generator.....	424,311	Mar. 25	2925	779	50	1716
Ketchum, Smith, Brimfield, Ill. Check-row planter.....	435,428	Sept. 2	74	23	52	1389
Kettenring, Peter, Defiance, Ohio. Felly-polishing machine.....	427,695	May 13	1010	{ 254 255 }	{ 51 }	1020
Kettenring, Peter, assignor to Defiance Machine Works, Defiance, Ohio. Spoke-lathe.....	429,924	June 10	1233	{ 305 306 }	{ 51 }	1720
Keuffel, William, <i>et al.</i> (See Paoli, John, assignor.)						
Key, Nicholas S., Warrenton, Mo. Twist-preventer.....	434,279	Aug. 12	1269	329	52	1014
Keyes, Atwood B. (See Whittlesey and Keyes.)						
Keyes, Benjamin B. (See Potter, Cartwright, and Keyes.)						
Keyes, Frank E., Peterborough, N. H., assignor to United Indurated Fibre Company, Portland, Me. Molding pulp articles.....	424,003	Mar. 25	2484	661	50	1631
Keyes, Martin L., Gorham, assignor to United Indurated Fibre Company, Portland, Me. Machine for finishing pulp articles.....	423,169	Mar. 11	1335	321	50	1379
Keyes, Nelson B., Unionville, Conn. Sheet-metal pliers.....	438,848	Oct. 21	1828	487	53	360
Keys, William W., Bridgeport, Conn. Paper-pulp digester.....	420,275	Jan. 28	2477	658	50	516
Keys, William W., Bridgeport, Conn. Metal boat.....	433,085	July 29	3212	{ 825 826 }	{ 52 }	648
Keys, William W., Bridgeport, Conn. Deoxidizing copper.....	433,086	July 29	3212	826	52	649
Keyser, John H., New York, N. Y. Gas-burner for stoves, &c.....	418,846	Jan. 7	295	72	50	62
Keyser, John H., New York, N. Y. Gas-burner for heating and cooking purposes.....	432,881	July 22	2869	{ 735 736 }	{ 52 }	579
Keystone Manufacturing Company. (See Baltzley, Edwin, assignor.)						
Keystone Portable Driller Company. (See Downie, John G., assignor.)						
Keystone Watch Case Company. (See Chappatte, Edward C., assignor.)						
Keystone Watch Case Company. (See Klahn, Emil, assignor.)						
Keystone Watch Case Company. (See Mink, Fritz, assignor.)						
Keyte, William J., <i>et al.</i> (See Newby, Albert S., assignor.)						
Keyworth, Thomas, Philadelphia, Pa. Inlet-valve for water-closets.....	439,730	Nov. 4	151	40	53	637

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Khotinsky, Achilles de, Gelnhausen, Prussia, Germany. Manufacture of carbon filaments.	429,534	June 3	657	51	1597
Khotinsky, Achilles de, Gelnhausen, Prussia, Germany. Manufacture of carbon filaments.	429,535	June 3	659	.....	51	1597
Khotinsky, Achilles de, Gelnhausen, Prussia, Germany. Manufacture of carbon conductors.	432,490	July 15	2255	.....	52	453
Kick, Ludwig, New York, N. Y. Shed-roof for factory-buildings	428,494	May 20	2220	561	51	1263
Kidd, Edward Z., assignor to himself and S. P. Romans, Deadwood, S. D. Concentrator	426,821	Apr. 29	3641	{ 949 950 }	51	744
Kidder, Jason, Franklin Falls, N. H. Roll having removable journals.	441,169	Nov. 25	2485	642	53	1112
Kidder, Jason, Franklin Falls, N. H. Pulley	441,170	Nov. 25	2487	643	53	1112
Kidder, Joshua R., Port Clinton, Ohio. Pillow-sham holder	438,000	Oct. 7	503	142	53	95
Kidder, Melvin A., Youngstown, Ill. Grain-meter	424,483	Apr. 1	61	18	51	15
Kidder, Richard E., Worcester, Mass. Pegging-jack	431,168	July 1	204	51	52	42
Kidder, Wellington P., Boston, Mass. Printing-machine	432,413	July 15	2132	{ 548 549 }	52	427
Kidder, Wellington P., Boston, Mass., and G. H. Kendall, New York, N. Y. Plate-printing press.	442,776	Dec. 16	1824	472	53	1636
Kidney, Nelson. (See Cooke and Kidney.)						
Kieckhefer, August, Milwaukee, Wis. Valve for hydraulic elevators.	436,245	Sept. 9	1342	{ 350 351 }	52	1637
Kieckhefer Brothers & Co. (See Walter, Sebastian, assignor.)						
Kiedaisch, John F. (See Schwauer and Kiedaisch.)						
Kiehl, John L., et al. (See Souders, Milton M., assignor.)						
Kiel, Butler & Turnbull. (See Kiel, William, assignor.)						
Kiel, William, Butler, N. J. Vulcanized plastic compound	430,958	June 24	2908	.....	51	2060
Kiel, William, Butler, N. J., assignor to Kiel, Butler & Turnbull, New York, N. Y. Manufacturing vulcanized plastic compounds	430,959	June 24	2910	.....	51	2060
Kieley, Timothy J., New York, N. Y. Damper-regulator	427,175	May 6	235	61	51	857
Kienle, Andreas, Newark, N. J., assignor to Bippart & Co. Bracelet	429,039	May 27	3056	788	51	1443
Kieran, Charles J., Newark, N. J. Door-check	437,847	Oct. 7	266	80	53	52
Kiernan, James V., and T. F. Moore, Norfolk, Va. Measuring-vessel	441,960	Dec. 2	514	137	53	1364
Kifer, George M., Penn's Station, Pa. Nut-lock	426,387	Apr. 22	2978	780	51	608
Kiggins, Isaac C., Elizabeth, N. J. Case for books	439,782	Nov. 4	228	59	53	653
Kilborn, Alden D., Oakland, Cal. Safety relief-valve	432,149	July 15	1738	446	52	354
Kilborn, Wilber E., assignor of one-half to W. H. C. Goode, Sidney, Ohio. Wheeled earth-scraper	422,531	Mar. 4	239	62	50	1181
Kilbourn, Edward E., New Brunswick, N. J. Manufacturing stockings.	422,886	Mar. 4	788	201	50	1286
Kilbourn, Edward E., New Brunswick, N. J. Circular-knitting machine	432,946	July 22	2966	{ 761 762 763 764 765 }	52	596
Kilbourn, Frederick H., et al. (See Wheat, John J., assignor.)						
Kilbourn, Joseph K., Liverpool, England. Composition pump for gaseous fluids	439,520	Oct. 28	2875	765	53	565
Kilbourn, Washington H., Olean, N. Y. System for stopping machines	422,948	Mar. 11	897	235	50	1315
Kilbourn, Washington H., assignor to H. O. Edgerton, Greenfield, Mass. Magneto-electric stop mechanism	443,646	Dec. 30	3297	850	53	1938
Kilbourne & Jacobs Manufacturing Company. (See Jacobs and Stagg, assignors.)						
Kilby, Oscar J., Lancaster, Wis. Windmill	431,983	July 8	1484	375	52	299
Kildovle, Edward E., Yokohama, Japan. Low-water alarm for steam-boilers	422,803	Mar. 4	638	163	50	1259
Kile, Henry, Marshall, Ill. Baling-press	437,120	Sept. 23	2780	725	52	1829
Kiler, Charles M., assignor of one-half to R. E. Poindexter, Indianapolis, Ind. Wire-tightener	430,581	June 17	2284	560	51	1931
Kiler, Charles M., assignor of one-half to R. E. Poindexter, Indianapolis, Ind. Wire-stretcher	431,265	July 1	350	88	52	72
Kilgore, Fred. O., assignor of one-half to J. F. Williamson, Minneapolis, Minn. Steam log-loader	420,942	Feb. 11	778	202	50	720
Kilgore, James M., et al. (See Getchell, Charles E., assignor.)						
Kilian, Conrad J., assignor of one-half to D. Atwood, Milwaukee, Wis. Support for electric-railway conductors	425,101	Apr. 8	1024	273	51	206
Kilian, Conrad J., assignor of one-half to D. Atwood, Milwaukee, Wis. Guard and stay for electric-railway wires	427,878	May 13	1296	328	51	1075
Killian, Green V. (See Case and Killian.)						
Killian, Green V., assignor of one-half to G. R. Case, Mountain View, Ark. Water-elevator	421,581	Feb. 18	1700	{ 441 442 }	50	902
Killin, Robert B., assignor of one-half to A. Wolf, Canton, Ohio. Fodder-cutter	427,769	May 13	1135	284	51	1045
Killingier, Melrose M., assignor of one-half to R. D. Scott and A. G. Mayers, Battle Creek, Mich. Rope-coupling	432,626	July 22	2454	632	52	499
Killingier, Melrose M., assignor of one-half to R. D. Scott and A. G. Mayers, Battle Creek, Mich. Hane-tug	434,511	Aug. 19	1632	428	52	1095
Killingier, Melrose M., assignor of one-half to R. D. Scott and A. G. Mayers, Battle Creek, Mich. Portable or knockdown wardrobe	436,482	Sept. 16	1727	{ 455 456 }	52	1720
Killingsworth, Wiley S., assignor of one-half to J. C. Fitzgerald, Greenville, S. C. Folding crate	420,908	Feb. 4	723	186	50	700
Kilmer, Irving A., Newburg, N. Y. Rod-mill plant	440,863	Nov. 18	1976	509	53	1004
Kilmer, Irving A., assignor to Kilmer Manufacturing Company, New Windsor, N. Y. Rod-rolling mill	430,998	June 24	2968	729	51	2071
Kilmer, Irving A., New Windsor, assignor to Kilmer Manufacturing Company, Newburg, N. Y. Rod-mill	441,171	Nov. 25	2487	643	53	1113
Kilmer Manufacturing Company. (See Kilmer, Irving A., assignor.)						
Kilpatrick, Calvin E., Tallmanville, Pa. Grading or road-scraping machine	431,470	July 1	671	168	52	135
Kilshaw, John, St. Paul, Minn. Automatic regulator	430,582	June 17	2285	561	51	1932
Kiltz, Peter, Rich Hill, Mo. Truck	430,130	June 17	1574	{ 391 392 }	51	1795
Kim, George M., Allegheny, Pa. Hose-carriage	423,764	June 10	995	244	51	1671
Kim, George M., Allegheny, Pa. Fire-truck and triple ladder	434,512	Aug. 19	1633	429	52	1095
Kim, George M., Allegheny, Pa. Hook-and-ladder turn-table truck for fire departments	443,096	Dec. 23	2378	607	53	1751
Kim, George M., Allegheny, Pa. Electric street-light	443,097	Dec. 23	2382	608	53	1752
Kimball, Alonzo. (See Hawes and Kimball.)						
Kimball Automatic Car Heating Company. (See Kimball, Richard D., assignor.)						
Kimball, Benjamin, et al. (See Bradley, Jay L., assignor.)						
Kimball, Charles W. (See McGhie, Charles E., assignor.)						
Kimball, Charles W., Chicago, Ill. Making hose-straps	421,004	Feb. 11	876	226	50	739
Kimball, Charles W., Chicago, Ill. Pliers for attaching couplings to hose	441,671	Dec. 2	63	17	53	1274
Kimball Company, W. W. (See Rice, Duane L., assignor.)						
Kimball, Frank W., assignor of two-thirds to H. Schamburg and I. C. Welch, Milford, Ill. Gate opening and closing attachment	439,521	Oct. 28	2877	766	53	565

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Kimball, Freddie C., Jackson, Mich. Harness-pad fastening	426,594	Apr. 29	3290	863	51	677
Kimball, Freddie C., assignor to F. C. Kimball Manufacturing Company, Cleveland, Ohio. Harness attachment	441,493	Nov. 25	3025	780	53	1211
Kimball, Granville, Chicago, Ill. Fluid-pressure governor	436,858	Sept. 23	2394	624	52	1852
Kimball, James L., <i>et al.</i> (See Kitfield, Edward H., assignor.)						
Kimball, James L., and H. C. Wirt, Boston, Mass. Fuse-block	431,062	July 1	49	11	52	11
Kimball, John H., Montreal, Quebec, Canada. Stock-car	427,428	May 6	610	153	51	932
Kimball Manufacturing Company, F. C. (See Kimball, Freddie C., assignor.)						
Kimball, Milton S. (See Trueheart and Kimball.)						
Kimball, Perley L., assignor to Vermont Farm Machine Company, Belkows Falls, Vt. But-ter-mold	423,478	Mar. 18	1688	445 446	50	1474
Kimball, Perley L., assignor to Vermont Farm Machine Company, Belkows Falls, Vt. Ele-vator	430,655	June 24	2426	591	51	1967
Kimball, Richard D., Boston, Mass., assignor to Kimball Automatic Car Heating Company, Portland, Me. Automatic device for controlling temperature	422,595	Mar. 4	338	84	50	1201
Kimball, Richard D., Boston, Mass., assignor to Kimball Automatic Car Heating Company, Portland, Me. Car-heating system	422,596	Mar. 4	340	84, 85	50	1201
Kimball, Samuel S., Bangor, Me. Coin-wrapper	420,159	Jan. 23	2385	605	50	481
Kimball, Stephen H., Everett, Mass. Rowing-machine	441,765	Dec. 2	217	57	53	1306
Kimball, William H. (See Webster and Kimball.)						
Kimball, William H., Fayette, and A. Storms, Scipio, Mich. Artificial-stone post	421,582	Feb. 18	1702	442	50	902
Kimball, William W., Washington, D. C. Transporting and distributing vehicle	420,456	Feb. 4	44	10 11	50	572
Kimber, Abraham, Indianapolis, Ind. Rail-joint	430,943	Feb. 11	779	202	50	720
Kimber, Abraham, Indianapolis, Ind. Rail-joint	430,944	Feb. 11	779	202	50	721
Kimber, Abraham, Indianapolis, Ind. Car-coupling	422,532	Mar. 4	240	63	50	1182
Kimber, Abraham, Indianapolis, Ind. Railway-tie	424,793	Apr. 1	565	150	51	110
Kimber, Abraham, Indianapolis, Ind. Metallic railway-tie	434,600	Aug. 19	1770	463	52	1123
Kimberlin, Lemuel F. (See Davis, Calvin R., assignor.)						
Kimble, Warren, Manchester, Mich. Stone-boat	423,933	Mar. 25	2376	632	50	1610
Kimble, Wyman, Honesdale, Pa. Glass-polishing wheel	421,727	Feb. 18	1906	501	50	943
Kimplen, Cornelius, Chicago, Ill. Printer's composing-stick	436,981	Sept. 23	2575	673	52	1888
Kimpton, Charles A., Malden, assignor of three-fourths to J. C. Bennett and F. L. White, Lynn, Mass. Car heating and ventilating apparatus	419,456	Jan. 14	1216	323	50	256
Kimpton, Charles A., Malden, assignor of three-fourths to J. C. Bennett and F. L. White, Lynn, Mass. Car cooling and ventilating apparatus	419,529	Jan. 14	1310	350 351	50	275
Kind, John E. (See Thompson and Kind.)						
Kindahl, Fredrick T., and V. A. Hallqvist, Boston, Mass. Rocking-chair	424,114	Mar. 25	2643	704	50	1661
Kinder, Arthur H., assignor of one-half to O. F. Kendall, Boston, Mass. Braiding device for sewing machines	437,816	Oct. 7	222	67	53	44
Kinder, Joseph J., de, Philadelphia, Pa. Apparatus for sprinkling and cooling liquids	441,365	Nov. 25	2814	727	53	1170
Kinder, Joseph J., de, Philadelphia, Pa. Apparatus for sprinkling and cooling liquids	442,865	Dec. 16	1982	509	53	1666
Kinder, Joseph J., de, and H. Reemer, Philadelphia, Pa.; said Reemer assignor to said de Kinder. Bottle-filling machine	430,526	June 17	2205	542	51	1917
Kindstrom, Oscar A. T. (See Petterson, Gustaf F., assignor.)						
Kindy, Levi H., Medina, Ohio. Harness collar-pad	435,229	Aug. 26	2759	729	52	1319
King, Charles A. (See Chapin and King.)						
King, Charles M., Downieville, Cal. Anvil attachment	426,280	Apr. 22	2810	738	51	573
King, Charles W., Newton, Mass. Making rivets	437,817	Oct. 7	223	67	53	44
King, Daniel, Finksburg, Md. Boiler-setting	423,170	Mar. 11	1238	322	50	1379
King, Emanuel, and H. Geisenhöner, Schenectady, N. Y. Dust-collector for grinding-machines	438,001	Oct. 7	504	142	53	95
King, Erastus E., Lee's Summit, Mo. Combination pipe and nut wrench	430,656	June 24	2127	591	51	1967
King, Ferdinand, New York, N. Y. Accident-case	435,310	Aug. 26	2598	768	52	1343
King, Francis M., Philadelphia, Pa. Machine for sharpening saws	437,929	Oct. 7	391	111	53	75
King, Frank B. (See Clark and King.)						
King, George. (See Ross, John, assignor.)						
King, George, <i>et al.</i> (See Woodward, William H., assignor.)						
King, George E., <i>et al.</i> (See Castleman, Morris N., assignor.)						
King, George E., <i>et al.</i> (See Palmer, Samuel D., assignor.)						
King, George F. (See Smith, Roswell T., assignor.)						
King, George H., Kansas City, Mo. Sash attachment	429,536	June 3	659	161	51	1597
King, George H., Kansas City, Mo., assignor to G. H. King Modern Window Company, Portland, Me. Sash-fastener	426,388	Apr. 22	2979	780	51	608
King, George R., and P. Chapman, Council Grove, Kans. Fence-post	419,018	Jan. 7	563	141	50	119
King, George W., Washington, D. C. Pneumatic-railway system	427,330	May 6	460	118	51	902
King, George W., Washington, D. C. Pneumatic-railway system	438,928	Oct. 21	1940	517	53	381
King, George W., Cleveland, Ohio. Brick-machine	443,321	Dec. 23	2783	714	53	1829
King, George W., Providence, R. I., assignor of one-half to S. A. King, Baltimore, Md. Device for opening hot boiled eggs	426,281	Apr. 22	2812	738	51	574
King, Henry H., Springfield, and B. F. K. Jennings, Dayton, assignors of one-half to R. A. Worthington, Springfield, Ohio. Veneering	424,484	Apr. 1	63	19	51	15
King Iron Bridge and Manufacturing Company. (See Mitchell, William, assignor.)						
King, Jacob W., Bowling Green, Me. Safety-car	434,078	Apr. 1	370	98	51	72
King, James L. O., Fair Play, S. C. Plow-stock	432,549	Oct. 14	1321	359	53	261
King, James M., Rochester, Minn. Separating grain	435,542	Sept. 2	247	69	52	1423
King, John W., Buena Vista, Tenn. Wire-stretcher	425,805	Apr. 15	2081	556	51	423
King, Jonathan H., and B. F. Reed, Swan Creek, Ill. Car-coupling	420,540	Feb. 4	158	39	50	595
King, Julius. (See Hinden, Mathias J., assignor.)						
King, Julius, Cleveland, Ohio. Eyeglasses	437,121	Sept. 23	2781	726	52	1929
King Modern Window Company, George H. (See King, George H., assignor.)						
King, Molesworth, assignor of one-half to L. E. Lafin, Chicago, Ill. Fire-place	443,239	Dec. 23	2647	679	53	1804
King, Molesworth, assignor of one-half to L. E. Lafin, Chicago, Ill. Fire-place	443,240	Dec. 23	2648	679 680	53	1804
King, Oliver, Cleveland, Ohio. Wood-chopping ax	427,088	May 6	97	26	51	831
King, Paul, Washington, D. C. Apparatus for stuffing and stretching leather	440,358	Nov. 11	1120	288	53	834
King, Phineas F., assignor to Mosler Bank Safe Company, Cincinnati, Ohio. Safe or vault	442,268	Dec. 9	995	263	53	1464
King, Robert, Brooklyn, N. Y. Split ring for cylindrical bodies	436,357	Sept. 16	1518	396	52	1680
King, Rockwell. (See Cline, Frederick N., assignor.)						
King, Rockwell. (See Serkey, Joseph von, assignor.)						
King, Robert E., Louisburg, N. C. Hog-head-making machine	441,011	Nov. 18	2206	570	53	1049
King, Sarah A. (See King, George W., assignor.)						
King, Sylvester, Owensville, Ind. Thrashing-machine	419,959	Jan. 21	1967	517	50	412

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King, Theodore E., Westport, and A. T. Goodsell, Bridgeport, Conn. Lamp-holder for upright pianos.....	424,004	Mar. 25	2486	{ 661 662 }	50	1631
King, Willard P., Truro, Nova Scotia, Canada. Remedy for dyspepsia.....	426,566	Apr. 29	3246	.....	51	668
King, William, assignor of one-half to J. W. Denio, Longmont, Colo. Belt-tightener.....	442,057	Dec. 2	679	183	53	1395
King, William E., St. Regis Falls, N. Y. Hame-tug.....	425,678	Apr. 15	1906	508	51	388
King, William H., Newark, N. J. Support for bicycles.....	439,879	Nov. 4	377	99	53	681
King, William H., assignor to A. Van Wiukle, Newark, N. J. Indicator-lock.....	419,607	Jan. 14	1423	{ 381 382 }	50	299
King, William P., Los Angeles, Cal. Floor-tightener.....	426,025	Apr. 22	2444	646	51	498
King, William S. (See Braggins, Seth, assignor.)						
King, William S. (See Combs, Edgar S., assignor.)						
King, William S. (See Combs and Goodhue, assignors.)						
King, William S. (See O'Boiger, Thomas, assignor.)						
King, William W. (See Urban and King.)						
Kingsman, Daniel C., New Orleans, assignor of one-half to W. G. Price, Plaquemine, La. Roller way or track for dredging and other machinery.....	432,947	July 22	2980	765	52	597
Kingry, Samuel S. (See Gary, George E., assignor.)						
Kingsbury, Albert, Hanover, N. H. Plotter.....	438,350	Oct. 14	1042	283	53	205
Kingsbury, Alvin C., Decorah, Iowa. Butter-worker.....	436,422	Sept. 16	1632	429	52	1701
Kingsbury, John, Albany, N. Y. Sleigh.....	422,032	Feb. 25	2317	{ 611 612 }	50	1029
Kingsland & Douglas Manufacturing Company. (See Reeder, William S., assignor.)						
Kingsland, Hugh A., Belleville, N. J. Driving-wheel for locomotives.....	436,711	Sept. 16	2084	548	52	1786
Kingsland, James S., Flatbush, N. Y. Ore-mill.....	425,886	Apr. 15	2204	586	51	445
Kingsland, Stephen A., assignor to B. Douglas, Jr., Middletown, Conn. Stove-polish.....	434,790	Aug. 19	2074	.....	52	1181
Kingsley, Alba T., Millport, N. Y. Door-hanger.....	419,201	Jan. 14	834	220	50	179
Kingston, James L., Boston, Mass. Carpet-stretcher.....	438,437	Oct. 14	1161	314	53	228
Kingston, Thomas J. (See Regul and Kingston.)						
Kink, Julius von, Vienna, Austria-Hungary, and J. G. Kreis, Wiesbaden, Germany. Machine for cutting wood.....	434,112	Aug. 12	1007	262	52	963
Kinkead, James I., San Francisco, Cal. Portable windlass.....	429,242	June 3	203	50	51	1511
Kinkele, Robert A., and G. H. Leinert, Brooklyn, N. Y. Combined bed and stretcher for zinc lithographic plates.....	422,227	Feb. 25	2626	696	50	1086
Kinn, Babbis, Dunkirk, N. Y. Device for forcing air into kegs containing liquids.....	431,592	July 8	864	215	52	180
Kinnamon, Albert L., and W. S. Dean, Sauk Center, Minn. Butter-mold.....	429,690	June 10	884	215	51	1653
Kinnard, James G. (See River, Amos J., assignor.)						
Kinnard, Owen B., assignor to Kinnard Press Company, Minneapolis, Minn. Baling-press.....	431,471	July 1	674	169	52	136
Kinnard, Owen B., assignor to Kinnard Press Company, Minneapolis, Minn. Friction-clutch.....	438,733	Oct. 21	1627	437	53	323
Kinnard Press Company. (See Kinnard, Owen B., assignor.)						
Kinnear, John S., Golden, Colo. Inhaler.....	433,597	Aug. 5	235	61	52	802
Kinnear, William R., Columbus, Ohio. Metallic ceiling.....	424,312	Mar. 25	2926	779	50	1716
Kinnear, William R., Columbus, Ohio. Metallic ceiling.....	424,313	Mar. 25	2927	780	50	1716
Kinnear, William R., Columbus, Ohio. Metal cornice.....	443,322	Dec. 23	2785	715	53	1830
Kinnear, William R., Columbus, Ohio. Metallic ceiling.....	443,323	Dec. 23	2786	{ 715 716 }	53	1830
Kinnear, William R., Columbus, Ohio. Metallic ceiling.....	443,324	Dec. 23	2788	716	53	1830
Kinnear, William R., Columbus, Ohio. Making cornices.....	443,453	Dec. 23	2923	767	53	1869
Kinney, Ariel, Lowell, Mass. Attachment for speed-governors.....	419,202	Jan. 14	835	220	50	179
Kinney, Cyrus, Windsor, Ontario, Canada. Metallic lathing.....	432,141	July 15	1739	446	52	354
Kinney, Daniel. (See Holt and Kinney.)						
Kinney, Edmund E., Bloomdale, Ohio. Milk-stool.....	422,023	Feb. 25	2319	612	50	1029
Kinney, Francis S., Pequanae, N. J. Cigarette.....	427,176	May 6	235	61	51	858
Kinney, Francis S., Pequanae, assignor to American Tobacco Company, Newark, N. J. Cigarette-machine.....	437,207	Sept. 30	2940	768	52	1964
Kinney, Francis S., Pequanae, assignor to American Tobacco Company, Newark, N. J. Cigarette-feeding device.....	437,208	Sept. 30	2942	{ 768 769 }	52	1965
Kinney, Israel, Brantford, Ontario, Canada. Wire fabric.....	429,537	June 3	660	161	51	1598
Kinney, Jesse, St. Thomas, Ontario, Canada. Bed-warmer.....	431,813	July 8	1238	309	52	250
Kinney, Jesse, assignor of one-half to W. W. Petherick and J. W. Alston, Detroit, Mich. Rope-clamp.....	419,960	Jan. 21	1968	517	50	412
Kinney, Robert, and J. P. Hebedahl, Weatherly, Pa. Elevating and lowering electric lights.....	423,873	Mar. 18	2274	600	50	1584
Kinney, Watson A. (See Fisher and Kinney.)						
Kinsey, Edwin F., Allegheny, Pa. Letter-box.....	442,983	Dec. 16	2174	559	53	1704
Kinsey, Evaline A., et al. (See Kinsey, Jacob O., assignor.)						
Kinsey, Isaac, et al. (See Perrine, Alfred T., assignor.)						
Kinsey, Jacob O., assignor to E. A. Kinsey, Roanoke, and C. D. Cromer, Montgomery county, Va. Thill-coupling.....	423,383	Mar. 11	1541	405	50	1437
Kinsey, John I., Easton, Pa. Steam-boiler.....	430,527	June 17	2208	542	51	1917
Kinsey, John I., Easton, Pa. Flask for molding.....	435,040	Aug. 26	2492	658	52	1267
Kinsey, John I., Easton, Pa. Apparatus for casting retort-pipes, &c.....	435,041	Aug. 26	2493	659	52	1268
Kinsey, Peter S., Newark, assignor to Australian Knitting Company, Paterson, N. J. Burr-wheel for knitting machines.....	424,314	Mar. 25	2929	{ 780 781 }	50	1717
Kinsey, William E., Peoria, and F. C. Smith, Mattoon, Ill. Journal-bearing.....	421,289	Feb. 11	1273	329	50	814
Kinsley, William L., Lowell, Vt. Belt-fastener.....	434,636	Aug. 19	1839	480	52	1136
Kinst, Emile, Chicago, Ill. Ball-bat.....	430,388	June 17	2001	494	51	1878
Kint, Daniel, assignor of one-half to Roth Brothers, Alpena, Mich. Land-roller.....	437,606	Sept. 30	3563	930	52	2087
Kint, Edmond, and J. W. Hyde, Minneapolis, Minn. Car-coupling tool.....	425,433	Apr. 15	1529	409	51	315
Kintner, Charles J. (See Paget, Leonard, assignor.)						
Kintner, Charles J., et al. (See Kitee, Isidor, assignor.)						
Kintner, Charles J., New York, N. Y. System of electrical distribution.....	426,127	Apr. 22	2589	681	51	527
Kinzer, Jacob, assignor, by mesne assignments, to Kinzer & Jones Manufacturing Company, Pittsburg, Pa. Molding-machine.....	422,081	Feb. 25	2403	635	50	1044
Kinzer & Jones Manufacturing Company. (See Kinzer, Jacob, assignor.)						
Kipper, Emil. (See Perry, Enoch W., Jr., assignor.)						
Kipper, Emil, Adams, Mass., and E. W. Perry, Jr., New York, N. Y. Plate holder and shifter.....	422,804	Mar. 4	639	163	50	1259
Kipper, Emil, Adams, Mass., and E. W. Perry, Jr., New York, N. Y. Photographic apparatus.....	424,315	Mar. 25	2930	781	50	1717
Kipper, Emil, Adams, Mass., and E. W. Perry, Jr., New York, N. Y. Magazine plate-holder for photographic apparatus.....	439,012	Oct. 21	2066	553	53	407
Kipper, Emil, Adams, Mass., and E. W. Perry, Jr., New York, N. Y. Photographic-plate holder.....	439,013	Oct. 21	2068	554	53	408
Kipper, Emil, and J. G. Jarvis, Zylonite, Mass., assignors to American Zylonite Company, New York, N. Y. Collar or cuff.....	425,679	Apr. 15	1907	508	51	388

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Kirby, A. Eugene, trustee. (See Osborne, Abel C., assignor.)						
Kirby, John, Jr., Dayton, Ohio. Lock	420,013	Jan. 21	2048	540	50	427
Kirby, John, Jr., Dayton, Ohio. Car-lamp	435,361	Aug. 26	2982	791	52	1359
Kirby, John, Marengo, Iowa. Cultivator	439,014	Oct. 21	2069	554	53	408
Kirby, John F., San Francisco, Cal. Governor	436,938	Sept. 23	2521	660	52	1877
Kirby, John M., St. Thomas, Ontario, Canada. Semaphore	421,005	Feb. 11	876	226	50	739
Kirchhoff, Franz R., Ludwigshafen-on-the-Rhine, Germany. Construction of pillars or supports for buildings, &c	435,429	Sept. 2	75	23	52	1389
Kirchhoff, Paul, Mittweida, Saxony, Germany. Rotating steam-engine	421,728	Feb. 18	1906	501	50	943
Kirchner, Gustav A. (See Schwachheim, Hermann, assignor.)						
Kirchner, Henry W., Denver, Colo., and G. N. Chase, U. S. Army. Means for transportation	441,672	Dec. 2	64	17, 18	53	1274
Kirchner, Nicholas, Philadelphia, Pa. Cable-grip	421,050	Feb. 11	937	242	50	750
Kirk, Albert, <i>et al.</i> (See West, Harley E., assignor.)						
Kirk, Arthur, Sharpsburg, Pa. Dam	439,522	Oct. 28	2878	766	53	566
Kirk & Co., James S., <i>et al.</i> (See Domcier and Hagemann, assignors.)						
Kirk & Co., James S., <i>et al.</i> (See Hagemann, Otto C., assignor.)						
Kirk & Co., James S., <i>et al.</i> (See Mitting, Ebenezer K., assignor.)						
Kirk, Elizabeth R., West Chester, Pa. Potato masher and beater	431,984	July 8	1485	375	52	299
Kirk, James A., <i>et al.</i> (See Mitting, Ebenezer K., assignor.)						
Kirk, John B., <i>et al.</i> (See Mitting, Ebenezer K., assignor.)						
Kirk, John E. (See Alden and Kirk.)						
Kirk, Milton W., <i>et al.</i> (See Mitting, Ebenezer K., assignor.)						
Kirk, Robert, Maplewood, assignor to J. J. Watrous, Cincinnati, Ohio. Routing-machine	434,394	Aug. 12	1441	376	52	1050
Kirk, Wallace F., <i>et al.</i> (See Mitting, Ebenezer K., assignor.)						
Kirk, William F. (See McLanahan and Kirk.)						
Kirkbride, Charles N., <i>et al.</i> (See Cavalli, Giosef A., assignor.)						
Kirkham, George K., Brooklyn, N. Y. Coffin-dam	418,726	Jan. 7	104	24	50	23
Kirkham, John J., Niles, Mich. Vestibule-car	439,523	Oct. 28	2880	767	53	566
Kirkpatrick, Drury T., assignor to Kirkpatrick Vapor Burner Company, Dallas, Tex. Vapor-burner	434,791	Aug. 19	2075	542	52	1181
Kirkpatrick, George W. (See Acker and Kirkpatrick.)						
Kirkpatrick, George W. (See Everett and Kirkpatrick.)						
Kirkpatrick, George W., Macedon, N. Y. Grain-drill	428,002	May 13	1481	376	51	1111
Kirkpatrick, Helen M. (See Acker and Kirkpatrick, assignors.)						
Kirkpatrick, Helen M. (See Everett, Samuel H., assignor.)						
Kirkpatrick, Helen M. (See Everett and Kirkpatrick, assignors.)						
Kirkpatrick, John A., Anthony, Kans. Air-heating apparatus	430,657	June 24	2429	{ 591 592 }	51	1968
Kirkpatrick Vapor Burner Company. (See Kirkpatrick, Drury T., assignor.)						
Kirkpatrick, William, Denver, Colo. Combined lunch-bucket and heater therefor	440,107	Nov. 4	716	190	53	749
Kirkpatrick, William M. (See Trimble and Kirkpatrick.)						
Kirks, Albert, assignor to Diebold Safe and Lock Company, Canton, Ohio. Safe-lock	438,317	Oct. 14	990	{ 267 268 }	53	195
Kirkup & Son, William. (See McCallum, William A., assignor.)						
Kirschner, Joseph N. (See Hamm, Phillip, assignor.)						
Kirtland, Edwin L., Holyoke, Mass. Curtained map	422,228	Feb. 25	2628	696	50	1086
Kirwan, George H., Wilkes-Barré, Pa. Electric station-indicator	439,015	Oct. 21	2070	{ 554 555 }	53	408
Kirwan, John, Asbury Park, N. J. Leather-skiver	438,002	Oct. 7	506	142	53	96
Kisinger, William S. (See Stiebel and Kisinger.)						
Kisinger, William S., Dayton, Ky., assignor of two-thirds to H. G. Stiebel, Jr., Cincinnati, Ohio, and A. C. Stiebel, St. Louis, Mo. Car-wheel	419,727	Jan. 7	105	24	50	23
Kisinger, William S., Bellevue, Ky., assignor to H. G. Stiebel, Cincinnati, Ohio. Water-sprinkler	421,729	Feb. 18	1908	502	50	943
Kisinger, William S., Bellevue, Ky., assignor to H. G. Stiebel, Cincinnati, Ohio. Clutch mechanism	423,431	Mar. 18	1620	425	50	1460
Kisinger, William S., Bellevue, Ky., and H. G. Stiebel, Jr., assignors to H. G. Stiebel, Cincinnati, Ohio. Water-sprinkler	420,879	Feb. 4	669	173	50	691
Kissel, Albert, Salem, assignor to Adamanta Manufacturing Company, Boston, Mass. Hardening resins	441,366	Nov. 25	2816	.....	53	1170
Kissell, Abraham S., deceased; M. A. Kissell, Chicago, Ill., executrix. Automatic electric switch	427,237	May 6	330	85	51	876
Kissell, Martin L., assignor to P. P. Mast & Company, Springfield, Ohio. Grain-drill	422,229	Feb. 25	2629	{ 696 697 }	50	1086
Kissell, Martin L., assignor to P. P. Mast & Company, Springfield, Ohio. Cultivator	424,316	Mar. 25	2932	782	50	1717
Kissell, Mary A., executrix. (See Kissell, Abraham S.)						
Kissock, John A. C. (See Mabel, Charles, assignor.)						
Kistenmacher, Frederick W., St. Louis, Mo. Preparing granulated cleaning material	440,314	Nov. 11	1062	.....	53	823
Kistler, Harry J., Oakland Cross Roads, Pa. Clasp for overshoes	442,627	Dec. 16	1562	404	53	1584
Kitchell, Hudson M., Brooklyn, N. Y. Die for embossing paper and like impressible materials	440,166	Nov. 11	825	213	53	780
Kitchell, Oscar, Valparaiso, Ind., assignor of one-half to W. H. Curtis, Chicago, Ill. Shipping-can	424,066	Mar. 25	2572	687	50	1647
Kitchell, Robert C. (See Colles, Kitchell, and Applegate.)						
Kitfield, Edward H., Lynn, assignor of two-thirds to H. C. Wirt and J. L. Kimball, Boston, Mass. Trolley-wire hanger or support	441,800	Dec. 2	270	72	52	1317
Kitsee, Isidor, Cincinnati, Ohio, assignor to M. Sulzberger, trustee, Philadelphia, Pa. Electric railway	419,588	Jan. 14	1389	372	50	292
Kitsee, Isidor, Cincinnati, Ohio, assignor to M. Sulzberger, trustee, Philadelphia, Pa. Electrode for secondary batteries	443,454	Dec. 23	2985	767	53	1869
Kitsee, Isidor, Cincinnati, Ohio, assignor to M. Sulzberger, trustee, Philadelphia, Pa. Electrode for secondary batteries	443,455	Dec. 23	2987	767	53	1869
Kitsee, Isidor, Cincinnati, Ohio, assignor to M. Sulzberger, trustee, Philadelphia, Pa. Secondary battery	443,456	Dec. 23	2988	768	53	1870
Kitsee, Isidor, Cincinnati, Ohio, assignor to M. Sulzberger, trustee, Philadelphia, Pa. Secondary battery	443,457	Dec. 23	2990	768	53	1870
Kitsee, Isidor, Cincinnati, Ohio, assignor of one-half to J. Carty, J. A. Wiedersheim, Philadelphia, Pa., and C. J. Kintner, New York, N. Y. Telephone system	430,960	June 24	2912	715	51	2060
Kitselman, Alva L., Ridgeville, Ind. Fence-post	442,189	Dec. 9	882	235	53	1442
Kitson, Arthur. (See Horry and Kitson.)						
Kitson, Arthur, Philadelphia, Pa. Apparatus for manufacturing heating or fuel gas	440,950	Nov. 18	2419	{ 550 551 }	53	1032

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Kitson Gaslight Improvement Company. (See Horry and Kitson, assignors.)						
Kitson, John E. (See Bufford, George W., assignor.)						
Kitson Machine Company. (See Perham, Haven C., assignor.)						
Kittinger, Charles E., Powell, S. D. Windmill.....	428,495	May 20	2221	562	51	1263
Kittle, Alonzo D., Blauveltville, N. Y. Railway-spike.....	439,524	Oct. 28	2881	767	53	566
Kittle, Alonzo D., Blauveltville, N. Y. Safety-spike.....	439,525	Oct. 28	2882	767	53	566
Kittle, Stephen Y., Wilkes-Barré, Pa. Adjustable table for carving-machines.....	436,712	Sept. 16	2085	548 } 549 }	52	1786
Kitton, John C., assignor of one-half to W. T. Garratt & Co., San Francisco, Cal. Ice-machine.	424,005	Mar. 25	2487	662	50	1631
Kittredge, Anson O. (See White and Kittredge.)						
Kittredge, Anson O., Slate Hill, N. Y. Advertiser's reply-coupon.....	443,141	Dec. 23	2464	630	53	1766
Kittredge, Franklin O., Medford, Mass. Device for operating elevator-hatchway gates.....	427,770	May 13	1136	285	51	1045
Kizer, Ariel D., Mishawaka, Ind. Composition for felting boots, &c.....	423,479	Mar. 18	1089	.....	50	1474
Kjesbu, Oluf E., and H. Stenson, Starbuck, Minn. Egg-tester.....	430,476	June 17	2129	523	51	1903
Kjesbu, Oluf E., and H. Stenson, Starbuck, Minn. Egg-transporting crate and tray.....	430,477	June 17	2130	523	51	1903
Kjoller, Anders P., Holyoke, Mass. Friction-clutch pulley.....	429,456	June 3	533	128	51	1575
Klabn, Emil, Jersey City, N. J., assignor to Keystone Watch Case Company, Philadelphia, Pa. Watch-bow fastener.....	441,172	Nov. 25	2488	643	53	1113
Klauder & Bro. (See Pulster, Henry, assignor.)						
Klauder, Charles L., Philadelphia, Pa. Dyeing apparatus.....	425,614	Apr. 15	1802	483	51	368
Klander, Charles L., Philadelphia, Pa. Dyeing apparatus.....	428,614	May 27	2401	610	51	1317
Klauser, Arthur E. (See Southard and Klauser.)						
Kleaber, Alonzo B., assignor of one-half to H. Loss, Wayne, Mich. Spring air-gun.....	440,638	Nov. 18	1597	412	53	934
Kleber, Harry, <i>et al.</i> (See Ellis, Josiah W., assignor.)						
Kleber, Oscar, <i>et al.</i> (See Ellis, Josiah W., assignor.)						
Kleber, Oscar, Allegheny, Pa. Telegraph-key.....	426,941	Apr. 29	3795	992	51	775
Kleemann, Fritz, Schoeningen, Germany. Filter-press.....	434,831	Aug. 19	2131	558	52	1192
Klein, August, Chicago, Ill. Rail-joint.....	433,571	Aug. 5	194	51	52	794
Klein, Charles J., New York, N. Y. Cut-out and connection for electrical apparatus.....	434,149	Aug. 12	1067	274	52	974
Klein, George N., Philadelphia, Pa. Wardrobe-trunk.....	438,889	Oct. 21	1889	501	53	371
Klein, Johann, Frankenthal, Bavaria, Germany. Heating and cooling liquids.....	430,961	June 24	2917	716	51	2061
Klein, Philip H., Jr., assignor to Bergmann Electric and Gas Fixture Company, New York, N. Y. Holder for incandescent electric lamps.....	426,189	Apr. 22	2686	705	51	546
Kleindorpf, Jacob, <i>et al.</i> (See Dasher, Hiram D., assignor.)						
Kleinhaus, Jacob, <i>et al.</i> (See Merrifield, Preston V., assignor.)						
Kleinman, Solomon. (See Silberman, Joseph, assignor.)						
Kleinsteuber, Oscar D. (See Paul and Kleinsteuber.)						
Kleinstiver, Abel, assignor of one-half to B. S. Van Tuyl, Petrolia, Ontario, Canada. Mechanism for driving machinery.....	429,134	June 3	41	9, 10	51	1480
Kleinstiver, Abel, assignor of one-half to B. S. Van Tuyl, Petrolia, Ontario, Canada. Threshing and separating machine.....	429,135	June 3	42	10, 11	51	1480
Kleitzi, Carl L., Sigourney, Iowa. Cable or wire rope guard for stump-pullers, &c.....	435,754	Sept. 2	577	154	52	1486
Klenk, John, <i>et al.</i> (See Hottman, Charles W., assignor.)						
Klette, Otto, Breslau, Germany. Composition for paper stucco.....	439,526	Oct. 28	2883	.....	53	566
Kletzker, Albert J. (See Nagel, Junius, assignor.)						
Kletzker, Albert J., St. Louis, Mo. Matrix-making machine.....	432,627	July 22	2456	633 } 634 }	52	499
Kletzker, Albert J., assignor of one-half to J. E. Blythe, St. Louis, Mo. Paper cutter and printer.....	420,388	Jan. 28	2635	699	50	545
Kletzker, Albert J., and B. Dubinski, St. Louis, Mo.; said Dubinski assignor to said Kletzker. Cash indicator and register.....	420,346	Jan. 28	2572	683 } 684 }	50	533
Kley, Jean, New York, N. Y. Combined target and toy gun.....	429,457	June	535	128 } 129 }	51	1576
Klimosch, Konrad E. (See Weiss, Franz C., assignor.)						
Kline, Abraham, Manheim, Pa. Curry-comb.....	433,006	July 29	3084	791	52	624
Kline, James, Beloit, Wis. Cork-extractor.....	441,422	Nov. 25	2909	750	53	1190
Kline, John E., assignor of one-half to W. F. Redman, J. Galbreath, and J. W. Redman, Union Centre, Ill. Car-coupling.....	443,597	Dec. 30	3216	827	53	1922
Kline, Winfield S., Bolivar, Ohio. Fence.....	422,422	Mar. 4	86	23	50	1153
Klinefelter, Henry H., <i>et al.</i> (See Himrod, William G., assignor.)						
Klinefelter, Victor H., <i>et al.</i> (See Reed, George T., assignor.)						
Klinefelter, William E., <i>et al.</i> (See Himrod, William G., assignor.)						
Klinefelter, George M., Middletown, Pa. Self-supporting shelf.....	439,731	Nov. 4	153	40	53	637
Kling, Peter M. (See Depp and Munn, assignors.)						
Kling, Peter M., <i>et al.</i> (See Verstraete, Edmond, assignor.)						
Kling, William L., St. Cloud, Minn. Hand seed-planter.....	435,430	Sept. 2	76	24	52	1390
Klinik, Constantin, Königshütte, and F. Zawische, Benthien, Prussia, Germany. Safety device for elevators.....	419,265	Jan. 14	927	244 } 245 }	50	198
Klink, John, Berea, Ohio. Feed-trough.....	436,423	Sept. 16	1729	456	52	1720
Klipfel, Thomas W., assignor to C. E. Simmons, Chicago, Ill. Coiled-wire floor mat.....	432,244	July 15	1884	484	52	381
Klippert, Charles V. (See Brown, Klippert, and Vogt.)						
Klipstein, Friedreck C., Leland, Wis. Sleigh.....	438,164	Oct. 14	756	207	53	152
Klohr, Charles B. (See Woodmansee and Klohr.)						
Klopfenstein, Joseph, Archbold, Ohio. Wire-stretcher.....	434,513	Aug. 19	1635	429	52	1096
Klopp, Elizabeth, Colorado Springs, Colo. Tracing-wheel.....	438,734	Oct. 21	1629	437	53	323
Klots, Henry D., and H. Nightingale, assignors of one-third to J. Nightingale, New York, N. Y. Silk-winding machine.....	427,696	May 13	1011	255	51	1021
Klotz, Daniel. (See Kerp, Wilhelm J., assignor.)						
Klotz, Felix S. (See Bülzingslöwen, Levy, and Klotz.)						
Klotz, Jacob E., <i>et al.</i> (See Mickler, Jacob H., assignor.)						
Knabe Manufacturing Company, Wm. (See Hartleb, Bernhard, assignor.)						
Knade, Ferdinand, Breslau, Prussia, Germany. Pen-holder.....	422,805	Mar. 4	640	164	50	1260
Knapp, Albert E., Poultney, Vt., assignor of one-half to F. Widner, Round Lake, N. Y. Plant protector.....	433,898	Aug. 5	680	176	52	890
Knapp, Augustus S., <i>et al.</i> (See Julian and Guillaume, assignors.)						
Knapp, Edgar W., Galesburg, Mich. Car-coupling.....	424,067	Mar. 25	2573	687	50	1647
Knapp, Edward, St. Louis, Mo., assignor of two-thirds to G. D. Barnard & Company, East St. Louis, Ill. Ruling-machine.....	430,583	June 17	2287	561 } 562 }	51	1932
Knapp, George W., Worcester, Mass. Making plumbers' traps.....	440,951	Nov. 18	2121	551	53	1932
Knapp, George W., Baltimore, Md. Handle for tea or coffee pots.....	442,900	Dec. 16	2054	527	53	1679
Knapp, Isaac N., Paterson, N. J., assignor to United Gas Improvement Company, Philadelphia, Pa. Coke-oven.....	421,583	Feb. 18	1703	442	50	903
Knapp, John E. (See Elster, Young, and Knapp.)						
Knapp, John I. (See Knapp, Susan V., assignor.)						
Knapp, Susan V., assignor of one-half to J. I. Knapp, Adrian, Mich. Clasp for belts.....	433,130	Oct. 7	702	190	53	135

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Knapp, William H., Galesburg, Mich. Grain-carrier	432,052	July 15	1598	409	52	326
Knapp, William H., Galesburg, Mich. Grain packer and carrier	435,143	Aug. 26	2641	699	52	1296
Knauber, Jacob, Milwaukee, Wis. Check-book	419,857	Jan. 21	1812	479	50	379
Knaus, James M., Sedalia, Mo. Axle-box	437,122	Sept. 23	2782	726	52	1929
Knaus, Joseph H., Fayette, Mo. Drawer-equalizer	427,331	May 6	462	119	51	902
Knaus, Joseph H., Fayette, Mo. Furniture-drawer	427,475	May 6	677	169	51	945
Knebel, Herman, and A. Henning, Birmingham, Ala., assignors to Birmingham Rotary Motor Company. Rotary engine	420,347	Jan. 28	2576	684	50	534
Knebel, John G. (See Quinlan and Knebel.)						
Knecht, Charles A., and H. Schlesinger, assignors to G. Knecht Manufacturing Company, Chicago, Ill. Barber's chair	431,593	July 8	865	215	52	180
Knecht, Heinrich. (See Knecht, Jacob and H.)						
Knecht, Jacob and H., Zurich, Switzerland. Machine for sharpening saws	433,866	Aug. 5	636	165	52	881
Knecht Manufacturing Company, Gustav. (See Knecht and Schlesinger, assignors.)						
Knell, James W., Highlands, N. J. Apparatus for producing illusory dramatic effects	423,171	Mar. 11	1239	322	50	1379
Knibbs, James, Troy, N. Y. Wire-cutter	426,128	Apr. 22	2591	681	51	528
Knickerbocker, John, Troy, N. Y. Valve	424,715	Apr. 1	430	114	51	85
Knickerbocker Gas Regulator Company. (See Knickerbocker, James B., assignor.)						
Knickerbocker, James B., assignor to Knickerbocker Gas Regulator Company, Indianapolis, Ind. Automatic pressure-regulator	427,516	May 6	737	184	51	958
Knickerbocker, Robert, Blue Island, assignor of one-half to C. F. Wardell, Chicago, Ill. Brick-machine	427,578	May 13	839	209	51	987
Knickerbocker, Robert, Blue Island, assignor of one-half to C. F. Wardell, Chicago, Ill. Brick-machine				210		
Knight, Charles A., Glasgow, Scotland. Connecting-box for water-tube boilers	431,117	July 1	126	32, 33	52	27
Knight, Charles A., Glasgow, Scotland. Steam-drum for sectional steam-boilers	434,601	Aug. 19	1771	463	52	1123
Knight, Charles A., Glasgow, Scotland. Steam-drum for sectional steam-boilers	433,776	Oct. 21	1696	455	53	336
Knight, Charles A., Brooklyn, N. Y. Refrigerator-vehicle	439,958	Nov. 4	499	130	53	705
				131		
Knight, David R. (See Sullenberger, William H., assignor.)						
Knight, Du Tee S., Hinsdale, N. H. Tug-strap and holder for looms	434,988	Aug. 26	2411	638	52	1253
Knight, Edward M., San Mateo, assignor to Rapid Safety Filter Company, San Francisco, Cal. Filter	419,266	Jan. 14	928	246	50	198
Knight, Edward S., assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	428,496	May 20	2223	562	51	1263
Knight, Frank H., Washington, D. C. Tube-expander	442,598	Dec. 9	1514	329	53	1566
Knight, Fred E., Worcester, Mass. Combined paper-weight and envelope-opener	419,682	Jan. 21	1549	413	50	328
Knight, George E. A., Providence, R. I. Jewelers' stock	437,862	Oct. 7	287	86	53	56
Knight, George W., assignor to G. Draper & Sons, Hopedale, Mass. Yarn-separator for spinning-machines	426,282	Apr. 22	2813	739	51	574
Knight, Harry M., Camden, N. J. Vending apparatus	426,537	Apr. 29	3205	840	51	660
Knight, Henry M. (See Shapley, Edmund L., assignor.)						
Knight, Henry T., South Riverside, Cal. Universal steam-joint	440,864	Nov. 18	1977	510	53	1004
Knight, Herbert, assignor to C. S. Upton, New York, N. Y. Pocket-lamp	430,584	June 17	2229	563	51	1933
Knight, Horatio D., Lancaster, Pa. Curtain-fixture	435,018	Aug. 26	2457	650	52	1261
Knight & Jillson. (See Holden, Charles L., assignor.)						
Knight, John H., Buffalo, N. Y. Sliding oven-shelf	420,295	Jan. 28	2506	665	50	521
Knight, Joseph, Livermore Falls, Me. Halter	432,414	July 15	2135	549	52	427
Knight, Margaret E., South Framingham, Mass. Sole-cutting machine	436,358	Sept. 16	1519	396	52	1681
				397		
				397		
				398		
Knight, Margaret E., South Framingham, Mass. Machine for cutting shoe-soles	436,359	Sept. 16	1521	399	52	1681
				400		
				401		
Knight, Octavius, administrator. (See Buchholz, Gustav A.)						
Knight, Patrick H., Gray, Me. Paper-box machine	428,677	May 27	2504	636	51	1335
				637		
Knight, Silas G., St. John, Newfoundland. Spool-holder	431,773	July 8	1170	291	52	237
Knight, Thomas G., Rockville Centre, N. Y. Surgical tent or dilator	438,929	Oct. 21	1942	517	53	382
Knight, Walter H., New York, N. Y. Electric railway	424,887	Apr. 1	702	186	51	135
Knight, Walter H., New York, N. Y. Electric railway	424,888	Apr. 1	704	186	51	136
Knight, Walter H., New York, N. Y. Electric railway	425,950	Apr. 15	2319	615	51	466
Knight, Walter H., New York, N. Y. Electric-motor regulator	423,169	May 20	1723	436	51	1167
Knight, Walter H., New York, N. Y. Electric locomotive	432,142	July 15	1740	447	52	354
Knight, Walter H., Newton, Mass. Electric railway. (Reissue)	11,083	June 10	1534	381	51	1778
Knight, Walter H., Newton, Mass. Electric railway. (Reissue)	11,084	June 10	1536	381	51	1778
				382		
Knipe, Oliver C., Norristown, Pa. Axle-box	424,317	Mar. 25	2934	782	50	1717
Knipp, Charles T. (See Knipp, Julius W. and C. T.)						
Knipp, Julius W. and C. T., Napoleon, Ohio. Book-stand	443,966	Dec. 30	3795	967	53	2033
Knisely, Abraham Y. and J. P., Steelton, Pa. Umbrella or parasol exhibitor	431,266	July 1	351	88	52	72
Knisely, John P. (See Knisely, Abraham Y. and J. P.)						
Knisley, James P., Adrian, Mo. Hitching device	430,962	June 24	2918	716	51	2061
Knobel, Casper. (See Withers and Knobel.)						
Knobelspies, Rudolph, assignor of one-half to T. M. Dicken, G. C. Miller, and C. A. Hunt, Kansas City, Mo. Smoke-consumer	429,765	June 10	996	244	51	1675
Knoblock, Jacob, Eldon, Mo. Fence	434,562	Aug. 19	1710	447	52	1110
Knoche, John, Helena, Mont. Carpet-cleaner	435,935	Sept. 9	868	227	52	1548
Knoepfl, Ernest G., and L. L. Lichtfeld, Argentine, Kans. Flying toy	421,920	Feb. 11	1274	329	50	814
Knoeller, Charles L., New York, N. Y. Folding chair and step-ladder	433,795	Aug. 5	533	138	52	860
Knoll, Louis P., Montrose, Pa. Head-rest	419,961	Jan. 21	1969	517	50	412
Knopp, Charles, Winona, Minn. Tightener for wire fences	433,475	Aug. 5	55	17	52	767
Knopp, Charles, Winona, Minn. Device for applying tighteners to wire fences	433,476	Aug. 5	56	17	52	767
Knott, Charles, Hamilton, Ontario, Canada. Upright-piano-forte action	427,177	May 6	336	61	51	858
Knowlton, George K., Hamilton, Mass. Vegetable colander or sifter	419,437	Jan. 14	1218	323	50	256
Knowles, Daniel, assignor of one-fourth to G. W. Johnston, Norfolk, Va. Sewer	436,736	Sept. 16	2119	557	52	1794
Knowles, Daniel C., Tilton, N. H. Device for checking and unchecking horses	435,550	Oct. 14	1322	359	53	261
Knowles, John H. (See Proctor and Knowles.)						
Knowles, John H., New York, N. Y. Eyeglass-holder	436,831	Sept. 23	2312	609	52	1838
Knowles Loom Works. (See Hollingworth, Edward, assignor.)						
Knowles Loom Works. (See Hutchins George F. assignor.)						
Knowles, Lorenzo D., Philadelphia, Pa. Extension-ladder and fire-escape	427,771	May 13	1137	285	51	1045
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Knowles, Percival, <i>et al.</i> (See Martin, Romeo B. and E. H., assignors.)						
Knowles, Thomas, Bolton, county of Lancaster, England. Mechanism for adjusting traveling flats of carding-machines	428,778	May 27	2661	675	51	1365
Knowles, William R., <i>et al.</i> (See Newhall, John F., assignor.) (Reissue.)						
Knowlson, James R. (See Knowlson, Walter O., assignor.)						
Knowlson, Walter O., assignor of one-half to J. R. Knowlson, Troy, N. Y. Valve-gear for engines	430,528	June 17	2208	543	51	1917
Knowlton, John J., Saccarappa, Me. Boring-mill	430,293	June 17	1858	456	51	1850
Knox, George F., San Antonio, Tex., assignor of one-half to E. F. Hoppe, St. Louis, Mo. Feed-water heater	419,530	Jan. 14	1312	351	50	275
Knox, Howard R., Richmond, Mich. Power-transmitter	428,497	May 20	2224	562	51	1264
Knox, William C. (See Vincent, Knox, and Rynerson.)						
Knabel, Charles H., New York, N. Y. Umbrella	418,845	Jan. 7	294	71	50	62
Knudson, Adolphus A., Brooklyn, N. Y. Insulating compound	425,615	Apr. 15	1803	483	51	368
Knudson, Adolphus A., Brooklyn, N. Y. Aerial conduit for electric conductors	438,003	Oct. 7	507	143	53	96
Knudson, Kittle. (See Fleck and Knudson.)						
Kohlegard, Jacob. (See Barnes, Thomas N., assignor.)						
Kohler, Victor. (See Saurer and Kohler.)						
Kohusch, George J., <i>et al.</i> (See Verstraete, Edmund, assignor.)						
Koch, Charles, and C. Biel, Germantown, Nebr. Garden-hoe	422,783	Mar. 4	604	155	50	1252
Koch, Eberhard, assignor of one-half to C. J. Allen, New Orleans, La. Apparatus for dis-	421,029	Feb. 11	905	{ 233 234 }	50	744
tiling wood						
Koch, Henry C. F., New York, N. Y. Velvet skirt-binding	441,423	Nov. 25	2910	750	53	1190
Koch, John C., Berlin, Germany. Clasp for albums, books, boxes, &c.	421,174	Feb. 11	1114	286	50	785
Koch, John C., Berlin, Germany. Clasp for albums	433,007	July 29	3085	792	52	625
Koch, John E. C. (See Smith and Maynard, assignors.)						
Koch, Matthias, assignor to L. Schultz, New York, N. Y. Quilting-machine	420,276	Jan. 28	2479	{ 658 659 }	50	516
Koch, Matthias, assignor of one-half to L. Schultz, New York, N. Y. Quilting-machine	421,584	Feb. 18	1705	{ 443 444 }	50	903
Koch, Max C. (See Soloman, William S., assignor.)						
Koch, Nicholas. (See Zehren, Jean and A., assignors.)						
Koch, Otto, and W. Danner, assignors of one-third to J. B. Schmitt, New Orleans, La. Apparatus for distilling wood	422,806	Mar. 4	641	164	50	1260
Koch, William, New York, N. Y., assignor to Kruse Check and Adding Machine Company, of New York. Cash-indicating and check-printing machine	428,003	May 13	1482	{ 376 377 378 }	51	1111
Koch, William, New York, N. Y., assignor to Kruse Check and Adding Machine Company, of New York. Check-machine	428,678	May 27	2506	{ 637 638 639 }	51	1335
Koch, William, New York, N. Y., assignor to Kruse Check and Adding Machine Company, of New York. Cash indicator and register	428,679	May 27	2513	{ 640 641 642 }	51	1336
Koch, William, New York, N. Y., assignor to Kruse Check and Adding Machine Company, of New York. Cash-recorder	431,661	July 8	981	{ 245 246 }	52	203
Koch, William, New York, N. Y., assignor to Kruse Check and Adding Machine Company, of New York. Cash-register	440,108	Nov. 4	717	191	53	749
Koch, William E., and F. M. Shook, Ashville, Ohio. Corn-planter	423,520	Mar. 18	1747	{ 460 461 }	50	1485
Kochs, Theodore A. (See Fischer and Rollert, assignors.)						
Kochs, Theodore A. (See Rollert, Anton J., assignor.)						
Kochs, Wilhelm, and M. Wolz, Bonn-on-the-Rhine, Prussia, Germany. Refracting-lens	421,585	Feb. 18	1710	444	50	904
Koehler, Charles F. W., assignor to C. Koehler & Co., Brooklyn, N. Y. Combined knife and eraser	435,543	Sept. 2	249	69	52	1423
Koehler & Co., Charles. (See Koehler, Charles F. W., assignor.)						
Koehler, Emma E., Toledo, Ohio. Card game	422,807	Mar. 4	642	164	50	1260
Koehler, John, Canton, Ohio. Machine for cutting I-beams or channel-bars	438,252	Oct. 14	886	{ 240 241 }	53	175
Koehler, William H., assignor of two-thirds to V. Maurer and J. W. Schuster, Cleveland, Ohio. Car-brake	437,652	Sept. 30	3624	947	52	2099
Koehler, William H., and M. Roskopf, Cleveland, Ohio. Street-railway switch	430,188	June 17	1650	411	51	1810
Koelbel, Herman. (See Sykora, Frank, assignor.)						
Koelsch, William G., Albany, and P. Shafer, Bath-on-the-Hudson, N. Y. Shears	434,345	Aug. 12	1362	356	52	1033
Koempel, Henry J., St. Paul, Minn. Paint vessel and package	428,109	May 20	1646	418	51	1153
Koenen, William, assignor of one-half to D. Vogt, Cleveland, Ohio. Street-railway switch	427,089	May 6	98	26	51	831
Koenig, Emil, New York, N. Y., assignor to D. Kops, R., H. V., and A. V. Lambert. Locking-latch	436,761	Sept. 16	2172	571	52	1803
Koenig, George, and S. H. Stupakoff, Pittsburg, Pa. Interlocking apparatus for operating signals	424,485	Apr. 1	65	19, 20	51	16
Koenig, George, and S. H. Stupakoff, Pittsburg, Pa. Interlocking apparatus	426,360	Sept. 16	1529	401	52	1682
Koerner, Georg, Ludwigshafen-on-the-Rhine, Bavaria, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Red dye	429,350	June 3	378	.....	51	1543
Koerner, Herman T. (See Behn and Koerner.)						
Kohl, Hermann H. E. G., Leipsic-Reudnitz, Germany. Plate-holder for mechanical printing	426,283	Apr. 22	2814	739	51	574
Kohler, G. A. Edward. (See Lounsbury, James A., assignor.)						
Kohler, George C., San Francisco, Cal., assignor to A. G. Spalding & Bros., Chicago, Ill. Base-ball glove	425,887	Apr. 15	2206	586	51	446
Kohler, George L., New York, N. Y. Clothes-line hanger	442,378	Dec. 9	1163	303	53	1495
Köhler, Hjalmar von, New York, N. Y. Push-button	440,813	Nov. 18	1894	487	53	989
Kohlmaier, Henry P., Norwalk, Ohio. Stove-pipe fastener	420,076	Jan. 28	2148	568	50	455
Kohlsaatt, Peter N., <i>et al.</i> (See Herder, Rudolph H., assignor.)						
Kohn, Morris, Chicago, Ill. Cloth-cutting machine	425,102	Apr. 8	1025	274	51	207
Kohn, Morris, assignor to Peerless Cloth Cutting Machine Company, Chicago, Ill. Cloth-cutting machine	431,521	July 1	753	188	52	150
Kohn, Samuel, <i>et al.</i> (See West, Harley E., assignor.)						
Kohmle, Frederick, Dayton, Ohio. Finishing emery polishing-wheels	431,774	July 8	1171	291	52	237
Kohrn, William A. J., San Francisco, Cal. Telegraph-key	439,959	Nov. 4	501	131	53	705
Kokernot, Alexander B., New Orleans, La. Refrigerating attachment for beer-barrels	419,203	Jan. 14	837	220	50	180
Kokernot, Alexander B., New Orleans, La. Refrigerator attachment for beer-barrels	419,204	Jan. 14	838	221	50	180
Kokernot, Alexander B., New Orleans, La. Refrigerating attachment for beer-barrels	433,867	Aug. 5	637	165	52	882
Kolb, Charles A. (See Ourdan and Kolb.)						
Kolbe, Hedwig M., Philadelphia, Pa. Artificial limb	419,019	Jan. 7	563	141	50	119
Kollberg, Fredrick L., assignor to J. Bee, Chicago, Ill. Machine for flanging boiler-heads	425,434	Apr. 15	1530	{ 409 410 }	51	315
Kollberg, Fredrick L., assignor to J. Bee, Chicago, Ill. Machine for flanging boiler-heads	426,505	Apr. 29	3156	830	51	651

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Kolle, Harold W. (See Lowrie, Hall, and Kolle.)						
Koller, Gustav, assignor of one-half to F. Pönninger, Vienna, Austria-Hungary. Treating glue and gelatine molds.....	419,779	Jan. 21	1685	50	354
Kolm, Christian P., assignor to J. L. McKenzie, Knapp's Creek, N. Y. Gas-regulator.....	420,726	Feb. 4	416	110	50	646
Kolter, Charles, Sr., <i>et al.</i> (See Brokaw, Harvey, assignor.)						
Komp, Adolf, Pittsburg, Pa. Pilot for locomotives or cars.....	428,110	May 20	1647	418	51	1153
Konigsberg, Gabriel, Denver, Colo. Attachment for cars.....	434,902	Aug. 19	2268	{ 594 595 }	52	1218
Konigsberg, Gabriel, Denver, Colo. Facing for walls of buildings.....	441,766	Dec. 2	219	57	53	1306
Kookogey Chemical Light and Power Company. (See Kookogey, William P., assignor.)						
Kookogey Electric Company. (See Kookogey, William P., assignor.)						
Kookogey, William P., Brooklyn, assignor to Kookogey Electric Company, New York, N. Y. Incandescent-lamp socket.....	421,586	Feb. 18	1710	445	50	904
Kookogey, William P., Brooklyn, N. Y., assignor to Kookogey Electric Company. Secondary-battery plate.....	422,533	Mar. 4	242	63	50	1182
Kookogey, William P., Brooklyn, N. Y., assignor to Kookogey Electric Company. Insulator.....	425,513	Apr. 15	1646	439	51	338
Kookogey, William P., assignor to Kookogey Electric Company, Brooklyn, N. Y. Making secondary-battery plates.....	432,672	July 22	2543	652	52	515
Kookogey, William P., Brooklyn, N. Y., assignor to Kookogey Electric Company. Separator for secondary batteries.....	433,174	July 29	3346	865	52	676
Kookogey, William P., Brooklyn, N. Y., assignor to Kookogey Electric Company. Method of and apparatus for burning holes in metal.....	434,133	Aug. 12	1044	270	52	970
Kookogey, William P., Brooklyn, N. Y., assignor to Kookogey Chemical Light and Power Company. Electrode for galvanic batteries.....	425,135	Apr. 8	1077	286	51	217
Koontz, Ezra P., Ligonier, Ind. Refrigerator.....	430,963	June 24	2919	716	51	2061
Koopman, Elias B., and W. W. McKenney, assignors to Magic Introduction Company, New York, N. Y. Pocket-lamp.....	440,265	Nov. 11	976	249	53	810
Koopman, Elias B., and W. W. McKenney, assignors to Magic Introduction Company, New York, N. Y. Pocket-lamp or lightning device. (Reissue).....	11,130	Dec. 9	1517	390	53	1566
Kopetchi, Rudolf, Focsani, Putua, Roumania. Safety-lamp.....	422,808	Mar. 4	844	164	50	1260
Kopf, John, Brooklyn, N. Y. Fishing rod case.....	442,269	Dec. 9	997	263	53	1465
Kopf, Louis. (See Engquist, Nicholas, assignor.)						
Kopf, Louis, assignor of one-half to N. Goldberg, Philadelphia, Pa. Folding step-ladder.....	434,792	Aug. 19	2077	543	52	1181
Kopp, Henry S. (See Dixon and Kopp.)						
Kopp, John, Cincinnati, Ohio. Violin.....	431,722	July 8	1093	272	52	223
Koppes, William M., Orrville, Ohio. Thrashing-machine.....	419,683	Jan. 21	1550	{ 413 414 }	50	328
Kops, Daniel, <i>et al.</i> (See Koenig, Emil, assignor.)						
Korbel, Joseph, San Francisco, Cal. Guard for gang-edgers.....	440,829	Nov. 18	1927	495	53	994
Kornprobst, Sebastian. (See Einstein and Kornprobst.)						
Kornrumpf, Christian, Huntingburg, Ind. Watch-case bezel.....	442,443	Dec. 9	1267	327	53	1517
Korst, Philip H., Racine, Wis. Electric meter.....	432,053	July 15	1599	409	52	326
Kortiek, Frank, San Francisco, Cal. Combination-tool.....	431,662	July 8	989	246	52	204
Körting, Ernst, Hanover, Prussia, Germany. Apparatus for moistening air.....	425,329	Apr. 8	1370	366	51	276
Korting Gas Engine Company. (See Heckert, William, assignor.)						
Korting Gas Engine Company. (See Willmer, Arnold, assignor.)						
Kosinski, Walter T. (See Kosinski, Wladyslaw T. and W. T.)						
Kosinski, Wladyslaw T. and W. T., Philadelphia, Pa.; said W. T. Kosinski assignor to said Wladyslaw T. Kosinski. Wrench.....	441,245	Nov. 25	2631	682	53	1137
Koskul, Frederick, Williamsport, Pa. Ornamental wood-working.....	436,041	Sept. 9	1030	268	52	1520
Koster, Lewis, assignor of one-half to R. Resseguie, Harrisville, N. Y. Cant-hook for loggers.....	428,724	May 27	2587	656	51	1351
Kothe, William, Thompsonville, Conn. Wire-operating device for pile-fabric looms.....	426,284	Apr. 22	2815	{ 739 740 }	51	574
Kottlors, Paul, Krappitz, Prussia, Germany. Aligned circular gun-sight.....	428,004	May 13	1487	378	51	1112
Kotze, Alphonse L., Oklahoma City, Oklahoma Ter. Neck-yoke attachment.....	443,142	Dec. 23	2466	631	53	1766
Kouns, Wesley, Salina, Kans. Stock-watering trough.....	443,446	Dec. 23	2970	765	53	1865
Kowalski, August J., <i>et al.</i> (See Lewandowski and Zalikowski, assignors.)						
Koyl, Charles H., Easton, Pa. Car-roof.....	436,361	Sept. 16	1532	401	52	1683
Koyl, Charles H., and J. W. Lattig, Easton, Pa. Electric signaling system and apparatus for railways.....	427,429	May 6	613	153	51	933
Koyl, Charles H., and J. W. Lattig, Easton, Pa. Electric signaling system and apparatus for railways.....	427,430	May 6	615	154	51	933
Koyl, Charles H., Easton, Pa., and F. A. D. Hancock, Savannah, Ga. Signal-light for vessels.....	434,280	Aug. 12	1271	330	52	1014
Kraemer & Company, T. F. (See Kraemer, Felix, assignor.)						
Kraemer, Felix, assignor to T. F. Kraemer & Company, New York, N. Y. Piano-stool.....	429,458	June 3	536	129	51	1576
Kraetzer, Edwin J., Gloversville, N. Y., assignor, by mesne assignments, to Consolidated Fastener Company, Portland, Me. Glove-fastener.....	424,794	Apr. 1	565	150	51	110
Kraetzer, Edwin J., Gloversville, N. Y., assignor, by mesne assignments, to Consolidated Fastener Company, Portland, Me. Glove-fastener.....	424,795	Apr. 1	566	150	51	110
Kraetzer, August, Newark, N. J., assignor to J. J. Tower, Brooklyn, N. Y. Wire-cutter.....	441,309	Nov. 25	2740	709	53	1156
Kraft, George, Wilmington, Del. Apparatus for sponging cloth.....	443,325	Dec. 23	2789	716	53	1831
Kraft, Theodore H. (See Engel, Godfrey, assignor.)						
Krag, Ole H. J., and E. Jørgensen, Kongsberg, Norway. Breech-loading gun.....	429,811	June 10	1062	{ 261 262 }	51	1686
Krall, Richard H., Allentown, Pa. Screen.....	426,595	Apr. 29	3291	863	51	677
Krall, Richard H., Allentown, Pa. Safety attachment for platform-rockers.....	442,485	Dec. 9	1333	344	53	1530
Krall, Richard H., and J. E. Dutt, Allentown, Pa. Window-screen or other slide.....	426,620	Apr. 29	3331	873	51	685
Kramer, Arthur M., Uniontown, Pa. Metal railway-tie.....	438,764	Oct. 21	1650	451	53	333
Kramer, Camillo, Albany, N. Y. Velocipede.....	421,100	Feb. 11	1010	259	50	764
Kramer, Charles. (See Kramer, John and C.)						
Kramer, Edward, Divide, Mont. Sled-brake.....	430,033	June 10	1413	351	51	1754
Kramer, John and C., Middletown, Pa. Nut-lock.....	439,279	Oct. 28	2505	671	53	494
Kramer, Nicholas, Sacramento, Cal. Car-coupling.....	436,859	Sept. 23	2395	625	52	1853
Kramer, Nicholas, and W. H. Gee, Pewamo, Mich. Fence-bracket.....	427,476	May 6	678	170	51	946
Krantz, Friedrich W., assignor to Michigan Lubricator Company, Detroit, Mich. Lubricator.....	433,008	July 29	3086	792	52	625
Kratzer, David N., Marion, Iowa. Road-cart.....	433,572	Aug. 5	195	52	52	794
Kratzer, David N., Marion, Iowa. Two-wheeled vehicle.....	441,767	Dec. 2	220	57	53	1306
Kratzer, David N., Marion, Iowa. Vehicle.....	441,768	Dec. 2	222	58	53	1307
Kratzer, David N., Marion, Iowa. Sulky.....	441,769	Dec. 2	223	58	53	1307
Kratzer, David N., assignor of one-half to J. G. Smith, Mount Oreb, Ohio. Flood-gate.....	425,179	Apr. 8	1159	305	51	234

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Kraupa, Franz, and L. Moser, Vienna, Austria-Hungary. Etching on lithographic stones or zinc.....	437,306	Sept. 30	3090	52	1993
Kraus, Jacob. (See Humerickhouse and Kraus.)						
Kraus, Jacob W., Stirling, Ohio. Cultivator.....	443,919	Dec. 30	3711	950	53	2018
Kranse, August C., and C. B. Wright, Saginaw, Mich. Goods-exhibitor.....	428,111	May 20	1649	418	51	1153
Krause, Richard E., New York, N. Y. Vending apparatus.....	430,389	June 17	2002	494	51	1878
Krause, Richard E., Göteborg, Sweden. Skate.....	439,161	Oct. 28	2296	616	53	456
Kranthelm, Richard J., Newark, N. J. Card-punch.....	421,938	Feb. 25	2207	578	50	1008
Kravik, Ole O., St. Carl, N. D. Boiler-leveler.....	442,777	Dec. 16	1826	473	53	1636
Krebs, Henrik J., Wilmington, Del. Circulating liquefied refrigerating agents.....	436,003	Sept. 9	964	252	52	1567
Kregel, Louis G., St. Louis, Mo. Coffin-fastener.....	430,478	June 17	2132	524	51	1903
Kregel, Louis G., St. Louis, Mo. Coffin-fastener.....	430,479	June 17	2133	524	51	1903
Kregel, Louis G., St. Louis, Mo. Padding for burial-caskets.....	430,964	June 24	2920	717	51	2061
Kreger, John, Buffalo, N. Y. Pipe-die.....	419,458	Jan. 14	1219	323	50	257
Krehbiel Capsule Company. (See Krehbiel, John, assignor.)						
Krehbiel, John, Kalamazoo, Mich. Float-valve.....	435,066	Aug. 26	2531	668	52	1275
Krehbiel, John, assignor to Krehbiel Capsule Company, Kalamazoo, Mich. Capsule-strip- ping machine.....	430,858	June 24	2757	{ 675 676 }	{ 51 51 }	{ 2031 2032 }
Krehbiel, John, assignor to Krehbiel Capsule Company, Kalamazoo, Mich. Machine for cutting gelatine capsules.....	430,859	June 24	2760	{ 676 677 }	{ 51 51 }	{ 2032 2033 }
Krehbiel, John, assignor to Krehbiel Capsule Company, Kalamazoo, Mich. Capsule-dip- ping machine.....	430,860	June 24	2763	677	51	2032
Krehbiel, John, assignor to Krehbiel Capsule Company, Kalamazoo, Mich. Mold-pin- greasing machine.....	430,861	June 24	2765	{ 677 678 }	{ 51 51 }	{ 2033 2034 }
Kreidler, John E., Fullerton, Nebr. Sash-fastener.....	422,597	Mar. 4	342	85	50	1261
Kreinberg, Richard, Jersey City, N. J. Molding-plane.....	421,407	Feb. 18	1445	{ 374 375 }	{ 50 50 }	{ 853 854 }
Kreis, Johann G. (See Von Kink and Kreis.)						
Kreiss, Peter L. (See Lindemuth, Harry H., assignor.)						
Krekel, Henriette L. M., et al. (See Belton, George W., assignor.)						
Krekeler, Carl. (See Lauch and Krekeler.)						
Krell, Henry P., assignor of one-third to M. Christmann, Leadville, Colo. Paper-weight.....	436,665	Sept. 16	2021	527	52	1774
Krell, Otto, St. Petersburg, Russia. Apparatus for transmission of power.....	421,587	Feb. 18	1711	445	50	904
Kremer, Franklin W., Wadsworth, assignor of one-half to C. O. Bartlett, Cleveland, Ohio. Fence-machine.....	436,004	Sept. 9	965	{ 252 253 }	{ 52 52 }	{ 1567 1568 }
Kremer, John C., Wadsworth, Ohio. Fence-machine.....	422,304	Feb. 25	2759	727	50	1110
Kremers, Peter, Milwaukee, Wis. Cooking utensil.....	438,849	Oct. 21	1829	487	53	360
Krenig, Joseph, Brooklyn, N. Y., and J. Ebrut, Stadtlauerinzen, Germany. Brick or tile.....	429,925	June 10	1234	306	51	1720
Kreoger, Henry, et al. (See Baldwin, George E. D., assignor.)						
Kress, George R., Pittsburg, Pa. Machine for making rope, &c.....	438,627	Oct. 21	1448	{ 390 391 }	{ 53 53 }	{ 290 291 }
Kretzschmar, Adolf, Dresden, Saxony, Germany. Brake for vehicles.....	428,725	May 27	2588	656	51	1351
Kreuter, Adam. (See Nelson and Kreuter.)						
Kreyzik, Johann, Hernalis, near Vienna, Austria-Hungary. Hand-propelled tram-car.....	440,230	Nov. 11	923	237	53	800
Krick, Irwin S., Conneautville, Pa. Anti-rattler for thill-couplings.....	425,888	Apr. 15	2207	586	51	446
Krick, Irwin S., Conneautville, Pa. Animal-poke.....	428,005	May 13	1489	378	51	1112
Krieger, Andrew, Columbus, Ohio, assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw.....	432,534	July 22	2326	601	52	474
Kriste, Henry C., Chicago, Ill. Rolling-mill.....	420,498	Feb. 4	102	24, 25	50	583
Kristen, Josef, Brünn, Moravia, Austria-Hungary. Apparatus for dyeing hides.....	427,697	May 13	1013	255	51	1021
Kristen, Josef, Brünn, Austria-Hungary. Apparatus for dyeing hides.....	442,628	Dec. 16	1563	404	53	1584
Kriz, Francis C., Milwaukee, Wis. Pitchfork.....	438,004	Oct. 7	508	143	53	96
Krnka, Karl. (See Krnka, Silvester and K.)						
Krnka, Karl, assignor to Krnka Repeating Rifle Company, London, England. Magazine- gun.....	442,058	Dec. 2	680	{ 183 184 }	{ 53 53 }	{ 1396 1397 }
Krnka Repeating Rifle Company. (See Krnka, Karl, assignor.)						
Krnka Repeating Rifle Company. (See Krnka, Silvester and K., assignors.)						
Krnka, Silvester and K., Michle, near Prague, Austria-Hungary, assignors to Krnka Re- peating Rifle Company, Limited, London, England. Straight-pull breech-loading gun.....	441,673	Dec. 2	66	18	53	1275
Krohne, Charles W., and H. F. Sesemann, London, England. Inhaler.....	440,713	Nov. 18	1725	442	53	958
Krom, Stephen R., Plainfield, N. J. Ore-crusher.....	419,449	Jan. 14	1220	324	50	257
Krom, Stephen R., Plainfield, N. J. Ore-crusher.....	419,460	Jan. 14	1223	324	50	257
Kromer, Henry, Lakeville, Minn. Draft-equalizer.....	425,514	Apr. 15	1647	439	51	338
Kromer, Otto. (See Keller, Jeremiah, assignor.)						
Kromer, Otto, Sandusky, Ohio. Lathe.....	422,809	Mar. 4	645	165	50	1261
Kron, Rudolf, Golzern, Saxony, Germany. Apparatus for dampening material.....	420,601	Feb. 4	246	65, 66	50	612
Krost, Anthony, assignor of one-half to J. Dietz, Buffalo, N. Y. Matcher-head cutter-vise.....	427,517	May 6	740	184	51	958
Krueger, August F., Kankakee, Ill., assignor to E. L. Shepard, Cleveland, Ohio, and W. S. Bates, Chicago, Ill., trustees. Tanning process.....	442,684	Dec. 16	1648	.....	53	1602
Krueger, Joe, Two Rivers, Wis. Stump-extractor.....	426,822	Apr. 29	3643	950	51	744
Kruger, Edward H., Buffalo, N. Y. Machine for channeling rock.....	435,973	Sept. 9	919	{ 242 243 }	{ 52 52 }	{ 1558 1559 }
Kruger, Lovie E., Canton, S. D. Roller-mill.....	410,480	Nov. 11	1335	345	53	875
Krugermann, Friedrich, Bethlehem, Pa. Axle.....	429,726	June 10	937	231	51	1663
Krull, Ernst, San Francisco, Cal. Sticky fly-paper.....	438,417	Oct. 14	1141	308	53	224
Krumholz, August, Chicago, Ill. Feed-water heater and purifier.....	434,667	Aug. 19	1895	494	52	1146
Kruschheid, Peter, Boston, Mass. Piano-forte.....	443,578	Dec. 30	3188	819	53	1917
Krupp, Fried. (See Salomon, Fritz, assignor.)						
Kruse Cash Register Company. (See Weiss, Carl W., assignor.)						
Kruse, Charles. (See Weiss, Charles W., assignor.)						
Kruse Check and Adding Machine Company. (See Hadley, Charles E., assignor.)						
Kruse Check and Adding Machine Company. (See Koch, William, assignor.)						
Kruse, Frederick, St. Louis, Mo. Clutch-pulley.....	434,150	Aug. 12	1069	274	52	975
Kruse, Henry T., Jules, Ill. Straw-stacker.....	433,175	July 29	3346	{ 865 866 }	{ 52 52 }	{ 676 677 }
Kruse, John H., et al. (See Bowen, Evan H., assignor.)						
Kruse & Murphy Manufacturing Company. (See Murphy, Edward, assignor.)						
Kruse, Theodore. (See Johnson and Kruse.)						
Krusi, Hermann. (See McMullen, Wood, and Krusi.)						
Krutsch, Anna. (See Krutsch, Willis W. and A.)						
Krutsch, Willis W., and R. K. Anderson, Fort Scott, Kans. Reversible railway-rail and seat.....	438,351	Oct. 14	1043	284	53	205
Krutsch, Willis W. and A., assignors of one-half to C. E. Douglas and J. T. Jones, Fort Scott, Kans. Car-seat.....	442,984	Dec. 16	2177	{ 559 560 }	{ 53 53 }	{ 1705 1706 }

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Kryger, Henry H., assignor of one-half to T. J. Canney, Minneapolis, Minn. Apparatus for clearing railway-tracks	426,129	Apr. 22	2593	682	51	528
Kryger, Henry H., assignor of one-half to T. J. Canney, Minneapolis, Minn. Apparatus for removing snow from railway-tracks	426,130	Apr. 22	2595	683	51	529
Kryger, Henry H., assignor of one-half to T. J. Canney, Minneapolis, Minn. Device for clearing the spaces between the rails of railway-tracks	426,131	Apr. 22	2597	683	51	529
Kubitz, Emil. (See Hennessy, Thomas F., assignor.)						
Kubler, John, assignor to W. L. Babcock, Hot Springs, Ark. Lock	441,674	Dec. 2	69	19	53	1275
Kueffer, John, San Francisco, Cal., assignor, by mesne assignments, to American Indicator and Improvement Company, of California. Automatic mechanism for station-indicators in railway-cars	438,689	Oct. 21	1549	417	53	308
Kuehn, Albert J., Delhi, Ohio. Water-motor	425,806	Apr. 15	2083	557	51	424
Knehu, Albert J., Delhi, assignor of two-thirds to L. Schott and J. W. Strehli, Cincinnati, Ohio. Nozzle for cans	424,421	Mar. 25	3126	830	50	1755
Knehn, Albert J., Delhi, assignor of two-thirds to L. Schott and J. W. Strehli, Cincinnati, Ohio. Potato-bug exterminator	424,432	Mar. 25	3127	830	50	1755
Knehu, John, Detroit, Mich. Crossing for overhead wires	426,452	Apr. 29	3080	808	51	636
Kugler, Clarence B. (See Lchman, Joseph H., assignor.)						
Kuhl, Albert F., and C. F. Lampe, Van Wert, Ohio. Railway-crossing	439,280	Oct. 28	2506	671	53	495
Kuhn, Edmund, Louisville, Ky. Outside oven-shelf	423,480	Mar. 18	1690	446	50	1474
Kuhn, Frederick L., Lunenburg, assignor to E. M. and C. P. Dickinson, Fitchburg, Mass. Leather-skiving machine	427,579	May 13	841	210	51	987
Kuhn, Louis, Milwaukee, Wis. Candy	426,506	Apr. 29	3157	830	51	651
Kuhn, Williams, Clermont-Ferrand, France. Pasteurization of beer	418,872	Jan. 7	334	81, 82	50	70
Kuhrts, Rudolf H., Germantown, Nebr. Latch	439,016	Oct. 21	2074	555	53	409
Kull, Andrew F., Marion, Ohio. Drive-chain	423,779	Mar. 18	2131	502	50	1556
Kummel, Franz C., assignor to Bartlett, Hayward & Co., Baltimore, Md. Splice-joint for pipes	431,697	July 8	1053	263	52	214
Kunhardt, David, Aachen, Germany. Automatic telegraphy	437,307	Sept. 30	3090	809 810 811	52	1993
Kunkel, Joseph, <i>et al.</i> (See Parker, Jonas, assignor.)						
Kuntz, Joseph W., and C. A. Eschenbrener, Republic, Ohio. Log-loading machine	429,926	June 10	1235	306	51	1720
Kunwald, Alfred de, Neuilly-on-the-Seine, France. Hydraulic propeller	426,285	Apr. 22	2817	740	51	575
Kunz, Fred M. (See Meinhardt, Henry W., assignor.)						
Kunze, Julius. (See Pearson, John J., assignor.)						
Kunze, Julius. (See Pearson and Kunze.)						
Künzel, Charles A., Camden, N. J., assignor of two-thirds to J. C. Oeters and J. T. Unterkoefler, Philadelphia, Pa. Fishing device	443,286	Dec. 23	2717	697	53	1816
Kunzelman, John R., Stillwater, Minn. Wagon	430,131	June 17	1576	392	51	1796
Kuolt, Joseph. (See Ceram and Kuolt.)						
Kupferle, John C., and E. Herman, St. Louis, Mo.; said Herman assignor to said Kupferle. Hydrant	442,059	Dec. 2	683	184	53	1396
Kurten, Joseph, St. Louis, Mo. Inking device for printing-presses	433,352	July 29	3592	926	52	726
Kurtz, Jacob S. (See Emerson and Kurtz.)						
Kurtz, John, Philadelphia, Pa. Ice-machine	421,175	Feb. 11	1115	286	50	785
Kurtz, John A., Pittsburg, Pa. Blasting	431,747	July 8	1130	281	52	230
Kurtz, John A., assignor of two-thirds to S. R. Horner and J. R. McClelland, Allegheny, Pa. Manufacture of window or plate glass	433,410	July 29	3668	947	52	742
Kurtz, John A., assignor of two-thirds to S. R. Horner and J. R. McClelland, Allegheny, Pa. Apparatus for manufacturing plate or window glass	433,411	July 29	3670	948	52	742
Kurtz, John A., assignor of two-thirds to E. T. Cooper and W. Traut, Allegheny, Pa. Pipe-thread protector	440,167	Nov. 11	825	213	53	780
Kurtz, John A., assignor to E. T. Cooper and W. Traut, Allegheny, Pa. Band for protecting screw-threads of pipes	440,168	Nov. 11	826	213	53	780
Kurtz, John C., Canal Fulton, Ohio. Thill-coupling	433,351	July 29	3591	926	52	726
Kurtz, John G., <i>et al.</i> (See Stein, Samuel P., assignor.)						
Kurtz, John S., Richfield, Pa. Gate	432,314	July 15	2002	512	52	401
Kurz, Cornelius, Cleveland, Ohio. Toilet-cabinet for infants	439,666	Nov. 4	64	17	53	619
Rusel, Frederick, Watertown, Wis. Implement for closing the seams of metal roofs	431,814	July 8	1239	309	52	250
Rutsche, Oswald, Chicago, Ill., assignor, by mesne assignments, to Allington & Curtis Manufacturing Company, of Michigan. Dust-collector	432,491	July 15	2256	583	52	453
Kutz, John D., Warsaw, Ind. Water-heating apparatus	420,807	Feb. 4	550	141	50	669
Kyle, Morrison, Rat Portage, Ontario, Canada. Leaf-turner	425,180	Apr. 8	1159	306	51	234
Kymer, James L. (See Fairchild, Frank J., assignor.)						
L'Eplattenier, Charles, Chicago, Ill. Bicycle	438,684	Oct. 21	1528	412	53	305
L'Homedieu, John P., Setuket, N. Y. Cultivator	436,795	Sept. 23	2246	591 592	52	1825
La Baie, Oliver J., Buffalo, N. Y. Whiffletree-coupling	439,802	Nov. 4	256	65	53	658
La Batt, Frank, Easton, N. Y. Lawn-sweeper	435,144	Aug. 26	2642	699	52	1206
La Boiteaux, Frank M., assignor to H. Varwig, Cincinnati, Ohio. Boiler-feeder and feed-water heater	440,109	Nov. 4	720	191	53	749
La Casse, Henry. (See Wile and La Casse.)						
La Casse, Henry, and S. Wile, assignors to Bottlers' Specialty Company, Rochester, N. Y. Feed apparatus or carrier	443,098	Dec. 23	2383	608 609 610	53	1752
La Casse, Henry, and S. Wile, assignors to Bottlers' Specialty Company, Rochester, N. Y. Twisting mechanism	443,192	Dec. 23	2364	658 659	53	1787
La Casse, Henry, and S. Wile, assignors to Bottlers' Specialty Company, Rochester, N. Y. Cutting mechanism	443,193	Dec. 23	2568	659 660	53	1788
La Casse, Henry, and S. Wile, assignors to Bottlers' Specialty Company, Rochester, N. Y. Mechanism for wiring bottles	443,194	Dec. 23	2571	660 661 662	53	1789
La Clair, Charles F. (See Grenon and La Clair.)						
La Dow, Charles, Albany, N. Y. Clasp	428,006	May 13	1490	378	51	1112
La Dow, Charles, Albany, N. Y. Spring-tooth harrow	431,594	July 8	866	215	52	181
La Dow, Charles, Albany, N. Y. Harrow	433,573	Aug. 5	196	52	52	794
La Dow, Charles, Albany, N. Y. Disk harrow	437,124	Sept. 23	2785	726 727	52	1930
La Dow, Charles, Albany, N. Y. Harrow	441,367	Nov. 25	2817	727	53	1170
La Fave, Joseph H. (See Eggleston and La Fave.)						
La Fever, George A., Selkirk, N. Y. Car-coupling	424,214	Mar. 25	2776	740	50	1687
La Fever, George A., Selkirk, N. Y. Bell-cord attachment	433,396	Dec. 23	2895	744	53	1852
La Fleur, Charles E., Baltimore, Md. Hinge	429,812	June 10	1068	263	51	1687

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La Follette, Harvey M., <i>et al.</i> (See Hood and Jacob, assignors.)						
La Follette, Harvey M., <i>et al.</i> (See Mains, John F., assignor.)						
La Grange, Clinton, Voorheesville, N. Y. Gripper for wire-stretchers	436,832	Sept. 23	2313	609	52	1838
La Manufacture Liegeoise D'Armes à Fen Société Anonyme. (See Engh, Casper, assignor.)						
La Mothe, Bernard J., New York, N. Y. Metallic building	431,364	July 1	503	125	52	102
La Roche, Fredrick A., Philadelphia, Pa. Brush-holder for dynamo-electric machines or motors	425,435	Apr. 15	1531	410	51	316
La Selle, Leroy F. (See Omstead, David J., assignor.)						
Lacey, Elmer E., <i>et al.</i> (See Webster, George L., assignor.)						
Lacey, Fred, Adams, Mass. Selvage-forming device for looms	436,018	Sept. 9	981	{ 257 258 }	52	1570
Lacey, Griffin S., New Orleans, La. Bolt	426,389	Apr. 22	2980	780	51	608
Lachman, Morris, San Francisco, Cal. Sewing-machine	438,690	Oct. 21	1550	{ 417 418 }	53	308
Laconia Car Company. (See Sargent, Arthur G., assignor.)						
Lacourse, Richard, St. Paul, Minn. Coat-adjuster	426,998	Apr. 29	3884	1014	51	791
Lacroix, John A., Chicago, Ill. Car-wheel	436,897	Sept. 23	2455	641	52	1865
Lacy, Francis D., Nirvana, Mich. Bee-swarmer	437,123	Sept. 23	2783	726	52	1930
Lacy, M. J. P., <i>et al.</i> (See Henshaw, Fred M., assignor.)						
Ladd, Calvin P., Boston, Mass., assignor, by mesne assignments, to National Loom Har- ness Company, of Maine. Machine for making heddles for looms	434,065	Aug. 12	917	{ 240 241 242 243 }	52	945
Ladd, Hermon W., Boston, Mass. Telephone-line vibrator	422,082	Feb. 25	2404	635	50	1044
Ladd, Hermon W., Boston, Mass., assignor to Comstock Brothers, Utica, N. Y. Folding- bed	441,569	Nov. 25	3135	{ 805 806 }	53	1233
Ladd, Leonard E., Philadelphia, Pa. Dwelling-house	430,480	June 17	2133	524	51	1903
Ladd, Sherman W. (See Gooding and Ladd.)						
Ladd, Story B., administrator. (See Langstaffe, John.)						
Lade, Robert. (See Williams and Lade.)						
Laemerhirt, Emil, Berlin, Germany. Steam-heating apparatus	430,529	June 17	2209	{ 543 544 }	51	1918
Lafaele, William H., assignor to A. Chapelean, Worcester, Mass. Power-shipping mechan- ism	420,160	Jan. 28	2286	605	50	482
Lafferty, Erastus S., Indiana, Pa., assignor to J. Sheasley and L. H. Slagle. Portable bath- tub	438,628	Oct. 21	1449	391	53	291
Lafferty, Hugh W., Wilmington, Del. Centrifugal machine	422,083	Feb. 25	2405	636	50	1044
Laffey, Thomas, assignor of one-half to A. C. Wettengel, Pittsburg, Pa. Washing-ma- chine	429,538	June 3	662	161	51	1598
Laffitte, Paul O., London, England. Rotary printing-machine	438,239	Oct. 14	870	{ 235 236 }	53	172
Lafin, Louis E. (See King, Molesworth, assignor.)						
Lagan, Matthew D. (See Wheaton, Frank, assignor.)						
Lagerman Typotheter Company. (See Chadwick, Julian M., assignor.)						
Lagerman Typotheter Company. (See Gustafson, John, assignor.)						
Lagowitz, Jacob, New York, N. Y. Traveling-bag	427,090	May 6	99	26	51	831
Laguire, William H., assignor of one-half to J. N. Mack and E. M. Briggs, Scottville, Mich. Mowing and reaping machine	431,522	July 1	754	188	52	151
Lahue, Moses M. (See Sawyer and Lahue.)						
Laidlaw, Alexander, Toronto, Canada. Grain-cleaning machine	443,366	Dec. 23	2852	{ 733 734 }	53	1843
Lain, Alonzo and M., Kansas City, Mo. Folding bed and dresser	426,286	Apr. 22	2818	740	51	575
Lain, Marion. (See Lain, Alonzo and M.)						
Laing, Louis F., <i>et al.</i> (See Horne, Samuel E., assignor.)						
Lairamore, James W., Salt Lake City, Utah Ter. Door-check	431,897	July 8	1357	343	52	274
Laird, Wesley E., assignor of one-half to F. H. Perry and B. R. Demeritt, Montpelier, Vt. Device for transmitting power	439,803	Nov. 4	257	65	53	658
Lake, Alexander H. (See Lake, Robert P. and A. H.)						
Lake Capping Machine Company. (See Lake, Simon, assignor.)						
Lake, Ezra B., Camden, N. J. Vehicle-wheel	439,408	Oct. 28	2709	723	53	533
Lake, Ezra B., Camden, N. J. Anti-friction box	442,289	Dec. 9	1026	271	53	1469
Lake, Otto E., Topsfield, Mass. Combined strainer and funnel	436,666	Sept. 16	2021	528	52	1774
Lake, Robert P. and A. H., Minneapolis, Minn. Clothes-drier	422,949	Mar. 11	898	236	50	1531
Lake, Simon, Baltimore, Md., assignor to Lake Capping Machine Company, New York, N. Y. Can-capping machine	427,332	May 6	463	{ 119 120 }	51	903
Lake, Vincent F., Pleasantville, assignor to Whiffen-Lake Lasting Machine Company, Hammononton, N. J. Machine for cementing soles to boots or shoes	425,544	Apr. 15	1691	452	51	346
Lake, Vincent F., Pleasantville, assignor to Whiffen-Lake Lasting Machine Company, Hammononton, N. J. Shoe-upper	441,173	Nov. 25	2490	643	53	1113
Lake, William W., E. T. Jacobs, and G. S. Smith, Fort Plain, N. Y. Hydrocarbon-burner	435,755	Sept. 2	578	154	52	1486
Lakey, Elmer E., Groton, N. Y. Roll-paper holder and cutter	434,668	Aug. 19	1896	495	52	1146
Lakin, Thomas N. (See Hunter and Lakin.)						
Lalance & Grosjean Manufacturing Company. (See Ball, Edward W., assignor.)						
Lalance & Grosjean Manufacturing Company. (See Cochran, James, assignor.)						
Lalance & Grosjean Manufacturing Company. (See Streeter, Nelson R., assignor.)						
Lallemant, Frédéric A. S. dit, and A. Gravel, Montreal, Quebec, Canada. Washing-ma- chine	425,889	Apr. 15	2208	586	51	446
Lalor, James, Annera, Ill. Photographic magazine-camera	436,060	Sept. 9	1053	{ 273 274 }	52	1584
Laman, Nancy A., Bertram, Tex. Refrigerator	435,230	Aug. 26	2760	729	52	1319
Lamb, George L., <i>et al.</i> (See Kelley, George W., assignor.)						
Lamb, John. (See Riesberry, William C., assignor.)						
Lamb, John R., Goodview, Ind. Pest-hole-boring machine	427,580	May 13	843	211	51	988
Lamb Knitting Machine Manufacturing Company. (See Sherman, Gardner M., assignor.)						
Lamb, Lafayette. (See Powers, Frank, assignor.)						
Lamb, Salem T., New Albany, Ind. Sack-holder	434,514	Aug. 19	1636	429	52	1096
Lamb, Thomas. (See Heine, Hermann, assignor.)						
Lamb, William A. (See Crowell, Myron D., assignor.)						
Lamb, William A., and M. D. Crowell, Hartford, Conn. Lock-valve	440,714	Nov. 18	1726	443	53	958
Lamb, Wilmer S., and W. P. Emmert, Freeport, Ill.; said Emmert assignor to said Lamb. Sweep attachment for horse-powers	428,615	May 27	2403	611	51	1318
Lambdin, James T., assignor of one-half to E. L. Fisher, Philadelphia, Pa. Gage for ma- sonry work	420,880	Feb. 4	670	174	50	691
Lambert, Albert S., Bridgeton, N. J. Closure for cans	428,343	May 20	2601	503	51	1221

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Lambert, August V., <i>et al.</i> (See Koenig, Emil, assignor.)						
Lambert, Charles O., Ansonia, Conn. Gage	435,311	Aug. 26	2899	768	52	1343
Lambert, Henry V., <i>et al.</i> (See Koenig, Emil, assignor.)						
Lambert, Julius, Hoboken, N. J. Clasp or buckle	433,868	Aug. 5	639	166	52	882
Lambert, Robert, <i>et al.</i> (See Koenig, Emil, assignor.)						
Lambert, William M., Brooklyn, N. Y. Tag-fastener	419,267	Jan. 14	929	246	50	198
Lambing, James M. (See Sloan, Stephen S., assignor.)						
Lamborn, Lewis, Philadelphia, assignor of one-half to N. H. Streng, Media, Pa. Fertilizer-distributor	440,481	Nov. 11	1337	346	53	875
Lamkin, Jeremiah R., Spring Hill, Ky. Elevating wagon-beds	434,637	Aug. 19	1840	481	52	1136
Lamkin, Leonard F., London, England. Burglar or other alarm	428,112	May 20	1651	419	51	1154
Lamkin, Perry T., Whittaker, Mich. Lathe for turning handles	430,862	June 24	2768	678 } 679 }	51	2033
Lamkin, Perry T., Whittaker, Mich. Machine for sandpapering handles	435,698	Sept. 2	500	133	52	1472
Lamm, Carl, Stockholm, Sweden. Mold for explosive charges	425,680	Apr. 15	1908	508	51	388
Lamm, Carl, Stockholm, Sweden. Manufacturing explosive charges	435,842	Sept. 2	714	191 } 192 }	52	1513
Lammedee, August, South Bend, Ind. Straw-stacker	430,863	June 24	2769	679	51	2034
Lamont, Charles G., Denver, assignor of one-half to D. R. C. Brown, Aspen, Colo. Skate	437,653	Sept. 30	3624	947	52	2100
Lanont, Mary, Lincoln, Kans. Broom-catcher	428,680	May 27	2520	640	51	1338
Lamp, William P., Brownsville, Ill. Car-coupling	441,494	Nov. 25	3027	780	53	1211
Lampe, Christian F. (See Kuhl and Lampe.)						
Lampert, Henry, Jr., Chicago, Ill. Secondary battery	437,848	Oct. 7	267	81	53	53
Lamplugh, Jacob, Philadelphia, Pa. Fish-plate	419,684	Jan. 21	1553	415	50	329
Lamplugh, Jacob, Philadelphia, Pa. Cable and street railway crossing	432,054	July 15	1601	409	52	327
Lamprey, Ben B. and A. C. Bugbee, assignors to Lamprey Manufacturing Company, Lake Village, N. H. Furnace-month lining	421,588	Feb. 18	1712	446	50	905
Lamprey Manufacturing Company. (See Lamprey and Bugbee, assignors.)						
Lamson Consolidated Store Service Company. (See Cowley, James T., assignor.)						
Lamson Consolidated Store Service Company. (See Daring, Harry P., assignor.)						
Lamson Consolidated Store Service Company. (See Elliott, Gilbert R., assignor.)						
Lamson Consolidated Store Service Company. (See Foster, Charles E., assignor.)						
Lamson & Sessions Company. (See Keep, William J., assignor.)						
Lancaster, Cornelius G., <i>et al.</i> (See Gaffield, William Z., assignor.)						
Lancaster, Frederick J., New York, N. Y., and J. H. Lancaster, Arlington, N. J., assignors to National Weighing Machine Company, New York, N. Y. Coin-controlled weighing-machine	422,230	Feb. 25	2631	697	50	1087
Lancaster, James H. (See Richter and Lancaster.)						
Lancaster, James H., assignor to Ives, Blakeslee & Williams Company, New York, N. Y. Toy	437,209	Sept. 30	2944	769	52	1965
Lancaster, John L., Waxahachie, Tex. Churn	438,165	Oct. 14	757	207	53	152
Lancaster, Joseph H. (See Lancaster, Frederick J. and J. H.)						
Lancaster, Stephen J., Petrolia, Ontario, Canada. Liniment	428,344	May 20	2003		51	1222
Lancaster, William C., Xenia, Ind. Cooler or refrigerator	437,697	Oct. 7	27	8, 9	53	8
Lance, Andrew M., Industry, Pa. Churn	436,605	Sept. 16	1913	503	52	1752
Lanceskes, Stephen, Louisville, Ky. Grate	439,527	Oct. 28	2884	767	53	567
Lanchester, Frederick W. (See Lanchester, Henry V. and F. W.)						
Lanchester, Henry V. and F. W., Balham, county of Surrey, England. Book-marker	422,423	Mar. 4	87	23	50	1154
Land, Abel, Hudson, Mich. Wire-fence machine	435,042	Aug. 26	2494	659 } 660 }	52	1268
Land, Charles H., Detroit, Mich. Hydrocarbon-burner	423,432	Mar. 18	1621	426	50	1460
Land, Charles H., Detroit, Mich. Artificial tooth	432,737	July 22	2648	676	52	535
Land, Charles H., Detroit, Mich. Manufacture of compound aluminum plates	440,952	Nov. 18	2126	551	53	1033
Land, Silas M., and S. A. Van Burskirk, Fort Scott, Kans. Embellishing wood	443,447	Dec. 23	2972	765	53	1866
Landenberger, Charles H., Philadelphia, Pa. Warp-knitting machine	423,780	Mar. 18	2132	563 } 564 }	50	1556
Landenberger, Charles H., Lawrence, Mass. Piled fabric	423,781	Mar. 18	2136	564	50	1557
Landers, William H., Syracuse, and F. Kernan, Jr., Utica, N. Y. Heater	442,901	Dec. 16	2035	528	53	1680
Landgraf, Philip B., South Bend, Ind. Mechanism for reversing motion and overcoming dead-centers	428,681	May 27	2521	640	51	1339
Landis, Abraham B., Waynesborough, Pa. Screw-cutting head	422,024	Feb. 25	2319	612	50	1029
Landis, Abraham B., Waynesborough, Pa. Grinding-machine	425,230	Apr. 8	1225	325 } 326 }	51	248
Landis, Abraham B., Waynesborough, Pa. Grinding-machine	427,091	May 6	100	27, 28	51	832
Landis, Ezra F., <i>et al.</i> (See Hepting, John A. P., assignor.)						
Landis, Israel L., Lancaster, Pa. Gage-cock	433,685	Aug. 5	363	93	52	827
Landis, Israel L. (See Iske, Anthony and A., assignors.)						
Landis, Israel L., Lancaster, Pa. Border for flower-beds	425,890	Apr. 15	2209	587	51	446
Landis, Israel L., Lancaster, Pa. Curbstone	428,007	May 13	1491	379	51	1113
Landis, Israel L., Lancaster, Pa. Pavement-curb	431,898	July 8	1358	343	52	274
Landis, Israel L., Lancaster, Pa. Curbing and gutter	442,060	Dec. 2	685	184	53	1396
Landman, John G., Brooklyn, N. Y. Reel-fastener for fishing-rods	434,793	Aug. 19	2078	543	52	1181
Landon, Frederick O., Bantam, Conn. Shaft-coupling	420,808	Feb. 4	552	141	50	669
Landreth, Leopold, Bristol, Pa. Car-window screen	421,408	Feb. 18	1446	375	50	854
Landreth, Leopold, Bristol, Pa. Decorticating-machine for ramie, &c	426,453	Apr. 29	3081	808	51	636
Landrien, Victor, Bay St. Louis, Miss. Wash-board	422,810	Mar. 4	648	166	50	1261
Landtsheer, Norbert de, Paris, France, and T. C. Barraclough, Manchester, England. Machine for decorticating, &c, ramie, &c	442,586	Dec. 9	1497	385 } 386 }	53	1563
Landry, Adolphus J., Greenfield, assignor of one-half to J. P. Willey, Worcester, Mass. Mop-wringing device	436,457	Sept. 16	1686	444	52	1712
Lane, Almeron M., Meriden, Conn. Clock	419,685	Jan. 21	1554	415	50	329
Lane, Almeron M., Meriden, Conn. Combined clock and bell	419,686	Jan. 21	1554	415	50	329
Lane, Almeron M., Meriden, Conn. Clock	423,058	Mar. 11	1064	276	50	1345
Lane, Almeron M., Meriden, Conn. Clock striking mechanism	424,796	Apr. 1	567	151	51	110
Lane, Almeron M., Meriden, Conn. Alarm-clock	424,797	Apr. 1	568	151	51	110
Lane, Almeron M., Meriden, Conn. Alarm-clock	431,505	July 8	868	216	52	181
Lane, Almeron M., Meriden, Conn. Clock-case	436,919	Sept. 23	2497	653	52	1873
Lane, Almeron M., Meriden, Conn. Fastening for escapement-pallets	436,920	Sept. 23	2498	653	52	1873
Lane, Almeron M., Meriden, Conn. Clock-key	436,921	Sept. 23	2499	654	52	1873
Lane, Almeron M., Meriden, Conn. Alarm-clock	436,922	Sept. 23	2500	654	52	1873
Lane, Alvin V., Dallas, Tex. Bank-punch	423,609	Mar. 18	1871	493 } 494 }	50	1506
Lane, Daniel F., Hornby, N. Y. Truss-bridge	424,318	Mar. 25	2936	782 } 783 }	50	1718

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Lane, Edward. (See Agee and Lane.)						
Lane, Frederic A. (See Fowler, Merwin, assignor.)						
Lane, Frederic A. (See Morgan and Lane.)						
Lane, Frederic A., assignor to New Haven Clock Company, New Haven, Conn. Electric indicator.	427,879	May 13	1298	{ 328 329 330 }	51	1075
Lane, Frederic A., assignor of one-half to F. E. Morgan, New Haven, Conn. Clock.	436,583	Sept. 16	1890	496	52	1748
Lane, Frederick R., Woodborough, England. Horizontal sawing-machine.	420,348	Jan. 28	2579	685	50	534
Laue, Freeman. (See Drake, Wear L., assignor.)						
Lane, George G., assignor of one-half to R. L. Luther, Prosperity, S. C. Car-coupling.	420,809	Feb. 4	553	142	50	669
Lane, George M., Ashbury Park, N. J. Insulating pipe-joint.	419,962	Jan. 21	1970	518	50	412
Lane, Henry F., Bangor, Me. Lock for extension-cases.	424,486	Apr. 1	69	20	51	16
Lane, Henry M., Cincinnati, Ohio. Railway curved track.	418,798	Jan. 7	210	52	50	46
Lane, James W. (See Thompson and Lane.)						
Lane, John H., Jackson, Mich. Wrench.	442,190	Dec. 9	883	235	53	1443
Lane, John W., Centerville, Iowa. Rein-holder.	419,687	Jan. 21	1556	415	50	329
Lane, John W., Centerville, Iowa. Rein-holder.	419,688	Jan. 21	1557	416	50	330
Lane, Julius S. (See Pitkin and Lane.)						
Lane, Lewis E., Jr., Auburn, Ind. Lace-drier.	436,178	Sept. 9	1244	324	52	1617
Lane, Melissa, Binghamton, N. Y. Window-bead fastener.	436,939	Sept. 23	2522	660	52	1877
Lane, Seward. (See Deweese and Lane.)						
Lane, Sewel W., Rutland, Mich. Farm-gate.	423,330	Mar. 11	1474	386	50	1424
Lane, Stephen D., et al. (See Brown, Louis A., assignor.)						
Lane, Thomas W. (See Bailey and Galbraith, assignors.)						
Lane, William J., Poughkeepsie, N. Y. Wheel for door-hangers.	422,305	Feb. 25	2761	727	50	1110
Lane, William J., Poughkeepsie, N. Y. Door-hanger.	422,306	Feb. 25	2761	728	50	1110
Lane, William J., Poughkeepsie, N. Y. Door-hanger wheel.	423,782	Mar. 18	2138	564	50	1557
Lane, William J., Poughkeepsie, N. Y. Door-hanger.	426,390	Apr. 22	2981	740	51	608
Lane, William J., Poughkeepsie, N. Y. Door-hanger.	433,009	July 29	3088	792	52	625
Lane, William P. (See McCausland, David, assignor.)						
Lane, Willis A., Barre, Vt. Stone-polishing machine.	420,203	Jan. 28	2362	627	50	495
Laney, William S., Lithopolis, Ohio. Steam attachment for cook-stoves.	422,598	Mar. 4	342	85	50	1202
Lanfair, Herbert D., assignor to Miller's Falls Company, Miller's Falls, Mass. Bench-hook.	438,890	Oct. 21	1890	502	53	372
Lang, Albert B., Pierron, Ill. Churn.	422,950	Mar. 11	900	236	50	1316
Lang, Arthur S. and R. C. P., Fall River, Mass. Ring-rail for spinning-frames.	424,215	Mar. 25	2779	741	50	1688
Lang, Dennis C., Indianapolis, Ind. Collapsible wagon-box.	419,689	Jan. 21	1557	416	50	330
Lang, Frederick C., Hoboken, N. J. Steam steering apparatus.	425,036	Apr. 8	937	250	51	189
Lang, Frederick C., Hoboken, N. J. Power steering apparatus.	426,538	Apr. 29	3206	{ 840 841 }	51	660
Lang, Henry V. (See Marshall, William C., assignor.)						
Lang, Robert A., Eau Claire, Wis. Gate for water-ways.	425,231	Apr. 8	1226	326	51	248
Lang, Rupert C. P. (See Lang, Arthur S. and R. C. P.)						
Lang, William, Brooklyn, N. Y. Adding-machine.	431,365	July 1	506	125	52	102
Lang, William, Brooklyn, N. Y. Coin-controlled vending apparatus.	431,366	July 1	508	126	52	102
Lang, William, Brooklyn, N. Y. Coin-controlled vending apparatus.	431,367	July 1	511	{ 126 127 }	52	103
Langman, James. (See Dubéy, Edward A., assignor.)						
Langman, Patrick J., et al. (See Langan, William B., assignor.)						
Langman, William B., assignor of two-thirds to P. J. Langan, Hawley, and J. J. Curtis, Honesdale, Pa. Bottle-stopper.	423,481	Mar. 18	1690	446	50	1474
Langbein, Theodore. (See Ellis and Langbein.)						
Langdon-Davies, Charles, London, England. Apparatus for the rhythmic generation of electric currents.	439,017	Oct. 21	2075	556	53	409
Langdon-Davies, Charles, assignor to Phonophore Syndicate, (limited,) London, England. Telegraphy.	424,006	Mar. 25	2489	662	50	1631
Langdon, George W., Mercer, Pa. Bread-cutter.	432,628	July 22	2466	634	52	501
Lange, Diego, La Crosse, Wis. Cuspidor.	439,667	Nov. 4	65	17	53	620
Lange, Gustave J. (See Rowell, Benning, assignor.)						
Lange, Henry G. (See Strong and Lange.)						
Lange, Henry G., assignor to C. E. Strong, Chicago, Ill. Stereotype-casting machine.	443,662	Dec. 30	3317	{ 854 855 }	53	1941
Lange, Herman O., Muskegon, Mich. Log-turner.	440,043	Nov. 4	634	168	53	732
Lange, Martin, Amersfoort, Netherlands. Making thio-oxypyridine.	431,472	Jan. 1	675	.....	52	136
Lange, Philip, assignor to Westinghouse Electric Company, Pittsburg, Pa. Arc lamp.	428,008	May 13	1492	379	51	1113
Lange, Philip, assignor to Westinghouse Electric Company, Pittsburg, Pa. Switch for electric circuits.	434,152	Aug. 12	1072	275	52	975
Lange, Philip, assignor to Westinghouse Electric Company, Pittsburg, Pa. Incandescent-lamp socket.	434,153	Aug. 12	1073	275	52	976
Lange, Philip, assignor to Westinghouse Electric Company, Pittsburg, Pa. Electric indicator.	434,154	Aug. 12	1075	275	52	976
Lange, Philip, Pittsburg, and O. B. Shallenberger, Rochester, assignors to Westinghouse Electric Company, Pittsburg, Pa. Switch for electric circuits.	434,151	Aug. 12	1071	275	52	975
Lange, Theodore. (See Keiller, Alexander, assignor.)						
Langenbach, Charles J., Dorchester, Iowa. Gate.	443,858	Dec. 30	3624	933	53	2001
Langenkamp, Anton, et al. (See Fleischer, Richard J., assignor.)						
Langer, Gotthold, assignor of one-half to H. F. Hoffman, Trenton, Mo. Automatic smoke-consumer.	438,005	Oct. 7	509	143	53	97
Langerfeld, Arthur, New York, N. Y. Embossing sheet metal.	426,132	Apr. 22	2598	.....	51	530
Langfeld Brothers Company. (See Andrews, Adolphus Y., assignor.)						
Langford, Simeon, Cynthia, Ind. Wagon-body lifter.	422,424	Mar. 4	88	23	50	1154
Langford, William L. (See Van Meter, James M., assignor.)						
Langhans, Rudolf, Berlin, Germany. Filament for incandescent lights.	420,881	Feb. 4	671	.....	50	691
Langhorn, Frederick, et al. (See Turner, Richard, assignor.)						
Langhorne, Maurice, Maysville, Ky. Combined bedstead, lounge, sofa, &c.	426,026	Apr. 22	2444	646	51	498
Langley, James P. (See Miller, John J., assignor.)						
Langly, Wilson F. (See Connett, Matthew F., assignor.)						
Langson, Frances H., St. Francis, Wis. Shutter-fastener.	425,330	Apr. 8	1371	366	51	276
Langstaffe, John, deceased, Battersea, England; S. B. Ladd administrator. Apparatus for preventing steam-boiler incrustation.	413,598	Dec. 30	3217	827	53	1922
Lanham, Robert, Chigford, England. Manifold memorandum or sales book.	440,044	Nov. 4	635	{ 168 169 }	53	732
Lanins, John, Galion, Ohio. Railway signal-flag and staff.	429,214	June 3	166	40	51	1502
Lankford, B. Louis. (See Jefferson, John T., assignor.)						
Lankford, Marion C., Florissant, Colo. Car-coupling.	431,063	July 1	50	12	52	12

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Lannert, John A. (See Jeavons, William R., assignor.)						
Lannoy, Francois, Tiffin, Ohio. Making glass	435,936	Sept. 9	869	228	52	1549
Lanpher, Charles W., Norwich, assignor of one-half to J. B. Kerr, New York, N. Y. Im- plement for tying the ends of wire	424,423	Mar. 25	3128	830	50	1756
Lansberg Brake Company. (See Lansberg, Frank, assignor.)						
Lansberg, Frank, assignor to Lansberg Brake Company, St. Louis, Mo. Governor-valve for air-brakes	436,713	Sept. 16	2087	549	52	1787
Lansberg, Frank, St. Louis, Mo., assignor to Lansberg Brake Company, East St. Louis, Ill. Pump	436,714	Sept. 16	2088	549	52	1787
Lansberg, Frank, assignor to Lansberg Brake Company, St. Louis, Mo. Air-brake	439,528	Oct. 23	2885	768	53	567
Lansing, William G., San Francisco, Cal. Holdback for vehicles	420,161	Jan. 23	2228	606	50	482
Lantern Globe Company. (See Barnes, George B., assignor.)						
Lantz, Benjamin F., Taylorsville, Ill. Device for carrying and affixing stamps	433,734	Aug. 5	431	110	52	840
Lantz, George N., near Sedan, Kans. Wire-cable bridge	436,606	Sept. 16	1914	509	52	1752
Lantz, Lester R., New Albany, Pa. Bale-tie	430,864	June 24	2772	680	51	2034
Lapage, Richard H., Westminster, county of Middlesex, England. Compound locomotive- engine	431,899	July 8	1359	344	52	274
Lapauigh, Daniel F. and L. T., Utica, N. Y. Car-heating apparatus	434,022	Aug. 12	855	225	52	932
Lapauigh, Louis T. (See Lapauigh, Daniel F. and L. T.)						
Lapham, Valentine, Chicago, Ill. Automatic sprinkler	433,477	Aug. 5	56	17	52	767
Lapierre, Clovis, Montreal, Canada, assignor to Dominion Tubular Lamp Company, Syra- cuse, N. Y. Burner-fastening for tubular lamps and lanterns	440,896	Nov. 18	2026	522	53	1015
Lapp, John. (See Loeke and Lapp.)						
Lappin, John J., Toronto, Ontario, Canada. Car-coupling draw-head	430,738	June 24	2566	628	51	1995
Lapworth, William, Easthampton, assignor to Hopedale Elastic Fabric Company, Hopedale, Mass. Elastic or corded fabric	440,743	Nov. 18	1765	454	53	967
Lardner, Charles, Topeka, Kans. Elevated carrier	422,231	Feb. 25	2634	698	50	1087
Lardner, Charles, Topeka, Kans. Dredger	429,351	June 3	379	89, 90	51	1543
Lariew, John R., Elmira, N. Y. Cot	443,712	Dec. 30	3402	873	53	1956
Larkin, Ferdinand P., assignor of one-half to S. A. Welch, Worcester, Mass. Water-closet seat	426,287	Apr. 22	2819	741	51	575
Larkin, George F., assignor to Newark Hat Block Company, Newark, N. J. Device for blocking hat-bodies	435,145	Aug. 26	2643	700	52	1296
Larkin, George F., assignor to Newark Hat Block Company, Newark, N. J. Hat-block	436,833	Sept. 23	2314	609	52	1838
Larkin, John, Bradford, Pa. Inkstand	434,346	Aug. 12	1362	356	52	1033
Larkin, John, Bradford, Pa. Inkstand	435,937	Sept. 9	870	228	52	1549
Laroe, Nathan, Cleveland, Ohio. Cork-feeding machine	423,610	Mar. 18	1873	494	50	1506
Larsen, Anton, New York, N. Y. Brake for hoisting-machines	439,529	Oct. 28	2887	768	53	567
Larsen, Charles. (See Olson, Charles J., assignor.)						
Larsen, Lauritz I. (See Drummond, David D., assignor.)						
Larson, George J., Carpentersville, Ill. Wagon-skein	423,433	Mar. 18	1623	426	50	1460
Larson, George J., Carpentersville, Ill. Wagon-skein	432,882	July 22	2871	736	52	579
Larson, J. H., et al. (See Samuelson, Andrew G., assignor.)						
Larson, Ludwig, Union Grove, Wis. Rein-holder	436,793	Sept. 23	2243	591	52	1825
Larsson, Pehr. (See Lorang, Anderson, and Larsson.)						
Lasack, Adolph, Oxford Junction, Iowa. Hay-loader	428,844	May 27	2757	701	51	1385
Lasar, Godfrey H., St. Louis, Mo. Type-writing machine	439,530	Oct. 28	2888	768	53	568
Lasar, Godfrey H., St. Louis, Mo. Band-cutter and feeder	440,865	Nov. 18	1978	510	53	1005
Lasater, William R., Paris, Tenn. Ironing-stand	436,584	Sept. 16	1891	497	52	1748
Lasear, Ferdinand, New York, N. Y. Filter	424,079	Apr. 1	370	98	51	72
Lasch, Carl L., Leipsic, Saxony, Germany. Wire-stapling machine	421,939	Feb. 25	2208	578 579	50	1008
Lash, Horace W., and J. Johnson, Pittsburg, Pa. Reducing iron ores	441,102	Nov. 18	2363	53	1079	
Lash, Horace W., and J. Johnson, Pittsburg, Pa., assignors to Carbon Iron Company, New York, N. Y. Manufacturing carburized metal	441,174	Nov. 25	2490	53	1113	
Lash, John F., assignor to Z. A. Lash, Toronto, Ontario, Canada. Letter-file	421,409	Feb. 18	1448	375	50	854
Lash, Levi, Waverly, Mo. Feeder for roller-mills	440,920	Nov. 18	2071	535 536	53	1022
Lash, Zebulun A. (See Lash, John F., assignor.)						
Lasher, Morgan E., assignor to himself, C. H. Baddeley, and E. M. Burr, Champaign, Ill. Slicing-machine	433,292	July 29	3512	906	52	710
Lasman, Christian, Jr., Chicago, Ill. Hitching device	441,175	Nov. 25	2491	644	53	1113
Lasmolles, Lucien P., and J. E. Fréchet, Nérac, France. Apparatus for atomizing liquids for destroying diseases in grape-vines	424,680	Apr. 1	372	98	51	72
Lässoe, Valdemar F., Brooklyn, N. Y. Duplex rudder for vessels	419,780	Jan. 21	1686	447 448	50	354
Lässoe, Valdemar F., Brooklyn, N. Y. Submarine gun	425,574	Apr. 15	1732	465	51	354
Lässoe, Valdemar F., Brooklyn, N. Y. Pilot-shell and centering-ring for submarine pro- jectiles	425,616	Apr. 15	1804	483 484	51	368
Lässoe, Valdemar F., Brooklyn, assignor of one-half to Ericsson Coast Defence Company, New York, N. Y. Subaquatic projectile	431,210	July 1	268	67, 68	52	55
Latham, Charles H., Lancaster, Mass., assignor of one-half to J. O. Stevens, New York, N. Y. Grass-receptacle	435,183	Aug. 26	2701	713 714	52	1307
Latham, D. H., et al. (See Palmer, John W., assignor.)						
Latham, Ephraim, Washington, D. C., assignor of one-half to E. A. Sawyers, Brownsville, Oreg. Car-coupling	420,014	Jan. 21	2050	541	50	427
Latham, Ephraim, Washington, D. C., assignor to United States Harness and Manufactur- ing Company, of Virginia. Buckle	430,078	June 10	1490	369	51	1769
Latham, Mary A. (See Tatro, Charles P., assignor.)						
Lather, Fred, Ridgeville Corners, Ohio. Flame-tug	427,092	May 6	104	28	51	832
Lathrop, Austin, et al. (See Barry, Charles, assignor.)						
Lathrop, Austin, et al. (See Coolbaugh and Hooper, assignors.)						
Lathrop, Henry G., St. Johnsville, N. Y. Ticket-holder	423,934	Mar. 25	2376	632	50	1610
Lathrop, Junia H., Northfield, Minn. Fish-hook	426,927	Apr. 22	2445	646	51	498
Lathrop, Thomas A., Canton, Ohio. Mechanism for automatically operating valves for oil- burners	431,596	July 8	869	216	52	181
Latimer Cash Register Company. (See Brady, James, assignor.)						
Latimer Cash Register Company. (See Latimer, William G., assignor.)						
Latimer, William G., Detroit, Mich. Automatic merchandise-seller	438,691	Oct. 21	1553	418	53	308
Latimer, William G., assignor, by mesne assignments, to Latimer Cash Register Company, Detroit, Mich. Cash indicator and register	430,390	June 17	2003	494 495	51	1879
Latimer, William G., assignor, by mesne assignments, to Latimer Cash Register Company, Detroit, Mich. Cash register and indicator	430,585	June 17	2221	563	51	1933
Latimer, William G., assignor to Latimer Cash Register Company, Detroit, Mich. Cash register and indicator	430,391	June 17	2008	495 496	51	1880

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Latimer, William G., assignor to Latimer Cash Register Company, Detroit, Mich. Cash-register	435,067	Aug. 26	2532	669	52	1275
Latimer, William G., assignor to Latimer Cash Register Company, Detroit, Mich. Rotary drawer for cash-registers	442,379	Dec. 9	1164	303	53	1495
Latouche, Jacques A. C. de, Paris, France. Utilization of fluids in checking recoil in ordnance, &c	424,829	Apr. 1	706	187	51	136
Latschar, Christian, assignor of one-half to J. Hingher, New Brunswick, N. J. Toy for forming soap-bubbles	430,999	June 24	2970	729	51	2072
Latshaw, Henry J., Jr., Kansas City, Mo. Stamp-canceling machine	434,935	Aug. 26	2340	618	52	1239
Latta, Adrian C., Friendship, N. Y. Velocipede	428,919	May 27	2872	734	51	1409
Latta, Charles C., <i>et al.</i> (See Kelley, George W., assignor.)						
Latta, Emmitt G., Friendship, N. Y. Velocipede	438,551	Oct. 14	1324	359 360	53	261
Latta, Emmitt G., Friendship, N. Y. Velocipede	440,897	Nov. 18	2027	522 523	53	1015
Latta, Emmitt G., Friendship, N. Y. Velocipede	443,663	Dec. 30	3319	855 856	53	1942
Latta, John A., Lincoln, Nebr. Animal-trap	425,136	Apr. 8	1079	286	51	217
Latté, Emile, <i>et al.</i> (See Fresco, Joseph A., assignor.)						
Lattig, Jacob W. (See Koyl and Lattig.)						
Lattig, Jacob W., assignor to National Switch and Signal Company, Easton, Pa. Railway-track electrical annunciator	439,409	Oct. 28	2710	723	53	533
Lattig, John W., South Bethlehem, Pa. Watchman's time-recorder	427,581	May 13	844	211 212	51	988
Latulip, Frederick, assignor of one-half to G. B. Leonard, Syracuse, N. Y. Pulley-covering	442,124	Dec. 9	781	211	53	1423
Latz, Charles J., assignor of three-fourths to J. Wehle, Rochester, N. Y. Elevator-guard	421,940	Feb. 25	2210	579 580	50	1008
Latz, Charles J., Rochester, N. Y., assignor to J. Wehle. Elevator-guard	439,844	Nov. 4	323	82, 83	53	671
Laub, Emilie C., Altoona, Pa. Hoop-skirt	435,649	Sept. 2	425	113	52	1455
Laube, Godfried, Huron, S. D. Straw-burning cook-stove	422,951	Mar. 11	901	236	50	1316
Laube, Godfried, Huron, S. D. Washing-machine	427,582	May 13	846	212 213	51	988
Laube, Godfried, Huron, S. D. Spirit-level	436,005	Sept. 9	966	253	52	1567
Laube, Godfried, Huron, S. D., assignor to United States Stove Company, Minneapolis, Minn. Straw-burning cook-stove. (Reissue.)	11,063	Mar. 4	809	206 207	50	1290
Laube, Godfried, Huron, S. D., assignor of five-eighths to T. J. McBride, Winnipeg, Canada, and M. Howes, St. Paul, Minn. Straw-burner. (Reissue.)	11,085	June 10	1538	382	51	1779
Lauch, Richard, and C. Krekeler, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Manufacture of dye-stuffs	438,438	Oct. 14	1162		53	228
Lauch, Richard, and M. Kahn, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue-black azo dye	440,639	Nov. 18	1600		53	935
Lauder, George, and J. H. Simpson, assignors to Carnegie, Phipps & Company, Limited, Pittsburg, Pa. Electric forging apparatus	437,654	Sept. 30	3627	948	52	2100
Lauer, Edward T. (See Mattill, Henry, assignor.)						
Lauer, John G. (See Marks, Lauer, and Ralston.)						
Laufer, Christian F., Newark, N. J. Razor	443,773	Dec. 30	3497	897	53	1975
Lauferty, Henry, New York, N. Y. Braiding-machine	430,346	June 17	1941	475 476	51	1866
Laughlin Company, Alex. (See Reuleaux, Josef, assignor.)						
Laughlin, John L., assignor to B. F. Avery & Sons, Louisville, Ky. Agricultural implement	420,727	Feb. 4	417	111	50	646
Laughton, Joseph B., Brooklyn, N. Y. Inking-pad	424,424	Mar. 25	3129	831	50	1756
Lauhoff, Frank, Detroit, Mich. Preparation of cereals	440,866	Nov. 18	1979	510	53	1005
Laun, Franz J., Villigen, Germany. Motor	439,162	Oct. 28	2297	616 617 618	53	457
Laundry, Andrew, Côte St. Paul, Quebec, Canada, and H. H. Warren, Massena, N. Y. Swaging-stock for drills	428,498	May 20	2225	562	51	1264
Laur, Charles T., De Witt, Ark. Lifting-jack	436,179	Sept. 9	1245	324	52	1617
Laurean, Louis G., Philadelphia, Pa. Reducing metallic oxides to the metallic state	420,945	Feb. 11	780	202	50	721
Laurence, Charles W., New York, N. Y. Curtain-pole	424,610	Apr. 1	269	71	51	54
Lauritzen, Albert, and J. F. Nielsen, Gowen, Mich. Potato-digger	424,007	Mar. 25	2495	663	50	1632
Larsen, Anders P., Passaic, N. J. Calipers and dividers	433,869	Aug. 5	639	166	52	882
Laut, Henry W. (See Smith and Lant.)						
Lauth, Bernard, Howard, Pa. Rolling sheet metal	431,748	July 8	1132	281 282	52	230
Lauth, Bernard C., Philadelphia, Pa. Hearth-furnace for metallurgical operations	434,715	Aug. 19	1974	513 514	52	1160
Lauth, Jacob, Chicago, Ill. Tongue-support	420,204	Jan. 28	3363	628	50	495
Laval, Carl G. P. de, Stockholm, Sweden. Rotating shaft	431,749	July 8	1133	282	52	230
Laval, Carl G. P. de, Stockholm, Sweden. Rotating shaft	431,750	July 8	1134	283	52	231
Laval, Carl G. P. de, assignor to Aktiebolaget Separator, Stockholm, Sweden. Making separator-bowls	441,368	Nov. 25	2818	727	53	1171
Lavandeyra, Francisco. (See Chappell, George H., assignor.)						
Lavandeyra, Jnan P., Philadelphia, Pa. Compartment-trunk	424,008	Mar. 25	2497	663	50	1633
Lavender, Charles F., Toronto, Ontario, Canada. Ball-bearing	422,232	Feb. 25	2635	698	50	1087
Lavery, William A. (See Merrill, William E., assignor.)						
Lavery, William A., Philadelphia, Pa. Neckscarf	433,293	July 29	3514	907	52	711
Lavery, William A., Philadelphia, Pa. Suspenders	440,430	Nov. 11	1264	327	53	860
Lavery, Richard, Boston, Mass. Pump	428,682	May 27	2522	640 641	51	1339
Lavery, Richard, Boston, Mass. Pulp-digester	431,267	July 1	354	89	52	72
Lavery, Richard, Boston, Mass. Trolley for hoisting apparatus	435,502	Sept. 2	185	51	52	1411
Lavey, William J., Cambridge, assignor of one-half to G. H. Woodman, Newton, Mass. Sole-edge-burnishing machine	438,318	Oct. 14	993	268 269	53	195
Lavigne, Basilide, New Orleans, La. Apparatus for decolorizing, filtering, &c., liquids	429,459	June 3	537	129	51	1576
Lavigne, Joseph P. (See Bradley and Lavigne.)						
Lavigne, Joseph P., New Haven, Conn. Breech-loading ordnance	421,730	Feb. 18	1909	502	50	943
Lavigne, Joseph P., New Haven, Conn. Clutch mechanism for staple stitching-machines	442,380	Dec. 9	1166	304	53	1496
Lavigne, Joseph P., assignor to R. H. Brown, New Haven, Conn. Button-setting machine	438,110	Oct. 7	675	183 184	53	130
Law, Sidney G., West New Brighton, N. Y. Tool-holder	436,362	Sept. 16	1533	402	52	1683
Lawler, Patrick J., and J. F. Barry, West Side, Iowa. Corn-harvester	425,515	Apr. 15	1647	440	51	338
Lawles, Joseph H., Brooklyn, N. Y. Machine for grinding pearl, ivory, &c	427,477	May 6	679	170	51	946

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Lawrence, Arthur, <i>et al.</i> (See Colby, John N., assignor.)						
Lawrence, Arthur B., Worcester, N. Y. Combined work-table and writing-desk	441,876	Dec. 2	369	102	53	1341
Lawrence, David. (See Shumaker and Lawrence.)						
Lawrence, Earl P. (See Le Bates and Lawrence.)						
Lawrence, Edward F., <i>et al.</i> (See Clark, Norman, assignor.)						
Lawrence, George J., Aurora, Ill. Rein-supporter	442,381	Dec. 9	1168	304	53	1496
Lawrence, John H., <i>et al.</i> (See Clark, Norman, assignor.)						
Lawrence, Le Roy P. (See Brennan, Nicholas, assignor.)						
Lawrence, Louis P., Passaic, N. J. Power-brake	432,948	July 22	2982	766	52	598
Lawrence, Louis P., Passaic, N. J. Railway-brake	433,412	July 29	3671	948	52	743
Lawrence, Louis P., Passaic, N. J. Locomotive-brake	433,413	July 29	3672	948 949	52	743
Lawrence, Louis P., Passaic, N. J. Locomotive-brake	433,414	July 29	3674	949	52	744
Lawrence, Louis P., Passaic, N. J. Spread-brake	434,874	Aug. 19	2302	576	52	1206
Lawrence, Louisa. (See Quanchi, Louis, assignor.)						
Lawrence, Louisa. (See Valiquet, Louis P., assignor.)						
Lawrence, Mariner S., <i>et al.</i> (See Macdonald and Flower, assignors.)						
Lawrence, Mortimer D., Marshalltown, Iowa. Stake-socket for trucks	440,169	Nov. 11	828	214	53	780
Lawrence, Rose M. (See Lawrence, William B., assignor.)						
Lawrence, William. (See Field, Philena L., assignor.)						
Lawrence, William, Collingwood, Ontario, Canada. Apron-duster for biscuit-machines ..	418,728	Jan. 7	106	25	50	23
Lawrence, William, Worcester, Mass. Brake-shoe	432,277	July 15	1941	496	52	391
Lawrence, William, New York, N. Y. Hat-band	433,988	Aug. 12	816	213	52	924
Lawrence, William B., assignor to R. M. Lawrence, Columbus, Ohio. Paper-bag hanger ..	427,583	May 13	847	213	51	988
Lawrie, William and J. McMillan, assignors, by mesne assignments, to J. McMillan, trustee, Petrolia, Ontario, Canada. Furnace	421,589	Feb. 18	1713	446	50	905
Laws, Robert. (See Aitken, Robert W., assignor.)						
Lawson, Enoch, assignor of one-half to P. Leprohon, San Francisco, Cal. Pipe-coupling ..	438,752	Oct. 21	1663	446	53	329
Lawson, Francis R., <i>et al.</i> (See Taggart, William P., assignor.)						
Lawson, John H., assignor to C. W. Perkins, trustee, Boston, Mass. Holder for sales slips or sheets	429,215	June 3	167	40	51	1503
Lawson, Samuel, assignor to himself and A. T. Welch, New York, N. Y. Valve for gas-engines	433,246	July 29	3447	890	52	697
Lawton, Charles H., assignor to I. S. Elkins and J. S. Zerbe, New York, N. Y. Socket for incandescent lamps	419,617	Jan. 14	1436	385	50	301
Lawton, Charles H., New York, assignor of two-thirds to J. C. Rogers, Brooklyn, N. Y., and C. A. Capen, Willimantic, Conn. Bug-trap	433,574	Aug. 5	197	52	52	794
Lawton, James B., Cincinnati, Ohio. Roll-paper holder and cutter	432,565	Mar. 18	1811	478	50	1495
Lawton, James F. (See Tyzick and Lawton.)						
Lawyer, Justin, Coldwater, Mich. Heating-furnace	419,049	Jan. 7	599	154 155	50	126
Lawyer, Justin, Coldwater, Mich. Grate and fire-box for stoves	430,658	June 24	2432	592	51	1968
Laybourne, Charles G. (See Wyckoff, Lunquist, and Smith, assignors.)						
Laycock, Slater, <i>et al.</i> (See Barry, William, assignor.)						
Layman, Hiram D., assignor to Layman Safety Car Coupler Company, Little Rock, Ark. Car-coupling	431,775	July 8	1172	292	52	237
Layman, Hiram D., and C. E. Rice, Little Rock, Ark. Transmitting-motor	438,552	Oct. 14	1328	360	53	262
Layman, James H., assignor to H. G. Stiebel, Cincinnati, Ohio. Water-sprinkler	428,113	May 20	1652	419	51	1154
Layman Safety Car Coupler Company. (See Layman, Hiram D., assignor.)						
Laying, William H., New York, N. Y., assignor to S. S. Miller, P. J. Chassagne, and W. R. Palmer, Akron, Ohio. Hanging device for electric lamps	421,864	Feb. 18	2104	552	50	978
Layton, Edward L., Trenton, N. J. Dumping-wagon	431,064	July 1	51	12	52	12
Lazarus, Samuel, Sherman, Tex. Stock-car	443,287	Dec. 23	2717	697	53	1817
Lazell, James D., Philadelphia, Pa. Composite girder	424,798	Apr. 1	568	151	51	111
Le Baron, George A. (See Barlow, Charles, assignor.)						
Le Baron, Robert, <i>et al.</i> (See Barnes, Amos, assignor.)						
Le Bates, Henri, and E. P. Lawrence, Portsmouth, N. H. Paint	431,268	July 1	357		52	73
Le Boutillier, John. (See Mallonee, Joseph D., assignor.)						
Le Clair, Edward T., <i>et al.</i> (See McDannel, Abner J., assignor.)						
Le Clair, George E., Cleveland, Ohio. Cigar-branding machine	426,133	Apr. 22	2000	683 684	51	530
Le Clair, George E., Mexico, N. Y. Milk-pail support	441,424	Nov. 25	2311	751	53	1190
Le Count, James M. (See Holz, Louis F., assignor.)						
Le Dan, Gustave P., Paris, France. Mechanical key-board player	419,690	Jan. 21	1558	416 417 418	50	330
Le Duc, Charles, Crescent, Wash. Water-wheel	423,935	Mar. 25	2377	632 633	50	1610
Le François, Céréal, Worcester, Mass. Door-hanging gage	435,089	Aug. 26	2563	676	52	1281
Le Mienn, Lucius A., Seymour, Wis. Steam-engine valve	441,176	Nov. 25	2492	614	53	1113
Le Mienn, Lucius A., Seymour, Wis. Steam-engine	441,177	Nov. 25	2494	614	53	1114
Le Plongeon, Augustus, Brooklyn, N. Y. Guitar	441,310	Nov. 25	2742	709	53	1156
Le Roy, Arthur D., and C. A. Lowell, Cortland, N. Y. Welding compound	428,114	May 20	1653		51	1154
Le Roy, Charles J., St. Louis, Mo. Molding-press	439,075	Oct. 21	2163	580	53	426
Le Roy, Charles J., assignor of one-half to J. Roskilly, St. Louis, Mo. Machine for finishing cast horseshoes	424,890	Apr. 1	708	187 188	51	137
Le Roy, Henry D. (See Linders and Le Roy.)						
Le Seur, William W., Boston, Mass. Device for operating railway-switches	440,880	Nov. 18	2001	515	53	1009
Le Tellier, John H., Sherman, Tex. Sweeping-machine	431,146	July 1	166	42	52	35
Lea, Edwin H. (See Marks and Lea.)						
Lea, Richard H. (See Singer and Lea.)						
Lea, Thomas, Plainfield, N. J. Boring tool	421,176	Feb. 11	1116	286	50	785
Lea, William S., Hanley, county of Stafford, England. Manufacturing and composition of refractory cements	433,129	July 29	3282		52	663
Leach, Edwin, Brooklyn, N. Y. Machine for decorating watch-cases	425,807	Apr. 15	2085	557 558	51	424
Leach, Edwin, Brooklyn, N. Y. Decorating watch-cases	425,808	Apr. 15	2087	558	51	424
Leach, Edwin, Brooklyn, N. Y. Machine for decorating watch-cases	425,809	Apr. 15	2088	558 559	51	424
Leach, Edwin, Brooklyn, N. Y. Machine for decorating watch-cases	441,495	Nov. 25	3028	780	53	1211
Leach, Henry B., Boston, Mass. Safety-razor	434,187	Aug. 12	1122	291	52	986
Leach, Henry L., Jr., Fitchburg, assignor of one-half to H. L. Leach, Sr., Boston, Mass. Track-sanding apparatus	433,686	Aug. 5	365	93	52	827
Leach, James, Sheffield, and W. V. Hirst, Rotherham, England. Car-starter	437,698	Oct. 7	28	9	53	8

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Leach, Mark. (See Midgley, Albert, assignor.)						
Leach, Porter F. (See Haugh and Leach.)						
Leahy, James F., <i>et al.</i> (See Griffin, Patrick, assignor.)						
Leahy, James F., <i>et al.</i> (See Griffin, Patrick, assignor.) (Reissue.)						
Leahy, Timothy J., North Andover, Mass. Expanding core or mandrel	435,756	Sept. 2	580	{ 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	52	1486
Leaird, William J., W. W. Meggs, G. F. Pond, and W. D. Separk, Peachland, N. C. Cotton-chopper	423,331	Mar. 11	1475	{ 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	50	1424
Leak, Crapo, assignor of three-fourths to M. Leak and D. V. B. Henarie, San Francisco, Cal. Spring presser-foot for sewing-machines	433,130	July 29	3284	845	52	663
Leak, Mondula, <i>et al.</i> (See Leak, Crapo, assignor.)						
Leak, William W., Montgomery, Ala. Plow	443,579	Dec. 30	3189	819	53	1917
Leake, Charles F. (See Godfrey, Leake, and Lucas.)						
Leake, Samuel F., Philadelphia, Pa. Pneumatic dispatch-tube	431,698	July 8	1054	{ 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	52	215
Leake, Samuel F., Philadelphia, Pa. Pneumatic dispatch-tube	431,699	July 8	1059	{ 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 3		

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			Spec.	Dr. & C.	Vol.	Page.
Lee, Julius T., Boston, Mass. Combined shaking and revolving bolt.....	423,783	Mar. 18	2138	565	50	1557
Lee, Julius T., Boston, Mass. Track-brake.....	424,487	Apr. 1	70	20, 21	51	16
Lee, Lewis S. (See Burman, William H., assignor.)						
Lee, Lewis S., Philadelphia, Pa. Horse-boot.....	433,478	Aug. 5	58	18	52	767
Lee, Newton M., Sherman, Tex. Gunpowder-can.....	424,115	Mar. 25	2644	704	50	1661
Lee, Obadiah S., and W. Viggers, Durango, Mexico. Stamp-mill guide.....	420,946	Feb. 11	761	203	50	721
Lee, Samuel F., and W. Johnson, Corona, N. Y.; said Johnson assignor to said Lee. Door or window casing for frame buildings.....	426,414	Apr. 22	3029	793	51	617
Lee, Theodore G. (See Dalton, John, assignor.)						
Lee, Walter. (See Busch, Charles L., assignor.)						
Lee, William A. (See Fuller and Lee.)						
Lee, William A., Peoria, Ill. Mechanism for operating street-car switches.....	439,354	Oct. 28	2625	700	53	518
Lee, William F., Philadelphia, Pa. Friction-clutch.....	439,960	Nov. 4	502	131	53	706
Lee, William H., et al. (See Nightengale, William O., assignor.)						
Lee, William H., Mediapolis, Iowa. Sled-brake.....	436,312	Sept. 9	1437	374	52	1657
Lee, William W., Northampton, Mass. Manufacture of hollow-handled articles.....	437,211	Sept. 30	2946	770	52	1966
Leech, Albert D., Farmington, Iowa. Wire carrier and stretcher.....	443,697	Dec. 30	3382	868	53	1953
Leech, John F. (See O'Hare, Hugh, assignor.)						
Leech, William T., and G. Himelspark, assignors of one-half to J. Carty, trustee, Philadelphia, Pa. Fleece-dividing attachment for carding-engines.....	439,073	Oct. 21	2160	579	53	425
Leechman, William L., Slaughter, Wash. Hop-drier.....	418,730	Jan. 7	108	25, 26	50	23
Leedom, Edward. (See Sibley, George F., assignor.)						
Leeds, Lewis W., London, England. Gas-stove.....	421,941	Feb. 25	2212	580	50	1008
Leeds, Lewis W., London, England. Apparatus for heating by gas or liquid fuel.....	426,596	Apr. 29	3292	864	51	677
Leeman, Charles E., and A. W. Jones, Salida, Colo. Engineer's valve for air-brakes.....	437,607	Sept. 30	3564	{ 930 931 }	52	2087
Leeper, James L., Fort Wayne, Ind. Bicycle.....	420,578	Feb. 4	213	55	50	606
Leeper, James L., Fort Wayne, Ind. Bicycle.....	420,579	Feb. 4	215	56	50	606
Lees, William J. (See Baulch, Steele, Lees, and Evans.)						
Leeson, Silas O., et al. (See Morgan, Edward S., assignor.)						
Leete, John W., assignor of one-half to L. A. Herrick, Carson City, Nev. Running-gear for vehicles.....	440,867	Nov. 18	1980	510	53	1005
Leever, Jacob, Bangor, Mich. Fence-post.....	442,290	Dec. 9	1027	271	53	1469
Leevey, George W., Jersey City, assignor to W. A. Osborn, Woodbridge, N. J. Leaf-turner.....	425,810	Apr. 15	2090	{ 559 560 }	51	425
Lefavour, Woodbury P., Beverly, Mass. Shaving-brush.....	422,085	Feb. 25	2407	636	50	1045
Lefebvre, Henry, Philadelphia, Pa. Sewing-machine.....	433,946	Aug. 12	752	196	52	914
Lefebvre, Henry, assignor to R. H. Farley, I. Keeler, and A. P. Phipps, Philadelphia, Pa. Quilting-machine.....	437,439	Sept. 30	3317	{ 865 866 }	52	2037
Lefever Arms Company. (See Lefever and Brown, assignors.)						
Lefever, Daniel M., and J. H. Brown, assignors to Lefever Arms Company, Syracuse, N. Y. Breech-loading fire-arm.....	423,521	Mar. 18	1748	461	50	1485
Leftwich, Ralph W. (See Christopher and Leftwich.)						
Legault, Joseph D., assignor of one-half to E. R. Bond, Portland, Me. Drum.....	423,060	Mar. 11	1066	276	50	1346
Legg, Cornelius E., O. G. Alexander, and G. W. Legg, Dunkerton, Iowa. Sliding-door lock.....	439,163	Oct. 28	2301	618	53	457
Legg, George W. (See Legg, Alexander, and Legg.)						
Legg, Jerome B., and J. Nile, St. Louis, Mo. Electric railway.....	428,499	May 20	2226	563	51	1264
Legge, Howard, San Francisco, Cal. Pencil-box.....	432,831	July 22	2600	716	52	564
Leggett, Clinton H., New York, N. Y. Insect-powder distributor.....	421,942	Feb. 25	2213	{ 580 581 }	50	1008
Leggett, Joseph P., Carthage, Mo. Spring bed-bottom.....	434,794	Aug. 19	2079	543	52	1182
Leggett, Wells W., et al. (See Cook, Frank S., assignor.)						
Leggett, William, Passaic, N. J., assignor to E. F. Eldredge, New York, N. Y. Tire for wheels.....	422,349	Feb. 25	2833	746	50	1123
Leggott, Henry. (See Marsh, Edwin, assignor.)						
Legreid, Sven, Stoughton, Wis. Bob-sled.....	428,845	May 27	2760	701	51	1386
Legvold, Ole O., et al. (See Samnelson, Andrew G., assignor.)						
Lehberger, George, assignor of one-half to F. G. Tallman, Beaver Falls, Pa. Device for coiling wire.....	420,909	Feb. 4	724	186	50	700
Lehman, David F., Rockford, Iowa. Broadcast seeder and planter.....	435,757	Sept. 2	582	155	52	1487
Lehman, Joseph H., Philadelphia, Pa. Electric gas-lighter.....	432,884	July 22	2873	736	52	580
Lehman, Joseph H., assignor of one-half to C. B. Kugler, Philadelphia, Pa. Gas-regulator.....	420,412	Jan. 28	2666	707	50	551
Lehmann, Carl, New York, N. Y. Plaiting apparatus.....	437,212	Sept. 30	2947	770	52	1966
Lehmann, Charles. (See Brunhoff and Lehmann.)						
Lehmann, Emil A., Brooklyn, assignor to Waterman & Lehmann, New York, N. Y. Ear-wire for car-rings.....	427,265	May 6	371	96	51	883
Lehmann, Fred. C., et al. (See Jones, Robert V., assignor.)						
Lehmann, Rudolf, Omaha, Nebr. Sofa-bed.....	430,427	June 17	2055	506	51	1389
Lehmer, Isaac, Sturgis, assignor of one-half to W. A. Thomas, Fawn River, Mich. Fence-weaving machine.....	434,281	Aug. 12	1273	330	52	1014
Lehnert, Joseph, St. Louis, Mo. Automatic lift for show-case covers.....	425,891	Apr. 15	2210	587	51	446
Lehr, Harry, New York, N. Y. Finger-ring.....	441,425	Nov. 25	2012	751	53	1191
Lehr, Harry, New York, N. Y. Jewelry.....	441,496	Nov. 25	3030	781	53	1211
Lehr, Joseph W. (See Lehr, Nicholas P. and J. W.)						
Lehr, Nicholas P. and J. W., Fremont, Ohio. Cultivator.....	436,667	Sept. 16	2032	528	52	1774
Lehy, Geoffrey B., Medford, Mass. Electric signaling apparatus.....	431,597	July 8	870	216	52	182
Lehy, Geoffrey B., Medford, Mass. Signaling apparatus.....	431,598	July 8	872	216	52	182
Leible, Herman F., Conrad Grove, Iowa. Trace-support.....	430,659	June 24	2433	592	51	1969
Leichsenring, Hermann, Chicago, Ill. Artificial plaster.....	433,899	Aug. 5	661		52	890
Leidig, William, Newark, N. J. Jewelry.....	435,066	Aug. 26	2533	669	52	1276
Leifer, William, assignor of one-half to E. E. Frey, York, Pa. Mail-bag.....	435,362	Aug. 26	2984	791	52	1360
Leighton, Alton W., New Haven, Conn. Ellipsograph.....	426,288	Apr. 22	2820	741	51	575
Leighton, Carleton F., Beverly, Mass., assignor to Edge and Heel Blacking Machine Company, Portland, Me. Heel or sole edge blacking machine.....	439,018	Oct. 21	2077	556	53	409
Leighton, Carleton F., Beverly, Mass., assignor to Edge and Heel Blacking Machine Company, Lynn, Mass. Edge-blackening machine.....	441,012	Nov. 18	2207	570	53	1049
Leighton, Carleton F., and W. E. Bailey, assignors to C. S. Hill, Beverly, and F. D. Greene, Boston, Mass. Heel-heading machine.....	433,796	Aug. 5	535	{ 138 139 }	52	861
Leighton, James E., Waltham, Mass. Boiler.....	431,599	July 8	873	217	52	182
Leighton, Richard B. H., Philadelphia, Pa. Manufacture of cast-steel ingots.....	434,347	Aug. 12	1364	{ 356 357 }	52	1034
Leighton, Richard B. H., Philadelphia, Pa. Lens-grinding machine.....	441,570	Nov. 25	3136	{ 806 807 }	53	1233

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Leilich, Francis T., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Rotary-shuttle sewing-machine	418,895	Jan. 7	383	93	50	80
Leilich, Francis T., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Cast-off for sewing-machine loop-takers	418,896	Jan. 7	385	94	50	80
Leilich, Francis T., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Rotary-shuttle sewing-machine	423,061	Mar. 11	1067	276 277	50	1346
Leilich, Francis T., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Button-hole sewing-machine	434,155	Aug. 12	1075	276 277	52	976
Leinard, Edgar A., Karle, assignor of one-half to D. A. Garver, Bryan, Ohio. Wagon-body and stake-holder	425,811	Apr. 15	2093	560	51	425
Leinard, Edgar A., and G. W. Sheets, Karle, Ohio. Fence-machine	438,007	Oct. 7	512	144	53	97
Leinbrock, Ernst O., Gottleuba, Germany. Closing device for the doors of railway-cars	434,516	Aug. 19	1639	430	52	1096
Leinert, Gustav H. (See Kinkle and Leinert.)						
Leineweber, Hermann, South Chicago, Ill., assignor of one-half to T. E. Hall, Kansas City, Mo. Recoil-operated magazine-gun	428,813	May 27	2709	687 688	51	1375
Leise, Conrad, New York, N. Y., assignor to A. Ludwig, Hoboken, N. J. Clamp for silver-ware boxes	424,216	Mar. 25	2780	741	50	1688
Leiser, Isadore, <i>et al.</i> (See Farmer, Julius M., assignor.)						
Leiser, Isidor, <i>et al.</i> (See Kayser, William J., assignor.)						
Leisner, George, assignor to United Gas Improvement Company, Philadelphia, Pa. Apparatus for manufacturing gas	426,823	Apr. 29	3644	950	51	745
Leitch, James. (See Shortle and Leitch.)						
Leiter, William, assignor of one-half to F. M. Van Doorn, Cleveland, Ohio. Rope-clutch	424,560	Apr. 1	191	52	51	39
Leith, Alexander J. (See Stirling, William R., assignor.)						
Leith, Alexander J., <i>et al.</i> (See Barnes, David L., assignor.)						
Leithead, Hiram H. (See Pray, John M., assignor.)						
Leithead, Hiram H. (See Rademacher, Frank, assignor.)						
Leivy, Solomon, Harrisonville, Mo. Music-leaf turner	439,759	Nov. 4	194	50, 51	53	646
Leland, Edwin A., assignor to L. Richardson, Brooklyn, N. Y. Brake-hose coupling	420,810	Feb. 4	555	142	50	670
Leland, Edwin A., assignor to L. Richardson, Brooklyn, N. Y. Brake-hose coupling	426,824	Apr. 29	3647	951	51	745
Leland, Edwin A., assignor to L. Richardson, Brooklyn, N. Y. Brake-hose coupling	434,282	Aug. 12	1275	331	52	1015
Leland, Edwin A., Brooklyn, assignor, by mesne assignments, to Consolidated Car Heating Company, Albany, N. Y. Steam-muffler	428,307	May 20	1945	489	51	1209
Leland, Edwin A., Brooklyn, assignor to Consolidated Car Heating Company, Albany, N. Y. Steam-muffler	428,308	May 20	1947	489	51	1210
Leland, Edwin A., assignor to C. M. Pratt, Brooklyn, N. Y. Heating apparatus for railway-cars	441,497	Nov. 25	3030	781	53	1212
Lemaire, Paul C. J., New York, N. Y., assignor to Bergmann & Company, of New York. Lighting-fixture	422,811	Mar. 4	649	166	50	1261
Lemert, Kate E., <i>et al.</i> (See Gwynn, John W., assignor.)						
Lemert, Mary B., <i>et al.</i> (See Gwynn, John W., assignor.)						
Lemmon, John A., Portersville, Ind. Tongue-support	421,502	Feb. 18	1584	408	50	880
Lemmon, John A., assignor of one-half to J. F. Corn, Velpen, Ind. Thill-support	435,431	Sept. 2	77	24	52	1390
Lemmon, John M., Des Moines, Iowa. Flour-dresser	439,821	Nov. 4	284	72	53	663
Lemmon, Robert T., Jr., Mount Airy, Va. Pegging and sewing jack	440,483	Nov. 11	1343	347	53	876
Lemmon, William W., assignor of two-thirds to R. C. A. Pecquet, Arbroth, and E. Vives, Sr., Napoleonville, La. Machine for moving earth	439,074	Oct. 21	2162	579	53	425
Lemoine, Jules, Vincennes, France. Vehicle-brake	441,801	Dec. 2	271	72, 73	53	1317
Lemoine, Louis R., Philadelphia, Pa. Traveling-crane mechanism	431,000	June 24	2970	729 730	51	2072
Lemp, Hermann, Lynn, Mass. Electric welding apparatus	440,641	Nov. 18	1605	412 413	53	935
Lemp, Hermann, Hartford, Conn., assignor to Schuyler Electric Company, of Connecticut. Incandescent-lamp socket	420,077	Jan. 28	2149	569	50	454
Lemp, Hermann, Hartford, Conn., assignor to Schuyler Electric Company, of Connecticut. Apparatus for flashing filaments	440,759	Nov. 18	1801	466	53	972
Lemp, Hermann, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Safety device for electric circuits	421,177	Feb. 11	1117	287	50	785
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Sliding clamp for electric welding apparatus	428,616	May 27	2405	611	51	1318
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electrical apparatus for welding rings	428,617	May 27	2406	611 612	51	1318
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Transformer for heavy currents	428,618	May 27	2408	612	51	1318
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Welding rings by electricity	428,619	May 27	2410	612	51	1319
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Forming or shaping metals by electricity	432,630	July 22	2469	635	52	501
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric-welding clamp	434,450	Aug. 19	1543	402	52	1076
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding transformer	440,640	Nov. 18	1602	412	53	935
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding apparatus	443,224	Dec. 23	2621	674	53	1799
Lemp, Hermann, and M. J. Wightman, Hartford, Conn., assignors to Schuyler Electric Company, of Connecticut. Electric regulating mechanism	420,882	Feb. 4	673	174	50	691
Lemp, Hermann, and W. S. Moody, Lynn, Mass., assignors to Thomson Electric Welding Company, of Maine. Reactive coil	428,620	May 27	2412	613	51	1319
Lemp, Hermann, and J. Tregoning, Lynn, Mass., assignors to Thomson Electric Welding Company, of Maine. Electric metal-working apparatus	432,629	July 22	2467	634	52	501
Leuahan, Francis P., Wilkes-Barré, Pa. Car-coupling	418,731	Jan. 7	110	26	50	24
Lendberg, John, Dover, N. J. Belt-fastener tool	426,942	Apr. 29	3797	992	51	775
Lenderoth, William, Deseronto, Ontario, Canada. Porous earthenware building material	426,642	Apr. 29	3364		51	691
Lenderoth, William, Deseronto, Ontario, Canada. Manufacturing porous earthenware	426,643	Apr. 29	3365		51	691
Lendy, John, Cleveland, Ohio. Means for binding books	430,318	June 17	1897	465	51	1858
Leng, C. F. (See Leng, Charles, assignor.)						
Leng, Charles. (See Leng, Christian F. and C.)						
Leng, Charles, assignor of one-half to C. F. Leng, Pittsburg, Pa. Bottle-neck-finishing machine	428,214	May 20	1786	450	51	1179
Leng, Christian F. and C., Pittsburg, Pa. Bottle-finishing machine	423,482	Mar. 18	1691	446	50	1474
Lengyel, Martin. (See Tischler, Gaebel, and Lengyel.)						
Lenhart, Cyrus, Brookfield, Mo. Car-coupling	431,902	July 8	1363	345	52	275
Lenhart, William H., Defiance, Ohio. Lathe for turning eccentric or polygonal forms	437,339	Sept. 30	3139	821 822	52	2001

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Lennart, Magdalena, Milwaukee, Wis. Adjustable pattern for drafting garments.....	441,369	Nov. 25	2819	728	53	1171
Lennon, Watson S., Hardinsburg, Ky. Vending apparatus.....	427,093	May 6	104	28	51	832
Lennox, George W., Haverhill, Mass. Leather-finishing machine.....	436,363	Sept. 16	1534	402	52	1683
Lennox, Robert P. (See Thomas and Lennox.)						
Lennox, William H., Mineola, N. Y. Snow-plow.....	421,731	Feb. 18	1910	502	50	944
Lenox, C. (See Anderson, John A. E., assignor.)						
Leut, Howard B., Boston, Mass., assignor of one-half to E. N. Higley, New York, N. Y. Adjustable fender or guard for street-cars.....	432,143	July 15	1741	447	52	354
Lentz, Charles, Mayville, Wis. Tug-coupling.....	431,368	July 1	513	127	52	103
Leonard, Charles H., Grand Rapids, Mich. Portable house.....	419,859	Jan. 21	1814	{ 479 480 }	{ 50 50 }	379
Leonard, Charles H., Grand Rapids, Mich. Ice-rack for refrigerators.....	431,903	July 8	1364	345	52	275
Leonard, Charles H., Grand Rapids, Mich. Refrigerator-trap.....	434,283	Aug. 12	1276	331	52	1015
Leonard, Charles H., Grand Rapids, Mich. Milk-cooler.....	436,364	Sept. 16	1537	403	52	1684
Leonard, Charles H., Grand Rapids, Mich. Portable storm-house.....	436,668	Sept. 16	2024	528	52	1774
Leonard, Charles H., Grand Rapids, Mich. Portable earth-closet.....	440,611	Nov. 11	1556	400	53	916
Leonard, Charles S., Glover, Vt., assignor of one-half to W. F. Templeton, Manchester, N. H. Truss-pad.....	436,630	Sept. 16	1953	513	52	1760
Leonard, Charles T., Norwalk, Conn. Pipe-coupling.....	428,846	May 27	2761	702	51	1386
Leonard, Edgar G. (See Leonard, Martin G., assignor.)						
Leonard, George B. (See Latulip, Frederick, assignor.)						
Leonard, Harry W., New York, N. Y. Electrical indicator.....	430,865	June 24	2773	680	51	2034
Leonard, Harry W., Chicago, Ill. Device for controlling the current of electric generators.....	435,700	Sept. 2	503	133	52	1472
Leonard, James F., Lincoln, assignor to M. E. Farnes and A. B. McMillan, Pawtucket, R. I. Hopper for emery-wheels.....	433,735	Aug. 5	432	110	52	840
Leonard, John K., Big Flats, and J. O. Bender, Fayetteville, N. Y. Transplanter.....	426,455	Apr. 29	3084	{ 809 810 }	{ 51 51 }	637
Leonard, Martin G., assignor of one-fourth to E. G. Leonard, Lowell, Mass. Bird-cage screen.....	429,196	June 3	138	33	51	1497
Leonard, Michael B., Richmond, Va. Car-brake.....	435,019	Aug. 26	2458	{ 650 651 }	{ 52 52 }	1261
Leonard, Seth A., Philadelphia, Pa. Die for forming augers.....	440,484	Nov. 11	1344	347	53	877
Leonard, William P., et al. (See Toulmin, Morton, assignor.)						
Leonhardt, Martin W., St. Louis, Mo. Machine for hulling oats or cotton-seed.....	425,331	Apr. 8	1371	366	51	276
Leonhardt, Martin W., St. Louis, Mo. Bolting-reel.....	436,247	Sept. 9	1348	351	52	1638
Leopold, Charles F., assignor to W. J. Lloyd, Philadelphia, Pa. Knife for meat-cutters and similar machines.....	431,230	July 1	303	75	52	61
Leopold, Charles F., assignor to W. J. Lloyd, Philadelphia, Pa. Saw-set.....	433,947	Aug. 12	755	197	52	914
Lepley, James, Lewisburg, Pa. Wrench.....	423,483	Mar. 18	1693	447	50	1475
Leprophon, Phillip. (See Lawson, Enoch, assignor.)						
Lerchen, William, assignor of one-half to L. Dugal, Denver, Colo. Safety-stirrup.....	435,432	Sept. 2	78	24	52	1390
Lerew, Henry, Perry, Iowa. Horse-collar attachment and protector.....	433,010	July 29	3089	793	52	625
Lesan, James W., Bradford, Ill. Wagon end-gate.....	443,099	Dec. 23	2389	610	53	1754
Leschorn, Alexander J., Phenixville, Pa. Trigonometrometer.....	435,843	Sept. 2	716	192	52	1513
Leshner, Arthur L. (See Murdock and Leshner.)						
Leslie, Andrew. (See Furney, Elliott E., assignor.)						
Leslie Brothers Manufacturing Company. (See Leslie, Edward, assignor.)						
Leslie Brothers Manufacturing Company. (See McDonald, Thomas A., assignor.)						
Leslie, Edward, Orangeville, Ontario, Canada. Ice-plow and flanger for railway-tracks.....	419,335	Jan. 14	1038	275	50	219
Leslie, Edward, Orangeville, Canada. Rotary snow-plow.....	438,008	Oct. 7	514	144	53	98
Leslie, Edward, Orangeville, Ontario, Canada, assignor to Leslie Brothers Manufacturing Company, Paterson, N. J. Slide-valve.....	425,681	Apr. 15	1910	509	51	388
Leslie, Edward, Orangeville, Ontario, Canada, assignor to Leslie Brothers Manufacturing Company, Paterson, N. J. Slide-valve.....	428,847	May 27	2762	702	51	1386
Leslie, Edward, Orangeville, Ontario, Canada, assignor to Leslie Brothers Manufacturing Company, Paterson, N. J. Separator.....	431,269	July 1	358	89	52	73
Leslie, Edward, Orangeville, Ontario, Canada, assignor to Leslie Brothers Manufacturing Company, Paterson, N. J. Equalizer.....	434,795	Aug. 19	2080	544	52	1182
Leslie, Edward, Orangeville, Ontario, Canada, assignor to Leslie Brothers Manufacturing Company, Paterson, N. J. Throttle-valve.....	434,796	Aug. 19	2082	544	52	1182
Leslie, Henry T., Chicago, Ill. Check-ledger.....	428,009	May 13	1495	380	51	1114
Leslie, James W., Everett, Mass. Curtain ring or hanger.....	440,170	Nov. 11	829	214	53	780
Leslie, John S. (See Hanghawout, John W., assignor.)						
Lessard, Frank I., Manchester, N. H. Pipe-joint.....	424,799	Apr. 1	569	151	51	111
Lessard, Frank I., Manchester, N. H. Pipe-expanding tool.....	424,800	Apr. 1	571	152	51	111
Lessard, Frank I., Manchester, N. H. Pipe-joint.....	424,801	Apr. 1	572	152	51	111
Lester, Eugene C., assignor to Gale Manufacturing Company, Albion, Mich. Plow.....	423,062	Mar. 11	1069	277	50	1346
Lester, James S., Atlanta, Ga. Motor.....	419,051	Jan. 7	608	157	50	128
Lesueur, Sam C., and T. M. Holsey, Chatfield, Tex. Plow.....	433,353	July 29	3593	{ 926 927 }	{ 52 52 }	726
Letchworth, John J., and C. J. Bessenes, Chicago, Ill. Vehicle-seat shade.....	424,116	Mar. 25	2645	705	50	1661
Letz, Louis H., Crown Point, Ind. Millstone.....	437,699	Oct. 7	30	10	53	9
Len, Frederick. (See Arvine, Freeling W., assignor.)						
Leubner, Charles W., McGregor, Tex. Washing-machine.....	436,794	Sept. 23	2244	591	52	1825
Levarn, Henry, Crown Point, N. Y. Corn-shocker.....	427,094	May 6	106	29	51	833
Leyasseur, Frank, Gouverneur, N. Y., assignor to Gouverneur Machine Company, of New York. Tube-cutter.....	442,125	Dec. 9	782	211	53	1423
Lever Bros. (See Scott, Ernest G., assignor.)						
Leverich, Gabriel, South Orange, N. J. Friction-clutch.....	426,567	Apr. 29	3247	852	51	668
Leverich, Gabriel, South Orange, N. J. Pillow-block.....	426,568	Apr. 29	3249	852	51	669
Leverich, Gabriel, South Orange, N. J. Draw-bar and link for railway-cars.....	428,215	May 20	1787	451	51	1180
Leverich, Gabriel, South Orange, N. J. Horizontal deflecting-pulley for cable railways.....	428,216	May 20	1791	451	51	1180
Leverich, Gabriel, South Orange, N. J. Gear for driving the winding-drums of cable railways.....	430,660	June 24	2435	{ 593 594 }	{ 51 51 }	1969
Leverich, Gabriel, South Orange, N. J. Tension-car indicator for cable railways.....	431,065	July 1	53	12, 13	52	12
Leverich, Gabriel, South Orange, N. J. Clutch for connecting and disconnecting shafts.....	431,066	July 1	55	13	52	13
Leverich, Gabriel, South Orange, N. J. Speed-indicator.....	435,433	Sept. 2	79	24	52	1390
Leverich, Gabriel, South Orange, N. J. Operating mechanism for cable-driving machinery.....	436,365	Sept. 16	1540	{ 403 404 405 406 }	{ 52 52 52 52 }	1685
Leverich, Gabriel, South Orange, N. J. Power plant for cable railways.....	436,423	Sept. 16	1633	430	52	1701
Leverich, Gabriel, Maplewood, N. J. Lubricator for shafting.....	435,434	Sept. 2	81	25	52	1391

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Leverich, Gabriel, Maplewood, N. J. Throttle-valve	443,326	Dec. 23	2790	716	53	1831
Levet, Benjamin F., assignor of one-half to F. W. Stewart, San Diego, Cal. Hose-coupling.	437,213	Sept. 30	2943	770	52	1966
Levey, Louis H. (See Levey, William M. and L. H.)						
Levey, William M. and L. H., Indianapolis, Ind. Blotter bath	433,527	Aug. 5	124	36	52	781
Levi, Joseph, New York, N. Y. Garment-fastening	443,774	Dec. 30	3498	897	53	1976
Levi, Jules C., Paterson, N. J. Pepper-grinder	430,661	June 24	2441	594	51	1970
Levi, Louis. (See Hose, William T., assignor.)						
Levi, Moritz, assignor of one-half to R. Forsholm, New York, N. Y. Electric advertising-clock	437,905	Oct. 7	350	102	53	68
Levi, Thomas, and J. W. Murchison, New Westminster, Canada. Shingling-bracket	434,348	Aug. 12	1366	357	52	1034
Levick, Fredrick T. (See Evans and Levick.)						
Levinger, Otto, New York, N. Y. Spoon	438,379	Oct. 14	1079	295	53	212
Levisay, Joel A. (See Nelson and Levisay.)						
Levison, Joseph A., New York, N. Y. Corset-clasp	438,009	Oct. 7	516	144	53	98
Levison, Michael M. (See Horton and Levison.)						
Levison, Philip, Chicago, Ill. Bicycle-lantern	436,528	Sept. 16	1783	470	52	1730
Levy, Abe, <i>et al.</i> (See Lorimer, William T., assignor.)						
Levy, Dreyfus & Co. (See Levy and Gerow, assignors.)						
Levy, Herman, New York, N. Y. Smoke-house	434,716	Aug. 19	1975	514	52	1160
Levy, Herman, New York, N. Y. Manufacture of ornamental fabrics	436,366	Sept. 16	1547	406	52	1686
Levy, Herman, <i>et al.</i> (See Lorimer, William T., assignor.)						
Levy, Louis W., New York, N. Y. Diamond-washer	429,276	June 3	240	60	51	1518
Levy, Louis W., New York, and J. U. Gerow, Brooklyn, assignors to Levy, Dreyfus & Co., New York, N. Y. Opera-glass holder	424,611	Apr. 1	270	71	51	54
Levy, Marc A., assignor to General Copying Apparatus Company, New York, N. Y. Cabinet for duplicating apparatus or slabs	427,518	May 6	741	184	51	958
Levy, Max. (See Biltzingslöwen, Levy, and Klotz.)						
Levy, Ray E., Chicago, Ill. Mitten	428,115	May 20	1653	419	51	1154
Lewandowski, Joseph, Gnesen, Prussia, Germany. Lubricant	423,522	Mar. 18	1751	50		1486
Lewandowski, Theodore, and J. Zalikowski, Chicago, Ill., assignors of one-half to A. J. Kowalski and A. Schultz. Window sash and casing	420,457	Feb. 4	55	11, 12	50	574
Lewes, George A., Farmborough, England. Sight for military and other fire-arms	421,943	Feb. 25	2215	581	50	1009
Lewinsolin, Hugo, Bromberg, Germany. Printing-press for printing addresses	436,631	Sept. 16	1954	513	52	1761
Lewis, Albert D., Chicago, Ill., assignor to Lewis Metallic Packing Company. Piston-rod packing	421,944	Feb. 25	2216	581	50	1009
Lewis, Alfred D. and C. S. Irish, Jordan, N. Y. Bung and vent	421,732	Feb. 18	1911	502	50	944
Lewis, Alfred D. and C. S. Irish, assignors to Perfect Liquid Measure Manufacturing Company, Jordan, N. Y. Can for measuring and retailing liquids	420,645	Feb. 4	315	81, 82	50	626
Lewis, Alonzo, Baltimore, Md. Bubble-pipe	432,415	July 15	2136	549	52	427
Lewis, Alvis E., and W. R. Crosby, Evansville, Ark. Car-coupling	437,761	Oct. 7	138	43	53	29
Lewis, Charles. (See Davis and Lewis.)						
Lewis, Charles A. (See Davis and Lewis.)						
Lewis, Charles S. (See Wagner and Seath, assignors.)						
Lewis, Charles W., New York, N. Y. Rail-joint	441,878	Dec. 2	390	102	53	1341
Lewis, David T., Pittsburg, Pa. Apparatus for coating sheet metal	431,663	July 8	991	247	52	204
Lewis, Edward B., <i>et al.</i> (See Menendez, Gabriel A., assignor.)						
Lewis, Ellsworth J., Warrenton, Ohio. Triple valve for automatic brake apparatus	433,598	Aug. 5	236	61	52	802
Lewis, Ellsworth J., Warrenton, Ohio, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Valve for fluid-pressure signaling apparatus	435,758	Sept. 2	583	155	52	1487
Lewis, Eugene C., Nashville, Tenn. Tool for crimping metal bungs	426,825	Apr. 29	3649	951	51	746
Lewis, Fay. (See Young and Lewis.)						
Lewis & Fowler Girder Rail Company. (See Wood, William C., assignor.)						
Lewis, Frank A., <i>et al.</i> (See May, Charles W., assignor.)						
Lewis, Frank L., Minneapolis, Minn. Curry-comb and brush	439,668	Nov. 4	66	18	53	620
Lewis, Frederick, assignor to J. C. English, New Haven, Conn. Incandescent-lamp fixture	441,877	Dec. 2	390	102	53	1341
Lewis, George D., Newport, R. I. Step for vehicles	430,530	June 17	2212	544	51	1918
Lewis, George T., Philadelphia, Pa. Lead pigment	437,700	Oct. 7	31	53		9
Lewis, George T., Philadelphia, Pa. Manufacturing lead pigment	437,701	Oct. 7	31	53		9
Lewis, Granville R., Lynchburg, Va. Car-coupling	439,410	Oct. 28	2711	723	53	534
Lewis, Henry C., assignor to himself and J. F. Barrows, Saginaw, Mich. Split pulley	437,125	Sept. 23	2788	727	52	1930
Lewis, Henry M., <i>et al.</i> , trustees. (See Rudd, Charles H., assignor.)						
Lewis, Hiram E., Gold Hill, Nev. Variable crank for velocipedes	422,086	Feb. 25	2408	637	50	1045
Lewis, James, Crowley, La. Traction-wheel	431,904	July 8	1365	345	52	275
Lewis, James, Oil City, assignor of nine-sixteenths to F. M. Ashmead, Hulton, E. C. Palmer, Allegheny, J. Gripp and G. R. Miller, Pittsburg, Pa. Heating apparatus	442,191	Dec. 9	884	236	53	1443
Lewis, James H., Detroit, Mich. Road-cart	428,921	May 27	2875	735	51	1409
Lewis, James M. (See Bennetts, Lewis, and Hatch.)						
Lewis, James S., Kimball, Va. Fire-escape	440,045	Nov. 4	635	169 170	53	732
Lewis, James S., assignor of one-half to E. L. Miller, Kimball, Va. Steam-generator and feed-water heater	429,574	June 3	712	173	51	1609
Lewis, James Y., Quincy, Ill. Height-measuring device	442,192	Dec. 9	885	236	53	1443
Lewis, Jasper B., Alexander, N. Y. Rod for coupling cars	442,061	Dec. 2	686	185	53	1396
Lewis, Joe H., <i>et al.</i> (See Harris, Milford B., assignor.)						
Lewis, John F., Braddock, assignor of two-thirds to B. J. Foley, Pittsburg, and H. McKinney, Braddock, Pa. Spring-washer	436,737	Sept. 16	2122	558	52	1794
Lewis, John S., Granville, Tenn. Corn-thinner	426,028	Apr. 22	2447	646	51	499
Lewis, John W. (See Mock, George, assignor.)						
Lewis, La Fayette W., Milnes, Va. Ore-washer	439,961	Nov. 4	503	132	53	706
Lewis Metallic Packing Company. (See Lewis, Albert D., assignor.)						
Lewis, Mitchell Y., Morrison, Ill. Saw-filing bench	425,332	Apr. 8	1373	367	51	276
Lewis, Othelo W. (See McLean and Lewis.)						
Lewis, Perrin F., Russell, Pa. Butter-jar	438,439	Oct. 14	1163	314	53	229
Lewis, Philip M., assignor of one-half to I. Gans, Washington, D. C. Attachment for window-frames	422,223	Feb. 25	2636	698	50	1088
Lewis, Richard. (See Edwards, Lewis, and Jones.)						
Lewis, Richard R., Union City, Pa. Tailor's measure	441,675	Dec. 2	70	19	53	1275
Lewis, Robert B., <i>et al.</i> (See Sneed, Harry V., assignor.)						
Lewis, Robert T., Jr., Oakville, Conn. Safety-pin	420,811	Feb. 4	557	142	50	670
Lewis, Russell H., assignor to A. Eddy, Providence, R. I. Button	426,999	Apr. 29	3885	1014	51	791
Lewis, Samuel C., San Francisco, Cal. Machine for making rock-drill bits	442,692	Dec. 16	1059	426	53	1604
Lewis, Thomas E., Dublin, Tex. Platform for harvesters	428,623	May 27	2524	641	51	1339
Lewis, Turner L., <i>et al.</i> (See Marsh, Grant, assignor.)						
Lewis, Walter H., Jr., New York, N. Y. Curtain-pole and ring	440,773	Nov. 18	1827	471	53	976

Alphabetical list of patentees—Continued.

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Lewis, Wilfred, assignor to W. Sellers & Company, Incorporated, Philadelphia, Pa. Coupling shafting.	419,589	Jan. 14	1391	373	50	292
Lewis, Wilfred, assignor to W. Sellers & Company, Incorporated, Philadelphia, Pa. Machinery for transmitting and arresting motion.	421,178	Feb. 11	1119	287	50	786
Lewis, Wilfred, assignor to W. Sellers & Company, Incorporated, Philadelphia, Pa. Friction-catch.	427,000	Apr. 29	3886	1015	51	791
Lewis, Willard F., assignor of one-third to F. F. Stanley, Swampscott, Mass. Trolley.	427,333	May 6	467	120	51	903
Lewis, William H., Huntington, assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic-printing frame.	434,188	Aug. 12	1123	292	52	986
Lewis, William H., Huntington, assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic shutter.	437,655	Sept. 30	3630	943	52	2100
Lewis, William H., Huntington, assignor to E. & H. T. Anthony & Company, New York, N. Y. Plate-holder.	437,656	Sept. 30	3632	949	52	2101
Lewis, William H., Huntington, assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic camera.	439,804	Nov. 4	258	65	53	658
Lewis, William, P., Washington, D. C., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Cleaning attachment for type-writing machines.	436,424	Sept. 16	1636	430	52	1702
Leyson, Joseph, and W. G. Dalling, Walkerville, Mont. Quartz-mill-battery guide.	422,812	Mar. 4	649	166	50	1261
Libbey, Hosea W., Boston, Mass. Automatic switch for street-railways.	419,052	Jan. 7	610	157	50	128
Libbey, Hosea W., Boston, Mass. Water chute or flume and water-basin.	419,860	Jan. 21	1816	480	50	380
Libbey, Hosea W., Boston, Mass. Telephone transmitter and receiver.	421,006	Feb. 11	877	226	50	739
Libbey, Hosea W., Boston, Mass. Railway-spike retainer.	421,007	Feb. 11	878	227	50	739
Libbey, Hosea W., Boston, Mass. Wood-screw.	422,307	Feb. 25	2763	728	50	1110
Libbey, Hosea W., Boston, Mass. Spring-hinge.	426,597	Apr. 29	3293	864	51	678
Libbey, Hosea W., Boston, Mass. Bottle-stopper.	426,826	Apr. 29	3651	951	51	746
Libbey, Hosea W., Boston, Mass. Street-car seat.	427,095	May 6	108	29	51	833
Libbey, Hosea W., Boston, Mass. Bottle-stopper.	430,132	June 17	1576	392	51	1796
Libbey, Hosea W., Boston, Mass. Cable railway and cable.	430,232	June 17	1726	429	51	1825
Libbey, Hosea W., Boston, Mass. Railway-tie.	430,780	June 24	2640	647	51	2010
Libbey, Hosea W., Boston, Mass. Street-car heater.	431,947	July 8	1422	361	52	286
Libbey, Hosea W., Boston, Mass. Electric railway.	436,425	Sept. 16	1637	431	52	1702
Libbey, Hosea W., Boston, Mass. Electric railway.	436,923	Sept. 23	2501	654	52	1873
Libbey, Hosea W., Boston, Mass. Hook and eye.	437,214	Sept. 30	2949	771	52	1966
Libbey, Hosea W., Boston, Mass. Fire-place.	438,319	Oct. 14	994	269	53	196
Libbey, Hosea W., Boston, Mass. Car.	441,178	Nov. 25	2495	645	53	1114
Libbey, Hosea W., Boston, Mass. Electric railway.	441,571	Nov. 25	3141	808	53	1233
Libbey, Hosea W., Boston, Mass. Electric railway.	441,572	Nov. 25	3143	808	53	1234
Libbey, Hosea W., Boston, Mass. Return-ball.	443,859	Dec. 30	3625	934	53	2002
Libbey, Mark A., South Berwick, Me. Propelling mechanism for vehicles.	438,010	Oct. 7	517	145	53	98
Libbey, Samuel R. (See Smith and Libbey.)						
Libby, Charles L., assignor to E. P. Bullard, Bridgeport, Conn. Chuck for screw-machines.	442,230	Dec. 9	941	{ 248 249 }	53	1454
Libby, Charles L., assignor to E. P. Bullard, Bridgeport, Conn. Attachment for turret-lathes.	443,775	Dec. 30	3499	{ 897 898 }	53	1976
Licht, Daniel, assignor to J. Glatz, Brooklyn, N. Y. Filtering-press.	421,503	Feb. 18	1585	409	50	880
Lichtenberger, Henry. (See Ratz, John, assignor.)						
Lichtenstein, Isaac, New York, N. Y. Tooth-brush.	424,716	Apr. 1	431	114	51	86
Lichtfield, Louis L. (See Knoepfel and Lichtfield.)						
Lidback, John A., Portland, Me. Steam-engine.	419,053	Jan. 7	610	{ 157 158 }	50	128
Lidbeck, Gustaf H., Carlskrona, Sweden. Life-buoy.	418,897	Jan. 7	387	94, 95	50	80
Liddell, William, and C. J. Dillon, Brooklyn, N. Y. Automatic time-detector.	435,435	Sept. 2	82	25	52	1391
Lidgerwood Manufacturing Company. (See Beekman, John V., assignor.)						
Lieb, Charles A., New York, N. Y. Anti-friction gearing for threaded rods.	431,067	July 1	57	13, 14	52	13
Lieb, Charles A., New York, N. Y. Electric conductor terminal.	433,948	Aug. 12	756	197	52	914
Lieb, Charles A., New York, N. Y. Electric rail-connector.	434,087	Aug. 12	961	252	52	955
Lieb, Charles A., New York, N. Y. Commutator.	435,503	Sept. 2	186	52	52	1411
Lieb, Charles A., New York, N. Y. Commutator and making the same.	435,504	Sept. 2	188	52	52	1411
Lieb, Charles A., New York, N. Y. Suspender or support for overhead wires.	435,505	Sept. 2	189	52	52	1411
Lieb, Charles A., New York, N. Y. Ball-bearing.	438,320	Oct. 14	995	{ 269 270 }	53	196
Lieb, Charles A., New York, N. Y. Trolley for electric railways.	440,814	Nov. 18	1895	487	53	989
Lieb, Charles A., New York, N. Y. Armature-body.	441,246	Nov. 25	2632	682	53	1137
Lieb, Charles A., New York, N. Y. Socket for electric lamps.	443,530	Dec. 30	3104	799	53	1901
Lieberoth, Von Anw & Co. (See Anw, Iwan v., assignor.)						
Lieberthal, Hyman, Chicago, Ill. Suspenders.	438,693	Oct. 21	1556	419	53	309
Liebig, Gustav A. (See Willms and Liebig.)						
Liebig, Gustav A., and C. Willms, Baltimore, Md. Galvanic battery.	437,469	Sept. 30	3365	881	52	2042
Liebscher, Leo, Milwaukee, Wis. Clothes-pin.	418,918	Jan. 7	425	104	50	89
Liedbeck, Carl H., Stockholm, Sweden. Shaking-machine for movement cure.	433,011	July 29	3090	793	52	626
Liedke, Edward L., assignor of one-half to F. K. McCormick, Sandusky, Ohio. Carbon for arc lamps.	421,733	Feb. 18	1912	503	50	944
Liefer, Henry, Hinsdale, Ill. Bench-vise.	418,847	Jan. 7	297	72	50	62
Lieker, Frederick, New York, N. Y. Pocket-book.	442,231	Dec. 9	942	249	53	1454
Liephart, John H. (See Goodfellow, Frank, assignor.)						
Light, William H., Lebanon, Pa. Machine for manufacturing washers.	437,440	Sept. 30	3319	{ 866 867 }	52	2037
Lightbody, James, et al. (See Loe, Syver, assignor.)						
Lightburne, Stafford, Jr., St. Louis, Mo. Towel-rack.	439,019	Oct. 21	2079	556	53	409
Lightfoot, Benjamin H. (See Wilbur, Alfred, assignor.)						
Lighthall, John A., Syracuse, N. Y. Making bags acid-proof.	439,880	Nov. 4	380	-----	53	681
Lighthill, A. T., et al. (See Mellett, Lemuel, assignor.)						
Lightner, Peter, Landisburg, Pa. Fence.	427,773	May 13	1140	286	51	1046
Lightning Check Punch Company. (See Smith and Williamson, assignors.)						
Lightning Check Punch Company. (See Williamson, Samuel S., assignor.)						
Lighton, John. (See Lipe and Lighton.)						
Lighton, John, Syracuse, N. Y. Coin-controlled test lifting-machine.	425,436	Apr. 15	1532	{ 411 412 }	51	316
Lighton, John, and P. H. Brennan, assignors to J. Lighton Machine Company, Syracuse, N. Y. Mail-bag-cord fastener.	434,875	Aug. 19	2203	577	52	1206
Lighton Machine Company, John. (See Lighton and Brennan, assignors.)						
Ligniform Tubing Company. (See MacFarlane, James, assignor.)						
Ligon, John, Clover Lick, W. Va. Fence.	422,813	Mar. 4	650	166	50	1262
Ligon, John, Clover Lick, W. Va. Cattle-stall.	426,456	Apr. 29	3086	810	51	637

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Likens, Samuel T., Amity, Oreg. Cultivator	419,691	Jan. 21	1560	418	50	330
Likes, Elbridge T., Des Moines, Iowa. Track-cleaner	439,783	Nov. 4	229	59	53	653
Liljencrantz, Gustave A. M., Chicago, Ill. Folding stair-chair	435,701	Sept. 2	505	133	52	1473
Lilley, Henry, Philadelphia, Pa. Process of and machine for making pipe-hooks	425,232	Apr. 8	1225	326 327	51	249
Lillie, Charles W., Staunton, Ill. Motor for churns	443,682	Dec. 30	3354	863	53	1949
Lillie, Harvey, Bellwood, Nebr. Loading and unloading wagon-bodies	430,662	June 24	2442	595	51	1970
Lillie, Samuel M., Philadelphia, Pa. Condenser with multiple-effect evaporating apparatus	422,234	Feb. 25	2637	698 699	50	1088
Lillie, Samuel M., Philadelphia, Pa. Evaporating apparatus	422,235	Feb. 25	2642	699	50	1088
Lillie, Samuel M., assignor to Sugar Apparatus Manufacturing Company, Philadelphia, Pa. Process of and apparatus for using heat in sugar-refineries	428,217	May 20	1792	452	51	1181
Lillie, Samuel M., assignor to Sugar Apparatus Manufacturing Company, Philadelphia, Pa. Evaporating apparatus	440,231	Nov. 11	924	238	53	800
Lillingston, Lottie. (See Lyon and Lillingston.)						
Lillpop, Jesse M., assignor of one-half to H. L. Wheat, Kyana, Ind. Vegetable-cutter	427,096	May 6	103	29	51	833
Limoge, Damos, assignor to Porter Manufacturing Company, Burlington, Vt. Extension-screen for windows	424,802	Apr. 1	573	152	51	111
Limont, Alexander H., Waterbury, Conn., assignor to Holmes, Booth & Haydens, New York, N. Y. Machine for drawing wire	420,303	Jan. 28	2515	667 668	50	523
Lincoln, Elizabeth J., San Francisco, Cal. Portable ash-basket	420,559	Feb. 4	187	48	50	601
Lincoln, John L., Chicago, Ill. Clothes-drier	435,436	Sept. 2	84	25	52	1391
Lincoln, Levi, Worcester, Mass. Fire-pail	442,062	Dec. 16	2057	528	53	1680
Lincoln, Samuel, West Derby, Vt. Wagon-jack	425,682	Apr. 15	1912	509	51	389
Lincoln, Thomas, assignor to Hopkins & Dickinson Manufacturing Company, Brooklyn, N. Y. Reversible latch	431,523	July 1	756	188	52	151
Lind, Peter A., <i>et al.</i> (See Hjelte, Adolf, assignor.)						
Lindaner, Benjamin, Chicago, Ill. Attachment for sewing-machines	419,781	Jan. 21	1689	448	50	355
Lindberg, John A., Dayton, Iowa. Gate-latch	438,481	Oct. 14	1225	333	53	241
Lindberg, Sven, Bloomington, Ill. Transposing key-board	431,369	July 1	514	128	52	103
Lindblom, Elias, Biggsville, Ill. Blind for bridles	422,133	Feb. 25	2485	657	50	1059
Lindeman, Louis C., Brooklyn, N. Y. Ballot	421,600	July 8	875	217	52	183
Lindemann, Albert J. and A., assignors to J. P. Lindemann & Sons, Milwaukee, Wis. Stove-pipe-elbow machine	441,426	Nov. 25	2913	751 752	53	1191
Lindemann, August. (See Lindemann, Albert J. and A.)						
Lindemann, Ernst C., Baltimore, Md. Tile	421,734	Feb. 18	1913	503	50	944
Lindemann, Ernst C., Baltimore, Md. Tile	426,289	Apr. 22	2821	741	51	576
Lindemann, Ernst C., Baltimore, Md. Roofing-tile	438,321	Oct. 14	999	210 271	53	197
Lindemann & Sons, J. P. (See Lindemann, Albert J. and A., assignors.)						
Lindemuth, Harry H., assignor of one-half to P. L. Kreiss, Mount Joy, Pa. Water-tube steam-boiler	433,415	July 29	3677	949 950	52	744
Linden, John A., assignor of one-half to N. Pehrson, Sterling, Ill. Portable bath-tub	428,252	May 20	1853	465	51	1193
Lindenau, Erick W., assignor to Joliet Clock Manufacturing Company, Joliet, Ill. Double-faced electric clock	424,929	Apr. 1	765	303 304	51	149
Lindenthal, Gustav. (See Andrews and Lindenthal.)						
Lindenthal, Gustav, Pittsburg, Pa. Suspension-bridge	430,428	June 17	2055	596	51	1889
Linder, Frans O., Brooklyn, N. Y. Fur garment	421,292	Feb. 11	1276	329	50	815
Linder, Mons A., and C. A. Carlson, Pullman, Ill. Bedbug-trap	431,815	July 8	1340	309	52	251
Linders, August, and H. D. Le Roy, St. Louis, Mo. Drawer-guide equalizer	419,963	Jan. 21	1971	518	50	412
Lindstrom, Hjalmar, assignor to M. L. Lindstrom, Chicago, Ill. Mower	427,238	May 6	332	85, 86	51	876
Lindstrom, Maria L. (See Lindstrom, Hjalmar, assignor.)						
Lindgren, August, Moline, Ill., assignor to Moline Plow Company, of Illinois. Wheel attachment for plows	421,410	Feb. 18	1449	375	50	854
Lindgren, August, Moline, Ill., assignor to Moline Plow Company, of Illinois. Landside-wheel for plows	427,881	May 13	1309	331	51	1077
Lindgren, August, Moline, Ill., assignor to Moline Plow Company, of Illinois. Yielding cultivator-shovel	428,010	May 13	1497	380	51	1114
Lindheimer, Friedrich O., Frankfort-on-the-Main, Prussia, Germany. Mill	426,598	Apr. 29	3394	864 865	51	678
Lindley, Herbert, and T. Browett, Salford, England. Liquid-hydrocarbon motor-engine	440,485	Nov. 11	1346	347 348	53	877
Lindley, John, St. Louis, Mo. Combined hammer and lifter	441,879	Dec. 2	391	103	53	1341
Lindley, Lafayette W., Louisville, Ky. Wire-fence stay	420,883	Feb. 4	677	175	50	692
Lindley, Lafayette W., Louisville, Ky. Motor for churns, &c	438,011	Oct. 7	520	145	53	99
Lindman, Frank T., <i>et al.</i> (See Strom, Fredrik E., assignor.)						
Lindner, Henry C., and B. D. Harris, Dayton, Ohio; said Harris assignor to said Lindner. Tail-screw	420,349	Jan. 28	2580	685	50	534
Lindquist, John S. (See Olson and Lindquist.)						
Lindsay, George W., Gainesville, Tex. Combined ink-stand and pen-rack	434,349	Aug. 12	1367	357	52	1034
Lindsay, Harry C., Stillwater, Minn. Means for cleaning band-saw wheels	421,963	Mar. 11	1070	278	50	1346
Lindsay, J. Robert, <i>et al.</i> (See Hoke, Quinton J., assignor.)						
Lindsay, Joseph. (See Cummins and Greenwald, assignors.)						
Lindsay, Lycurgus, Humboldt, Kans. Bolting-reel	433,575	Aug. 5	198	52, 53	52	794
Lindsay, William E., assignor of three-fourths to J. M. McClintock and W. H. Richardson, Baltimore, Md. Cotton-chopper	432,057	July 15	1604	410 411	52	328
Lindsey, Martha R. (See Akers, William P., assignor.)						
Lindsley, Isaac, deceased; C. A. Warland, Pawtucket, R. I., administrator. Straw matting or similar fabric	425,090	Apr. 8	1009	270	51	203
Lindsley, Isaac, deceased; C. A. Warland, Pawtucket, R. I., administrator. Machine for trimming the edges of straw matting and similar fabrics	431,498	July 1	721	179 180	52	144
Lindsley, Lyman S., Pratt's Hollow, N. Y. Seat-lock	440,171	Nov. 11	830	214	53	781
Lindstrom, John T., Rockford, Ill. Dash-pot for steam-engines	434,602	Aug. 19	1772	463	52	1123
Lineff, Alexander L., Chiswick, county of Middlesex, England. Means for supplying electricity to tram-cars	423,874	Mar. 18	2276	600 601 602	50	1585
Lineff, Alexander L., Chiswick, county of Middlesex, England. Electric tramway and car	429,277	June 3	241	60	51	1518
Lineudoll, Oren J., Inlay City, Mich. Fence-machine	421,945	Feb. 25	2217	581	50	1009
Lines, Henry, and H. G. Bronson, assignors to Kean & Lines, New Haven, Conn. Window for carriage-doors	420,205	Jan. 28	2364	628	50	495
Lines, John, assignor to Scovill Manufacturing Company, Waterbury, Conn. Curtain-ring	443,288	Dec. 23	2720	698	53	1817
Lines, Wellington H., Chagrin Falls, Ohio. Sap-bucket	435,437	Sept. 2	84	25	52	1392
Ling, Jacob H., Detroit, Mich. Automatic repeating mechanism for phonographs	440,046	Nov. 4	637	170	53	733
Ling, Louis, Berlin, Germany. Manufacturing ornamented veneers	425,233	Apr. 8	1230	327	51	249

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Lingemann, John F., Detroit, Mich. Hydrant	426,457	Apr. 29	3087	810	51	638
Lingle, William H., assignor of three-fourths to D. M. Estey, Owosso, Mich. Movable seat for vehicles	428,922	May 27	2876	735 } 736 }	51	1410
Lingner, Emil A., Leipsic, Germany. Copy-press	430,781	June 24	2640	647	51	2010
Linsinger, George W. (See Frost, John, assignor.)						
Link-Belt Machinery Company. (See Ewart, William D., assignor.)						
Link-Belt Machinery Company. (See Gregg, John, assignor.)						
Link-Belt Machinery Company. (See Miller, Thomas S., assignor.)						
Link-Belt Machinery Company. (See Miller and Foster, assignors.)						
Link, Charles O., <i>et al.</i> (See Link, Harvey L., assignor.)						
Link, Harvey L., assignor of two-thirds to C. O. Link and A. S. Bowen, Denver, Colo. Lock	430,189	June 17	1651	411	51	1810
Linke, Gustav A., Brooklyn, N. Y. Umbrella	420,690	Feb. 4	369	98	50	636
Linn, Allen D. (See Merrill and Linn.)						
Linn, Allen D., and A. A. Lytle, Grand Rapids, Mich. Egg-carrier	426,943	Apr. 29	3798	992	51	775
Linn, Arthur L., Cleveland, Ohio. Sash-fastener	440,600	Nov. 11	1540	397	53	913
Linn, George E. (See Slager and Linn.)						
Linn, Lewis B., Ganges, Mich. Horseshoe	429,460	June 3	539	130	51	1576
Linn, Samuel H., Rochester, N. Y. Electrical speculum	438,891	Oct. 21	1892	502	53	372
Linn, William, Philadelphia, Pa. Fire-extinguisher	430,866	June 24	2774	680	51	2035
Linsley, Newton, assignor to Freeport Hardware Manufacturing Company, Freeport, Ill. Spring-hinge	422,952	Mar. 11	902	237	50	1316
Linstrom, John. (See O'Neill and Linstrom.)						
Linstrom, John G. (See Draper, John F., assignor.)						
Linville, Jacob H., Philadelphia, Pa. Galvanic battery	422,534	Mar. 4	242	63	50	1182
Linzee, John W., Jr. (See Nichols, Henry B., assignor.)						
Lionbeiger, J. M. (See Grubb, William H., assignor.)						
Lipe, Charles E., and J. Lighton, Syracuse, N. Y. Coin-controlled test lifting and pulling machine	425,892	Apr. 15	2211	587 } 588 }	51	446
Lipe, Walter, <i>et al.</i> (See Van Slyke, Alexander, assignor.)						
Lipman, Ernest, <i>et al.</i> (See Bronson, Benjamin, assignor.)						
Lippert, Frank A., Mazomanie, Wis. Transom-lifter	419,964	Jan. 21	1972	518	50	413
Lippitt, Anna, <i>et al.</i> (See Lippitt and Hansdoerfer, assignors.)						
Lippitt, Elihu, Zanesville, and W. Pope, Bucyrus, Ohio. Circular-knitting machine	425,617	Apr. 15	1807	484	51	369
Lippitt, Elihu, and R. Hansdoerfer, assignors to H. H. Sturtevant, J. Martin, A. Lippitt, and A. Mercer, Zanesville, Ohio. Circular-knitting machine	429,856	June 10	1129	279 } 280 }	51	1699
Lippy, David, Mansfield, Ohio. Suspender-buckle	421,735	Feb. 18	1913	503	50	944
Lippy, David, Mansfield, Ohio. Cash and parcel carrier	424,319	Mar. 25	2938	783	50	1718
Lippy, David, Mansfield, Ohio. Two-wheeled vehicle	424,488	Apr. 1	75	21	51	18
Lippy, David, Mansfield, Ohio. Suspender-buckle	438,892	Oct. 21	1893	503	53	372
Lipscomb, James W., Marinette, Wis. Chair attachment	442,629	Dec. 16	1564	404	53	1585
Lipsey, Andrew B., West Hoboken, N. J. Stove-lid	426,190	Apr. 22	2646	705	51	546
Lisk, George W., assignor of one-half to M. A. Lisk, Clifton Springs, N. Y. Baking-pan	432,315	July 15	2004	512	52	401
Lisk, George W., and C. Van Auken, assignors to Lisk Manufacturing Company, Limited, Clifton Springs, Canada. Pail-bottom	440,642	Nov. 18	1608	413	53	936
Lisk Manufacturing Company. (See Lisk and Van Auken, assignors.)						
Lisk, Murry A. (See Lisk, George W., assignor.)						
Lisle, Emile A. de, assignor to Société du Traitement des Quinquinas, Paris, France. Vegetable black	432,058	July 15	1605	411	52	328
Lisle, Myron C., assignor of one-half to H. J. W. Campman, Grand Rapids, Mich. Feeding mechanism for sewing-machines	428,171	May 20	1725	437	51	1167
Lispensard, George, Brooklyn, assignor to H. Guggenheimer, New York, N. Y. Card-edging machine	434,088	Aug. 12	962	252	52	955
Listeman, Philip, Collinsville, Ill. Roofing-tongs	438,012	Oct. 7	521	146 } 147 }	53	99
Lister, Alfred, Newark, N. J. Bone-grinding machine	419,462	Jan. 14	1225	325 } 326 }	50	258
Lister, Alfred, Newark, N. J. Cleaning attachment for bone-flour sifters	427,774	May 13	1141	286 } 287 }	51	1046
Lister & Co. (See Lister and Reixach, assignors.)						
Lister & Co. (See Reixach, José, assignor.)						
Lister, Samuel C., and J. Reixach, assignors to Lister & Co., (limited,) Bradford, county of York, England. Woven pile fabric	425,437	Apr. 15	1536	412	51	317
Litch, Wilbur F., Philadelphia, Pa. Mucilage-bottle	430,481	June 17	2134	525	51	1904
Litch, Wilbur F., Philadelphia, Pa. Mucilage-bottle	434,189	Aug. 12	1123	292	52	986
Lithgow, Hector. (See Wintermute, Harris C., assignor.)						
Little, Thomas J., Philadelphia, Pa. Combined shirt and supporter	436,607	Sept. 16	1916	504	52	1753
Little, Addison M., assignor of one-half to D. T. H. Mackennon, Menasha, Wis. Mandrel for key-seat-cutting machines	430,133	June 17	1577	392	51	1796
Little, Calvin W. (See Culp, Samuel T., assignor.)						
Little, Charles E., Mount Carroll, Ill. Vehicle-seat lock	442,630	Dec. 16	1565	404	53	1585
Little, David M. (See Simon, Alfred W., assignor.)						
Little, Everett W., New York, N. Y. Cut-out	421,179	Feb. 11	1120	237	50	786
Little, Everett W., New York, N. Y. Thermal cut-out	421,180	Feb. 11	1122	288	50	786
Little, Everett W., New York, and J. T. Rohb, Mount Vernon, N. Y. Electrolier	433,687	Aug. 5	366	93	52	827
Little, George and G. J., Passaic, N. J., said G. J. Little assignor to George Little. Electric motor	437,835	Oct. 7	249	76, 77 }	53	49
Little, George C., Bethel, Kans. Clay-mill covering	440,172	Nov. 11	831	214	53	781
Little, George J. (See Little, George and G. J.)						
Little, John, assignor to Xenia Canning Company, Xenia, Ohio. Automatic can-filling machine	420,910	Feb. 4	725	186 } 187 }	50	701
Little, Peter E., Dayton, Ohio. Disk harrow	431,370	July 1	516	128	52	104
Little, Peter E., assignor to Ohio Rake Company, Dayton, Ohio. Harrow	423,523	Mar. 18	1752	461 } 462 }	50	1486
Little, Robert H., Cypress River, Manitoba, Canada, assignor to E. P. Donnell, Chicago, Ill. Machine for stapling bags	433,247	July 29	3448	891	52	697
Little, Robert H., assignor to H. H. Heimerdinger and I. Meyer, Chicago, Ill. Coin-controlled liquid-dispensing apparatus	434,395	Aug. 12	1443	376	52	1050
Little, William B., New York, N. Y. Combination-gage	424,681	Apr. 1	373	98	51	72
Littlefield, George, Burlington, Wis. Vapor-generating burner	421,411	Feb. 18	1451	376	50	855
Littlefield, George K. (See Boynton, George O., assignor.)						
Littlejohn, Charles F., Bridgeport, Conn. Power-transmitter	423,064	Mar. 11	1071	278 } 279 }	50	1347
Littlejohn, Charles F., Bridgeport, Conn., assignor of one-half to E. B. Welch, Cambridge, Mass. Double-thread sewing-machine	421,590	Feb. 18	1715	446 } 447 }	50	905

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Littlepage, Europe F., San José, Cal. Well-boring apparatus	418,873	Jan. 7	340	82, 83	50	71
Little, Joseph W. (See Bennett, William H., assignor.)						
Littlewood, George H., and O. D. Phillips, Lisle, N. Y.; said Phillips assignor to said Littlewood. Can-cover and lock	432,600	Mar. 4	344	86	50	1202
Littley, William, Philadelphia, Pa. Gage	431,702	July 8	1064	266	52	217
Lively, James M., <i>et al.</i> (See Hastings, John B., assignor.)						
Livingood, Winfield S., assignor of one-half to C. L. Ballintine, Kansas City, Mo. Baling-press	422,236	Feb. 25	2646	{ 699 700 }	{ 50 }	1089
Livingood, Winfield S., assignor of one-half to C. L. Ballintine, Kansas City, Mo. Attachment for street-cars, &c.	428,500	May 20	2227	563	51	1264
Livingood, Winfield S., assignor of one-half to C. L. Ballintine, Kansas City, Mo. Attachment for street-cars	428,501	May 20	2228	564	51	1265
Livingood, Winfield S., assignor of one-half to C. L. Ballintine, Kansas City, Mo. Attachment for street-cars, &c.	428,923	May 27	2877	736	51	1410
Livergood, Hiram J., Brentford, Ontario, Canada. Wheat-scouring machine	427,585	May 13	850	214	51	989
Livermore, Darwin O., Los Gatos, Cal. Sash-fastener	422,953	Mar. 11	903	237	50	1316
Livermore, Darwin O., Los Gatos, Cal., assignor of one-fourth to F. Y. Whitmore, West Union, Iowa. Sash-fastener	419,692	Jan. 21	1561	418	50	330
Livermore, Frederick D., Rochester, Minn. Furnace-grate	422,954	Mar. 11	905	237	50	1316
Livingston, Frederick B., Philadelphia, Pa. Movable roof for brick-yards, &c.	435,146	Aug. 26	2645	700	52	1297
Livingston, Isaac, A. Blum, A. Wollenweber, L. Westheimer, and H. Cohn, New York, N. Y.; said Wollenweber assignor to said Cohn, Livingston, Blum, and Westheimer. Combination-lock	429,691	June 10	886	215	51	1653
Livingston, Thomas P., <i>et al.</i> (See Phillips, Edwin G., assignor.)						
Livingstone, John, Toronto, Ontario, Canada. Grate-bar for boiler-furnaces	427,431	May 6	617	154	51	934
Livingstone, John, Toronto, Ontario, Canada. Means for assuring perfect combustion	427,432	May 6	618	154	51	934
Livingstone, William, Jersey City, assignor of one-half to J. Toler, trustee, Newark, N. J. Caster	423,065	Mar. 11	1072	279	50	1347
Livingstone, William, Jersey City, N. J., assignor of one-half to J. Cooper, New York, N. Y. Knob	428,924	May 27	2878	736	51	1410
Livingstone, William, Jersey City, N. J., assignor of one-half to J. Cooper, New York, N. Y. Making metallic fences	429,095	May 27	3141	809	51	1460
Ljunggren, Ernst J., Chicago, Ill. Remedy for toothache	424,009	Mar. 25	2498	50	50	1633
Lloyd, George E., Chicago, Ill. Stereotype-shaving machine	418,799	Jan. 7	211	52	50	46
Lloyd, Hamlin J., Wyalusing, Pa. Vignetter	425,812	Apr. 15	2095	560	51	425
Lloyd, Harlan P. (See Sagenorph, Longley L., assignor.)						
Lloyd, Henry H., Camden, assignor to Electric Storage Battery Company, Gloucester City, N. J. Casting apparatus	438,553	Oct. 14	1330	360	53	261
Lloyd, John E., Brooklyn, N. Y. Glazier's diamond	442,062	Dec. 2	687	185	53	1397
Lloyd, John U., Cincinnati, Ohio. Device for evaporating liquids	433,528	Aug. 5	124	36	52	781
Lloyd, Lewis M., San Buenaventura, Cal. Wave and tide motor	443,367	Dec. 23	2853	734	53	1844
Lloyd, Marshall B., assignor of one-half to E. H. Holbrook, Jr., Minneapolis, Minn. Automatic grain-scale	430,867	June 24	2775	680	51	2035
Lloyd, Walter J., and W. Priest, Birmingham, county of Warwick, England. Velocipede	421,946	Feb. 25	2218	582	50	1010
Lloyd, Walter J., and W. Priest, Birmingham, county of Warwick, England. Bicycle	426,191	Apr. 22	2687	706	51	546
Lloyd, William J. (See Leopold, Charles F., assignor.)						
Loback, John H. (See McAfee and Loback.)						
Loback, John H., Pleasant Hill, Mo. Razor-strop case	423,784	Mar. 18	2143	565	50	1558
Lobben, Peder. (See Hanson and Lobben.)						
Lobben, Peder, Worcester, Mass. Metal-turning lathe	421,181	Feb. 11	1123	288	50	786
Loddell, Alonzo, Racine, Wis. Check-hook	438,380	Oct. 14	1020	295	53	213
Loddell, Alonzo, Racine, Wis. Harness-terret	439,881	Nov. 4	380	99	53	681
Lochmann, Ernst. (See Böckel and Lochmann.)						
Lochmann, Oskar P., Gohlis, near Leipsic, Germany. Pocket time-stamp	433,354	July 29	3549	927	52	727
Lockard, John K., Bloomsburg, Pa. Dumping car	434,517	Aug. 19	1640	430	52	1097
Locke, Edward W., Grand Rapids, Mich. Bed-spring	442,063	Dec. 2	688	185	53	1397
Locke, Fred M., Victor, and J. Lapp, Rochester, assignors of one-third to T. M. Norton, Victor, N. Y. Electric line-hook	441,849	Dec. 2	351	92, 93	53	1333
Locke, Henry L., Richfield, N. Y. Device for cleaning stables	442,064	Dec. 2	689	{ 185 186 }	{ 53 }	1397
Locke, Howard G., Weymouth, assignor of one-half to Brockton Last Company, Brockton, Mass. Boot or shoe tree	427,698	May 13	1015	255	51	1021
Locke, Jesse A., assignor of two-thirds to T. P. Wilkinson, Milford, Mass., and F. S. Shepherd, New York, N. Y. Presser-foot-lifting device for sewing-machines	424,010	Mar. 25	2499	664	50	1633
Locke, John F., <i>et al.</i> (See McDannel, Abner J., assignor.)						
Locke, Joseph S., Spartanburg, assignor to S. P. Glunt, Union City, Ind. Wire-twister	424,117	Mar. 25	2645	705	50	1661
Locke, Jndson E., Glasford, Ill. Running-gear for vehicles	436,248	Sept. 9	1349	{ 351 352 }	{ 52 }	1639
Locke, Lucien G., Haverhill, Ohio. Folding wagon-body	419,693	Jan. 21	1562	419	50	331
Locke, Nathaniel C., Salem, Mass. Pressure-regulating apparatus	424,561	Apr. 1	192	53	51	39
Locke, Nathaniel C., Salem, Mass. Regulator	443,051	Dec. 16	2279	{ 584 585 }	{ 53 }	1725
Locke, Sylvanus D., Hoosick Falls, N. Y. Harvester-wheel	420,947	Feb. 11	782	203	50	721
Locke, Sylvanus D., Hoosick Falls, N. Y. Mold for casting	422,425	Mar. 4	90	24	50	1154
Locke, Sylvanus D., Hoosick Falls, N. Y. Harvester	422,001	Mar. 4	346	86, 87	50	1203
Locke, Sylvanus D., Hoosick Falls, N. Y. Grain-binder	423,524	Mar. 18	1754	{ 402 403 }	{ 50 }	1486
Locke, Sylvanus D., Hoosick Falls, N. Y. Electrical vote-recorder	442,126	Dec. 9	783	{ 211 212 }	{ 53 }	1423
Locke, William H., Jr., Brooklyn, N. Y. Printing fabrics with flock	418,800	Jan. 7	213	52	50	46
Locket, Hiram M. (See Berry and Wheeler, assignors.)						
Lockey, James M. (See Wies, Charles, assignor.)						
Lockwood, Charles L., Philadelphia, Pa. Sector-shaped box	421,504	Feb. 18	1586	409	50	880
Lockwood, Charles L., Covington, Ky., assignor to himself, and J. W. Shrague, Cincinnati, Ohio. Car stall or pen for shipping horses and other animals	431,024	June 24	3013	739	51	2080
Lockwood, Charles S., Newark, N. J. Belt-fastener	419,590	Jan. 14	1393	373	50	292
Lockwood, David D., assignor of one-half to G. G. Prentice, Bridgeport, Conn. Game apparatus	433,599	Aug. 5	238	62	52	802
Lockwood, Frederic A., Boston, Mass. Chain conveyer	420,277	Jan. 28	2481	659	50	516
Lockwood, Frederick J., Bridgeport, Conn. Check-punch	433,176	July 29	3348	866	52	677
Lockwood, George E., assignor to G. H. Colket, Philadelphia, Pa. Can-soldering machine	443,289	Dec. 23	2721	{ 693 699 }	{ 53 }	1817
Lockwood, George M., <i>et al.</i> (See Thorp, Thomas J., assignor.)						
Lockwood, Henry H., Olean, N. Y. Two-wheeled vehicle	430,190	June 17	1652	411	51	1810

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Lockwood, Henry H., Olean, N. Y. Vehicle-pole	431,751	July 8	1136	283	52	231
Lockwood, Henry H., Olean, N. Y. Two-wheeled vehicle	441,247	Nov. 25	2633	683	53	1137
Lockwood, James F., Philadelphia, Pa. Toy savings-bank	433,736	Aug. 5	433	111	52	840
Lockwood, Samuel T., Chicago, Ill. Bran-packing machine	434,669	Aug. 19	1897	{ 495 496 }	52	1147
Lockwood, Samuel T., Chicago, Ill. Copying-press	438,850	Oct. 21	1829	487	53	360
Lockwood, Thomas D., Melrose, Mass. Telephony	435,438	Sept. 2	86	26	52	1392
Lodge & Davis Machine Tool Company. (See Barker, William, assignor.)						
Lodge, Oliver J., Liverpool, county of Lancaster, England. Lightning-arrester	429,727	June 10	938	231	51	1663
Lodge, William, Cincinnati, Ohio. Power machine drill	425,438	Apr. 15	1538	412	51	317
Loe, Söver, assignor of two-thirds to M. Anderson and J. H. Lightbody, La Crosse, Wis. Device for closing doors	429,278	June 3	244	61	51	1519
Loe, Söver, assignor of two-thirds to M. Anderson and J. Lightbody, La Crosse, Wis. Door-closing device	439,076	Oct. 21	2165	580	53	426
Loeb, Louis, Jr., Rorschach, Switzerland. Producing tucks on fabrics	424,682	Apr. 1	375	99	51	73
Loeb, Louis, Jr., Rorschach, Switzerland. Embroidered flounced fabric	430,347	June 17	1942	{ 476 477 }	51	1867
Loeb, Maurice, <i>et al.</i> (See Merrill, William E. T., assignor.)						
Loeffel, Christian. (See Schmidt and Loeffel.)						
Loehr, Peter H., assignor of three-fourths to C. Heavrich, L. A. Bourbonnais, and L. Mautner, East Saginaw, Mich. Water-proof garment	422,814	Mar. 4	651	167	50	1262
Loesewitz, Johannes, Witten-on-the-Ruhr, Prussia, Germany. Packing-ring for axle-journal-nals	421,505	Feb. 18	1587	410	50	880
Loether, Hugo. (See Banks and Belt, assignors.)						
Loewenbach, Hugo, Milwaukee, Wis. Combined receipt and record book	421,412	Feb. 18	1451	376	50	855
Loewenbach, Hugo, Milwaukee, Wis. Combined receipt and record book	436,983	Sept. 23	2577	674	52	1838
Loewenbach, Hugo, Milwaukee, Wis. Receipt and record book	443,776	Dec. 30	3500	698	53	1976
Loewenstein, Henry, Kearney, Nebr. Cultivator	418,953	Jan. 7	473	118	50	99
Loewenthal, Julius, Paducah, Ky. Pole and shafts for vehicles	434,797	Aug. 19	2083	545	52	1182
Loewenthal, Marcus, New York, N. Y. Box-stay	431,068	July 1	58	14	52	13
Loewer, Henry. (See Gillard and Loewer.)						
Loflin, Henry D., Saugerties, N. Y., and R. E. Shaw, Pittston, Pa. Powder-press	422,602	Mar. 4	353	88	50	1204
Lofthouse, Robert, Manchester, county of Lancaster, England. Means for humidifying, drying, warming, or cooling air	424,118	Mar. 25	2646	705	50	1662
Lofthouse, Robert, Manchester, county of Lancaster, England. Apparatus for moistening, drying, warming, or cooling air	424,320	Mar. 25	2940	783	50	1719
Loftie, Henry, Syracuse, N. Y. Wood-auger	421,293	Feb. 11	1277	330	50	815
Lofton, Thomas W., Kansas City, Mo. Bier	434,717	Aug. 19	1977	514	52	1161
Lofts, Ezra, Cambridge, England. Range	422,426	Mar. 4	91	{ 24 25 26 }	50	1154
Loftus, Edward C., and E. H. Booth, San Francisco, Cal. Ore-feeder	429,857	June 10	1135	281	51	1700
Logan, Colin, Newark, N. J. Machine for making rasps	428,011	May 13	1498	{ 380 381 }	51	1114
Logan, George C., New Orleans, La. Stenographer's stand	430,805	June 24	2682	{ 656 657 }	51	2017
Logan, J. L., <i>et al.</i> , executors. (See Dunlap, William R.)						
Logan, John, Waltham, Mass. Apparatus for polishing the edges of watch-mainsprings	432,755	July 22	2687	687	52	543
Logan, John, Waltham, Mass. Device for holding watch-mainsprings	435,844	Sept. 2	717	192	52	1513
Logan, John, Waltham, Mass. Making hair-springs for watch-balances	443,256	Dec. 23	2668	684	53	1808
Logan, Leonard, Plymouth, Ind. Washing-machine	427,775	May 13	1142	287	51	1047
Logan, Martin, New York, N. Y. Drain for stalls	428,848	May 27	2764	702	51	1386
Loges, Henry. (See Frey and Loges.)						
Logsdon, William B. (See Craig, Thomas S., assignor.)						
Logue, Hugh, Philadelphia, Pa., assignor to American Meter Company, New York, N. Y. Valve for gas-meters	429,383	June 3	434	102	51	1554
Lohbiller, Anton, assignor to American Steam Gage Company, Boston, Mass. Safety-valve	440,315	Nov. 11	1063	273	53	823
Lohmann, Albert C., Akron, Ohio. Knockdown paper box	432,885	July 22	2876	737	52	580
Lohmann, Albert C., Akron, Ohio. Paper-box blank	436,141	Sept. 9	1186	{ 309 310 }	52	1606
Lohmann, Albert C., Akron, Ohio. Knockdown paper box	436,142	Sept. 9	1188	310	52	1607
Lohmann, August. (See Morrison, John, assignor.)						
Lohr, William J., Johnstown, Pa. Whiffletree attachment	433,355	July 29	3506	927	52	727
Lohse, Frank R. H., St. Louis, Mo. Door	430,482	June 17	2135	525	51	1904
Lohse, Frank R. H., St. Louis, Mo. Door-frame	435,313	Aug. 26	2902	768	52	1344
Lomasney, William F., assignor of one-half to H. McMullen, Schenectady N. Y. Pipe-coupling	431,816	July 8	1241	{ 309 310 }	52	251
Lomax, Edward L., <i>et al.</i> (See Blanchard, Allen I., assignor.)						
Lomax, George H., Somerville, Mass. Mold for forming flanges on glass shades, &c.	438,893	Oct. 21	1893	503	53	372
Lomax, Harvard, and W. Hasard, Congdon, Nebr. Machine for cutting and shocking corn	422,427	Mar. 4	94	26	50	1155
Lomax, Maria. (See Starr, Humphrey G., assignor.)						
Lombard, Henry A., Saco, and J. W. Rankin, Wells, Me. Vehicle-seat lock	429,352	June 3	381	90	51	1544
Lombard, Levi W. and N. Boston, Mass. Braiding-machine	429,136	June 3	44	11, 12	51	1480
Lombard, Nathaniel. (See Lombard, Levi W. and N.)						
Lomer, Louis L., Harrodsburg, Ky. Sheet-adjuster for printing-presses	438,585	Oct. 14	1375	373	53	271
Lommatsch, Ernst E., San Francisco, Cal. Toy target	439,082	Oct. 21	2179	585	53	429
Lomont, Augustus A., Santa Rosa, Cal. Cuff-holder	439,299	Oct. 28	2549	681	53	503
Lomont, Francis T. (See Morel and Lomont.)						
Lomont, Mary P., administratrix. (See Morel and Lomont.)						
London Toilet Bazar Company. (See Cassidy, Isabel, assignor.)						
Long & Allstatter Company. (See Long, John M. W., assignor.)						
Long, Daniel W., and B. F. Windsor, Lockport, Ill. Button-holder	435,650	Sept. 2	425	113	52	1455
Long, Fred., Rochester, N. Y. Sad-iron	430,663	June 24	2443	595	51	1970
Long, George S., Big Rock, Ill. Device for catching and holding animals	433,356	July 29	3597	928	52	737
Long, Harry W., <i>et al.</i> (See Merrifield, Preston V., assignor.)						
Long, Henry S., Philadelphia, Pa. Knitting-machine	424,011	Mar. 25	2500	664	50	1633
Long, Henry S., Philadelphia, Pa. Circular-knitting machine	435,378	Aug. 26	3010	{ 797 798 }	52	1364
Long, Hezekiah E., Pittsburg, Pa. Clay-grinding mill	428,172	May 20	1727	437	51	1168
Long, Hezekiah E., Pittsburg, Pa. Brick-machine	428,173	May 20	1729	438	51	1168
Long, James M. (See Spilman, Henry E., assignor.)						
Long, John M., Hamilton, Ohio. Tongueless cultivator	441,179	Nov. 25	2497	645	53	1114

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Long, John M. W., assignor to Long & Allstatter Company, Hamilton, Ohio. Cultivator-spring	440,316	Nov. 11	1065	273	53	824
Long, Josiah, Larchwood, Iowa. Buggy-top raiser	429,728	June 10	940	231	51	1664
Long, Nathan H., Muncie, Ind. Rain-water filter	424,651	Apr. 1	329	86	51	64
Long, Peter, Turners, N. Y. Gunstock	429,631	June 10	800	195	51	1636
Long, Stephen M., <i>et al.</i> (See Taylor, George E., assignor.)						
Long, Thomas C., West Chester, Pa. Ratchet attachment for bit-stocks	426,827	Apr. 29	3651	951	51	746
Lougacré Company. (See Lougacré, Matthias R., assignor.)						
Lougacré, Matthias R., assignor to Longacré Company, (limited,) Philadelphia, Pa. Cash register and indicator	429,927	June 10	1236	307	51	1720
Louganeker, John, <i>et al.</i> (See Martin, Orien B., assignor.)						
Longden, William, Holland, Manitoba, Canada. Fence	423,785	Mar. 18	2144	566	50	1558
Longridge, James A., Grève d'Azette, Isle of Jersey, Great Britain. Ordnance	431,270	July 1	360	90	52	73
Longworth, Joshua, Brooklyn, N. Y. High-pressure blower	435,506	Sept. 2	190	52	52	1412
Longyear, Edward M., Fly Mountain, N. Y. Stove-pipe shelf	423,611	Mar. 18	1875	494	50	1507
Löuholdt, Georg W., Berlin, Germany. Fire-place	423,693	Mar. 18	2017	532	50	1534
Look, Luther, assignor to himself, J. Montgomery, and G. M. Snow, Ketchum, Idaho. Ore concentrator, separator, and washer	439,962	Nov. 4	505	133	53	706
Looker, William C. (See Newlove, John, assignor.)						
Loomis, Albert E. (See Hard, Franks, and Loomis.)						
Loomis, Burdett, Hartford, Conn. Process of and apparatus for the manufacture of gas	438,013	Oct. 7	522	147	53	99
Loomis Electric Manufacturing Company. (See Loomis, Osborn P., assignor.)						
Loomis, Frank F., Akron, Ohio. Signaling apparatus for electric railways	440,881	Nov. 18	2003	515	53	1009
Loomis, John J., North East, Pa. Bed-bottom-stretching mechanism	420,304	Jan. 28	2517	668	50	523
Loomis, Moses D., Detroit, Mich. Converting helical springs to straight bars	437,702	Oct. 7	32	10	53	9
Loomis, Moses D., Detroit, Mich. Converting helical springs to straight bars	437,703	Oct. 7	33	10	53	9
Loomis, Osborn P., Brooklyn, N. Y., assignor to Eureka Electric Company, of New York. Lightning-arrester	424,562	Apr. 1	193	53	51	40
Loomis, Osborn P., Brooklyn, N. Y., assignor to Eureka Electric Company, of New York. Lightning-arrester	424,563	Apr. 1	196	54	51	41
Loomis, Osborn P., Somerville, Mass., assignor to Loomis Electric Manufacturing Company, New York, N. Y. Electric switch	431,118	July 1	128	33	52	27
Looney, William, assignor of one-half to J. Pickering, Oxford, Ind. Grain measuring or weighing apparatus	431,948	July 8	1423	361	52	287
Loonie, Patrick J., Dallas, Tex. Cotton-harvester	430,429	June 17	2057	507	51	1889
Loos, Adam, assignor of one-third to J. W. Flowers, Toledo, Ohio. Separable collar-button	427,699	May 13	1016	256	51	1022
Loos, Christ. G. (See Stupp, John H., assignor.)						
Loos, John, Freeport, Ill. Sweat-pad for horse-collars	435,702	Sept. 2	506	134	52	1473
Loose, John H., Cincinnati, Ohio. Comb-cleaner	421,413	Feb. 18	1452	376	50	855
Lopez, Virgil, Brooklyn, N. Y. Toy	432,316	July 15	2005	513	52	402
Loranz, Rudolph, J. Anderson, and P. Larsson, Chicago, Ill. Guitar	440,882	Nov. 18	2004	516	53	1010
Lord, Daniel W., Malden, Mass. Buoyant propeller	438,815	Oct. 21	1765	473	53	349
Lord, George E., Utica, N. Y. Reclining-chair	435,938	Sept. 9	871	228	52	1549
Lord, George W. (See Miner, Howard A., assignor.)						
Lord, George W., and J. S. Gillett, Minneapolis, Minn., assignors to Minneapolis Sash and Door Company. Refrigerator	432,134	Feb. 25	2486	657	50	1059
Lord, Henry M., Fletcher, Vt. Artist's kit	426,290	Apr. 22	2822	741	51	576
Lord, Peter. (See Decarie and Lord.)						
Loree, James K., Howell, Mich. Buggy-boot	434,670	Aug. 19	1903	496	52	1147
Loree, John. (See Loree, Samuel, assignor.)						
Loree, Leónor F., <i>et al.</i> (See Bennett, Charles M., assignor.)						
Loree, Perry E., assignor of two-thirds to D. P. Clark, Miamisburg, and C. E. Clark, Dayton, Ohio. Copying-pad	424,930	Apr. 1	766	204	51	149
Loree, Samuel, Cincinnati, Ohio, assignor of one-half to J. Loree, Lincoln, Nebr. Combined corn sheller and cutter	443,143	Dec. 23	2466	631	53	1766
Lorenz, Lewis P. (See Lorenz, Philip and L. P.)						
Lorenz, Philip and L. P., Rimersburg, Pa. Mower	436,947	Sept. 23	2530	662	52	1879
Lorenz, Wilhelm, Karlsruhe, Baden, Germany. Primer for gun-cartridges	431,601	July 8	876	217	52	183
Lorenz, Wilhelm, Karlsruhe, Germany. Making ring and plug gages	438,253	Oct. 14	882	241	53	176
Lorenz, William A., Hartford, Conn. Paper flour-sack	418,919	Jan. 7	425	104	50	89
Lorenz, William A., Hartford, Conn., assignor of one-half to H. Behr, Brooklyn, N. Y. Sand-paper	440,317	Nov. 11	1066	274	53	824
Lorillard, Pierre, <i>et al.</i> (See Harmon, Orville S., assignor.)						
Lorimer, Edward S. (See Dox and Lorimer.)						
Lorimer, John A. (See Moore, Charles R., assignor.)						
Lorimer, John H., Philadelphia, Pa. Apparatus for dyeing	418,801	Jan. 7	214	53	50	47
Lorimer, John H., Philadelphia, Pa. Motor	421,736	Feb. 18	1914	503	50	945
Lorimer, John H., Philadelphia, Pa. Drive-chain	422,955	Mar. 11	906	237	50	1317
Lorimer, John H., Philadelphia, Pa. Machine for treating textile or other fibers	426,828	Apr. 29	3652	952	51	746
Lorimer, William T., assignor of one-half to A. and H. Levy, Detroit, Mich. Device for supporting the legs of trousers	431,664	July 8	992	247	52	204
Loring, Abbott, assignor to H. Loring, Boston, Mass. Lined boiler	440,318	Nov. 11	1066	274	53	824
Loring, Harrison. (See Loring, Abbott, assignor.)						
Loring, Silas H., Holden, Mass. Coin-holder	430,531	June 17	2213	544	51	1918
Loron, Paul L., St. Etienne, France. Repeating-pistol	422,135	Feb. 25	2487	657	50	1059
Lorsch, Moses S., New York, N. Y. Carriage-apron	421,737	Feb. 18	1916	504	50	945
Lorton, James K., Beecher City, Ill. Car-door	420,305	Jan. 28	2519	668	50	523
Lortz, George M., Utica, N. Y. Metallic cot-bedstead	431,602	July 8	877	217	52	183
Loose, Jesse A., Titusville, Pa. Radiator	443,531	Dec. 30	3106	799	53	1901
Loser, Charles H., Chicago, Ill. Velocipede	422,087	Feb. 25	2410	637	50	1045
Losere, Christian H. G., New York, N. Y. Telescopic bag	426,829	Apr. 29	3655	952	51	747
Loss, Henry. (See Kleaber, Alonzo B., assignor.)						
Loss, Henry, <i>et al.</i> (See Swegles, John, assignor.)						
Loss, John C., <i>et al.</i> (See Trump, John G., assignor.)						
Loth, Charles E., Troy, N. Y. Underground electric conduit	437,126	Sept. 23	2791	727	52	1931
Lothrop, Emma F., <i>et al.</i> (See Dean, Henry W., assignor.)						
Lothrop, Emma F., <i>et al.</i> (See Dean and Mundell, assignors.)						
Lothrop, George H. (See Coffin, Charles L., assignor.)						
Lotstrom, Arick, and C. M. Biorseth, Superior, Wis. Shaft-support	427,586	May 13	852	214	51	989

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			Spec.	Dr'g	Vol.	Page.
Lott, John B., Kittanning, Pa. Vehicle-wheel	436,565	Sept. 16	1854	488	52	1742
Lott, William F., Riverton, N. J. Toy or game	425,575	Apr. 15	1736	466	51	355
Lotterbos, Augustus. (See Stewart, Marcellus A., assignor.)						
Lottman, Albert C., Houston, Tex. Mosquito-net frame	442,486	Dec. 9	1334	344	53	1530
Lotto, Albert J., Chicago, Ill. Window-mirror	423,434	Mar. 18	1624	{ 426 427 }	{ 50 }	1461
Lottridge, William, Grinnell, assignor of part to M. V. Nicholls and C. H. Cotter, Osage, Iowa. Reaper mechanism	434,048	Aug. 12	889	234	52	939
Loud, Charles A., Winchendon, Mass. Shuttle-driving mechanism for looms	437,215	Sept. 30	2949	771	52	1966
Louden, William, Fairfield, Iowa. Hay-carrier elevating-pulley	434,544	Aug. 19	1682	439	52	1105
Londenslager, Augustus, Columbus, Ohio. Potato-planter	421,738	Feb. 18	1917	504	50	945
Lougee, Amanda M., Boston, Mass. Outer garment	425,439	Apr. 15	1539	413	51	317
Lougee, Frank, <i>et al.</i> (See Smith, Thomas D., assignor.)						
Lougee, George W., <i>et al.</i> (See Smart, Fred A. J., assignor.)						
Lougee, Hayes, <i>et al.</i> (See Smith, Thomas D., assignor.)						
Lougheed, Aaron, Port Arthur, Ontario, Canada. Car-coupling	433,797	Aug. 5	538	139	52	861
Loughridge, Abram. (See Taylor, Charles F., assignor.)						
Loughridge Brake and Car Company. (See Loughridge, Jacob E., assignor.)						
Loughridge, Jacob E., Philadelphia, Pa., assignor, by mesne assignments, to Loughridge Brake and Car Company, of New Jersey. Power-actuated braking mechanism for railway-cars	422,237	Feb. 25	2652	701	50	1090
Loughridge, Jacob E., Philadelphia, Pa., assignor to Loughridge Brake and Car Company, Camden, N. J. Brake mechanism for railway-cars	433,294	July 29	3515	907	52	711
Longhry, William A., Odessa, Nebr. Combined lister and drill	422,603	Mar. 4	356	88	50	1204
Louisville Lithographic Company. (See Richardson, Charles C., assignor.)						
Lounsberry, James A., assignor of one-half to G. A. E. Kohler, Chicago, Ill. Hanging device for electric-arc lamps	442,127	Dec. 9	786	212	53	1424
Loury, Josiah C., Jr., and J. H. Doyle, Huntersville, W. Va. Parcel-handler	426,830	Apr. 29	3656	952	51	747
Lovatt, John, Manchester, county of Lancaster, England. Apparatus for teaching the art of boxing	426,944	Apr. 29	3800	992	51	775
Love, James, Stratford, England. Carburetor	440,486	Nov. 11	1350	349	53	878
Love, James M., Covington, Ky. Pin-and-link holder for cars	433,479	Aug. 5	59	18	52	768
Love, John K. (See Cameron, Elmore, assignor.)						
Love, Matthew S. (See Moore and Love.)						
Love, Robert G., Richmond, Va. Machine for laying off wood-work	439,532	Oct. 28	2891	769	53	568
Lovegrove, Thomas G. (See Foer, Daniel, assignor.)						
Lovegrove, Thomas J., New Egypt, N. J. Gun	441,676	Dec. 2	71	19	53	1275
Lovejoy, Fred E. (See Bachelder and Lovejoy.)						
Lovejoy, Fredric C., Albany, N. Y. Digester	429,692	June 10	888	{ 216 215 }	{ 51 }	1654
Loveland, Byron S., assignor to B. D. Whitney, Winchendon, Mass. Saw-gage	434,284	Aug. 12	1277	331	52	1015
Loveland, Frank O., <i>et al.</i> (See Cutler, James L., assignor.)						
Loveland, Joseph H., <i>et al.</i> (See Bibikov, Nicholas A., assignor.)						
Loveland, Joseph H., <i>et al.</i> (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Loveless, Charles B., Worthington, Minn. Hot-air ventilating heater	432,188	July 15	1804	464	52	366
Loveless, Fred H., Lafayette, Ind. Buckle	429,137	June 3	48	12	51	1481
Lovells, William A., Ozan, Ark. Turning-plow	436,484	Sept. 16	1730	456	52	1720
Lovell, Charles W. (See Bredenberg, Alfred, assignor.)						
Lovell, Clinton. (See Allen and Lovell.)						
Lovell Manufacturing Company. (See Clark, William H., assignor.)						
Lovell, William S., Charleston, W. Va. Animal-trap	441,677	Dec. 2	72	19	53	1276
Lovely, Theodore S., Concord, N. H. Coal-hod	425,440	Apr. 15	1539	413	51	317
Loving, William C., Taunton, Mass. Cut marker for warp sizing and drying machines	432,535	July 22	2327	601	52	474
Loving, William C., Taunton, Mass. Protecting manufacturers of cloth against loss of cloth in weaving	432,536	July 22	2330	601	52	475
Lovett, Tazewell, and E. H. Purcell, Round Hill, Va.; said Purcell assignor to said Lovett. Harness	437,159	Sept. 23	2865	744	52	1943
Loving, Christopher. (See Blume and Loving.)						
Lovins, Wesley C. (See Benford, William H., assignor.)						
Lovold, John M., Liverpool, England. Deck-seat for ships	429,928	June 10	1241	308	51	1721
Low, Abbot A. (See Johnson and Low.)						
Low, Abbot A., Brooklyn, N. Y. Combination implement	419,268	Jan. 14	930	246	50	198
Low, Abbot A., Brooklyn, N. Y. Twine-cutter	419,269	Jan. 14	931	246	50	198
Low, Abbot A., Brooklyn, N. Y. Pliers	419,270	Jan. 14	932	247	50	199
Low, Abbot A., Brooklyn, N. Y. Twine-cutter	419,271	Jan. 14	933	247	50	199
Low, Abbot A., Brooklyn, N. Y. Pliers	419,272	Jan. 14	934	247	50	199
Low, Abbot A., Brooklyn, N. Y. Twine-cutter	419,273	Jan. 14	936	247	50	199
Low, Abbot A., Brooklyn, N. Y. Device for holding and manipulating tickets, &c.	439,784	Nov. 4	230	59	53	653
Low, Abbot A., Brooklyn, N. Y. Device for holding and manipulating tickets, &c.	439,785	Nov. 4	231	60	53	654
Low, Abbot A., Brooklyn, N. Y. Holder for tickets, cards, &c.	439,786	Nov. 4	234	60	53	654
Low, Everett M., assignor to Emerson, Low & Barber Company, Worcester, Mass. Apparatus for feeding paper	435,100	Aug. 26	2577	680	52	1283
Low, Hamilton F. (See Taber and Low.)						
Low, James E., Chicago, Ill. Artificial denture	443,144	Dec. 23	2468	631	53	1767
Low, Joel B., San Francisco, Cal. Railway-car	429,216	June 3	169	40, 41	51	1503
Low & Rewell Manufacturing Company. (See Webster, Albert B., assignor.)						
Low, Robert, Woolwich, England. Hardening or tempering steel projectiles	442,065	Dec. 2	691	186	53	1397
Lowden, John D. (See Peters, Mahlon, assignor.)						
Lowe, Austin, Minneapolis, Kans. Type-writing machine	441,880	Dec. 2	392	{ 103 104 }	{ 53 }	1342
Lowe, Francis A. (See Noll and Lowe.)						
Lowe, George. (See Parsons and Lowe.)						
Lowe, Harry, Montpelier, Vt. Muzzle for horses	432,317	July 15	2006	513	52	402
Lowe, John M., Butler, Ind. Regulator for windmills	442,487	Dec. 9	1336	{ 344 345 }	{ 53 }	1531
Lowe, Robert E., Jamaica, N. Y. Pattern for drawers	430,532	June 17	2214	545	51	1919
Lowe, William S., Lima, Ohio, assignor to American Straw Board Company, Chicago, Ill. Egg-tray machine	424,068	Mar. 25	2573	688	50	1647
Lowell, Charles A. (See Le Roy and Lowell.)						
Lowell, James E., assignor of one-half to E. L. Youngblood, Boonville, Ind. Hedge-trimmer	424,803	Apr. 1	574	152	51	112
Lowell, John B., Baltimore, Md. Steering-engine	420,162	Jan. 28	2288	606	50	482
Lowell Machine Shop. (See Canning, William P., assignor.)						
Lowell Machine Shop. (See Penney, Loren W., assignor.)						
Lowenthal, Marcus, New York, N. Y. Thread-measuring attachment for sewing-machines	423,786	Mar. 18	2145	566	50	1559

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Lower, Martin L. (See Davis and Lower.)						
Lowery, John H., Wilson, Mich. Register for grain-measures.....	441,678	Dec. 2	72	20	53	1276
Löwit & Co. (See Richter, Karl, assignor.)						
Lowrance, Rufus N. (See Jones, William F., assignor.)						
Lowrey & Co., J. S. (See Campbell, John M., assignor.)						
Lowrey, John H., Nevada, Mo. Washing-machine.....	440,774	Nov. 18	1828	471	53	976
Lowrie, William, C. J. Hall, and H. W. Kelle, London, county of Middlesex, England.} Method of and apparatus for measuring alternating currents of electricity.....	424,891	Apr. 1	709	{ 188 189 }	{ 51	137
Lowry, Charles A. (See Cowgill, Christian D., assignor.)						
Lowry, George, Northampton, county of Northampton, England. Stone-crusher.....	431,069	July 1	59	14, 15	52	13
Lowry, George A., Des Moines, Iowa. Machine for making twine.....	436,908	Sept. 23	2472	645	52	1868
Lowry, George A., assignor to Alliance Twine Company, Des Moines, Iowa. Grain-binder.	443,589	Dec. 30	3218	827	53	1923
Lowry, Joseph L., Pittsburg, Pa. Steam pumping-engine.....	431,371	July 1	519	{ 129 130 }	{ 52	104
Loyd, Samuel, New York, N. Y. Pipe branch.....	419,694	Jan. 21	1563	419	50	331
Loynd, Richard B., Worcester, Mass. Manufacturing Wilton and Moquette carpets.....	436,529	Sept. 16	1784	471	52	1730
Lozier & Yost Bicycle Manufacturing Company. (See Hodgman, Frank S., assignor.)						
Lozier & Yost Bicycle Manufacturing Company. (See Yost and Moore, assignors.)						
Lozon, Joseph. (See Yarger, George E., assignor.)						
Lübbecke, Wilhelm, Berlin, Germany. Tension and compression rod for structure purposes.....	442,488	Dec. 9	1338	345	53	1531
Lubbers, John H., New Castle, Pa. Window-glass leer.....	427,882	May 13	1310	331	51	1077
Lucas, Austin H., assignor of one-half to A. T. Rowand, Pittsburg, Pa. Arc lamp.....	432,949	July 22	2984	766	52	598
Lucas, Charles E. (See Godfrey, Leake, and Lucas.)						
Lucas, John H. (See Watkins, William D., assignor.)						
Lucas, Joseph, New York, N. Y. Screw-driver.....	428,012	May 13	1501	381	51	1115
Lucas, Raymond A. (See Phelps and Lucas.)						
Lucas, Samuel, Poquetanuck, Conn. Artificial hand.....	429,243	June 3	204	50, 51	51	1511
Luce, Bartlett P., Boston, Mass. Wick-raiser.....	435,663	Sept. 2	449	119	52	1461
Luce, Charles J., Niantic, Conn. Car-brake and starter.....	438,694	Oct. 21	1557	419	53	309
Luce, Edwin W., Bradford, Pa. Oil can and filler.....	420,812	Feb. 4	558	143	50	670
Luce, Edwin W., Bradford, Pa. Gage-cock.....	425,441	Apr. 15	1540	413	51	317
Luce, Edwin W., Bradford, Pa. Valve.....	425,442	Apr. 15	1542	413	51	318
Luce, Edwin W., Bradford, Pa. Safety car-brake.....	425,443	Apr. 15	1544	414	51	318
Luce, William B., assignor to P. Mason & Co., Boston, Mass. Photographic camera.....	424,564	Apr. 1	199	54	51	41
Luce, William B., Brookline, assignor to J. H. Thurston, Boston, Mass. Photographic shutter.....	429,929	June 10	1242	308	51	1721
Lucht, Wilhelm. (See Wesselmann, Bruno, assignor.)						
Luchterhand, Jacob C., assignor of one-third to J. A. Wieck, Boston, Mass. Tacker or nailer.....	422,815	Mar. 4	652	167	50	1262
Luckenbach, Frederic A., New York, N. Y. Apparatus for saving gold, silver, and quick-silver.....	425,545	Apr. 15	1692	452	51	347
Lucking, Alfred, et al. (See Harris, Thomas, assignor.)						
Lüde, Carl v., Arbon, Switzerland. Petroleum or similar motor.....	435,439	Sept. 2	90	26	52	1392
Lüde, Carl v., Arbon, Switzerland. Pump.....	437,216	Sept. 30	2951	771	52	1967
Ludewig, Carl A., Pittsville, Wis. Horse-collar.....	436,875	Sept. 23	2424	632	52	1859
Ludington Company. (See Ludington, Frank J., assignor.)						
Ludington, Frank J., Waterbury, assignor to Ludington Company, New Haven, Conn.} Cigarette-machine.....	439,963	Nov. 4	507	{ 133 134 135 136 }	{ 53	707
Ludlow, Edgar S. (See Ludlow, William E. and E. S.)						
Ludlow, Erastus D., Chicago, Ill. Trimmer for sewing-machines.....	430,134	June 17	1579	393	51	1796
Ludlow, Rodney F., Springfield, Ohio. Apparatus for decarbonizing and purifying iron.....	420,078	Jan. 28	2151	569	50	456
Ludlow, Rodney F., Springfield, Ohio. Converter.....	423,612	Mar. 18	1877	495	50	1507
Ludlow, Washington I., assignor to Cleveland Window Shade Company, Cleveland, Ohio. Combined carpet stretcher and tacker.....	425,137	Apr. 8	1081	286	51	218
Ludlow, Washington I., assignor to Cleveland Window Shade Company, Cleveland, Ohio. Machine for making staples.....	439,077	Oct. 21	2165	581	53	426
Ludlow, William E. and E. S., Toledo, Ohio. Dumping-bucket.....	424,989	Apr. 8	860	228	51	175
Ludlum, William, and G. Stevens, Mount Vernon, N. Y. Game apparatus.....	424,321	Mar. 25	2942	784	50	1719
Ludwick, Jay J., Charlotte, assignor of one-half to A. F. Peake, Jackson, Mich. Two-wheeled vehicle.....	429,197	June 3	138	34	51	1497
Ludwig, Adolf. (See Leise, Conrad, assignor.)						
Ludwig, John C., assignor of one-half to A. C. Paulsell, M. Corcoran, San Francisco, T. C. Coogan and H. T. Compton, Oakland, Cal. Telephone.....	428,174	May 20	1732	438	51	1168
Ludwig, Mary, Bucyrus, Ohio. Chopping-knife.....	443,600	Dec. 30	3219	828	53	1923
Ludwig, Roscoe F., Chicago, Ill. Crown-anchor.....	421,947	Feb. 25	1219	582	50	1010
Lueth, John F. (See Lueth, John H. and J. F.)						
Lueth, John H. and J. F., Kankakee, Ill. Running-gear for vehicles.....	434,350	Aug. 12	1369	358	52	1035
Luetke, Oscar, Brooklyn, N. Y. Adjustable lamp-standard.....	439,411	Oct. 28	2712	723	53	534
Lufkin, Harvey L. (See Serrell and Lufkin.)						
Lugrin, Horatio N. H., Worcester, assignor to Cutter Tower Company, Boston, Mass. Letter-sheet.....	429,575	June 3	714	173	51	1609
Lührig, Carl, Dresden, Saxony, Germany, and J. C. Cunningham, Glasgow, Scotland. Separating and cleansing coal and other minerals.....	427,433	May 6	620	{ 155 156 }	{ 51	934
Lutink & Sons Manufacturing Company, William. (See Lutink, William, assignor.)						
Lutink, William, assignor to W. Lutink & Sons Manufacturing Company, Milwaukee, Wis. Door-hanger.....	438,111	Oct. 7	678	184	53	131
Lukens, William J. (See Spaulding, George H., assignor.)						
Lull, Newton, Chicago, Ill. Book-binding.....	436,042	Sept. 9	1032	268	52	1580
Lum, George B., Stamford, Conn. Saw-greaser.....	429,040	May 27	3057	788	51	1443
Lum, George E. (See McManes and Lum.)						
Lum, Henry B., Red Bank, N. J. Spiral-screw button.....	419,206	Jan. 14	841	221	50	181
Lumaghi, Octavius, St. Louis, Mo. Apparatus for the reduction of argentiferous ores.....	425,813	Apr. 15	2096	560	51	426
Lumbard, G. B. (See Maggard, James H., assignor.)						
Lumbard, William. (See Pressley and Lumbard.)						
Lumbert, Daniel, Centerville, Mass. Cranberry-picker.....	433,177	July 29	3351	866	52	677
Lumbert, Daniel, Centerville, Mass. Cranberry-picker.....	433,178	July 29	3352	867	52	677
Lumbert, Daniel, Centerville, Mass. Cranberry-picker.....	433,179	July 29	3354	867	52	677
Lumbe, George H., St. Louis, Mo. Hat-hanger.....	435,312	Aug. 26	2900	768	52	1343
Lumley, Edwin J., Washington, D. C., assignor to G. McGovern, Richmond, Va. Toy horse-race machine.....	432,012	July 29	3091	{ 793 794 }	{ 52	626
Lumley, George C., Philadelphia, Pa. Thill-coupling.....	420,514	Feb. 4	123	31	50	587

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Lumley, William, Chicago, Ill. Bracket for ink-wells.....	427,883	May 13	1311	331	51	1077
Lumley, William, Chicago, Ill. Temporary binder.....	432,537	July 22	2331	602	52	475
Lumm, John J. (See Blandon, Ross, and Lumm.)						
Lund, Edward, Jr., Stretford, England. Pulsometer.....	443,532	Dec. 30	3107	800	53	1901
Lund, George R. (See Weigle, Gotthilf F., assignor.)						
Lund, Oliver, assignor to Johnson & Lund, Philadelphia, Pa. Artificial tooth.....	422,350	Feb. 25	2834	747	50	1124
Lund, William (See Thompson and Lund.)						
Lundborg, Charles G., New York, N. Y. Spring-scales.....	422,238	Feb. 25	2656	701	50	1091
Lundborg, Charles G., New York, N. Y. Snap-hook.....	437,380	Sept. 30	3232	840	52	2018
Lundell, Robert, New York, N. Y. Regulator for electric generators and motors.....	437,704	Oct. 7	34	10, 11	53	10
Lundgren, Frans, Stockholm, Sweden. Machine for making boxes.....	434,545	Aug. 19	1684	440 441	52	1105
Lundholm, Carl O., and J. Sayers, Stevenston, Scotland. Manufacture of explosives.....	438,816	Oct. 21	1766		53	350
Lundin, Fred., Jr., et al. (See Alson, John, assignor.)						
Lundin, Titus, et al. (See Alson, John, assignor.)						
Lundquist, Karl J. F., Chicago, Ill. Lock.....	434,980	Aug. 26	2412	638	52	1253
Lundstrom, Carl J. (See Wahlin, Lundstrom, and Collins.)						
Lungren, Charles M., Brooklyn, N. Y. Incandescent gas-light.....	439,882	Nov. 4	381	99	53	681
Lunkenheimer Brass Manufacturing Company. (See Lunkenheimer, Edmund, assignor.)						
Lunkenheimer, Edmund, Cincinnati, Ohio. Advertising catalogue.....	430,430	June 17	2059	507	51	1890
Lunkenheimer, Edmund, assignor to Lunkenheimer Brass Manufacturing Company, Cincinnati, Ohio. Straight-way valve.....	426,539	Apr. 29	3207	841	51	600
Lunkenheimer, Edmund, assignor to Lunkenheimer Brass Manufacturing Company, Cincinnati, Ohio. Oil-cup.....	435,607	Sept. 2	345	96	52	1441
Lunquist, Charles W. (See Wyckoff, Lunquist, and Smith.)						
Lupton, David J., Jerusalem, Ohio. Car-platform.....	433,295	July 29	3516	907	52	711
Lupton, David J., Jerusalem, Ohio. Combined car and air-brake coupling.....	433,296	July 29	3517	907 908	52	711
Lupton, Nathan E. (See Miller and Lupton.)						
Lutley, Charles W., Maysville, Ky. Railway-puzzle.....	442,445	Dec. 9	1269	328	53	1517
Luscomb, Abijah H., Fall River, Mass. Weft-fork for looms.....	421,948	Feb. 25	2220	582 583	50	1010
Luscomb, Henry H., assignor to C. T. Lee and Gould & Watson Company, Boston, Mass. Trolley-wire hanger.....	442,446	Dec. 9	1270	328	53	1517
Luscombe, Thomas T., Carthage, Mo. Blotting-pad.....	441,498	Nov. 25	3032	781	53	1212
Luse, Daniel F., Centre Hall, Pa. Top for carriages.....	436,632	Sept. 16	1955	514	52	1761
Lushey, George G., Jr. (See Woodmansee and Klotz, assignors.)						
Lusk, Lewis N., Kalamazoo, Mich. Detachable bail and ear therefor.....	443,100	Dec. 23	2396	611	53	1754
Lusuardi, Amilcare, and A. Falco, Turin, Italy. Registering-manometer.....	426,029	Apr. 22	2448	647	51	499
Luthe, John W., and A. E. Jeavons, Cleveland, Ohio; said Jeavons assignor of one-half to said Luthe. Automatic electric annunciator.....	435,440	Sept. 2	92	26	52	1393
Luthe, John W., and A. E. Jeavons, Cleveland, Ohio; said Jeavons assignor of one-half to said Luthe. Electrical annunciator.....	443,834	Dec. 30	3598	925	53	1996
Luther, Benjamin G., assignor to A. F. and V. F. Prentice, Worcester, Mass. Drilling-machine.....	438,014	Oct. 7	525	147 148	53	100
Luther, James H., Olean, N. Y. Hose-reel attachment.....	427,334	May 6	468	120	51	904
Luther, James H., Olean, N. Y. Hose-reel attachment.....	442,447	Dec. 9	1271	328 329	53	1517
Luther, Justus P., Berlin, Wis. Cot.....	420,813	Feb. 4	560	143	50	671
Luther, Robert L. (See Lane, George G., assignor.)						
Luthman, Charles H. (See Messner and Luthman.)						
Lutton, William J., Paterson, N. J. Shuttle-box-operating mechanism for looms.....	440,487	Nov. 11	1354	350	53	878
Lutwyche, William. (See Valère, James, assignor.)						
Lutz, Ernst. (See Tanner and Lutz.)						
Lutz, Samuel, Marietta, Ill. Tension device for fence-machines.....	436,006	Sept. 9	966	253	52	1567
Lutz, William F., Jr., Brooklyn, N. Y. Door-alarm.....	434,876	Aug. 19	2205	577	52	1207
Luzier, Thomas B. (See Naylor, William H., assignor.)						
Lyddon, Henry. (See Hazen, Lyddon, and Farmer.)						
Lyford, Asa B., et al. (See Hill, Burton W., assignor.)						
Lyford, Francis, Augusta, Me., assignor to W. F. Miller, Boston, Mass. Trunk.....	421,949	Feb. 25	2221	583	50	1010
Lyke, Nathaniel, Williamsport, Pa. Electrical spray and vapor bath.....	421,294	Feb. 11	1278	330	50	815
Lyke, Nathaniel, Williamsport, Pa. Electrical and vapor face-bath.....	443,580	Dec. 30	3190	819 820	53	1917
Lyken, Johan. (See Hammerstad and Lyken.)						
Lyle, William R., Ripon, Wis. Screen-door.....	443,448	Dec. 23	2973	765	53	1866
Lyles, Alexander. (See Crook, Robert N., assignor.)						
Lyles, William O. (See Elliott and Lyles.)						
Lyman, Albert B., Baltimore, Md. Obstetrical forceps.....	441,427	Nov. 25	2020	753	53	1192
Lyman, Moses. (See Crandall, Charles M., assignor.)						
Lyman, Frank, Little Rock, Ark. Package-holder for bicycles.....	441,679	Dec. 2	74	20	53	1276
Lynch, Amos, Eugene City, Oreg. Car-coupling.....	418,732	Jan. 7	111	26	50	24
Lynch, Edward P., Davenport, Iowa. Method of and means for manufacturing metal wheels.....	434,990	Aug. 26	2414	638	52	1253
Lynch, Edward P., Davenport, Iowa. Metal wheel and manufacturing the same.....	439,412	Oct. 28	2713	724	53	534
Lynch, George F., Milwaukee, Wis. Feed-water heater and purifier.....	431,231	July 1	305	75	52	61
Lynch, Harry B., McKeesport, Pa., assignor to E. C. Converse, New York, N. Y. Furnace for coating metal.....	419,695	Jan. 21	1563	419	50	331
Lynch, John, Washington, D. C. Sewer.....	429,041	May 27	3058	788	51	1444
Lynch, John, Washington, D. C. Conduit for electric or cable railways.....	432,416	July 15	2137	549 550	52	428
Lynch, John, Washington, D. C. Terra-cotta construction.....	441,013	Nov. 18	2209	571	53	1049
Lynch, John, North Muskegon, Mich. Refuse-burner.....	429,693	June 10	890	216	51	1654
Lynch, Patrick H., Kenyon, R. I. Adjustable tug-strap holder for power-looms.....	419,336	Jan. 14	1043	276	50	226
Lynch, Timothy J., Danvers, Mass. Means for hanging electric lights.....	441,248	Nov. 25	2635	683	53	1137
Lynde, Frederick C., Manchester, county of Lancaster, England. Portable table or desk.....	425,814	Apr. 15	2098	551	51	426
Lynde, John D., Haddonfield, N. J., assignor to Hancock Inspirator Company, Boston, Mass. Boiler-injector.....	440,488	Nov. 11	1357	350 351	53	879
Lynn, Albert F. (See Sly, John W., assignor.)						
Lynn, James W., New York, N. Y. Feed-bag support for vehicles.....	422,239	Feb. 25	2657	702	50	1092
Lynn, Joseph, Holyoke, Mass. Indicator for elevators.....	435,232	Aug. 26	2762	729	52	1319
Lyon, Alvin S., Lowell, Mass. Mixing-picker.....	435,147	Aug. 26	2646	700	52	1297
Lyon, Charles B., New York, N. Y. Rail-joint.....	421,950	Feb. 25	2222	583	50	1010
Lyon, Edward H., Needham, Mass. Pencil-sharpener.....	423,787	Mar. 18	2146	566 567	50	1559

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Lyon, Fremont E., Akron, Ohio. Rubber tire for vehicles	418,982	Jan. 7	511	127	50	108
Lyon, Fremont E., Akron, Ohio. Baby-jumper	420,948	Feb. 11	783	203	50	721
Lyon & Healy. (See Durkee, George B., assignor.)						
Lyon, Henry W. (See Gilbert, Henry W., assignor.)						
Lyon, Henry W., Bridgeport, Conn. Making button-strip blanks	434,546	Aug. 19	1689	{ 441 442 }	52	1106
Lyon, Henry W., Bridgeport, Conn. Securing button-strips to corsets	434,547	Aug. 19	1690	442	52	1106
Lyon, Henry W., and L. Lillingston, Bridgeport, Conn.; said Lillingston assignor to said Lyon. Making button-hole strips	439,413	Oct. 28	2714	724	53	534
Lyon, James W., Brooklyn, N. Y. Self-lighting gas-burner	423,525	Mar. 18	1760	463	50	1487
Lyon, Job P., et al. (See Prescott, George P., assignor.)						
Lyon, Samuel, Chicago, Ill. Truck	438,015	Oct. 7	527	148	53	100
Lyon, William M., Union Bridge, Md. Support for hammocks or beds	438,630	Oct. 21	1452	392	53	291
Lyons, Cornelius J. (See Smith and Lyons.)						
Lyons, George W., et al. (See Lyons, William H., assignor.)						
Lyons, William H., assignor to W. H., Jr., and G. W. Lyons, Chicago, Ill. Breech-loading ordnance	433,013	July 29	3094	794	52	626
Lysgård, Ingvald A. L., Bergen, Norway. Device for detaching horses	439,355	Oct. 28	2627	{ 700 701 }	53	518
Lyte, Farnham M., London, county of Middlesex, England, assignor to Electric Car Company of America, Philadelphia, Pa. Electrode for secondary batteries	422,308	Feb. 25	2763	.....	50	1110
Lyth, John, New York, N. Y. Fuel-receptacle	442,382	Dec. 9	1169	304	53	1496
Lytle, Albert E., Chicago, Ill. Fire-place heater	425,103	Apr. 8	1026	274	51	207
Lytle, Alton A. (See Linn and Lytle.)						
Lytle, Felton M., Boston, Mass., assignor to A. R. Baldwin, trustee, Charlotte, N. Y. Mold for casting	422,055	Feb. 25	2367	626	50	1038
Maag, Samuel. (See Stanton, Charles R., assignor.)						
Mabal, Francis, administratrix. (See Mabel, Charles.)						
Mabel, Charles, deceased; F. Mabal, administratrix, and assignor to J. A. C. Kissock, Fort Collins, Colo. Carpet-stretcher	426,030	Apr. 22	2449	647	51	499
Mabie, Langford C., Richmond, Va. Spark-arrester	429,138	June 3	49	12	51	1481
MacCarthy, Daniel F., St. Paul, Minn. Seal-lock	421,951	Feb. 25	2223	583	50	1010
MacCarthy, Daniel F., St. Paul, Minn. Car-coupling	441,499	Nov. 25	3032	781	53	1212
MacCarthy, Daniel F., St. Paul, Minn. Seal-lock	441,770	Dec. 2	224	58	53	1307
MacCormack, John. (See Patterson, MacCormack, and Van Zile.)						
MacDonald, Archibald J., North Tiverton, R. I., assignor to H. E. Townsend, trustee, Boston, Mass. Galvanic battery	428,116	May 20	1654	419	51	1154
MacDonald, Archibald J., North Tiverton, R. I., assignor to H. E. Townsend, trustee, Boston, Mass. Telephone-transmitter	438,631	Oct. 21	1454	392	53	291
MacDonald, Archibald J., North Tiverton, R. I., assignor to H. E. Townsend, trustee, Boston, Mass. Telephone	438,632	Oct. 21	1455	393	53	291
MacDonald, Archibald J., North Tiverton, R. I., assignor to H. E. Townsend, trustee, Boston, Mass. Battery-zinc	440,173	Nov. 11	832	.....	53	781
MacDonald, Charles A., Chicago, Ill. Gas-pump	421,414	Feb. 18	1454	376	50	855
MacDonald, Charles A., assignor to Hercules Iron Works, Chicago, Ill. Precipitator for impurities in exhaust-steam	440,715	Nov. 18	1728	443	53	958
MacDonald, Charles A., assignor to Hercules Iron Works, Chicago, Ill. Flexible connection for piston and pitman rods	443,860	Dec. 30	3626	934	53	2002
MacDonnell, John T. F., Holyoke, Mass. Writing-tablet	437,399	Sept. 30	3246	846	52	2023
MacEvvitt, John C., Brooklyn, N. Y. Fluid-controller	425,234	Apr. 8	1231	327	51	249
MacFarlane, James, Malden, Mass. High and low water alarm for steam-boilers	431,271	July 1	362	90	52	74
MacFarlane, James, Malden, Mass., assignor to Ligniform Tubing Company, Portland, Me. Preparing strips of wood to be converted into cylinders	422,309	Feb. 25	2764	728	50	1111
MacFarlane, Strang & Co. (See Bonna, Aimé, assignor.)						
MacKellar, Robert, Peekskill, N. Y. Cooking-stove oven	433,480	Aug. 5	60	18	52	768
MacKenzie-Hughes, Edward W., Chicago, Ill. Spray-diffuser	434,066	Aug. 12	925	243	52	947
MacKenzie-Hughes, Edward W., Chicago, Ill., assignor to Fox Solid Pressed Steel Company, of Illinois. Bolster-beam journal	421,937	Feb. 25	2206	578	50	1007
MacKenzie-Hughes, Edward W., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Bolster-beam	423,476	Mar. 18	1686	445	50	1473
MacKenzie-Hughes, Edward W., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Locomotive front plate	423,517	Mar. 18	1744	{ 459 460 }	50	1484
MacKenzie-Hughes, Edward W., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Ore-car	425,517	Apr. 15	1651	441	51	339
MacKenzie-Hughes, Edward W., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Locomotive-lamp bracket	431,603	July 8	878	218	52	183
MacKenzie-Hughes, Edward W., Chicago, Ill., assignor to himself and E. N. Dickerson, New York, N. Y. Car-journal box	436,355	Sept. 16	1515	395	52	1680
MacLachlan, William F., Chicago, Ill. Slate-washer	435,069	Aug. 26	2534	669	52	1276
MacLaurin, George S., assignor of one-half to J. H. Crankshaw, Philadelphia, Pa. Scaffold-securing device	427,180	May 6	239	62	51	858
MacMaster, Marion A., Utica, N. Y. Electro-medical chair	424,012	Mar. 25	2502	{ 664 665 }	50	1634
MacMillan, David F., et al. (See Arnold, Samuel S., assignor.)						
MacMullen, Dickson D. (See Phelps, Lucius J., assignor.)						
MacMurtrie, William, and E. H. Homsher, Philadelphia, Pa. Tool-holder	427,335	May 6	469	120	51	904
MacQuisten, William D., New York, N. Y. Electric-railway system	429,199	June 3	141	34	51	1498
MacQuisten, William D., New York, N. Y., assignor to C. L. Edgar, trustee, Boston, Mass. Continuously-operated electric motor	429,314	June 3	323	76	51	1532
MacQuisten, William D., New York, N. Y., assignor to C. L. Edgar, trustee, Boston, Mass. Insulator for electric railways	429,315	June 3	325	77	51	1532
MacQuisten, William D., New York, N. Y., assignor to C. L. Edgar, trustee, Boston, Mass. Tension-bracket for trolley-wires	429,316	June 3	327	77	51	1532
Macbeth, George A. (See Hamm, Charles, assignor.)						
Macbeth, George A., Pittsburg, Pa. Machine for grinding glassware	426,671	Apr. 29	3406	894	51	699
Macdonald, Daniel W., and J. G. Flower, Boston, assignors to C. J. Bailey, Newton, and M. S. Lawrence, Boston, Mass. Disinfectant	423,875	Mar. 18	2279	.....	50	1585
Macdonald, James, assignor to Webster & Comstock Manufacturing Company, Chicago, Ill. Shaft-collar	422,025	Feb. 25	2321	613	50	1029
Macdonald, Peter J., Boston, Mass. Refrigerating apparatus	429,198	June 3	130	34	51	1407
Macdonald, Robert, New York, N. Y. Inhaling apparatus	427,178	May 6	237	61	51	858
Macdonald, Robert, New York, N. Y. Inhaler	427,179	May 6	238	62	51	858
Macdonald, William R., Allegheny, Pa. Device for medicating air	441,573	Nov. 25	3144	808	53	1234
Macdonald, William R., Allegheny, Pa. Combined heater and ventilator	441,574	Nov. 25	3146	809	53	1234

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Macdonough, Richard M. (See Groshon, John A., assignor.)						
Macdougald, George D. (See Baxter and Macdougald.)						
Macdougald, George D. (See Sturrock and Macdougald.)						
Mace, Garwin A., Mayville, Wis. Lime-kiln	436,426	Sept. 16	1638	431	52	1702
Mace, Stewart R., Moulton, Iowa. Barrel-stand	420,306	Jan. 28	2520	668	50	524
Mace, Stewart R., Moulton, Iowa. Liquid-holding vessel	428,013	May 13	1502	381	51	1115
Macfarlane, William W., assignor to Quaker City Dye Works Company, Philadelphia, Pa. Machine for cutting fabrics	424,425	Mar. 25	3129	831	50	1756
Mack, Andrew C., Portland, Oreg. Millinery hat or bonnet box	443,397	Dec. 23	2897	745	53	1852
Mack, David, Dana, Ind. Buggy-top lowerer	442,812	Dec. 16	1886	486	53	1648
Mack, Frank D., Chicago, Ill. Perforator for automatic telegraphing	439,164	Oct. 28	2302	618	53	457
Mack, Henry L., Ellensburg, Wash. Harrow	421,739	Feb. 18	1918	504	50	945
Mack, Henry L., Ellensburg, Wash. Harrow	440,047	Nov. 4	639	170	53	733
Mack, Hugo S., et al. (See Weigel, Robert, assignor.)						
Mack, John, Grand Rapids, Mich. Platform for wagons	441,881	Dec. 2	395	104	53	1342
Mack, John G. D. (See Jones and Mack.)						
Mack, John N., et al. (See Laguire, William H., assignor.)						
Mack, Louis S., and B. Woodward, New York, N. Y. Holder for stereotype-plates	423,332	Mar. 11	1476	387	50	1424
Mack, William B., East Boston, Mass. Injector	439,356	Oct. 28	2628	701	53	518
Mackay, William H. (See Cooke and Mackay.)						
Mackee, James F., Pittsburg, Pa. Stove or range	423,613	Mar. 18	1879	495	50	1508
Mackennon, Duncan T. H. (See Little, Addison M., assignor.)						
Mackenzie, George W., Asbury Park, N. J. Hasp-lock	438,554	Oct. 14	1332	361	53	263
Mackenzie, James A., Minneapolis, Minn. Musical instrument	440,601	Nov. 11	1541	397	53	913
Mackenzie, James A., Minneapolis, Minn., assignor to J. J. Comstock, A. W. Storms, and J. H. Willard, Chicago, Ill. Hinge-mortising machine	437,657	Sept. 30	3633	949	52	2101
Mackenzie, James U., assignor to Gamewell Fire Alarm Telegraph Company, New York, N. Y. Electrical signaling apparatus	426,621	Apr. 29	3331	873 874	51	685
Mackenzie, Lydia A., San Francisco, Cal. Crib	430,294	June 17	1859	456 457	51	1850
Mackenzie, Philip W., assignor to Fuel Gas and Light Improvement Company of America, New York, N. Y. Apparatus for the manufacture of illuminating-gas	435,070	Aug. 26	2536	669 670	52	1276
Mackenzie, Philip W., assignor to Fuel Gas and Light Improvement Company of America, New York, N. Y. Manufacturing illuminating-gas	435,071	Aug. 26	2538	670	52	1276
Mackey, Samuel W., Baltimore, Md. Hoof-expander	426,831	Apr. 29	3657	952	51	747
Mackie, David, Philadelphia, Pa. Clutch	438,077	Oct. 7	629	171	53	121
Mackin, Stephen S., Worcester, Mass. Curtain-roll support	429,930	June 10	1244	308	51	1722
Mackintosh, Edward D., Brooklyn, N. Y. Boring and turning mill	440,319	Nov. 11	1067	274	53	824
Mackintosh, John S. W., Saratoga, N. Y., assignor to C. H. Emerson, Burlington, Vt. Coasting-toboggan	425,138	Apr. 8	1083	287	51	218
Macloskie, Charles H., Allegheny, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Ground-detector	428,050	May 13	1555	393	51	1124
Macmillan, James R., Chicago, Ill. Suspender-buckle	422,088	Feb. 25	2411	638	50	1045
Macmillan, James R., Chicago, Ill. Clasp	426,672	Apr. 29	3407	895	51	699
Macnair, Thomas M., and F. Wood, Brooklyn, N. Y. Tube-machine	443,601	Dec. 30	3219	828 829	53	1923
Macnamar, William, assignor of one-half to W. H. Hubbard, Indianapolis, Ind. Coin-operated receptacle	443,368	Dec. 23	2855	734	53	1844
Macnamee, Richard S. (See Quimby and Macnamee.)						
Macneill, Telford, London, England. Means for effecting a uniform supply of oil, &c	429,042	May 27	3059	788 789	51	1444
Macphail, James, Rockford, Ill. Mower	423,435	Mar. 18	1625	427	50	1461
Macwhinnie, John T. (See Fergen and Macwhinnie.)						
Macy, James, Stranghn, Ind. Gate-hinge	440,320	Nov. 11	1068	274	53	824
Macy, Josiah H., Harrison, assignor to himself, and E. N. Dickerson, New York, N. Y. Preparing hydrocarbons and other oils for burning	443,225	Dec. 23	2625	674 675	53	1800
Madden, Edward, Amsterdam, N. Y. Marking-instrument	426,622	Apr. 29	3334	874	51	686
Madden, Horace B., assignor of one-half to J. B. Thomas, Newark, Ohio. Checkrein-book	439,357	Oct. 28	2630	701	53	518
Madden, Joseph, Providence, R. I. Automatic fire-extinguisher	426,832	Apr. 29	3659	953	51	747
Madden, Michael, Harrisburg, Pa. Car-brake	438,381	Oct. 14	1081	295	53	213
Maddock, William H., Pittsburg, Pa. Rolling-mill appliance	439,078	Oct. 21	2168	582 583	53	427
Maddocks, John. (See Whitehead, Walter C., assignor.)						
Maddox, James M., Birmingham, Ala. Transom-lifter	439,964	Nov. 4	515	136	53	708
Maddox, John W., Jamestown, N. Y. Device for brazing	423,614	Mar. 18	1881	496	50	1508
Maddox, Joshua P., Portland, Me. Woven fabric for machine-beltting	427,700	May 13	1017	256	51	1022
Maddox, Robert E. (See Turner and Taylor, assignors.)						
Madill, Thomas P., Albany, Oreg. Fence-making machine	436,180	Sept. 9	1246	325	52	1617
Madison, Frank S., Grand Rapids, assignor of one-half to W. E. Hoyt, Greenville, Mich. Wood-working machine	428,051	May 13	1556	394	51	1125
Madison, Frank S., assignor of one-half to J. B. and E. J. Ware, Grand Rapids, Mich. Rotary cutter	427,001	Apr. 29	3888	1015	51	792
Madison, Frank S., assignor of one-half to J. B. Ware and F. H. Olin, Grand Rapids, Mich. Matcher-head	439,079	Oct. 21	2173	584	53	428
Madison, William A., Cleveland, Ohio. Cash-book	433,243	July 29	3453	891	52	698
Madison, William A., Cleveland, Ohio. Abstract-book	433,249	July 29	3453	891	52	698
Madsen, Christian, Chicago, Ill. Bridge-gate	433,206	July 29	3392	876 877	52	685
Madsen, Loren C., Sleepy Eye, Minn. Photograph-mounting machine	434,451	Aug. 19	1545	402 403	52	1076
Madson, Cornelius, Manitowoc, Wis. Harvester	421,740	Feb. 18	1919	504	50	946
Magoo, George J., et al. (See Barry, Charles, assignor.)						
Magee, George J., et al. (See Coolbaugh and Hooper, assignors.)						
Mageuis, James P., North Adams, Mass. Phonograph	432,886	July 22	2877	737	52	580
Magerhans & Brokaw. (See Beals, Leonard S., assignor.)						
Magers, William S., and F. P. Parker, Goshen, Ind. Split pulley	439,020	Oct. 21	2079	557	53	410
Maggard, James H., assignor of one-half to G. B. Lombard, Iowa City, Iowa. Automatic grain-measure	423,876	Mar. 18	2280	602	50	1585
Maggi, Julius, Kempthal, Switzerland. Capsuled condensed food	428,502	May 20	2230	564	51	1265
Magic Introduction Company. (See Koopman and McKenney, assignors.)						
Magic Introduction Company. (See Koopman and McKenney, assignors.) (Reissue.)						
Magic Introduction Company. (See Nelson, John F., assignor.)						
Magie, James K., Chicago, Ill. Permutation-lock	425,893	Apr. 15	2215	588	51	447

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Magill, Henry A., <i>et al.</i> (See Platt, Albert L., assignor.)						
Maginn, Madison, Chicago, Ill. Automatic water-valve	425,333	Apr. 8	1374	367	51	276
Maginn, Madison, Chicago, Ill. Speed-regulating device	433,529	Aug. 5	126	36	52	781
Maginn, Madison, Chicago, Ill. Device for the development of water-power	439,165	Oct. 28	2304	619	53	457
Magne, Charles A., Haldane, Ill. Car-coupling	442,193	Dec. 9	887	236	53	1443
Magness, William H., Jr., <i>et al.</i> (See Sperry, Fred. W., assignor.)						
Magnetic Separator Company. (See Ball and Norton, assignors.)						
Magnolia Anti-Friction Metal Company. (See Singley, Samuel, assignor.)						
Magoun, James A. H. (See Gemmell, Robert, assignor.)						
Magraw, William R., Strickersville, Pa. Horse-blanket fastener	441,249	Nov. 25	2636	683	53	1137
Magruder, John C., assignor of one-half to R. S. Crandall, Hillsborough, Ohio. Cherry-seeder	418,733	Jan. 7	113	27	50	24
Maguire, Patrick H., New York N. Y., Pocometer	439,732	Nov. 4	154	40	53	638
Maguire, Thomas T. (See Rebok, Maguire, and Rebok.)						
Mahady, John, Cambridge, assignor of one-half to E. Denton, Boston, Mass. Box-strap	432,538	July 22	2334	602	52	475
Mahaffey, James B., Baltimore, Md. Lumber-assorter	436,934	Sept. 23	2378	674	52	1888
Mahaffie, Andrew H., and P. Kesling, Logansport, Ind. Cornstalk-cutter	430,664	June 24	2445	596	51	1971
Maher, James H., Slingerlands, N. Y. Buckle	427,776	May 13	1143	287	51	1047
Maher, John L., <i>et al.</i> (See Griffin, Patrick, assignor.)						
Maher, John L., <i>et al.</i> (See Griffin, Patrick, assignor.) (Reissue.)						
Maher, William E., Johnson City, Tenn., assignor of one-half to W. Toothe, New York, N. Y. Air-brake	433,737	Aug. 5	433	111	52	840
Mahin, Milton F., Monett, Mo. Hanger for rain-water pipes	441,428	Nov. 25	2921	753	53	1192
Mahin, Milton F., Monett, Mo. Eaves-trough hanger	441,429	Nov. 25	2922	753	53	1193
Mahnken, Henry, assignor to Commercial Telegram Company, New York, N. Y. Printing-telegraph receiver	422,604	Mar. 4	357	88, 89	50	1204
Mahon, J. J. (See Deane, William H., assignor.)						
Mahoney, Dennis C., Somerville, Mass. Hog-hoisting machine	441,311	Nov. 25	2742	709	53	1156
Mahoney, Edward S., assignor of one-third to J. J. Miller, St. Louis, Mo. Foot-guard for frogs, guard-rails, and switches	427,884	May 13	1313	331	51	1078
Mahoney, Thomas O., assignor to E. O. Mahoney, Brooklyn, N. Y. Reefing-gear for sailing-vessels	441,680	Dec. 2	75	20	53	1276
Mahoney, William P., Newburyport, Mass., assignor of one-half to C. H. Folsom, Brooklyn, N. Y. Machine for starting hat-bodies	431,272	July 1	364	90	52	74
Mahood, James A., Victoria, Canada. Railway-car axle	441,014	Nov. 18	2210	571	53	1049
Maiden, Henry P., assignor of one-third to R. C. Nichols, Ord, Nebr. Car-coupling	435,181	Apr. 8	1161	306	51	235
Maiier, Franz J., Trenton, N. J. Spring-bed and binder therefor	427,777	May 13	1144	287	51	1047
Maignen, Prosper A., London, England. Filter	426,945	Apr. 29	3801	993	51	776
Maitler, William, St. Joseph, Mo. Filter	423,615	Mar. 18	1883	496	50	1508
Maillox, Cyrien O., Brooklyn, N. Y. Regulation system for electric circuits	430,868	June 24	2777	681	51	2035
Maillox, James A., Brookline, Mass. Camera	427,778	May 13	1145	288	51	1047
Main, Charles T., Lawrence, assignor of one-half to L. I. Seymour, Plymouth, Mass. Apparatus for regulating the exhaust for condensing-engines	438,272	Oct. 14	925	250	53	182
Main, Frank J., Madison, Wis. Sash-fastener	424,990	Apr. 8	862	229	51	176
Main, Fred F., assignor of one-half to W. S. Denning and J. Noble, South New Lyme, Ohio. Type-writing machine	438,078	Oct. 7	631	172	53	121
Main, Martin L., Westminster, Md. Hedge and wire-woven fence	426,291	Apr. 22	2823	742	51	576
Main, Samuel A., Danbury, Conn. Hat-pouncing machine	436,061	Sept. 9	1055	274	52	1584
Main, William B., and C. H. Wilson, Chicago, Ill. Apparatus for marking cloth	424,717	Apr. 1	432	114, 115	51	85
Mains, John F., Indianapolis, Ind. Mail-sack crane	443,290	Dec. 23	2725	699, 700	53	1818
Mains, John F., assignor of two-thirds to B. Carr and H. M. La Follette, Indianapolis, Ind. Bag-lock	432,539	July 22	2335	602, 603	52	475
Mains, John F., assignor of two-thirds to B. Carr and H. M. La Follette, Indianapolis, Ind. Device for delivering mail-bags to cars in motion	435,507	Sept. 2	191	53	52	1412
Mains, John F., assignor of two-thirds to B. Carr and H. M. La Follette, Indianapolis, Ind. Mail-bag-catching fork	435,508	Sept. 2	193	53	52	1412
Mains, John F., assignor of three-fourths to B. Carr, H. M. La Follette, and E. J. Robison, Indianapolis, Ind. Mail-bag lock	432,756	July 22	2689	687	52	543
Mains, John F., assignor of three-fourths to B. Carr, H. M. La Follette, and E. J. Robison, Indianapolis, Ind. Fuel-gas burner	443,835	Dec. 30	3599	925	53	1996
Mains, Samuel C., Glendon, Iowa. Combined corn-planter and check-rower	438,440	Oct. 14	1164	314, 315, 316	53	229
Maisel, Conrad, Buffalo, N. Y. Fastening device for hams, &c	440,815	Nov. 18	1897	488	53	989
Maiser, Charles P., Allegheny, Pa. Jar-lid fastener	420,949	Feb. 11	784	204	50	721
Maish, Wilbur F., Warsaw, Ind. Split pulley	426,292	Apr. 22	2823	742	51	576
Maisonneuve, Paul, Oakland, Cal. Fruit-stoning machine	435,651	Sept. 2	426	113, 114	52	1455
Maitland, George. (See Carlyle, George, assignor.)						
Majert, Wilhelm, Berlin, Germany. Blue dye	440,953	Nov. 18	2127	-----	53	1033
Major, Albert D., Allentown, Pa., assignor to W. S. Gooding, Chicago, Ill. Shoe-polishing machine	438,079	Oct. 7	633	172	53	121
Makin, John S., Philadelphia, Pa. Draft-regulator for furnaces	421,591	Feb. 18	1718	448	50	906
Malandin, Leon P. C. (See Delamare-Deboutteville and Malandin.)						
Malekh, Ali, New York, N. Y. Draft-regulator for ships' galleys	427,336	May 6	469	121	51	904
Malen, Louis, Paris, France. Coffee-urn	429,139	June 3	50	13	51	1482
Malen, Louis, Paris, France. Portable kitchen	434,548	Aug. 19	1691	442, 443	52	1106
Maley, Archibald A., New York, N. Y. Reversible envelope	437,705	Oct. 7	36	12	53	10
Malings, James, and W. Muckle, Woolwich, county of Kent, England. Game and appliance therefor	424,322	Mar. 25	2943	784	50	1719
Malke, Ernst, Connewitz, near Leipsic, Saxony, Germany. Feed mechanism for music-boxes	427,097	May 6	110	29, 30	51	833
Mallahah, John T. (See Carr and Mallahan.)						
Mallard, William S., Darien, Ga. Rice huller and polisher	425,633	Apr. 15	1913	510	51	389
Mallery, James G., Flint, Mich. Land-roller	435,441	Sept. 2	93	26	52	1393
Mallett, Francis W., assignor to D. Frisbie, New York, N. Y. Belt-controller	419,531	Jan. 14	1316	351	50	276
Mallett, Francis W., New York, assignor to Brooklyn Fastener Company, Brooklyn, N. Y. Fabric-clasp	433,297	July 29	3520	908	52	712
Malloch, John. (See Glover, James B., assignor.)						
Mallon, Guy, <i>et al.</i> (See Cutler, James L., assignor.)						
Mallon, James, New Orleans, La. Cultivator	441,500	Nov. 25	3034	782	53	1212

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Mallonee, Joseph D., Brooklyn, assignor, by mesne assignments, of one-third to J. Le Boutillier, New York, N. Y. Time-stamp.	434,396	Aug. 12	1446	377	52	1050
Mallonee, Joseph D., Brooklyn, assignor to J. M. Glover, New York, N. Y. Time-stamp	441,430	Nov. 25	2923	754	53	1193
Mallory, Charles A. (See Judd and Mallory.)						
Mallory, Charles A., Danbury, Conn. Machine for beating up nap on hats	420,814	Feb. 4	560	144	50	671
Mallory, Elwyn A., Piqua, Ohio. Sheet-metal roof.	425,104	Apr. 8	1027	274	51	207
Mallory, Frank B., Flemington, N. J. Car-ventilator.	420,541	Feb. 4	159	39, 40	50	595
Mallory, Frank B., Flemington, N. J. Lifting-jack.	421,592	Feb. 18	1720	448	50	906
Mallory, Frank B., Flemington, N. J. Hand-truck.	429,140	June 3	51	13	51	1482
Mallory, George W., Fairhaven, Conn. Check-punch.	420,728	Feb. 4	419	111	50	646
Mallory, James L., <i>et al.</i> (See Hill, Edward A., assignor.)						
Malm, Alexander, assignor to T. W. & C. B. Sheridan, New York, N. Y. Machine for backing books.	427,434	May 6	622	156	51	935
Malm, Alexander, assignor to T. W. & C. B. Sheridan, New York, N. Y. Paper-cutting machine.	434,285	Aug. 12	1278	332	52	1015
Malm, Alexander, New York, assignor to T. W. Sheridan, Brooklyn, N. Y., and C. B. Sheridan, Orange, N. J. Paper-cutting machine.	443,398	Dec. 23	2898	745	53	1852
Malmberg, Hjalmar, <i>et al.</i> (See Hatfield and Chubb, assignors.)						
Malmberg, Ernst R., St. Louis, Mo., assignor, by mesne assignments, to New York Electrical Device Company, of Virginia. Date and time stamp.	438,166	Oct. 14	758	207	53	152
Malmberg, Ernst R., assignor of two-thirds to J. M. Glover, St. Louis, Mo., and W. B. Martindale, Kenosha, Wis. Electric valve-controller.	422,956	Mar. 11	907	238	50	1317
Malmqvist, Carl P. (See Carlstedt, Johan H., assignor.)						
Malmqvist, Carl W., New Haven, Conn. Micrometer surface-gage.	438,851	Oct. 21	1831	487	53	360
Malone, Charles J., assignor of one-half to A. O. Christenson, Bala City, Kans. Snow-scraper for railway-tracks.	419,532	Jan. 14	1318	{ 351 352 }	{ 50 50 }	{ 276 276 }
Malone, James, Newark, N. J. Blacksmith's forge.	424,069	Mar. 25	2575	688	50	1648
Malone, John E., <i>et al.</i> (See Colvin, Robert J., assignor.)						
Maloney, Edward and P., San Francisco, Cal. Horseshoe.	428,117	May 20	1655	420	51	1155
Maloney, John P., Milwaukee, Wis. Bridge-gate.	431,817	July 8	1243	310	52	251
Maloney, John P., Milwaukee, Wis. Bridge-gate.	433,949	Aug. 12	758	197	52	915
Maloney, Michael N., St. Louis, Mo. Faucet.	428,503	May 20	2231	564	51	1266
Maloney, Peter. (See Maloney, Edward and P.)						
Maltby, Warren, and J. D. Wallace, Champaign, Ill. Water-heating apparatus.	437,495	Sept. 30	3401	891	52	2056
Malter, George H., San Francisco, Cal. Aging wine.	433,131	July 29	3285	845	52	663
Mambourg, Leopold, <i>et al.</i> (See Houze, Luke, assignor.)						
Manahan, George M. D., New York, N. Y. Wrapping-paper holder and cutter.	442,066	Dec. 2	693	186	53	1398
Manahan, John F., Lowell, Mass. Safety-catch for fire-arms.	436,062	Sept. 9	1056	274	52	1584
Manasse, Emanuel. (See Blood, Joel S., assignor.)						
Manbré, Ernest. (See Francis and Manbré.)						
Manchester, Charles W., Feesburg, Ohio. Car-coupling.	443,967	Dec. 30	3796	967	53	2033
Manchester, Seward M. (See Wentworth and Manchester.)						
Mandel, Philip H., Astoria, assignor, by mesne assignments, to Pyrophoto Company, New York, N. Y. Printing pictures on celluloid.	439,533	Oct. 28	2892		53	568
Mandleberg, Goodman C., H. L. Rothband, and S. L. Mandleberg, Manchester, England.	441,501	Nov. 25	3035		53	1213
Mandleberg, Goodman C., H. L. Rothband, and S. L. Mandleberg, Manchester, England.	441,502	Nov. 25	3036		53	1213
Mandleberg, Goodman C., H. L. Rothband, and S. L. Mandleberg, Manchester, England.	441,503	Nov. 25	3038	782	53	1213
Mandleberg, Samuel L. (See Mandleberg, Rothband, and Mandleberg.)						
Mandt, Targe G. (See Johnson and Mandt.)						
Mandt, Targe G., Stoughton, Wis. Whiffletree-hook.	428,504	May 20	2232	565	51	1266
Mandt, Targe G., Stoughton, Wis. Clevis.	429,461	June 3	540	130	51	1577
Mandt, Targe G., Stoughton, Wis. Thill-coupling.	429,462	June 3	541	130	51	1577
Mandt, Targe G., Stoughton, Wis. Reach-plate for vehicles.	438,441	Oct. 14	1169	316	53	230
Manecke, Albert, Cerro Gordo, Ill. Grinding and polishing machine.	439,300	Oct. 28	2550	681	53	503
Manger, Leo, <i>et al.</i> (See Pritschau, Arthur F., assignor.)						
Mangum, George A., Skidmore, Tex. Mud-scraper.	429,217	June 3	170	41	51	1503
Manhattan Brass Company. (See White, James H., assignor.)						
Manhattan Quilting and Manufacturing Company. (See Coles, David H., assignor.)						
Manheimer, Joseph, New York, N. Y. Toilet-niritor.	421,101	Feb. 11	1012	259	50	764
Manker, Charles W., Nebraska City, Nebr., and G. F. Manker, Bedford, assignors of one-third to H. E. Manker, Elliott, Iowa. Galvanic apparatus for dental surgery.	423,616	Mar. 18	1884	496	50	1509
Manker, Charles W., Nebraska City, Nebr., and G. F. Manker, Bedford, assignors of one-third to H. E. Manker, Elliott, Iowa. Electrical device for use in dental operations.	423,617	Mar. 18	1885	{ 496 497 }	{ 50 50 }	{ 1509 1509 }
Manker, Fletcher H. (See Walsh, Dormer, assignor.)						
Manker, George F. (See Manker, Charles W. and G. F.)						
Manker, Henry E. (See Manker, Charles W. and G. F., assignors.)						
Manlove, John H., Cooper, Tex. Hen's nest.	436,249	Sept. 9	1350	352	52	1639
Mann, George W. (See Cain and Mann.)						
Mann, Henry F., Allegheny, Pa. Car-wheel.	433,950	Aug. 12	759	198	52	915
Mann, Henry F., Allegheny, Pa. Car-wheel.	439,358	Oct. 28	2631	{ 701 702 }	{ 53 53 }	{ 518 518 }
Mann, Jessie R. (See Mann, William R., assignor.)						
Mann, Newton. (See Morton, William A., assignor.)						
Mann, Thomas W., Holyoke, Mass. Fire-escape.	436,834	Sept. 23	2317	610	52	1839
Mann-Tiechler, Hugo von, Munich, Germany. Scarf-holder.	430,191	June 17	1653	411	51	1810
Mann-Tiechler, Hugo von, Munich, Bavaria, Germany. Shawl-strap.	435,101	Aug. 26	2579	681	52	1284
Mann, Washington, Fresno City, Cal. Insecticide.	435,509	Sept. 2	194		52	1412
Mann, William R., assignor of one-fourth to J. R. Mann, Earlville, Ill. Hay-rake.	425,618	Apr. 15	1812	{ 484 485 }	{ 51 51 }	{ 370 370 }
Manner, Marion M., Lebanon, Ind. Check-punch.	438,695	Oct. 21	1559	{ 419 420 }	{ 53 53 }	{ 310 310 }
Manners, Edwin. (See Bechtel and Moebus, assignors.)						
Manners, Edwin. (See Snyder and Homan, assignors.)						
Mannesmann, Reinhard, Bliedinghausen, Remscheid, Germany. Producing pressure-tension in tubular bodies.	440,489	Nov. 11	1361	351	53	879
Manning, Chesterfield, Sharonville, assignor of one-half to G. Nixon, Monroe, Ohio. Machine for stamping soap.	435,442	Sept. 2	94	27	52	1393
Manning, James A., Ashtabula, Ohio. Attachment for electric-arc lamps.	443,944	Dec. 30	3756	960	53	2025
Manning, John A. (See Chambers, A. Delbert, assignor.)						
Manning, William, Mount Joy, Pa. Washing-machine.	436,367	Sept. 16	1548	407	52	1686
Mannock, Thomas. (See Smith, Goddard, Higginbottom, and Mannock.)						
Manny, John P., Rockford, Ill. Lemon-juice extractor.	441,882	Dec. 2	395	104	53	1342

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Manser, Alfred, Sing Sing, N. Y. Domestic cremator	435,184	Aug. 26	2702	714	52	1307
Manser, Edward, Peekskill, N. Y. Clothes-line clasp	426,392	Apr. 22	2983	781	51	609
Mansfield, Albert K., New York, N. Y. Railway water-column	429,141	June 3	53	14	51	1482
Mansfield, Edward, Orono, Me. Making ferrules for cant-hooks	442,813	Dec. 16	1887	486	53	1648
Mansfield, Frank, Melrose, Mass. Electric railway	432,673	July 22	2543	{ 652 653 }	52	515
Mansfield, Frank, New York, N. Y. Electric railway	432,674	July 22	2547	{ 653 654 }	52	516
Mansfield, Frank, New York, N. Y. Electrical railway	432,675	July 22	2551	654	52	517
Mansfield, Frank, New York, N. Y. Gearing and motor-supporting mechanism for electric locomotives	441,771	Dec. 2	226	58	53	1307
Mansfield, Frank, New York, N. Y. Attachment for span-wires for suspended electric conductors	442,232	Dec. 9	943	249	53	1454
Mansfield, George W., Boston, Mass. Electric locomotive	424,070	Mar. 25	2575	{ 688 689 706 707 }	50	1648
Mansfield, Hiram N. J., Malone, N. Y. Machine for grinding mill-rollers	426,192	Apr. 22	2688	{ 688 689 706 707 }	51	547
Mansfield, Luther E., Brooklyn, N. Y. Grip for hoisting-machines	433,481	Aug. 5	61	18	52	768
Mansfield, Stanley, Lowell, Mass. Dish-drainer	435,148	Aug. 26	2648	701	52	1297
Mansfield, Sylvester, Lynn, Mass. Tire-heater	441,431	Nov. 25	2927	754	53	1193
Manson, John, North Bloomfield, Cal. Stump-extractor	427,588	May 13	854	214	51	990
Mansur, John H. (See Goodwin, Lee, and Mansur.)						
Manton, John. (See Casey, Manton, and Millen.)						
Manton, Frank S., Providence, R. I. Ship's windlass	426,673	Apr. 29	3409	895	51	699
Manufacturer's Special Machine Company. (See Beardslee, William F., assignor.)						
Manufacturer's Special Machine Company. (See Beardslee and Chauvet, assignors.)						
Manufacturer's Special Machine Company. (See Beardslee, Kaiser, and Russell, assignors.)						
Manum, Michael S., Harrisburg, Pa. Vehicle-wheel	422,136	Feb. 25	2488	658	50	1060
Manville, Frank B., assignor to Blake & Johnson, Waterbury, Conn. Machine for draw- ing shells	427,435	May 6	624	{ 156 157 }	51	935
Manwaring, Morris B., Bayonne, N. J. Food compound or condiment	427,779	May 13	1147	51	1047	
Manwaring, Morris B., Bayonne, N. J. Disinfecting device	429,384	June 3	435	102	51	1554
Mapes, Hiram C., Gorham, N. Y. Car-register	442,527	Dec. 9	1403	{ 358 359 111 112 113 }	53	1543
Maquay, Samuel W., Fulham, county of Middlesex, England. Galvanic battery	433,738	Aug. 5	434	{ 112 113 }	52	841
Mara, Martin J. (See Trowbridge, Frank C., assignor.)						
Maranville, Egbert L., Poulney, Vt. Chopping-knife	436,043	Sept. 9	1033	268	52	1580
Marbach, Herman L., Cleveland, Ohio. Injector oil-burner	419,020	Jan. 7	565	142	50	119
Marbeau, Henry, assignor to Société Anonyme Le Ferro-Nickel, Paris, France. Manufac- turing iron and steel alloys	419,274	Jan. 14	937	50	199	
Marble, Ezra, Jr., Boston, Mass. Fountain-pen	426,833	Apr. 29	3060	953	51	748
Marble, George W., assignor of one-fourth to W. W. Simons, Plymouth, Ind. Metal roller- forging machine	425,951	Apr. 15	2321	616	51	467
Marble, George W., assignor of one-fourth to M. W. Simons, Plymouth, Ind. Rolling-mill gearing	433,416	July 29	3678	950	52	744
Mare, Edmond, Paris, France. Machine for disintegrating ramie and other fibrous ma- terials	440,775	Nov. 18	1830	{ 471 472 }	53	977
Marcano, Vicente, Caracas, Venezuela. Making vegetable pepsin	441,182	Nov. 25	2500	53	1115	
Marcano, Vicente, Caracas, Venezuela, assignor, by mesne assignments, to Mosquera Julia Food Company, Detroit, Mich. Making peptones	441,180	Nov. 25	2498	53	1114	
Marcano, Vicente, Caracas, Venezuela, assignor, by mesne assignments, to Mosquera Julia Food Company, Detroit, Mich. Making peptonized meat	441,181	Nov. 25	2499	53	1115	
March, Jeannette B., Baltimore, Md. Portable window-balcony for flowers	443,369	Dec. 23	2256	735	53	1845
Marchant, David, and G. W. Patnoe, assignors to themselves and Dolese & Shepard, Chi- cago, Ill. Sprocket-and-chain elevator	425,037	Apr. 8	939	251	51	190
Marchant, John E. (See Clay and Marchant.)						
Marchant, R. H. (See Hay, Charles R., assignor.)						
Marcher, Thomas, Neumarkt, near Nuremberg, assignor of one-half to F. Ernecke, Berlin, Germany. Circuit-closer	438,167	Oct. 14	761	208	53	153
Marchetti, Giulio, and H. N. Mellor, Halifax, England. Woven pile fabric	436,368	Sept. 16	1550	52	1686	
Marcott, Joseph. (See Charest, John T., assignor.)						
Marcotte, Oliver, Stetsonville, Wis. Log-hauling device	431,169	July 1	206	51	52	43
Marcy, Alexander, Montreal, Quebec, Canada. Transposing key-board	426,031	Apr. 22	2451	647	51	499
Marcy, Frank M., Worcester, Mass. Machine for repairing spinning-rings	439,883	Nov. 4	382	100	53	682
Marcy, Henry W., Utica, N. Y. Trolley-switch for electric railways	438,894	Oct. 21	1894	503	53	372
Marcy, Joseph E., and H. A. Jones, New York, N. Y. Boiler-feeder	433,576	Aug. 5	199	53	52	795
Marcy, Leonard, assignor to M. L. Marcy, North Bergen, N. J. Sewing-machine	433,900	Aug. 5	682	177	52	890
Marcy, Mary L. (See Marcy, Leonard, assignor.)						
Marden, Frank D. (See Soars, Andrew T., assignor.)						
Mardis, Martin L., and J. W. Britton, deceased, (H. Morrow administrator,) New Lisbon, Ohio. Car-coupling	425,684	Apr. 15	1914	510	51	389
Marès, Etienne, Paris, France. Electric motor	440,431	Nov. 11	1265	327	53	860
Maret, James, Mount Vernon, Ky. Envelope moistener and sealer	426,728	Apr. 29	3500	915	51	717
Maret, James, Mount Vernon, Ky. Music-leaf turner	443,626	Dec. 30	3262	840	53	1931
Maret, James, assignor of two-thirds to D. N. Williams and J. W. Brown, Mount Vernon, Ky. Anemoscope	419,608	Jan. 14	1425	382	50	299
Margedant, August W. G. (See Cotton, Margedant, Gardner, and Margedant.)						
Margedant, William C. (See Cotton, Margedant, Gardner, and Margedant.)						
Marick, Calvin, Mount Heron, Ohio. Mowing and harvesting reaper	420,458	Feb. 4	58	12	50	575
Mariliew, Frank A. (See Jordan and Mariliew.)						
Marion Manufacturing Company. (See Strobel, Frederick, assignor.)						
Maris, Jared, Lebanon, Ohio. Cap and lining for point-bands of hubs	433,250	July 29	3455	892	52	699
Maris, Jared, Lebanon, Ohio. End band for hubs	437,496	Sept. 30	3402	891	52	2056
Mark, Aaron, Ivesdale, Ill. Cut-off table for tile-machines	419,782	Jan. 21	1690	419	50	355
Mark, Charlie E., assignor, by mesne assignments, to R. Bottsford, Cleveland, Ohio. Mani- fold	419,783	Jan. 21	1691	449	50	355
Mark, Charlie E., assignor, by mesne assignments, to R. Bottsford, Cleveland, Ohio. Heat- ing apparatus	434,936	Aug. 26	2341	618	52	1239
Mark, John W., New York, N. Y. Illuminating-tile	436,085	Sept. 9	1096	{ 283 284 }	52	1591
Markel, Jacob L., et al. (See Erb, Paris, assignor.)						
Markel, John, Monticello, Ill. Device for stretching wire or raising wagon-beds	421,295	Feb. 11	1281	330	50	815

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Markey, Laurence, Chicago, Ill. Shutter-fastener	433,688	Aug. 5	367	93, 94	52	828
Markham, Clarence I., and L. R. Pomeroy, Syracuse, N. Y. Adjustable window-screen	428,309	May 20	1949	489	51	1210
Markham, Dewitt C., Collinsville, N. Y. Mowing-machine	423,936	Mar. 25	2380	633	50	1611
Markham, Dewitt C., Collinsville, N. Y. Cultivator	430,965	June 24	2921	717	51	2061
Markham, Dewitt C., Collinsville, N. Y. Spring-tooth harrow	442,067	Dec. 2	695	{ 186 187 }	53	1398
Markham, Dewitt C., Collinsville, assignor, by mesne assignments, to W. M. Brinkerhoff, } Auburn, N. Y. Harrow	428,310	May 20	1951	{ 489 490 }	51	1211
Markham, Edward R., assignor to J. Stevens Arms and Tool Company, Chicopee Falls, } Mass. Surface-gage	437,308	Sept. 30	3094	811	52	1993
Markham, George A., Coldwater, Mich. Combined flour bin and sifter	425,334	Apr. 8	1377	367	51	277
Markham, L. Wirt, <i>et al.</i> (See Hall, Thadens M., assignor.)						
Markham, Romondo D., Chicago, Ill. Broom-hanger	424,323	Mar. 25	2944	784	50	1719
Markham, Romondo D., Chicago, Ill. Broom-hanger	434,603	Aug. 19	1773	464	52	1123
Markillie, George H., Elvaston, Ill. Sharpener for harrow-disks, &c	436,530	Sept. 16	1786	471	52	1730
Markillie, George H., Elvaston, Ill. Door-check	442,068	Dec. 2	696	187	53	1398
Markley, Arthur D. (See Bailey, John S., assignor.)						
Marks, Bernhard. (See Müller, Theodor, assignor.)						
Marks, Charles H., East Whitby, Ontario, Canada. Die for making sickles	443,777	Dec. 30	3502	898	53	1976
Marks, Henry A., Lynn, Mass. Guide for trolley-wheels	427,589	May 13	855	215	51	990
Marks, Solomon, Cincinnati, Ohio. Slate-frame	439,534	Oct. 28	2892	769	53	568
Marks, Solomon, Cincinnati, Ohio, assignor to Paragon Slate Company, of Ohio. Draw-leaf } slate	424,931	Apr. 1	767	204	51	149
Marks, Walter B., and E. H. Lea, Richmond, Va. Wick adjuster and trimmer for lanterns. } 424,489	424,489	Apr. 1	76	21	51	18
Marks, Walter B., J. G. Lauer, and R. R. Ralston, Richmond, Va. Suspending device for } electric wires	441,312	Nov. 25	2743	709	53	1157
Markworth, Carl, Plauen, near Dresden, Germany. Cover-fastener	442,233	Dec. 9	945	{ 249 250 }	53	1455
Marlett, William E., assignor of two-thirds to P. R., A. F., J. L., and E. A. De Steiger, La } Salle, Ill. Device for operating the doors to elevator-shafts	433,901	Aug. 5	683	177	52	890
Marley, James D., assignor of one-half to I. M. Carter, Dodd, Tex. Plow	441,313	Nov. 25	2745	710	53	1157
Marlin Fire Arms Company. (See Hepburn, Lewis L., assignor.)						
Marlow, George, assignor of two-thirds to E. R. Martin and A. M. Campbell, Chicago, Ill. } Stove	422,026	Feb. 25	2322	613	50	1029
Marqua, George, assignor to M. Marqua, Cincinnati, Ohio. Child's carriage	432,492	July 15	2257	583	52	453
Marqua, Magdalena. (See Marqua, George, assignor.)						
Marquart, Fredrich, Cleveland, Ohio. Cooking stove or range	422,310	Feb. 25	2765	729	50	1111
Marque, Augustus. (See Spanoghe, Josse-Egide, assignor.)						
Marr, John. (See Wagner, Louis, assignor.)						
Marrow, Robert N. (See Tripp, John W., assignor.)						
Marsch, Frederick. (See Jones, Harry J., assignor.)						
Marsching & Co., J. (See Favor, Irving P., assignor.)						
Marsden, George E. W. (See Robinson, Lyman C., assignor.)						
Marsh, Canfield. (See Horey and Marsh.)						
Marsh, Cyrus, Washington, Miss. Plow	443,861	Dec. 30	3627	934	53	2002
Marsh, Edward B., <i>et al.</i> (See Reynolds, George H., assignor.)						
Marsh, Edward H. (See Glynn, William, assignor.)						
Marsh, Edwin, Leeds, assignor of one-half to H. Leggott, Bradford, England. Apparatus } for firing steam-boilers	438,080	Oct. 7	634	{ 172 173 }	53	122
Marsh, George, <i>et al.</i> (See McArthur, Robert X., assignor.)						
Marsh, Gideon W. (See Morrell, James A., assignor.)						
Marsh, Grant, Cape Girardeau, assignor of three-fourths to T. T. Lewis and O. L. Garrison, } St. Louis, Mo., and J. H. Rees, Memphis, Tenn. Movable jetty	431,524	July 1	757	189	52	151
Marsh, Harlon J. (See Blagrove and Marsh.)						
Marsh, Leonardo M., assignor of one-half to G. N. Adams and J. W. Brady, Spaulding, } Nebr. Screw-driver and bit-holder	442,710	Dec. 16	1698	436	53	1611
Marsh, Lewis F. (See Follett and Marsh.)						
Marsh, Riverius, New Brunswick, N. J. Decorative frame	421,741	Feb. 18	1920	505	50	946
Marsh, Riverius, New Brunswick, N. J. Tile-holder	421,742	Feb. 18	1921	505	50	946
Marsh, William A., Foster, La. Trace-carrier	438,418	Oct. 14	1141	308	53	224
Marsh, William R., Boston, Mass. Hand-piece for dental engines	427,780	May 13	1147	288	51	1047
Marshall, Henry, Lincoln, Nebr. Car-coupling	433,798	Aug. 5	540	{ 139 140 }	52	862
Marshall, Henry, Lincoln, Nebr. Journal-box	442,631	Dec. 16	1566	405	53	1585
Marshall, Anderson C., Cornuna, Mich. Steam road-vehicle	438,168	Oct. 14	762	208	53	153
Marshall, Benjamin, San Francisco, Cal. Sash-balance	420,425	Jan. 28	2683	711	50	554
Marshall, Benjamin, assignor to Marshall Improved Window Furniture Company, San } Francisco, Cal. Sash-fastener	433,600	Aug. 5	239	62	52	802
Marshall, Charles A., Lowell, assignor of one-half to W. H. Bartlett, New Bedford, Mass. } Bag and twine holder	431,604	July 8	879	218	52	183
Marshall, Charles H., Kansas City, Mo. Dust-pan	422,240	Feb. 25	2658	702	50	1092
Marshall, Charles K., Vicksburg, Miss. Saddle	426,032	Apr. 22	2452	647	51	500
Marshall, Charles K., Vicksburg, Miss. Horse-collar	428,218	May 20	1799	452	51	1182
Marshall, Charles K., Vicksburg, assignor of one-half to W. L. Nugent, Jackson, Miss. } Machine for delinting cotton-seed	431,665	July 8	993	248	52	204
Marshall, Charles K., Vicksburg, assignor of one-half to W. L. Nugent, Jackson, Miss. } Machine for removing lint from cotton-seed	431,949	July 8	1426	362	52	287
Marshall, Cornelius. (See Haslam and Marshall.)						
Marshall, Edward R., Turner's Falls, Mass. Machine for grinding wood to pulp	438,633	Oct. 21	1456	{ 393 394 }	53	292
Marshall, Edward S., Great Falls, Mont. Wedge	443,581	Dec. 30	3192	820	53	1918
Marshall, Herbert E., Brooklyn, N. Y., assignor of one-half to W. Burtis, New Egypt, N. J. } Cash indicator and register	437,441	Sept. 30	3323	{ 867 868 }	52	2039
Marshall, Howard T., Brockton, Mass. Rubber-sole boot or shoe	437,608	Sept. 30	3566	931	52	2087
Marshall, Ianthus E., Martinez, assignor of one-third to P. Tormey, Pinole, Cal. Car-coup- } ling	442,814	Dec. 16	1888	487	53	1648
Marshall Improved Window Furniture Company. (See Johnson, Axel, assignor.)						
Marshall Improved Window Furniture Company. (See Marshall, Benjamin, assignor.)						
Marshall, Israel W., Yorklyn, Del. Treating fibrous material	428,925	May 27	2880	737	51	1410
Marshall, John B., New Baltimore, N. Y. Floating safe	433,330	Aug. 5	127	36	52	781
Marshall, John B., White Pine, Pa. Hame-tug	434,937	Aug. 26	2342	619	52	1239
Marshall, Joseph F., Hanover, Ohio. Tile-post	435,443	Sept. 2	98	28	52	1391
Marshall, Luther A. (See Leavy, Thomas J., assignor.)						
Marshall, Norman, Boston, Mass. Electric switch	442,588	Dec. 9	1500	386	53	1564

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Marshall, Norman, Boston, Mass., assignor to Star Electrix Company, Philadelphia, Pa. Device for attaching incandescent electric lamps to gas-fixtures.	442,270	Dec. 9	998	263	53	1465
Marshall, Robert, assignor of one-half to C. M. Jacobs, London, England. Nut-lock.	422,027	Feb. 25	2323	613	50	1030
Marshall, Robert, London, England, assignor to H. O. Berg, New York, N. Y. Attachment for steam-boiler furnaces.	426,599	Apr. 29	3295	865	51	678
Marshall, Robert E., Wilmington, Del. Engineer's air-brake valve.	441,432	Nov. 25	2929	755	53	1194
Marshall, Waldo H., Chicago, Ill., assignor to R. R. Hazard, New York, N. Y. Car-truck.	421,593	Feb. 18	1721	448	50	906
Marshall, Waldo H., Chicago, Ill., assignor to R. R. Hazard, New York, N. Y. Means for facilitating the uncoupling of cars provided with intermediate trucks.	431,605	July 8	880	218 219	52	184
Marshall, Winfield S., Centralia, Ill. Saddle-bag.	424,324	Mar. 25	2944	784	50	1719
Marshall, Winfield S., Centralia, Ill. Box-fastener.	442,903	Dec. 16	2058	528	53	1680
Marshall, William, Dunnville, Ontario, Canada. Fruit paring and coring machine.	427,337	May 6	470	121	51	904
Marshall, William C., assignor of one-fourth to H. V. Lang, St. Louis, Mo. Envelope for cured meats.	436,287	Sept. 9	1401	365	52	1650
Marshall, William H., Oxford, Miss. Combined dental separator and matrix.	421,952	Feb. 25	2225	584	50	1011
Marshall, William H., Oxford, Miss. Dental matrix.	427,338	May 6	472	121	51	904
Marshall, William H., Chelsea, Mass., assignor to H. E. Streeter. Game.	429,312	June 3	320	76	51	1532
Marshall, William H., Chelsea, assignor to J. W. Tufts, Medford, Mass. Soda-water fountain.	443,683	Dec. 30	3359	863	53	1949
Marston, Dudley J., Amesbury, Mass. Concrete body.	433,014	July 29	3097	795	52	627
Marston, James M., Hartwell, Ohio. Composition molding.	435,845	Sept. 2	718	193	52	1514
Marston, Nathaniel B., Lebanon, N. H. Weighing-fork.	436,427	Sept. 16	1639	431	52	1702
Marston, Warren C., Miller's Falls, Mass., assignor of one-half to R. H. Austin, New Haven, Conn. Extension hack-saw frame.	440,174	Nov. 11	833	215	53	781
Marten, Louis F., St. Charles, Mo. Emulsion for photographic-printing paper.	439,021	Oct. 21	2080	53	40	1011
Martens, Jacob G. W., New York, N. Y. Paint.	434,798	Aug. 19	2085	52	1183	
Marter, Ezra, Mishawaka, Ind. Dovetail joint.	435,759	Sept. 2	585	156	52	1487
Martignier, Auguste, Montpellier, France. Obtaining cream of tartar.	439,805	Nov. 4	260	53	659	
Martin, Abraham, Birmingham, county of Warwick, England. Percussion-fuse.	431,273	July 1	365	90, 91	52	74
Martin, Alexander C., Chicago, Ill. Car-coupling.	436,796	Sept. 23	2247	592	52	1826
Martin, Andrew J., Macedon, N. Y. Grain-drill.	432,417	July 15	2139	550	52	428
Martin, Andrew J., and E. J. Corser, Macedon, N. Y. Seed-distributing apparatus.	430,135	June 17	1580	393	51	1797
Martin, Andrew J., and E. J. Corser, Macedon, N. Y. Changeable-speed gearing.	443,370	Dec. 23	3358	735	53	1845
Martin, Andrew J., and L. Heath, assignors to Bickford & Huffman, Macedon, N. Y. Changeable speed gearing.	432,418	July 15	2140	550	52	428
Martin, Archer. (See Carman, Albert, assignor.)						
Martin Cash Carrier Company. (See Martin, Joseph C., assignor.)						
Martin, Charles M., Washington, D. C., assignor to Fire Extinguisher Company of America, Philadelphia, Pa. Fire-extinguisher.	431,950	July 8	1429	363	52	288
Martin, Charles M., Washington, D. C., assignor to Fire Extinguisher Company of America, Philadelphia, Pa. Fire-extinguishing compound.	431,985	July 8	1487	52	300	
Martin, Charles W., Chicago, Ill. Rubber-stamp holder.	422,056	Feb. 25	2369	626	50	1038
Martin, David N., Lawrence, Mass. Fastening device for bottles, &c.	427,590	May 13	856	215	51	990
Martin, Edmond, Potsdam, N. Y. Spark-arrester.	422,957	Mar. 11	908	238	50	1317
Martin, Edward H. (See Martin, Romeo B. and E. H.)						
Martin, Edward L., et al. (See Hatch, Adin A., assignor.)						
Martin, Edwin, T. F. Drake, and J. W. Johnson, assignors to Martin Sons & Co., Huddersfield, county of York, England. Bed for shearing or cropping machines.	421,743	Feb. 18	1922	505	50	946
Martin, Edwin, T. F. Drake, and J. W. Johnson, assignors to Martin Sons & Co., Lindley, Huddersfield, county of York, England. Bed for cloth shearing or cropping machines.	421,865	Feb. 18	2105	552	50	979
Martin, Edwin K. (See Abraham and Martin.)						
Martin, Edwin K., assignor to Conestoga Cigar Machine Company, Lancaster, Pa. Cigar-bunching machine.	421,030	Feb. 11	907	234 235	50	745
Martin, Edwin R., et al. (See Marlow, George, assignor.)						
Martin, Francis P., Easton, assignor to J. T. Martin, Scranton, Pa. Rod-packing.	418,802	Jan. 7	215	53	50	47
Martin, Frank, Salt Lake City, Utah Ter. Velocipede.	440,954	Nov. 18	2129	551 552	53	1033
Martin, Frank and G., Milwaukee, Wis. Fulling-mill.	443,722	Dec. 30	3416	877	53	1959
Martin, Frederick W., Clayton, N. Y. Revolving center-board.	421,008	Feb. 11	879	227	50	739
Martin, George. (See Martin, Frank and G.)						
Martin, George, and J. F. Gee, assignors to E. H. Godshalk, Philadelphia, Pa. Circular-knitting machine.	428,052	May 13	1558	394 846 847	51	1125
Martin, George, and L. M. Friar, Rochester, N. Y. Car-coupling.	437,400	Sept. 30	3248	52	2023	
Martin, Henry, Lancaster, Pa. Truck.	429,463	June 3	542	130	51	1577
Martin, Herbert D., Philadelphia, Pa. Eyeglasses.	424,217	Mar. 25	2781	741	50	1688
Martin, Herbert D., Philadelphia, Pa. Eyeglasses.	434,832	Aug. 19	2132	558	52	1193
Martin, James A., Uniontown, Ala. Plow.	437,217	Sept. 30	2952	772	52	1967
Martin, James B., assignor to Martin's Middlings Purifier Company, Grand Rapids, Mich. Dust-arrester.	431,951	July 8	1430	363	52	288
Martin, James N., and W. H. Harris, Newberry, S. C. Car-coupling.	428,118	May 20	1656	420	51	1155
Martin, James N., and W. H. Harris, Newberry, S. C. Car-coupling.	428,119	May 20	1658	420	51	1155
Martin, Jefferson H., Kansas City, Mo. Tag-fastener.	428,926	May 27	2881	737	51	1411
Martin, Jerome W., assignor of one half to W. J. Hollis, Kansas City, Mo. Strand-twisting machine.	438,696	Oct. 21	1562	420	53	310
Martin, John, et al. (See Anderson, Lee, assignor.)						
Martin, John, et al. (See Lippitt and Hansdoerfer, assignors.)						
Martin, John A., East Liverpool, Ohio. Splice-bar for railway-rails.	435,233	Aug. 26	2763	730	52	1320
Martin, John B. (See McGowen, Charles M., assignor.)						
Martin, John B., Cincinnati, Ohio. Pendulum-scales.	436,835	Sept. 23	2318	610	52	1839
Martin, John C., Hammersmith, county of Middlesex, England. Manufacture of pigments.	440,232	Nov. 11	928	53	801	
Martin, John J., and P. Cunningham, Pinos Altos, N. Mex. Rock-drill.	437,609	Sept. 30	3568	931	52	2087
Martin, John T. (See Martin, Francis P., assignor.)						
Martin, John W., et al. (See McArthur, James, assignor.)						
Martin, John W., assignor to S. S. Stebbins, St. Louis, Mo., and Hercules Iron Works Company, East St. Louis, Ill. Brake for vehicles.	420,815	Feb. 4	562	144	50	671
Martin, Joseph C., Florence, Mass., assignor to Martin Cash Carrier Company, Portland, Me. Conveying service apparatus.	431,666	July 8	996	248	52	205
Martin, Josiah T., et al. (See Fielder, John S., assignor.)						
Martin, Lemuel, Rickreall, Oreg. Sack-detacher.	419,337	Jan. 14	1044	276	50	221
Martin, Lewis, New York, N. Y. Spike-extractor.	420,603	Feb. 4	250	67	50	613
Martin, Lincoln E., Emery, S. D. Windmill.	428,849	May 27	2765	703	51	1387
Martin, Morris, Malden, Mass., assignor to Municipal Signal Company, Portsmouth, N. H. Signal-box.	425,576	Apr. 15	1737	466	51	355

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Martin, Myron R., Humboldt, Iowa. Windmill-gearing	429,931	June 10	1245	309	51	1722
Martin, Onesime, Marlborough, Mass. Lasting-jack	430,233	June 17	1727	430	51	1825
Martin, Orien B., Akron, assignor of one-half to T. Hale and J. Longanecker, Morgadore, Ohio. Air-brake	437,218	Sept. 30	2953	772 773	52	1967
Martin, Orien B., Akron, assignor of one-half to T. Hale and J. Longanecker, Morgadore, Ohio. Smoke-burning furnace	437,219	Sept. 30	2956	773	52	1967
Martin, Robert W. (See Sinclair, Alexander, assignor.)						
Martin, Romeo B., and E. H., assignors of one-half to J. M. Funk and P. Knowles, Webster City, Iowa. Wall-covering composition	427,591	May 13	857	.....	51	990
Martin, Samuel W., assignor to Mast, Foos & Company, Springfield, Ohio. Windmill	433,531	Aug. 5	129	37	52	782
Martin, Samuel W., assignor to Mast, Foos & Company, Springfield, Ohio. Pump-head	433,989	Aug. 12	817	213	52	924
Martin, Samuel W., assignor to Mast, Foos & Company, Springfield, Ohio. Pump-piston guide	433,990	Aug. 12	818	214	52	924
Martin Sons & Co. (See Martin, Drake, and Johnson, assignors.)						
Martin, Stephen J. (See Hadstate and Martin.)						
Martin, Stephen J., and H. C. Hadstate, Detroit, Mich. Elevator	442,632	Dec. 16	1568	405	53	1586
Martin, Theodore, Wallaceburg, Ontario, Canada. Latch and lock combined	426,834	Apr. 29	3662	953	51	748
Martin, Washington A., assignor to R. H. Park, H. Reuter, and M. T. Coyne, Chicago, Ill. Lock	443,945	Dec. 30	3756	960	53	2025
Martin, William, Salem, Mass. Incliniometer	423,484	Mar. 18	1694	447	50	1475
Martin, William, Dunkirk, N. Y. Pipe-coupling	429,022	Oct. 21	2081	557	53	410
Martin, William D., Warsaw, N. Y. Bill-file	438,352	Oct. 14	1044	284	53	206
Martin, William D., Warsaw, N. Y. Dust-pan	443,327	Dec. 23	2791	717	53	1831
Martindale, Warren B., <i>et al.</i> (See Malmberg, Ernst R., assignor.)						
Martineau, Alphonse. (See Branagan and Martineau.)						
Martineau, Edmund N. (See Honey, Horace D., assignor.)						
Martineau, Edmund N., Holyoke, assignor of one-half to T. Van Riper, South Hadley Falls, Mass. Machine for pasting backing-tape on book-covers	429,173	June 3	100	24	51	1491
Martineau, William C., Albany, N. Y. Combined book-mark and leaf-holder	432,189	July 15	1808	465	52	367
Martini & Co., F. (See Thalmann, Julius H., assignor.)						
Martinot, Mary L. W., New York, N. Y. Wash-boiler	432,419	July 15	2141	551	52	428
Martinot, Mary L. W., New York, N. Y. Wash-tub	438,930	Oct. 21	1943	517	53	382
Martinot, Mary L. W., New York, N. Y. Foot-bath	438,931	Oct. 21	1944	518	53	382
Martinot, Mary L. W., New York, N. Y. Heater	438,932	Oct. 21	1944	518	53	382
Martinot, Mary L. W., New York, N. Y. Window-cleaning brush	443,968	Dec. 30	3798	968	53	2033
Martin's Middlings Purifier Company. (See Martin, James B., assignor.)						
Marty, Louis K. (See Schickner and Marty.)						
Martyn, Edward, Detroit, Mich. Relief-valve	429,632	June 10	801	195	51	1636
Martyn, John P. (See Callender, Romaine, assignor.)						
Marvin, Charles S. (See Marvin, Burnett, and Marvin.)						
Marvin Electric Drill Company. (See Marvin, Harry N., assignor.)						
Marvin, George E., Boston, Mass. Railway-tie	426,458	Apr. 29	3089	810	51	638
Marvin, Harry N., Syracuse, N. Y. Electric reciprocating tool	419,861	Jan. 21	1817	480	50	380
Marvin, Harry N., Syracuse, N. Y. Electric reciprocating tool	420,079	Jan. 28	2153	569	50	456
Marvin, Harry N., Syracuse, N. Y. Electric reciprocating tool	420,080	Jan. 28	2154	569	50	456
Marvin, Harry N., Syracuse, N. Y. Electrically-reciprocated tool	420,816	Feb. 4	564	144	50	671
Marvin, Harry N., Syracuse, N. Y. Generator for electrically-reciprocated tools	429,729	June 10	940	232	51	1664
Marvin, Harry N., Syracuse, N. Y. Electric drill system	429,730	June 10	942	232	51	1664
Marvin, Harry N., Syracuse, N. Y. Electric drill system	429,731	June 10	943	232	51	1664
Marvin, Harry N., Syracuse, N. Y. Generator for electrically-reciprocated tools	429,732	June 10	945	232	51	1664
Marvin, Harry N., assignor to Marvin Electric Drill Company, Syracuse, N. Y. Electro-magnetic drill system	431,170	July 1	206	51	52	43
Marvin, Samuel W., W. Burnett, and C. S. Marvin, Cambridge, Mass. Paper-dust collector for printing-presses	437,863	Oct. 7	288	86, 87	53	56
Marx, David J., Chicago, Ill. Car-coupling	435,072	Aug. 26	2540	670	52	1277
Marx, Ernest, Brooklyn, N. Y. Buckle	435,880	Sept. 2	782	208	52	1526
Marx, Friedrich, Berlin, Germany. Manufacturing metallic electrodes for batteries	425,335	Apr. 8	1377	.....	51	277
Marx, Friedrich, Berlin, Germany. Secondary battery	440,175	Nov. 11	834	215	53	782
Marx, Zero. (See Whiteway, William L., assignor.)						
Masbach, Robert J., New York, N. Y. Protector for leaders	439,669	Nov. 4	67	18	53	620
Maschinen-Werkstätten & Eisengiesserei St. Georgen bei St. Gallen. (See Spühl, Heinrich, assignor.)						
Maschmeyer, Charles, assignor to E. Miller & Company, Meriden, Conn. Extension-lamp support	430,392	June 17	2010	496	51	1880
Maschmeyer, Charles, assignor to E. Miller & Company, Meriden, Conn. Metal tubing	432,059	July 15	1606	411	52	328
Maschmeyer, Charles, assignor to E. Miller & Company, Meriden, Conn. Extension lamp-support	432,278	July 15	1942	497	52	391
Masius, Alfred G., Egg Harbor City, N. J. Perpetual calendar	429,043	May 27	3062	789	51	1444
Maskelyne, John N., London, England. Registering-till	436,500	Sept. 16	1747	461 462	52	1723
Mason, Albert, <i>et al.</i> (See May, Charles W., assignor.)						
Mason, Albert E. (See Hyland, Joseph, assignor.)						
Mason, Allan. (See Wilson and Mason.)						
Mason, Allan, Brooklyn, assignor to H. H. Sanderson, trustee, New York, N. Y. Apparatus for burning coal and hydrocarbon fuel in combination	438,852	Oct. 21	1833	488	53	361
Mason, Alverdo H., Braintree, Mass. Easel for the use of china-decorators	429,858	June 10	1136	281 282	51	1700
Mason, Alvin C. (See Davis, Frank B., assignor.)						
Mason & Co., J. S. (See Taylor, William O., assignor.)						
Mason & Co., James D. (See Smith and Bright, assignors.)						
Mason & Co., Perry. (See Luce, William B., assignor.)						
Mason, Edward J., assignor of three-fourths to F. B. Allan, E. E. Slaght, and J. W. Thompson, Watford, Canada. Secondary battery	439,324	Oct. 28	2584	689	53	510
Mason, Edward L., and F. A. Bergman, Chicago, Ill. Can for sirups, &c	435,234	Aug. 26	2764	730	52	1320
Mason, Frank C. (See Bretherton and Mason.)						
Mason, George W., Sharon, Pa. Water-motor	436,715	Sept. 16	2089	550	52	1787
Mason, George W., Eau Claire, Wis. Resawing-machine	442,528	Dec. 9	1404	359	53	1543
Mason & Hamlin Organ and Piano Company. (See Richardson and Dyer, assignors.)						
Mason, Henry I. (See Schmitt and Mason.)						
Mason, James A., Savoy, Tex. Car-coupling	418,734	Jan. 7	114	27	50	25
Mason, James H., Brooklyn, N. Y. Preparing battery-zincs	428,684	May 27	2525	.....	51	1339
Mason, James M., New Glasgow, Nova Scotia, Canada. Car-coupling	418,954	Jan. 7	475	118	50	100
Mason, John, Petaluma, Cal. Gate	430,605	June 17	2331	572	51	1941
Mason, John, New York, N. Y. Knife	437,762	Oct. 7	139	44	53	29

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Mason Machine Works. (See Meats, John T., assignor.)						
Mason Regulator Company. (See Mason, William B., assignor.)						
Mason, Thomas B., Trenton, N. J. Horse-boot	419,338	Jan. 14	1045	276	50	221
Mason, Thomas G. (See Risch, Vincent M., assignor.)						
Mason, Thomas J., Simpsonville, Tex. Plow	429,767	June 10	997	244	51	1675
Mason, William, Hamilton, Victoria. Thill-coupling	433,298	July 29	3521	909	52	712
Mason, William, Hamilton, Victoria. Wire or cable tightener	433,799	Aug. 5	542	140	52	862
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Machine for heating cartridge-shells	437,442	Sept. 30	3328	868	52	2039
Mason, William B., assignor to Mason Regulator Company, Boston, Mass. Damper-regulator	426,835	Apr. 29	3664	953	51	748
Masser, William H., Los Angeles, Cal. Metallurgical apparatus	427,701	May 13	1018	256	51	1022
Masseth, Benjamin. (See Black, David W., assignor.)						
Masseth, Benjamin, Butler, Pa. Packer for deep wells	439,166	Oct. 28	2306	619	53	458
Masseth, Benjamin, Butler, Pa. Casing-splitter	439,167	Oct. 28	2308	619	53	458
Massey, Albert P., Watertown, N. Y. Automatic valve for regulating fluid-pressure	426,507	Apr. 29	3158	830	51	651
Massey, Albert P., Watertown, N. Y. Steam air-pump	428,120	May 20	1659	420	51	1156
Massey, Albert P., Watertown, N. Y. Ejector for vacuum-brakes	423,621	May 27	2414	613	51	1319
Massey, Albert P., Watertown, N. Y., assignor to Eames Vacuum Brake Company. Compound steam air-compressor	433,951	Aug. 12	760	198	52	915
Massey, Albert P., Watertown, N. Y., assignor to Eames Vacuum Brake Company. Air-pump	434,089	Aug. 12	963	253	52	955
Massey, George, Sydney, New South Wales. Railway-brake-pipe coupling	438,290	Oct. 14	953	258 259	53	187
Massey, George B., assignor to O. Flemming, Philadelphia, Pa. Current-regulator or rheostat	432,279	July 15	1944	497	52	392
Massey, Gideon B., deceased; S. R. Massey and S. A. Bryant, Mamaroneck, N. Y., administrators. Ticket-printing machine	443,969	Dec. 30	3799	968 969	53	2034
Massey, Joseph, Faribault, Minn. Hat-hanger	422,137	Feb. 25	2489	658	50	1060
Massey Manufacturing Company. (See McLachlan, John C., assignor.)						
Massey, Sarah R., et al., administrators. (See Massey, Gideon B.)						
Massey, Thomas C., Chicago, Ill. Game apparatus	423,066	Mar. 11	1074	279	50	1347
Massey, R. C., et al. (See Schryver, Charles, assignor.)						
Mast & Company, P. P. (See Kissell, Martin L., assignor.)						
Mast, Foos & Company. (See Bean, Roscoe, assignor.)						
Mast, Foos & Company. (See Martin, Samuel W., assignor.)						
Mast, John M., Cambridge, Pa. Stamp-affixing machine	426,729	Apr. 29	3501	915 916	51	717
Mast, John M., Cambridge, Pa. Button-hole shield and latch for carriage-curtains	430,348	June 17	1945	477	51	1867
Mast, Peter, Waterville, Ohio. Wire fence	426,623	Apr. 29	3335	874	51	686
Matejec, Josef, Prague, Bohemia, Austria-Hungary. Glove-punch	423,526	Mar. 18	1762	463	50	1487
Matteller, Thaddens C. (See Reppy, Albert W., assignor.)						
Masters, Henry W., Boston, Mass. Combination-lock	438,353	Oct. 14	1045	284 285	53	206
Masters, John H., Stockton, Cal. Cotton-harvester	432,420	July 15	2142	551	52	429
Masters, Joseph H., Chicago, Ill. Cable-grip	429,590	June 3	740	178	51	1619
Masterson, Carson A., Decatur, Ill. Bolster-standard	440,176	Nov. 11	835	215	53	782
Mastin, Charles J. (See Strickle and Mastin.)						
Mateovich, Paolo. (See Grossich and Mateovich.)						
Mather, Alexander C., Montreal, Canada. Vehicle-propeller	442,985	Dec. 16	2178	561	53	1705
Mather, Alonzo C., Chicago, Ill. Glove-fastener	433,629	Aug. 5	368	94	52	828
Mather, Alonzo C., Chicago, Ill. Car-coupling	438,697	Oct. 21	1563	420	53	310
Mather, Alonzo C., Chicago, Ill. Water-power	441,183	Nov. 25	2501	645 646	53	1115
Mather Electric Company. (See Anthony, William A., assignor.)						
Mather, Edmund, Harrisburg, Pa. Furnace-grate and shaker therefor	433,952	Aug. 12	761	198	52	913
Mather, Frank J. (See Hayward, Henry, assignor.)						
Mathes, Richard M., Neosho, Mo. Device for assisting the hearing	426,508	Apr. 29	3160	831	51	652
Mathesius, Alexander H., Brooklyn, N. Y. Wire-rope grip	423,694	Mar. 18	2019	533	50	1535
Mathesius, Alexander H., Brooklyn, N. Y. Cable railway	432,757	July 22	2690	688	52	543
Matheson, Alexander E., Oberlin, Kans. Door-check	431,667	July 8	999	249	52	205
Mathews, Denny O., and I. Pruett, St. Joseph, Mo. Elevator-hatchway gate	429,932	June 10	1247	309	51	1722
Mathews, Edward T. and F. S., Philadelphia, Pa. Coupling for water-closet hoppers and pipes	432,318	July 15	2007	513	52	402
Mathews, Frank S. (See Mathews, Edward T. and F. S.)						
Mathews, John A., and H. T. Scurry, Vancouver, British Columbia, Canada. Submarine mining-machine for dredging and separating the precious metals	436,181	Sept. 9	1247	325 326	52	1618
Mathews, Leroy M., Lawrence, Kans., assignor to Wilmington Dental Manufacturing Company, Philadelphia, Pa. Blow-pipe	442,194	Dec. 9	890	236	53	1444
Mathews, William F., assignor of one-half to A. P. Jewett, Plymouth, Me. Sleigh	422,958	Mar. 11	909	238	50	1317
Mathewson, Frank M., et al. (See Smith, Charles R., assignor.)						
Mathewson, James R., assignor to W. H. Wade and E. P. Davis, Wrentham, Mass. Bracelet	427,592	May 13	859	215	51	990
Mathewson, James R., assignor to W. H. Wade and E. P. Davis, Wrentham, Mass. Bracelet	427,593	May 13	859	215	51	990
Mathewson, James R., assignor to W. H. Wade and E. P. Davis, Wrentham, Mass. Bracelet	430,295	June 17	1860	457	51	1850
Mathewson, James R., assignor to E. P. Davis and W. H. Wade, Wrentham, Mass. Manufacture of curved tubes for jewelry	435,939	Sept. 9	872	229	52	1549
Mathias, David H., assignor of one-half to J. H. Simonson, Albany, N. Y. Egg-holder	437,706	Oct. 7	37	12	53	10
Mathias, Theodore N., Milwaukee, Wis. Horse-collar fastener	435,149	Aug. 26	2649	701	52	1297
Mathis, Edwin R., Council Bluffs, Iowa. Reversible envelope	442,234	Dec. 9	946	250	53	1455
Mathison, Joseph, Somerville, Mass. Button-holder for button-sewing machines	426,293	Apr. 22	2824	742	51	576
Mathison, Joseph, Somerville, Mass. Button-machine	431,001	June 24	2975	730	51	2072
Mathison, Joseph, Somerville, Mass. Machine for sewing on buttons	431,473	July 1	676	169	52	136
Matson, A. Holton, et al. (See Eldridge, Andrew H., assignor.)						
Matson, David B., Watkins, assignor of three-fourths to R. I. Smith, Catlin, N. Y. Device for raising and lowering electric or other lights	439,023	Oct. 21	2082	558	53	410
Matson, Fannie L., San José, Cal. Chart, reading, and number stand	420,560	Feb. 4	188	49	50	601
Matteson, Charles E., Allentown, Pa. Apparatus for galvanizing wire	431,905	July 8	1366	345 346	52	275
Matteson, Charles E., Allentown, Pa. Rod-reel	434,190	Aug. 12	1124	292	52	986
Matteson, Charles E., Allentown, Pa. Apparatus for galvanizing	435,760	Sept. 2	586	156	52	1488
Matteson, Charles E., Allentown, Pa. Rod-reel	440,573	Nov. 11	1487	384	53	903
Matteson, James A. (See Whitaker, Henry B., assignor.)						
Matteson, Silas C., Campbellsport, Wis. Composition for preserving eggs	432,060	July 15	1607	52	328

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Matthaei, August W., administrator. (See Richter, Jens.)						
Matthaeus, Robert, Buffalo, N. Y. Fire-escape	426,540	Apr. 29	3210	841	51	661
Matthews, Benjamin B. (See Himphey, James J., assignor.)						
Matthews, Firm of John. (See Matthews, George, assignor.)						
Matthews, Francis L., and D. J. Quinlean, Oakland, Cal. Adjustable grooving-head	423,618	Mar. 18	1887	497	50	1509
Matthews, Francis W., <i>et al.</i> (See Shaw, William C., assignor.)						
Matthews, George, assignor to Firm of John Matthews, New York, N. Y. Apparatus for charging receptacles with aerated beverages	422,959	Mar. 11	910	238	50	1317
Matthews, George G., Wichita, Kans. Kettle-drainer	434,452	Aug. 19	1547	403	52	1077
Matthews, George T., <i>et al.</i> (See Traber, Simon, assignor.)						
Matthews, Henry A., Waterbury, Conn. Attaching knobs	441,883	Dec. 2	397	105	53	1343
Matthews, James F., and W. C. Dinsmore, Claremont, S. D. Motor	425,894	Apr. 15	2217	589	51	447
Matthews, Joseph R., Macon, Ga. Automatic railway-switch	442,904	Dec. 16	2058	528	53	1650
Matthews, Oscar S., Dallas, Tex. Ruler	421,102	Feb. 11	1013	259	50	765
Matthews, Thomas J. (See Hitt, Marcellus M., assignor.)						
Matthiessen, William, Philadelphia, Pa. Chime for clocks	439,965	Nov. 4	517	136	53	708
Matthiessen & Wiechers Sugar Refining Company, F. O. (See Sternberg, Lothar, assignor.)						
Mattijetz, Andreas, Giddings, Tex. Baling-press	422,138	Feb. 25	2490	{ 658 659 }	{ 50 }	1060
Mattill, Henry, assignor of one-half to E. T. Lauer, Cleveland, Ohio. Gathering-machine for book-binders	428,685	May 27	2525	641	51	1339
Mattison, Christen, Minneapolis, Minn. Combined chamfer-cutter and lathe	431,525	July 1	758	189	52	151
Mattison, Munroe, Busti, N. Y. Coffee-pot	419,965	Jan. 21	1973	518	50	413
Mattox, Hamilton A., and E. Evans, Homerville, Ga. Plow	421,506	Feb. 18	1588	410	50	881
Mattson, Samuel, Jersey City, N. J. Method of and apparatus for tunneling	427,339	May 6	473	{ 121 122 }	{ 51 }	905
Mattullath, Hugo, Detroit, Mich. Sanding-machine for continuous barrel-staves	421,953	Feb. 25	2226	584	50	1011
Matzeliger, Jan E., deceased, Lynn, Mass.; G. W. Moulton, administrator. Nailing-machine	421,954	Feb. 25	2227	585	50	1011
Matzeliger, Jan E., deceased, Lynn, Mass.; G. W. Moulton, administrator. Tack separating and distributing mechanism	423,937	Mar. 25	2381	633	50	1611
Maudsley, Robert, <i>et al.</i> (See Gwynn, John W., assignor.)						
Mauermann, Albert J., Houston, Tex. Submarine-channel protection	423,172	Mar. 11	1240	323	50	1380
Maurer, Charles A., Cedar Bluff, Iowa. Bolt-holder	429,633	June 10	803	195	51	1636
Maurer, Valentine, <i>et al.</i> (See Koehler, William H., assignor.)						
Maurice, William T., Norfolk, Va. Waste-valve for water-pipes and means for operating the same	432,540	July 22	2336	603	52	476
Maurino, Henry G., assignor of one-fourth to C. W. Kennedy, Albuquerque, N. Mex. Ter. Vehicle-wheel	442,069	Dec. 2	697	187	53	1398
Mauser, Paul, assignor to Waffenfabrik Mauser, Oberndorf-on-the-Neckar, Württemberg, Germany. Ring cartridge-extractor	427,587	May 13	853	214	51	989
Mauser, Paul, assignor to Waffenfabrik Mauser, Oberndorf, Württemberg, Germany. Bolt-stop with cartridge-shell ejector for breech-loading guns	431,668	July 8	1000	249	52	205
Mauser, Paul, assignor to Waffenfabrik Mauser, Oberndorf, Württemberg, Germany. Shell-extractor for bolt-guns	431,669	July 8	1002	249	52	206
Mauser, Paul, assignor to Waffenfabrik Mauser, Oberndorf, Württemberg, Germany. Shell-extractor for bolt-guns	431,670	July 8	1003	249	52	206
Mauser, Paul, assignor to Waffenfabrik Mauser, Oberndorf-on-the-Neckar, Germany. Small lock for bolts of breech-loading guns	440,955	Nov. 18	2131	552	53	1033
Mautner, Adalbert, Vienna, Austria-Hungary, assignor to R. Winternitz, New York, N. Y. Renovating fabrics	429,791	June 10	1032		51	1680
Mautner, Louis, <i>et al.</i> (See Loehr, Peter H., assignor.)						
Mawhinney, Samuel, <i>et al.</i> (See Westgate, Joseph D., assignor.)						
Maxe, John W., Austin, Tex. Base-ball game	429,354	June 3	384	91	51	1544
Maxe, Lida J., Jacksonville, Fla. Button	433,087	July 29	3214	826	52	649
Maxfield, Samuel, assignor of one-half to C. Cline, Angola, Ind. Implement for recovering lost pipe from tubular wells	424,612	Apr. 1	271	71	51	55
Maxim, Hiram S., London, England. Gun	424,119	Mar. 25	2647	706	50	1662
Maxim, Hiram S., London, England. Apparatus for working ordnance	430,136	June 17	1581	{ 393 394 }	{ 51 }	1797
Maxim, Hiram S., London, England. Automatic gun	430,210	June 17	1679	{ 418 419 }	{ 51 }	1816
Maxim, Hiram S., London, England. Automatic machine-gun	430,211	June 17	1686	{ 419 420 421 }	{ 51 }	1817
Maxim, Hiram S., London, England. Manufacture of explosives	430,212	June 17	1692	421	51	1818
Maxim, Hiram S., London, England. Carburetor	430,213	June 17	1695	422	51	1819
Maxim, Hiram S., London, England. Recoil-check for ordnance	430,214	June 17	1700	423	51	1820
Maxim, Hiram S., London, England. Recovering solvents from explosives	430,215	June 17	1701	423	51	1820
Maxim, Hiram S., London, England. Explosive compound	434,049	Aug. 12	890		52	939
Maxim, Hiram S., London, England. Manufacture of explosives	436,898	Sept. 23	2456		52	1865
Maxim, Hiram S., London, England. Automatic gun	436,899	Sept. 23	2458	642	52	1865
Maxim, Hiram S., London, England. Machine-gun	439,248	Oct. 28	2447	{ 657 658 }	{ 53 }	484
Maxim, Hiram S., London, England. Projectile	443,101	Dec. 23	2391	611	53	1754
Maxim, Hudson, Pittsfield, Mass. Detachable gas-check for projectiles	428,311	May 20	1952	490	51	1211
Maxim-Nordenfeldt Guns and Ammunition Company. (See Holmström and Nordenfeldt, assignors.)						
Maxim-Nordenfeldt Guns and Ammunition Company. (See Nordenfeldt, Per, assignor.)						
Maxim-Nordenfeldt Guns and Ammunition Company. (See Nordenfeldt, Thorsten, assignor.)						
Maxim, Walter P., South Paris, Me. Bracket	425,182	Apr. 8	1163	306	51	235
Maxon, Daniel M., assignor of one-half to J. McKeon, Bay City, Mich. Conveyor	422,139	Feb. 25	2492	659	50	1061
Maxon, Daniel M., assignor of one-half to J. McKeon, Bay City, Mich. Sprocket-wheel	439,535	Oct. 28	2293	769	53	568
Maxon, Thomas, Dayton, Ohio. Disk harrow	420,817	Feb. 4	566	145	50	672
Maxon, Thomas, Dayton, Ohio. Disk harrow	435,846	Sept. 2	719	193	52	1514
Maxon, Thomas, assignor of one-half to C. Fenzel, Dayton, Ohio. Drive-chain	420,818	Feb. 4	567	145	50	672
Maxson, Cassius M., Allentown, N. Y. Snicker-rod and tubing elevator	425,183	Apr. 8	1164	307	51	236
Maxson, Cassius M., Allentown, N. Y. Nutmeg-grater	435,235	Aug. 26	2764	730	52	1320
Maxwell, David, Detroit, Mich. Tower for electric lighting	434,639	Aug. 19	1843	{ 481 482 }	{ 52 }	1137
Maxwell, George S., Louisville, Ky. Lightning-arrester	423,788	Mar. 18	2148	567	50	1559
Maxwell, Henry T., and T. McCall, Blencoe, Iowa. Apparatus for watering stock	426,459	Apr. 29	3090	811	51	638

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Maxwell, Thomas E. (See De Weese and Maxwell.)						
Maxwell, William H., Chartiers, assignor to Pittsburgh Glass Novelty Company, Pittsburg, Pa. Transferring prints or designs	439,536	Oct. 28	2895		53	569
May, Charles W., assignor of two-thirds to A. Mason and F. A. Lewis, Omaha, Nebr. Automatic station-indicator	425,685	Apr. 15	1916	{ 510 511	51	390
May, Croffard W., Verdella, Mo. Check-row corn-planter	437,220	Sept. 30	2956	773	52	1968
May, Horatio N., et al. (See Odell, John B., assignor.)						
May, John C. (See Templin, Thomas T., assignor.)						
May, John M., Cedar Rapids, Iowa. Car-axle	420,307	Jan. 28	2521	669	50	524
May, John M., Cedar Rapids, Iowa. Door-check	441,314	Nov. 25	2746	710	53	1157
May, Joseph F., Utica, Nebr. Watering-trough	443,647	Dec. 30	3299	850	53	1938
May, Max. (See Buchner, Georg, assignor.)						
May, Merinda, Manchester, Iowa. Picture-hanger, &c	426,460	Apr. 29	3091	811	51	639
May, Rudolph A., Akron, Ohio. Heating-furnace	442,291	Dec. 9	1028	271	53	1470
May, Rudolph A., Akron, Ohio. Heating-furnace	442,292	Dec. 9	1029	271	53	1470
Maybaum, Henry W. (See Farrel, John H., assignor.)						
Maybeck, Bernard K., Salt Lake City, Utah Ter., assignor of one-half to A. White, Kansas City, Mo. Toilet-fan	432,541	July 22	2337	603	52	476
Maybury, William, Pasadena, Cal. Apparatus for dyeing, bleaching, and washing yarn	439,966	Nov. 4	518	137	53	708
Maycock, Henry, New York, N. Y. Dipper-handle	434,351	Aug. 12	1370	358	52	1035
Mayer, Adolph, Chicago, Ill. Lump-fuel of coal, charcoal, or coke screenings	433,653	Aug. 5	317		52	817
Mayer, Adolphus, Brooklyn, and M. Muller, New York, N. Y. Vending apparatus	437,610	Sept. 30	3567	{ 931 932	52	2087
Mayer, Alfred, Phillipsburg, Pa. Car-wheel	439,670	Nov. 4	68	18	53	620
Mayer, August, Pasadena, Cal. Automatic flush-tank	426,033	Apr. 22	2453	648	51	500
Mayer, August, Pasadena, Cal. Automatic flush-tank	426,034	Apr. 22	2455	648	51	500
Mayer, Carl A., assignor to Société L. Durand, Huguéin & Compagnie, Basle, Switzerland. Blue dye	440,359	Nov. 11	1122		53	834
Mayer, Charles, El Paso, Tex. Fishing-tackle	419,054	Jan. 7	613	158	50	129
Mayer, Ernest, assignor of one-half to J. Mayer, New Brighton, Pa. Potter's block and batter	419,609	Jan. 14	1426	382	50	299
Mayer, John B., Newark, N. J. Clothes-line fastener	424,071	Mar. 25	2580	689	50	1649
Mayer, Joseph. (See Mayer, Ernest, assignor.)						
Mayer, Joseph A., Muskegon, Mich. Saw-guide	420,950	Feb. 11	786	{ 204 205	50	722
Mayer, Max, assignor to D. Hirsch, New York, N. Y. Dynamo-electric machine or motor	437,160	Sept. 23	2865	{ 744 745	52	1943
Mayer, William T. (See Verplanck, Robert L., assignor.)						
Mayers, Albert G., et al. (See Killinger, Mehrose M., assignor.)						
Mayes, Thomas T., Belton, Tex. Hay-press	418,735	Jan. 7	115	27	50	25
Mayfield, Elmer J., assignor of two-thirds to S. Cohen and S. Proskauer, Richmond, Va. Shoe-lace fastener	428,758	May 27	2634	667	51	1360
Mayfield, Reuben N., Boulder, Colo. Railway-tricycle	419,591	Jan. 14	1394	373	50	293
Mayfield, William D., Fort Worth, Tex. Running-gear	435,847	Sept. 2	720	193	52	1514
Mayhew, Ernest E., and A. C. Brandau, Grand Rapids, Mich., said Mayhew assignor to said Brandau. Drawer-guide and runner	423,877	Mar. 18	2281	602	50	1585
Maynadier, James E., trustee. (See Heymann, Edward and F. W., assignors.)						
Maynadier, James E., Taunton, Mass. System of telpherage	425,038	Apr. 8	940	{ 251 252	51	190
Maynadier, James E., Taunton, Mass. Telpherage system	441,250	Nov. 25	2636	{ 683 684	53	1137
Maynard, Allen E. (See Potter, Frank R., assignor.)						
Maynard, Robert. (See Smith and Maynard.)						
Mayo, Alice L., New York, N. Y. Guide for sewing-machines	423,173	Mar. 11	1242	323	50	1380
Mayo, Warren S., assignor of one-half to G. Robertson, Ottawa, Ontario, Canada. Drying-kiln	433,800	Aug. 5	544	140	52	862
Mayo, William A., Paris, Tex. Tire-tightener	426,730	Apr. 29	3504	916	51	717
Mayo, William S., New York, N. Y. Overflow for water-closets	430,966	June 24	2922	717	51	2062
Mayott, Lafayette H., Springfield, Mass. Safety trigger-lock	436,099	Sept. 9	1114	289	52	1594
Mayott, Lafayette H., Springfield, Mass. Safety-lock for fire-arms	436,100	Sept. 9	1115	290	52	1595
Mayotte, Napoleon. (See Valquet, Ephrem F., assignor.)						
Mayotte, Daniel L., and J. M. Castle, Mount Sylvan, Tex. Device for attaching horseshoes	440,048	Nov. 4	640	170	53	733
Mayrhofer, Carl A., Berlin, Germany, assignor, by mesne assignments, to Electro-Pneumatic Time Company, New York, N. Y. Electro-pneumatic-clock system	427,781	May 13	1148	288	51	1048
Mayrhofer, Carl A., Berlin, Germany, assignor, by mesne assignments, to Electro-Pneumatic Time Company, New York, N. Y. Electro-mechanical central system for regulating clocks	443,291	Dec. 23	2726	{ 700 701	53	1818
Mayrhofer, Joseph C., New York, N. Y., assignor to American Automatic Spray Perfume Company. Apparatus for dispensing liquids	430,079	June 10	1491	370	51	1769
Mays, James F., assignor of one-half to I. Berry & Co. and D. Turbeville, Birmingham, Ala. Adding-machine	424,932	Apr. 1	768	204	51	149
McAdams, George B. (See Walter, Willie C., assignor.)						
McAfee, Charles and R., Portland, Ore. Draw-head for railway-cars	420,561	Feb. 4	189	49	50	602
McAfee, John F., Pleasant Hill, Mo. Paper-cutter attachment	420,823	Feb. 4	577	147	50	674
McAfee, John F., and J. H. Loback, Pleasant Hill, Mo. Automatic winding attachment for carding-machines	439,542	Oct. 28	2902	{ 771 772 773	53	570
McAfee, John Q., et al. (See Baldwin, George E. D., assignor.)						
McAfee, Roger. (See McAfee, Charles and R.)						
McAfee, Dennis B., Lincoln, R. I. Ink-well attachment for inkstands	425,689	Apr. 15	1924	512	51	392
McAlister, James R., Rossie, N. Y. Vehicle-hub	423,265	Mar. 11	1370	356	50	1403
McAllister, George, Sterling, Kans. Wheat-steaming and heating machine	424,808	Apr. 1	581	154	51	113
McAlpine, James W., Jr., Savannah, Ga. Vegetable-chopper	424,075	Dec. 2	705	189	53	1400
McAlpine, Lemuel B., Homer, N. Y. Veneer-cutting machine	440,321	Nov. 11	1069	275	53	824
McAlpine, Robert L., et al. (See Terteling, Theodor A., assignor.)						
McAlpine, William W., Boligee, Ala. Shelf	424,333	Mar. 25	2967	791	50	1724
McAnnulty, Jefferson D., Pioneer Mills, assignor of one-third to S. F. Houston, Charlotte, N. C. Saw-gin	439,601	Oct. 28	3001	796	53	590
McAnally, James D., Waterloo, Ind. Hame-tug	421,105	Feb. 11	1016	260	50	765
McArthur, James, et al. (See Boner, William W., assignor.)						
McArthur, James, assignor, by mesne assignments, to J. W. Martin, A. R. Sheffer, R. S. Kenyon, trustee, and A. Sorge, Jr., New York, N. Y. Sash-balance	418,811	Jan. 7	228	56	50	49
McArthur, James, assignor to Pullman Sash Balance Company, Rochester, N. Y. Sash-balance	429,941	June 10	1257	311	51	1724
McArthur, Mary J., Cleveland, Ohio. Axle-lubricator	438,817	Oct. 21	1767	473	53	350

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McArthur, Peter, assignor of two-thirds to T. Howard and J. W. Harrison, St. Louis, Mo. Mold-drying apparatus	434,833	Aug. 19	2133	559	52	1193
McArthur, Robert X., Jackson, Mich., assignor of one-half to G. Marsh and E. C. Hall, St. Anthony Park, Minn. Clamp for holding bedclothes	420,083	Jan. 28	2156	570	50	457
McAuley, John G., New York, N. Y. Pulverized-fuel feeder	441,688	Dec. 2	90	24	53	1280
McAuley, John G., New York, N. Y. Fuel-feeding apparatus	441,689	Dec. 2	92	25	53	1280
McAvity, George, <i>et al.</i> (See McShane, William, assignor.)						
McAvity, John, <i>et al.</i> (See McShane, William, assignor.)						
McAvity, Thomas. (See Jones, Erastus N., assignor.)						
McAvity, Thomas, <i>et al.</i> (See McShane, William, assignor.)						
McAvoy, James A. (See Scott and McAvoy.)						
McBean, George, assignor of one-half to C. H. Akerley, Tonawanda, N. Y. Shingle-trimming machine	436,145	Sept. 9	1192	{ 311 312 }	{ 52 51 }	{ 1607 1545 }
McBee, Randolph, Washington, D. C. Pipe-hanger	429,357	June 3	388	92	51	1545
McBlair, Charles R., Washington, D. C., assignor to M. W. Offutt, Towsontown, Md. Making iron prints by photography	442,450	Dec. 9	1275	.....	53	1518
McBride, Charles O., Muscatine, Iowa. Folding target	429,942	June 10	1255	311	51	1724
McBride, John J. (See Coe and McBride.)						
McBride, T. J., <i>et al.</i> (See Laube, Godfried, assignor.) (Reissue.)						
McBride, Thomas, Philadelphia, Pa., and E. Fisher, Kincardine, Canada. Friction-clutch	442,076	Dec. 2	706	{ 189 190 }	{ 53 50 }	{ 1401 1475 }
McBride, William, Portland, Me. Steerer for inclined rudder-posts	423,486	Mar. 18	1696	447	50	1475
McBride, William C., Brooklyn, N. Y. Machine for breaking fibrous vegetable substances	436,718	Sept. 16	2091	{ 550 551 }	{ 52 51 }	{ 1788 1788 }
McBride, William C., Brooklyn, N. Y. Apparatus for transferring fiber	436,719	Sept. 16	2093	551	52	1788
McBride, William C., Brooklyn, N. Y. Machine for cleaning vegetable fiber	436,720	Sept. 16	2094	{ 551 552 }	{ 52 52 }	{ 1789 1789 }
McCabe, William, assignor to St. Louis Corset Company, St. Louis, Mo. Button-fastening for garments	425,899	Apr. 15	2222	590	51	448
McCahey, Charles, and C. W. Biglow, New York, N. Y. Double bag	428,853	May 27	2774	705	51	1388
McCahey, John. (See McDonough, Charles, assignor.)						
McCahey, John, Providence, R. I., assignor to New England Bntt Company. Guide for machines for covering wire	439,675	Nov. 4	74	20	53	622
McCain, Richard H., <i>et al.</i> (See Rose, William P., assignor.)						
McCalip, Daniel C. (See Budde and McCalip.)						
McCall, Charles S. (See Fletcher, John C., assignor.)						
McCall, Dugald B., Yareleton, Tex. Back-band buckle	437,222	Sept. 30	2959	774	52	1968
McCall, Thomas. (See Maxwell and McCall.)						
McCalla, William B., Gallion, Ohio. Wind-engine	420,824	Feb. 4	578	148	50	674
McCallum, Hugh, <i>et al.</i> (See Heald, Alfred, assignor.)						
McCallum, William A., assignor to W. Kirkup & Son, Cincinnati, Ohio. Jointed post and manufacture of the same	443,053	Dec. 16	2281	585	53	1726
McCamant, Theodore F., San Antonio, Tex. Sanitary closet	427,600	May 13	868	{ 217 218 }	{ 51 51 }	{ 992 992 }
McCandless, James W., assignor of one-half to W. F. Venard, Florence, Colo. Auxiliary rifle-barrel for guns	439,543	Oct. 28	2908	773	53	571
McCandless, Charles E., Atlanta, Ga. Truss	436,721	Sept. 16	2097	552	52	1789
McCanley, John W., Lake Charles, La. Wagon	419,537	Jan. 14	1324	353	50	278
McCann, Adam A., New York, N. Y., assignor to H. V. and W. E. Piaget, Jersey City, N. J. Antographic manifold-tablet	439,887	Nov. 4	388	101	53	683
McCann, John J., Poughkeepsie, N. Y. Horse-holder	428,931	May 27	2884	738	51	1411
McCanna, Andrew B., and B. B. Brady, Chicago, Ill. Coffee-grinder	425,817	Apr. 15	2102	562	51	427
McCants, Jason S., Talladega, Ala. Pessary	421,958	Feb. 25	2232	587	50	1013
McCarten, George I., Kansas City, Kans., and F. C. McNally, Kansas City, Mo. Means for supplying compressed air to motors	421,418	Feb. 18	1457	377	50	856
McCarter, James and M., Bowers, Ind. Washing-machine	421,959	Feb. 25	2233	587	50	1013
McCarter, Joseph, <i>et al.</i> (See Drodzewski, Julius R., assignor.) (Reissue.)						
McCarter, Milton. (See McCarter, James and M.)						
McCarthy, John. (See Jandus and McCarthy.)						
McCarthy, John A., Lebanon, Ind. Wire fence	429,244	June 3	205	51	51	1511
McCarthy, Joseph J., Dodsonville, Ohio. Wrench	433,353	July 29	3599	928	52	728
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin ornament	430,395	June 17	2014	496	51	1281
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin-handle	433,692	Aug. 5	372	95	52	829
McCarthy, Oxley, London, England, assignor to Overman Wheel Company, Boston, Mass. Velocipede	437,223	Sept. 30	2960	774	52	1968
McCarthy, William, Drinker, Pa. Nut-lock	431,705	July 8	1068	267	52	217
McCartney, James H., Rochester, N. Y. Signaling apparatus	431,671	July 8	1004	250	52	206
McCartney, James H., Rochester, N. Y. Railway-signal	441,324	Nov. 25	2758	713	53	1160
McCart, Charles, assignor to himself and P. P. Morris, Fall River, Mass. Ring-rail for spinning-frames	419,538	Jan. 14	1325	354	50	278
McCart, Richard J., and C. A. Burton, Kansas City, Mo. Lubricator	431,910	July 8	1370	347	52	276
McCart, Thomas, Pittsburg, Pa. Shift for coal, &c.	426,045	Apr. 22	2466	{ 651 652 }	{ 51 51 }	{ 502 502 }
McCart, Timothy M., Hartford, Conn. Folding carriage	434,570	Apr. 1	206	56, 57	51	43
McCart, Will. H., Rolling Prairie, Ind. Ingrowing-toe-nail protector	440,434	Nov. 11	1270	328	53	861
McCaskey, John L., Waynesborough, Pa. Electric programme-clock	428,854	May 27	2775	706	51	1389
McCaslin Machine Company. (See Hunt, Charles W., assignor.)						
McCaull, William J., Dickson, assignor of one-half to J. N. Simpson, McEwen, Tenn. Car-coupling	435,852	Sept. 2	726	195	52	1515
McCauley, Reuben A., Baltimore, Md. Funereal carriage	420,605	Feb. 4	252	68	50	614
McCauley, Reuben A., Baltimore, Md. Coal-chute	427,184	May 6	243	63	51	859
McCauley, William H. (See Freeman and McCauley.)						
McCausland, David, assignor of one-half to W. P. Lane, Detroit, Mich. Thill-jack	442,040	Dec. 2	649	174	53	1389
McCausland, William L., Temple, Tex. Washing-machine	427,601	May 13	869	218	51	992
McCay, Douglas R. (See Parker and McCay.)						
McChesney, Marcus. (See Carter and McChesney.)						
McChesney, Reuben, Philadelphia, Pa. Guide for band-saws	425,105	Apr. 8	1028	275	51	207
McClain, Andrew, San Diego, Cal. Pumigator	441,690	Dec. 2	93	25	53	1280
McClain, Edward L. (See Altman, Thornton F., assignor.)						
McClain, Edward L., Greenfield, Ohio. Coffee-mill	419,700	Jan. 21	1573	421	50	333
McClain, Edward L., Greenfield, Ohio. Coffee-mill	419,701	Jan. 21	1574	421	50	333
McClain, Edward L., Greenfield, Ohio. Animal-trap	431,122	July 1	133	35	52	28

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McClain, Edward L., Greenfield, Ohio. Horse-collar pad	438,171	Oct. 14	768	209	53	154
McClary, Thomas D., assignor to Perfection Heat and Light Company, Washington, D. C. Vapor-burner	421,188	Feb. 11	1139	291	50	789
McClary, Thomas D., assignor to G. W. Cooper, Washington, D. C. Vapor or decompos- ing hydrocarbon burner	437,310	Sept. 30	3096	{ 811 812 }	52	1994
McClaghry, Charles C., Joliet, Ill. Clothes-line prop and stretcher	432,429	July 15	2154	554	52	431
McClave, Albert B., Platteville, Colo. Car-coupling	430,216	June 17	1703	423	51	1820
McClay, John, Chicago, Ill. Railway-car	418,739	Jan. 7	118	28, 29	50	26
McCleane, George F., Allegheny, and W. M. Faber, Jr., Pittsburg, Pa. Mill appliance	426,046	Apr. 22	2468	{ 652 653 }	51	503
McCleery, William, <i>et al.</i> (See Campbell, Duncan H., assignor.)						
McClellan, Ezra S., Paterson, N. J. Waste-pipe connection for basins	441,691	Dec. 2	95	25	53	1281
McClellan, Felix G., Carrothers, Ohio. Farm-vehicle	419,280	Jan. 14	947	250	50	201
McClellan, James P., and A. W. Hitt, Thayer, Mo. Vaginal syringe	426,047	Apr. 22	2470	653	51	503
McClelland, George B., and H. Ruppel, Cleveland, Ohio. Vapor-stove	424,654	Apr. 1	334	87	51	65
McClelland, James R., <i>et al.</i> (See Kurtz, John A., assignor.)						
McClelland, William, Berlin, Wis. Gate	443,863	Dec. 30	3629	935	53	2003
McClinchie, Uriah, Brooklyn, N. Y. Perambulator	428,780	May 27	2665	676	51	1366
McClintock, George W., Quincy, assignor of one-half to M. N. Bray, Brookline, Mass. Lock for fire-arms	430,396	June 17	2015	497	51	1881
McClintock, George W., Quincy, assignor of one-half to M. N. Bray, Brookline, Mass. Lock for fire-arms	430,397	June 17	2017	497	51	1881
McClintock, John M., <i>et al.</i> (See Lindsay, William E., assignor.)						
McCloskey, David, assignor to L. C. McCloskey, Wilmington, Del. Game	435,853	Sept. 2	728	195	52	1516
McCloskey, John, and C. F. Farwell, Boston, Mass. Printing-ink	422,430	Mar. 4	98		50	1155
McCloskey, Louisa C. (See McCloskey, David, assignor.)						
McCloud, Smith N. (See Hazen, Fred, assignor.)						
McCluer, Charles E., Richmond, Va. Telephone toll-box and connection-register	424,993	Apr. 8	866	230	51	176
McCluer, Charles E., Richmond, Va. Artificial ground and compound metallic circuit system	437,311	Sept. 30	3099	812	52	1994
McClure, Albert E., Sedalia, Mo. Cam-cleat	441,692	Dec. 2	96	25, 26	53	1381
McClure, Frank, assignor of one-half to A. M. Abbott, Stockton, Cal. Chuck for turning- lathes	436,459	Sept. 16	1689	445	52	1712
McClure, John H. (See Norton and McClure.)						
McClure, Mame, Coshocton, Ohio. Laundry-table	436,839	Sept. 23	2325	{ 611 612 }	52	1840
McClure, Walter P. (See Franck, Emil, assignor.)						
McClure, William, Pittsburg, Pa. Game apparatus	435,237	Aug. 26	2767	731	52	1320
McClure, William B., St. Paul, Minn. Manufacturing artificial fuel	437,163	Sept. 23	2869	746	52	1944
McClure, William B., St. Paul, Minn. Artificial fuel	437,164	Sept. 23	2970		52	1944
McClure, William H., Guthrie, Oklahoma Ter. Sash-holder	440,186	Nov. 11	851	219	53	785
McCollister, Irvin, and B. F. Rennerd, Chillicothe, Ohio. Reel for corn-harvesters	435,238	Aug. 26	2768	731	52	1321
McCollum, Henry. (See Parr, Joseph, assignor.)						
McCollum, John A., and B. F. Burt, River Side, Cal. Apparatus for the manufacture of gas	430,807	June 24	2684	658	51	2018
McComb, James. (See Davis and McComb.)						
McCombie, William, Chicago, Ill. Journal-brass	433,301	July 29	3527	910	52	713
McComish, John J., <i>et al.</i> (See Shanahan, John J., assignor.)						
McConihay, Felix G., Lewiston, W. Va. Miner's spectacles	427,438	May 6	630	158	51	936
McConnell, John W., and J. Higginson, Jr., Manchester, county of Lancaster, England. Apparatus for grinding flats for revolving carding-engines	426,416	Apr. 22	3032	794	51	618
McConnell, George. (See Powell, Francis M., assignor.)						
McConnell, James, and M. B. Sherman, Evanston, Ill. Horse-detacher	433,873	Aug. 5	646	167	52	883
McConnell, John, Cleveland, Ohio. Wick-tube and attachment	436,948	Sept. 23	2532	663	52	1879
McConnell, Thomas, San Francisco, Cal. Loading elevator	432,637	July 22	2480	638	52	503
McConnell, William H., Nelsonville, Ohio. Friction-clutch	428,568	May 20	2323	589	51	1283
McConnell, William T. (See O'Connor and McConnell.)						
McConnico, Samuel B., <i>et al.</i> (See Berne, Arthur W., assignor.)						
McConnico, Samuel B., New Orleans, La. Umbrella	429,466	June 3	553	134	51	1579
McConway, William. (See Buhoup, Henry C., assignor.)						
McCook, Edward M. (See Pennycook, John T., assignor.)						
McCool, John W., assignor of one-half to C. Wilson, Eddyville, Ill. Fence-post	434,454	Aug. 19	1548	404	52	1077
McCool, William A., Beaver Falls, Pa. Chuck	420,016	Jan. 21	2052	541	50	427
McCord, Alvin C., Minneapolis, Minn. Car-coupling	438,275	Oct. 14	931	252	53	183
McCord, Ezra. (See Hopkins, Harvey L., assignor.)						
McCord, George D. (See Dickins, Sam, assignor.)						
McCord, George W., Baker City, Oreg. Clothes-pin	439,250	Oct. 28	2457	658	53	486
McCord, James R., Jackson, Ga. Fertilizer-distributor	429,859	June 10	1140	282	51	1701
McCord, William S., Gratz, Ky. Harrow	427,353	May 6	494	126	51	909
McCormack, Sarah M., Cold Spring, N. Y. Wardrobe-trunk	440,957	Nov. 18	2135	{ 552 553 }	53	1034
McCormack, Ulysses S., Newark, N. J., assignor to American Writing Machine Company, Hartford, Conn. Type-writing machine	439,544	Oct. 28	2909	774	53	572
McCormack, William, West Chester, Pa. Device for supporting shades, &c.	438,857	Oct. 21	1842	490	53	362
McCormick Cane-Umbrella Company. (See McCormick, John, assignor.)						
McCormick, Charles A., <i>et al.</i> (See Riedell, John H., assignor.)						
McCormick, Charles W., Emporia, Kans. Store-service apparatus	431,003	June 24	2978	{ 731 732 }	51	2073
McCormick, Charles W., Emporia, Kans. Store-service apparatus	437,931	Oct. 7	395	112	52	76
McCormick, Frank K. (See Liedke, Edward L., assignor.)						
McCormick, H. L. P., <i>et al.</i> (See Insti, Johann A. W., assignor.)						
McCormick Harvesting Machine Company. (See Baker, William R., assignor.)						
McCormick Harvesting Machine Company. (See Baker and Pridmore, assignors.)						
McCormick Harvesting Machine Company. (See Coler, Peter P., assignor.) (Reissue.)						
McCormick Harvesting Machine Company. (See Haskins, James H., assignor.)						
McCormick Harvesting Machine Company. (See Kellogg, Edwin M., assignor.)						
McCormick Harvesting Machine Company. (See Pridmore, Henry E., assignor.)						
McCormick Harvesting Machine Company. (See Pridmore and Baker, assignors.)						
McCormick, John, assignor to McCormick Cane-Umbrella Company, Washington, D. C. Umbrella	421,419	Feb. 18	1450	378	50	857
McCormick, Joseph J., <i>et al.</i> (See Riedell, John H., assignor.)						
McCort, John. (See Bopp and McCort.)						
McCottery, Alexander M., Fernandina, Fla. Wheel	442,077	Dec. 2	708	190	53	1401

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McCowen, William A. (See Wright, Alfred G., assignor.)						
McCoy, Andrew T., Boston, Mass., assignor to J. Anderson, New York, N. Y. Printing-telegraph	429,576	June 3	715	{ 173 174 }	51	1610
McCoy, Andrew T., Boston, Mass., assignor to J. Anderson, New York, N. Y. Printing-telegraph	429,577	June 3	718	174	51	1610
McCoy, Andrew T., Boston, Mass., assignor to J. Anderson, New York, N. Y. Printing-telegraph	431,987	July 8	1490	375	52	300
McCoy, James M. (See Cox, Israel W., assignor.)						
McCoy, John A., Medford, assignor to New England Telephone and Telegraph Company, Boston, Mass. Telephone-exchange	432,547	July 22	2344	{ 695 696 869 870 }	52	478
McCoy, John S., Beverly, N. J. Road-cart	437,446	Sept. 30	3334	{ 869 870 }	52	2040
McCoy, John W. (See Bartlett and McCoy.)						
McCoy, William, Rome, Ga. Steam blower and drier for furnaces	419,539	Jan. 14	1326	354	50	279
McCoy, William H., assignor to Miller's Falls Company, Erving, Mass. Jaws of bit-braces and tool-holders	421,420	Feb. 18	1460	378	50	857
McCracken, Edwin D., Alpine, N. J., assignor of one-half to F. M. Miller, Cortland, N. Y. Machine for making paper tubes	427,705	May 13	1024	{ 257 258 }	51	1023
McCrary, Frank E., Kansas City, Mo., and W. W. Gelatt, Chicago, Ill. Car-coupling	435,444	Sept. 2	98	28	52	1394
McCray, John E., assignor of two-thirds to J. M. McCray and L. H. Rentert, Indianapolis, Ind. Horse-detacher	423,623	Mar. 18	1900	501	50	1512
McCray, John M., et al. (See McCray, John E., assignor.)						
McCreedy, Charles H., et al. (See Beacock, George, assignor.)						
McCreedy, Richard L., Allegheny, Pa. Marking-pen	437,312	Sept. 30	3103	812	52	1994
McCreedy, William F., Homewood, Pa. Sanding device for cars	438,568	Oct. 14	1352	367	53	267
McCreedy, William F., Homewood, Pa. Car-wheel	440,050	Nov. 4	644	171	53	734
McCreary, Alfred A., New York, N. Y. Electric-light shield	438,419	Oct. 14	1142	308	53	224
McCree, Daniel, Chicago, Ill. Portable fire-escape	440,322	Nov. 11	1071	275	53	825
McCreight, M. I. (See Powers, Charles M., assignor.)						
McCrory, William. (See McGlaflin, Eugene O., assignor.)						
McCruy, William, Minneapolis, and E. O. McGlaflin, Anoka, Minn. Brake for cable cars	419,616	Jan. 14	1435	385	50	301
McCruden, James, assignor to Flint Road Cart Company, Flint, Mich. Vehicle-seat	422,431	Mar. 4	98	27	50	1155
McCrystal, John F., et al. (See Montgomery, Edward F., assignor.)						
McCulloch, George F. (See Cornelius, Charles, assignor.)						
McCulloch, John A. (See Cenkle and McCulloch.)						
McCullough, George C., assignor of one-third to J. B. Dougan, Richmond, Ind. Fire or police telegraph	423,487	Mar. 18	1698	448	50	1476
McCully, Charles H. (See McCully, Richard P. and C. H.)						
McCully, Richard P. and C. H., Brooklyn, N. Y. Speculum	430,350	June 17	1947	{ 477 478 }	51	1867
McCully, William F., trustee. (See Wood, Joseph S., assignor.)						
McCune, Joseph B., et al. (See Torkelson, Reinhard T., assignor.)						
McCune, Joseph B., and J. L. Yost, Everett, Mass. Bicycle	424,994	Apr. 8	870	{ 230 231 }	51	177
McCurdy, Arthur W., and F. H. Wines, Washington, D. C. Printing block or form	443,373	Dec. 23	2862	736	53	1846
McCurdy, George, Unity, Wis. Log-hook	435,511	Sept. 2	195	54	52	1412
McCurdy, John D., assignor of one-half to G. E. Hannum, Minneapolis, Minn. Washing-machine	432,548	July 22	2350	606	52	478
McCurdy, Thomas B., Lancaster, Tex. Vehicle-top	437,224	Sept. 30	2963	775	52	1969
McCurry, Henry, Chicago, Ill. Vehicle-seat top	426,302	Apr. 22	2842	749	51	580
McCutcheon, John B., Battle Creek, Mich. Band-cutter and feeder	424,334	Mar. 25	2968	791	50	1724
McCutcheon, John B., assignor of one-half to W. M. Hickman, Battle Creek, Mich. Grain tally or register	419,281	Jan. 14	950	250	50	201
McDaniel, Charles W., assignor of one-half to A. L. Sargent, Lake Village, N. H. Turning-lathe	419,155	Jan. 7	758	201	50	158
McDaniel, John S., assignor to himself and J. Watson, Philadelphia, Pa. Steam trap and separator	434,675	Aug. 19	1911	498	52	1149
McDaniel, Johnson B., Madison, Kans. Seeder attachment for cultivators	434,397	Aug. 12	1450	377	52	1051
McDaniel, Oscar D., Ridgway, Ill. Grain measure and tally	421,421	Feb. 18	1461	378	50	857
McDaniel, Samuel W. (See Berry, Ellen A., assignor.)						
McDaniel, William, Bearden, Ark. Hog-pen	431,800	Aug. 19	2089	{ 546 547 }	52	1184
McDannel, Abner J., assignor, by mesne assignments, of one-half to J. F. Locke, M. C. Flint, and E. T. Le Clair, Denver, Colo. Composition of matter	428,219	May 20	1801	.....	51	1182
McDermot, James W., Nevada, assignor of one-half to A. and M. A. Smalley, Upper Sandusky, Ohio. Thill-coupling	433,417	July 29	3679	950	52	745
McDermott, Augustine S., Dubuque, Iowa. Cultivator	434,067	Aug. 12	925	{ 243 244 }	52	947
McDermott, C. A. (See Falkner, William, assignor.)						
McDermott, James, Brooklyn, N. Y. Suspended stair-scaffold	436,460	Sept. 16	1690	445	52	1712
McDiarmid, John, Des Moines, Iowa. Tool for laying out stairways	437,313	Sept. 30	3103	813	52	1995
McDill, Mary M., Ora, S. C. Churn	424,335	Mar. 25	2969	791	50	1724
McDill, Samuel F., assignor of one-half to J. R. Fritz, San Francisco, Cal. Street-sweeping machine	427,185	May 6	244	63, 64	51	859
McDonagh, Charles, assignor of one-half to J. McCaffrey, Toledo, Ohio. Flower-pot machine	427,354	May 6	495	127	51	909
McDonah, Robert, assignor of one-fourth to W. N. Croffut, Binghamton, N. Y. Nut-lock	421,358	Feb. 11	1374	355	50	832
McDonald, Alexander, Franklin, Cal. Sack-holder	426,208	Apr. 22	2715	711	51	552
McDonald, Alexander, Franklin, Cal. Straw-dump attachment for combined harvesters	443,648	Dec. 30	3300	851	53	1938
McDonald, Alexander E., Brooklyn, N. Y. Ticket-holder for car-seats	424,429	Mar. 25	3137	832	50	1758
McDonald, Alexander J. (See Dyer, Isaac T., assignor.)						
McDonald, Charles L., et al. (See Burke, Stephen L., assignor.)						
McDonald, Donald, Louisville, Ky. Jail-bucket	437,614	Sept. 30	3574	934	52	2089
McDonald, Duncan F., Berkeley, Cal. Animal-shears	430,669	June 24	2454	598	51	1973
McDonald, Duncan F., Berkeley, Cal. Ship's berth	430,670	June 24	2455	599	51	1973
McDonald, Duncan F., Berkeley, Cal. Device for adjusting window-curtains	442,590	Dec. 9	1502	387	53	1564
McDonald, Edward, Cincinnati, Ohio. Water-closet	437,709	Oct. 7	42	13	53	11
McDonald, Edward P., Pittsfield, Mass. Device for fitting hats	424,336	Mar. 25	2970	791	50	1724
McDonald, Edwin, Willow, Cal. Washing-machine	433,133	July 29	3288	{ 846 847 }	52	664
McDonald, Gallaspie, assignor of two-thirds to J. McDonald, Rencoverto, and P. Dow, White Sulphur Springs, W. Va. Bedstead	437,314	Sept. 30	3104	813	52	1995
McDonald, James M., Montgomery, Ala. Brick-die	422,432	Mar. 4	99	27	50	1156

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McDonald, James S., Chicago, Ill. Manifold order-book.....	431,071	July 1	65	16	52	15
McDonald, John, <i>et al.</i> (See McDonald, Gallaspie, assignor.)						
McDonald, John, Pittsburg, Pa. Steam-boiler water-level indicator.....	419,967	Jan. 21	1975	519	50	413
McDonald, John B., <i>et al.</i> (See Sawyer, Edward C., assignor.)						
McDonald, Louis A., Roe, Ark. Lap-hook.....	435,151	Aug. 26	2651	701	52	1298
McDonald, Neil, assignor of one-half to J. H. Townsend, Tangier, Nova Scotia, Canada. Window-ventilator.....	424,895	Apr. 1	716	191	51	138
McDonald, Robert E., <i>et al.</i> (See Graham, Robert A., assignor.)						
McDonald, Thomas A., Durham, Canada, assignor to Leslie Brothers Manufacturing Company, Paterson, N. J. Water-wheel.....	442,694	Dec. 16	1662	427	53	1604
McDonald, William A. (See Ryan and McDonald.)						
McDonna, Mathew J., Edelstein, Ill. Water-cart.....	436,373	Sept. 16	1558	409	52	1688
McDonnell, William J., Salt Lake City, Utah Ter. Mop-head.....	429,048	May 27	3071	792	51	1446
McDonough, Charles B., Sr., Philadelphia, Pa. Ice-tongs.....	426,464	Apr. 29	3098	812	51	640
McDonough, Denis and F. H. Green; said Green assignor, by mesne assignments, to W. H. Frawley, Eau Claire, Wis. Harness-hook.....	430,217	June 17	1704	424	51	1820
McDonough, Frank, Eau Claire, Wis. Machine-carriage.....	432,549	July 22	2351	606	52	478
McDonough, James W., New York, N. Y. Telephone.....	438,818	Oct. 21	1769	473 474	53	350
McDonough, Thomas, <i>et al.</i> (See Green, James A., assignor.)						
McDougall, Alexander, Madawaska Station, Ontario, Canada. Car-coupling.....	429,358	June 3	389	92	51	1545
McDougall, Alexander, assignor to himself, M. J. Grady, and W. W. Roche, Madawaska Station, Ontario, Canada. Car-coupling.....	427,602	May 13	870	218	51	992
McDougall, Alexander, Duluth, Minn. Apparatus for cooling and drying grain.....	432,145	July 15	1748	448 449	52	356
McDougall, Alexander, Duluth, Minn., assignor to American Steel Barge Company, of New York. Tow-boat.....	429,467	June 3	554	134 135	51	1579
McDougall, Alexander, Duluth, Minn., assignor to American Steel Barge Company, of New York. Steam tow-boat.....	429,468	June 3	556	135 136	51	1579
McDougall, William M., East Orange, N. J. Electric motor for railway-cars.....	431,213	July 1	275	69	52	56
McDorman, Calvin W., Fargo, N. D. Harness.....	443,106	Dec. 23	2402	612	53	1756
McDowell, Albert, assignor of one-half to J. A. Stroud, Selma, Cal. Cooler.....	424,125	Mar. 25	2656	707 708	50	1663
McDowell, Bartley D., Morrison, Ill. Pipe-crimper.....	435,764	Sept. 2	594	158	52	1489
McDowell, David E., Columbus, Ohio. Paving-block.....	436,989	Sept. 23	2583	676	52	1889
McDowell-Guajardo, José A., Saltillo, Coahuila, Mexico. Lubricating device for the top and bottom rollers of spinning or other frames.....	431,779	July 8	1176	293	52	238
McDowell, Harry S., <i>et al.</i> (See Pritschau, Arthur F., assignor.)						
McDowell, Lewis, <i>et al.</i> (See Green, James A., assignor.)						
McDowell, Oliver, Harlan, Iowa. End-gate.....	425,620	Apr. 15	1814	485	51	370
McDowell, Richard, Lambertville, N. J. Sand box and drier.....	431,911	July 8	1371	347	52	277
McDowell, Samuel J., assignor of one-half to W. O. Armes, Boston, Mass. Portable cooking apparatus.....	428,569	May 20	2324	590	51	1283
McDowell, William J., Snow Shoe, Pa. Miner's safety-lamp.....	430,671	June 24	2457	599	51	1973
McDowell, William L., Lower Merion, Pa. Oven for stoves or ranges.....	419,021	Jan. 7	566	142	50	119
McDuff, Allan, and J. Mrazek, Cedar Rapids, Iowa. Device for testing crank-pins.....	437,225	Sept. 30	2963	775	52	1969
McDuffie, Charles D., Manchester, N. H. Support for spinning-spindles.....	418,740	Jan. 7	120	29	50	27
McDowdney, James H., Detroit, Mich. Broom or whisk.....	429,469	June 3	559	136	51	1580
McElroy Car Heating Company. (See McElroy, James F., assignor.)						
McElroy, Charles E., assignor of one-half to A. Barrows, Brockton, Mass. Glove-band.....	441,693	Dec. 2	97	26	53	1281
McElroy, Daniel S., New York, N. Y. Electro-magnetic car-brake.....	420,693	Feb. 4	372	99	50	637
McElroy, Daniel S., New York, N. Y. Railway train-signal.....	437,084	Oct. 7	638	174	53	123
McElroy, James, assignor of two-thirds to M. R. and L. Sulzer, Madison, Ind. Pen-extractor.....	429,218	June 3	171	41	51	1504
McElroy, James F., Lansing, assignor to McElroy Car Heating Company, Detroit, Mich. Circulating hot-water apparatus.....	422,312	Feb. 25	2767	729	50	1111
McElroy, James F., Lansing, Mich., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Water-heater.....	435,075	Aug. 26	2544	671	52	1277
McElroy, James F., assignor to McElroy Car Heating Company, Albany, N. Y. Heating system.....	425,384	Apr. 8	1451	388 389	51	290
McElroy, James F., Albany, N. Y., assignor, by mesne assignments, to Consolidated Car Heating Company, Wheeling, W. Va. Heating system.....	439,883	Nov. 4	389	101	53	683
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Temperature-regulator.....	436,015	Sept. 9	1036	269	52	1581
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Temperature-regulator.....	442,990	Dec. 16	2188	563	53	1707
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Temperature-regulator.....	443,294	Dec. 23	2735	702	53	1820
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Railway-car heater.....	426,845	Apr. 29	3675	957	51	750
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Train-pipe for railway-cars.....	428,016	May 13	1505	382	51	1115
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Regulating-valve.....	428,932	May 27	2886	739	51	1412
McElroy, Patrick J., Cambridge, Mass. Atomizer.....	433,954	Aug. 12	766	199	52	916
McElya, John D., Metropolis City, Ill. Stump-extractor.....	438,634	Oct. 21	1459	394	53	292
McEnany, Patrick, Troy, N. Y. Connection for the steam-heating pipes of railway-cars.....	438,356	Oct. 14	1048	285 286	53	207
McEnerney, John, assignor to American Granite Company, New York, N. Y. Machine for grinding and polishing stone.....	429,860	June 10	1141	282	51	1701
McEntee, James A., Chicago, Ill. Electric illuminated letter.....	437,226	Sept. 30	2965	775	52	1969
McEntee, Patrick, Montgomery, Minn. Car-coupling.....	436,019	Sept. 9	985	258	52	1570
McErlain, John J., South Bend, Ind. Bicycle-fork.....	421,748	Feb. 18	1930	507	50	947
McEuen, Charles A. (See Young, Tapley W., assignor.)						
McEvoy, Henry, assignor to M. A. McEvoy, New York, N. Y. Branch connection for pipes.....	427,478	May 6	680	170	51	946
McEvoy, Mary A. (See McEvoy, Henry, assignor.)						
McEvoy, Thomas F., Waterbury, Conn. Electric switch.....	423,488	Mar. 18	1701	449	50	1476
McEwan, William W. (See Hull and McEwan.)						
McEwen, Addison C., Jersey City, N. J. Dumping-wagon.....	422,822	Mar. 4	663	170	50	1264
McFadden, Henry W. (See Roat, John W., assignor.)						
McFadden, Thomas B., Peoria, Ill. Baker's oven.....	436,670	Sept. 16	2028	529	52	1775
McFarland, I. N., <i>et al.</i> (See House, John, assignor.)						
McFarland, Thomas W., Chicago, Ill. Steam-generator.....	431,475	July 1	679	170	52	136
McFarlane, Hugh, Chicago, Ill. Oil-transporting tank and wagon.....	436,840	Sept. 23	2326	612	52	1840

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McFarlane, John, assignor of two-thirds to G. J. Bessler and H. Wex, Washington, D. C. } Hydraulic dredging.....	426,846	Apr. 29	3676	{ 957 958	{ 51	751
McFedries, Robert, Pueblo, Colo. Insect-excluder for bedsteads.....	421,604	Feb. 18	1739	455	50	910
McFeely, Ronald F., Pittsburg, Pa. Valve-gear for engines.....	418,741	Jan. 7	121	29, 30	50	27
McFeely, William J., Mount Vernon, Ohio. Combination-tool.....	418,742	Jan. 7	123	30	50	27
McGahan, John C., <i>et al.</i> (See Hart, Marshall W., assignor.)						
McGahan, Fred L. (See Abrams, Milton, assignor.)						
McGahan, Fred L., Indianapolis, Ind. Feed-water heater.....	427,266	May 6	371	97	51	883
McGahan, Fred L., Indianapolis, Ind. Apparatus for supplying pure water to steam-boilers.....	439,788	Nov. 4	236	60, 61	53	654
McGahan, Frederick L., Indianapolis, Ind. Electrical generator.....	439,974	Nov. 4	534	{ 140 141	{ 53	711
McGann, Thomas F., Somerville, Mass. Show-rack.....	437,035	Sept. 23	2651	693	52	1903
McGann, Thomas F., Somerville, Mass. Show-rack.....	437,036	Sept. 23	2653	693	52	1904
McGar, Frederick, Bristol, Conn. Glass-tube cutter.....	433,537	Aug. 5	134	38	52	783
McGarvin, Smith, San José, Cal. Running-gear.....	436,610	Sept. 16	1919	504	52	1753
McGary, James, assignor of one-half to F. C. Thompson, East Tawas, Mich. Car-replacer.....	438,483	Oct. 14	1227	333	53	242
McGaugh, George W. (See McGee, William O., assignor.)						
McGeary, Thomas J., assignor of one-half to E. W. Anderson, Washington, D. C. Frieze or cornice.....	436,487	Sept. 16	1733	457	52	1721
McGee, John R., Due West, S. C. Compost-distributor.....	421,300	Feb. 11	1226	331	50	816
McGee, Joseph, Lancaster, N. H. Locking whips to their sockets.....	434,519	Aug. 19	1643	431	52	1097
McGee, Robert D., Owensborough, Ky. Car-coupling.....	443,337	Dec. 30	3602	926	53	1296
McGee, Thomas, <i>et al.</i> (See Woodward, William H., assignor.)						
McGee, William F., Jackson, Mich. Corset-clasp.....	438,172	Oct. 14	770	210	53	154
McGee, William O., assignor of one-half to G. W. McGaugh, Richmond, Mo. Machine for stretching barbed wire.....	437,492	Sept. 30	3250	847	52	2023
McGeoch, William. (See Conde, George H., assignor.)						
McGhee, George, assignor of one-half to P. Burt, Glasgow, Scotland. Gas-motor engine.....	432,638	July 22	2481	638	52	504
McGhie, Charles E., assignor to C. W. Kimball, Chicago, Ill. Hydrocarbon vaporizer and burner.....	442,078	Dec. 2	709	190	53	1401
McGhie, William. (See Halsey and McGhie.)						
McGiehan, Isaac S., New York, N. Y. Machine for forming and bending metal.....	419,156	Jan. 7	760	{ 201 202	{ 50	158
McGiehan, Isaac S., New York, N. Y. Elevated or bridge structure.....	429,470	June 3	560	{ 136 137	{ 51	1580
McGiehan, Isaac S., New York, N. Y. Railway-rail joint.....	431,611	July 8	828	221	52	185
McGiffin, Nathaniel W., Canal Lewisville, Ohio. Bridge.....	443,714	Dec. 30	3404	874	53	1957
McGill, George W. (See Shipley, Ralph J., assignor.)						
McGill, George W., Rivervale, N. Y. Paper-fastener.....	424,337	Mar. 25	2971	792	50	1724
McGill, George W., New York, N. Y. Sample holder or fastener for show and other cards.....	429,943	June 10	1259	312	51	1724
McGill, J. Not, <i>et al.</i> (See Arnold, Will F., assignor.)						
McGill, John J. (See Diescher, Samuel, assignor.)						
McGinness, John A. (See George and McGinness.)						
McGinnis, George R., Cisco, Ill. Corn-planter.....	426,947	Apr. 29	3803	994	51	776
McGinnis, Johnson, Emlinton, Pa. Boiler-bottom.....	439,761	Nov. 4	198	51	53	647
McGinnis, William T., New York, N. Y. Screw-swaging machine.....	432,164	July 15	1772	456	52	361
McGlauffin, Eugene O. (See McCrory and McGlauffin.)						
McGlauffin, Eugene O., Anoka, assignor of one-half to W. McCrory, Minneapolis, Minn. Cable road.....	421,507	Feb. 18	1589	410	50	881
McGlinchey, Charles E., assignor of two-thirds to C. H. Dunham and F. Brady, Chicago, Ill. Handle-bar for velocipedes.....	442,532	Dec. 9	1410	360	53	1544
McGlohan, Julia A., Buckeye, Tenn. Work-stand.....	435,588	Sept. 2	320	89	52	1437
McGonegal, John, Slippery Rock, Pa. Wagon-brake.....	435,512	Sept. 2	196	54	52	1413
McGovern, Bernard, assignor to M. E. McGovern, Norwalk, Conn. Wagon-wheel.....	420,663	Feb. 4	333	87	50	629
McGovern, Francis P., Conshohocken, Pa. Sash-fastener.....	426,303	Apr. 22	2843	749	51	580
McGovern, George. (See Lunley, Edwin J., assignor.)						
McGovern, Mary E. (See McGovern, Bernard, assignor.)						
McGovern, Thomas, New York, N. Y. Coffin.....	427,889	May 13	1320	333	51	1079
McGovern, Thomas, New York, N. Y. Candelabrum.....	429,471	June 3	563	{ 137 138	{ 51	1580
McGowan, John H., Cincinnati, Ohio. Duplex steam-pump.....	427,784	May 13	1156	289	51	1049
McGowan, Michael A. (See Bresnahan, Cornelius, assignor.)						
McGowan, Thomson, Cleveland, Ohio. Apparatus for distilling oil.....	431,386	July 1	547	136	52	111
McGowan, Thomson, Cleveland, Ohio. Apparatus for distilling hydrocarbons.....	443,328	Dec. 23	2792	717	53	1831
McGowen, Alexander, Independence, Iowa. Heater for watering-tanks.....	428,124	May 20	1665	422	51	1156
McGowen, Charles M., assignor of one-half to J. B. Martin, St. Louis, Mo. Wash-boiler.....	442,533	Dec. 9	1411	360	53	1544
McGowen, William R., Randalia, Iowa. Regulator for windmills.....	438,555	Oct. 14	1333	361	53	263
McGrath, John, and G. Y. Smith, Minneapolis, Minn. Flax-thresher.....	439,889	Nov. 4	391	102	53	684
McGrath, John F., Taunton, Mass. Fulcrum for the weight-levers for the rolls of spinning-frames.....	419,611	Jan. 14	1428	382	50	300
McGrath, Thomas, and G. C. Finley, Toledo, Ohio. Railway-crossing.....	436,146	Sept. 9	1193	312	52	1608
McGrath, Timothy W., Minneapolis, Minn. Game or puzzle.....	437,932	Oct. 7	397	112	53	76
McGraun, Bernard J., <i>et al.</i> (See Miller, Charles F., assignor.)						
McGraw, Charles E. (See McGraw, John A., G. W., Jr., H. L., and C. E.)						
McGraw, George W., Jr. (See McGraw, John A., G. W., Jr., H. L., and C. E.)						
McGraw, Henry L. (See McGraw, John A., G. W., Jr., H. L., and C. E.)						
McGraw, John A., deceased, (H. L. McGraw, administrator,) G. W., Jr., H. L., and C. E., Allegheny, Pa. Scraper-bar for composite-roofing machines.....	422,609	Mar. 4	366	90	50	1206
McGraw, Thomas H. (See Roberts, Isaiah L., assignor.)						
McGregor, George L., Chicago, Ill. Making boiler-stays.....	430,672	June 24	2458	599	51	1973
McGregor, John A. K., assignor to himself, H. and E. Cohn, H. and S. J. Wallach, trustees, New York, N. Y. Electric switch.....	439,602	Oct. 28	3002	796	53	590
McGregor, Lewis B., <i>et al.</i> (See Godfrey, William L., assignor.)						
McGregory, Delia, Los Angeles, Cal. Making butter.....	430,536	June 17	2220		51	1919
McGrew, Frank M., Canal Fulton, Ohio. Reclining-chair.....	426,948	Apr. 29	3805	{ 994 995	{ 51	776
McGrew, James B. (See Slentz and McGrew.)						
McGuire, Alexander. (See Teed, Ralph L., assignor.)						
McGuire, Charles, Glasston, N. D. Oscillating gang-plow.....	435,513	Sept. 2	197	54	52	1413
McGuire, Elwood W. (See Dille and McGuire.)						
McGuire, Elwood W., Richmond, Ind. Ratchet mechanism.....	423,266	Mar. 11	1372	356	50	1404
McGuire, George W., Cleveland, Ohio. Draw-bar for railway-cars.....	437,227	Sept. 30	2967	775	52	1969
McGuire, James P., Atchison, Kans. Railway-track.....	419,210	Jan. 14	850	223	50	182

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McGuire, John P. (See Hill and McGuire.)						
McGuire Manufacturing Company. (See McGuire, William A., assignor.)						
McGuire, Michael, Syracuse, N. Y. Stove-pipe thimble	437,381	Sept. 30	3223	840	52	2018
McGuire, William A., assignor to McGuire Manufacturing Company, Chicago, Ill. Freight-car door	436,586	Sept. 16	1894	497 498 499	52	1749
McGukin, James K., Newark, N. J. Shutter-worker	419,789	Jan. 21	1701	451	50	358
McGwin, James. (See Holland, Luther W., assignor.)						
McHenry, John, and J. O'Donnell, Catawissa, Mo. Band-cutter and feeder for thrashing-machines	429,472	June 3	564	138	51	1581
McHugh, James H. (See Thomas, Martin E., assignor.)						
McHugh, Michael J., Jersey City, N. J. Bottle-stopper	443,971	Dec. 30	3803	969	53	2034
McHugh, Timothy, Wakefield, assignor of one-half to Smith & Anthony Stove Company, Boston, Mass. Plumber's trap	425,339	Apr. 8	1382	368	51	278
McHugh, Timothy, Wakefield, assignor of one-half to Smith & Anthony Stove Company, Boston, Mass. Water-closet valve and operating mechanism therefor	435,021	Aug. 26	2463	652	52	1262
McHugh, Timothy, assignor of one-half to Smith & Anthony Stove Company, Wakefield, Mass. Retarding device for water-closet valves	431,387	July 1	548	136 137	52	111
Mcllvain, Monroe M., Putnamville, J. C. Gose, and H. F. Pickett, assignors of one-fourth to L. B. Smith, Reelsville, Ind. Ballot-box	425,238	Apr. 8	1235	328	51	250
McIndoe, James W., and B. B. Emery, Boston, Mass. Glove-fastening	434,114	Aug. 12	1011	263	52	964
McIntire, Bartlett, San Francisco, Cal. Self-loading mechanism for wire-rope transmission	432,191	July 15	1811	465 466	52	367
McIntire, Bartlett, assignor to Vulcan Iron Works, San Francisco, Cal. Saw-setting machine	418,874	Jan. 7	342	83	50	71
McIntire, Bartlett, assignor to Vulcan Iron Works, San Francisco, Cal. Clip for wire-rope ways	419,466	Jan. 14	1233	328	50	259
McIntire, Bartlett, assignor to Vulcan Iron Works, San Francisco, Cal. Clip for wire-rope ways	431,476	July 1	682	170	52	137
McIntire, Charles, deceased, Newark, N. J.; C. H. McIntire, administrator. Electric connector	422,058	Feb. 25	2371	627	50	1038
McIntire, Charles H., administrator. (See McIntire, Charles.)						
McIntire, John S., Chicago, Ill. Device for beating carpets	440,408	Nov. 11	1213	313	53	853
McIntire, Joseph H., Galion, Ohio. Ring	418,812	Jan. 7	230	56	50	50
McIntire, William C., Washington, D. C. Deal-indicator for card-players	436,739	Sept. 16	2125	559	52	1795
McIntire, William C., Washington, D. C., assignor to Iron Clad Manufacturing Company, New York, N. Y. Handle for coffee-pots or similar vessels	420,916	Feb. 4	734	189	50	703
McIntire, William C., Washington, D. C., assignor to Iron Clad Manufacturing Company, New York, N. Y. Handle for coffee-pots or similar vessels	420,917	Feb. 4	736	189	50	703
McIntosh, Lyman D., Chicago, Ill. Stereopticon	439,420	Oct. 28	2723	726 727	53	536
McIntosh, Thomas. (See Wamsley and McIntosh.)						
McIntosh, William, Winona, Minn. Snow and ice flanger	434,195	Aug. 12	1130	294	52	987
McIntosh, William W., Clinton, Ill. Thimble	421,301	Feb. 11	1287	332	50	816
McIntyre, Daniel C., assignor of one-half to P. N. Jacobsen, Jr., Detroit, Mich. Gang-plank	426,209	Apr. 22	2716	711	51	552
McIntyre, Finlay, Glasgow, county of Lanark, Scotland. Preserving milk	432,325	July 15	2016	518	52	404
McIntyre, Innes T., assignor of one-half to A. E. O'Brien and L. C. Brittan, Carrollton, Miss. Plow-clevis	427,603	May 13	872	219	51	993
McIver, Duncan E., et al. (See Wright, James A. and J. B., assignors.)						
McJunkin, John. (See Greene, Jerome E., assignor.)						
McKaig, Merwin. (See Muncaster, Walter J., assignor.)						
McKay, Andrew, Philadelphia, Pa. Horse-boot	420,208	Jan. 28	2369	629	50	496
McKay & Copeland Lasting Machine Company. (See Brock, Matthias, assignor.)						
McKay & Copeland Lasting Machine Company. (See Crosbie, John A., assignor.)						
McKay, David, et al. (See Bridewell, Richard F., assignor.)						
McKay, David E., et al. (See Paridy and Brown, assignors.)						
McKay, Hiram, Boston, Mass. Press	427,604	May 13	873	219	51	993
McKay, John, Titusville, Pa. Apparatus for producing gas from hydrocarbon oil	437,315	Sept. 30	3105	813	52	1995
McKay, Joseph, Troy, N. Y. Machine for creasing the fold-lines in shirts	437,786	Oct. 7	175	54 55 56	53	36
McKay, Joseph, Troy, N. Y. Apparatus for folding shirts	437,787	Oct. 7	180	56	53	36
McKay, Walter S., East Boston, Mass. Steam-engine indicator	428,933	May 27	2887	739	51	1412
McKay, William W., Stanton, N. D. Hitching-anchor	435,365	Apr. 8	1452	389	51	291
McKeage, Joseph, Brooklyn, N. Y. Bill-board	425,621	Apr. 15	1815	485	51	370
McKeane, John T., Santa Cruz, Cal. Device for securing extra leaves in books	440,831	Nov. 18	1928	495	53	995
McKechnie, James H., Granby, Quebec, Canada. Ventilated rubber shoe	429,944	June 10	1260	312	51	1725
McKee, Alfred J., Westmoreland, Kans. Washing-machine	442,726	Dec. 16	1754	454	53	1620
McKee, Charles W. (See Bateman, George C., assignor.)						
McKee, Henry S., Allegheny, Pa. Fly-trap	439,545	Oct. 28	2911	774	53	572
McKee, James W. (See Shearer and McKee.)						
McKee, John, Niles, Ohio. Fence-post	440,323	Nov. 11	1072	276	53	825
McKee, John, Jr., Niles, Ohio. Fence-post	436,539	Sept. 16	1824	480	52	1736
McKee, John L., assignor to Hitchcock Manufacturing Company, Cortland, N. Y. Spring-hammer device	419,702	Jan. 21	1575	421	50	333
McKee, Newton, Chicago, Ill. Velocipede	435,977	Sept. 9	927	244	52	1559
McKee, Patrick E., Royaltown, Minn. Foot-warmer	418,743	Jan. 7	124	30	50	27
McKeen, Thomas L., Easton, Pa., assignor to Thurmond Car Coupling Company, of West Virginia. Car-coupling	430,743	June 24	2575	631	51	1996
McKeen, Thomas L., Easton, Pa., assignor to Thurmond Car Coupling Company, of West Virginia. Car-coupling	430,744	June 24	2578	631	51	1996
McKeever, Timothy W., Brooklyn, N. Y. Ash-sifter	432,165	July 15	1774	456	52	361
McKellen, Samuel D., Manchester, England, assignor to Eastman Dry Plate and Film Company, Rochester, N. Y. Roller-holder for photographic films	433,020	July 29	3107	797	52	629
McKellor, John B. (See Ferguson and McKellor.)						
McKelvey, H. D. (See Straut and Shute, assignors.)						
McKelvey, William J., Columbus, Ohio. Pipe-hanger	428,690	May 27	2531	643	51	1341
McKenney, Franklin S., Detroit, Mich. Lacing-eye	437,228	Sept. 30	2968	776	52	1970
McKenney, Franklin S., Detroit, Mich. Lacing	437,836	Oct. 7	251	77	53	50
McKenney, Franklin S., Detroit, Mich. Lacing-hook	438,420	Oct. 14	1143	309	53	222
McKenney, Franklin S., Detroit, Mich. Construction of shoe-uppers	438,705	Oct. 21	1571	422	53	312
McKenney, Franklin S., Detroit, Mich. Lacing-eye	438,936	Oct. 21	1952	520	53	384
McKenney, Franklin S., Detroit, Mich. Fastening for gloves and other articles	430,034	Oct. 21	2099	562	53	413
McKenney, William W. (See Koopman and McKenney.)						
McKenney, William W. (See Koopman and McKenney.) (Reissue.)						
McKenzie, Angus, Cleveland, Ohio. Curve-scriber	419,467	Jan. 14	1234	338	50	260

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McKenzie, Jacob L. (See Kolm, Christian P., assignor.)						
McKenzie, Kenneth, assignor to G. R. Anderson, Edinburgh, Scotland. Fire-place.....	437,615	Sept. 30	3575	934	52	2089
McKenzie, William V., Rahway, N. J. Apparatus for refining camphor.....	424,615	Apr. 1	276	72	51	56
McKeon, James. (See Maxon, Daniel M., assignor.)						
McKerahan, Charles, Allegheny, Pa. Car-coupling.....	428,855	May 27	2776	706	51	1389
McKevitt, Anna, Chicago, Ill. Combined protection-case and drip-ferrule for umbrellas.....	442,991	Dec. 16	2189	563	53	1707
McKibben, Frank S., Joseph, Oreg. Valve-gear.....	438,085	Oct. 7	639	174	53	123
McKibbin, George, Brooklyn, N. Y. Memorandum-book cover.....	440,233	Nov. 11	928	238	53	801
McKiernan, Charles A., assignor of one-half to W. H. Salmon, Clinton, Mo. Store-service apparatus.....	433,741	Aug. 5	439	113 114 115 116	52	841
McKillen, Benjamin, Bad Axe, Mich. Thrashing-machine.....	431,612	July 8	889	221	52	185
McKim, Charles E. (See McKim, George W., assignor.)						
McKim, George W., assignor to C. E. McKim, Martin's Ferry, Ohio. Manufacturing brooms from wood splints.....	425,043	Apr. 8	946	253	51	191
McKim, George W., assignor to C. E. McKim, Martin's Ferry, Ohio. Wood splint for manufacturing brooms.....	425,044	Apr. 8	947	253	51	191
McKim, George W., assignor to C. E. McKim, Martin's Ferry, Ohio. Wood-broom-splint-making machine.....	437,710	Oct. 7	45	14, 15	53	11
McKim, James T. (See Moore and McKim.)						
McKim, James T., Thorntown, Ind. Paint.....	442,195	Dec. 9	891	.....	53	1444
McKinley, S. S. (See Sharpe, Lemuel W., assignor.)						
McKinley, Walter, assignor of one-half to W. J. Wyant, Tremont City, Ohio. Flour-sifter and spice-bin.....	443,400	Dec. 23	2900	746	53	1853
McKinney, David P., Dayton, Ohio. Lawn-mower.....	439,172	Oct. 28	2317	622	53	460
McKinney, Harvey, <i>et al.</i> (See Lewis, John F., assignor.)						
McKinney, Thomas P., <i>et al.</i> (See Bobemerith, Lewis E., assignor.)						
McKinney, William, Philadelphia, Pa. Electric meter.....	424,338	Mar. 25	2972	792	50	1725
McKinnon, Daniel M., Edwardsville, Ill. Grain searer and cleaner.....	429,945	June 10	1261	312	51	1725
McKinnon, James W., assignor of one-half to A. M. Downs, New York, N. Y. Nursing-bottle.....	438,937	Oct. 21	1953	520	53	384
McKirdy, John. (See Preston, De Russett, Mullan, and McKirdy.)						
McKnight, Henry F., assignor of two-thirds to J. L. McKnight and W. E. Jackson, Ingham, Ill. Thill-coupling.....	432,064	July 15	1611	412	52	329
McKnight, Joseph L., <i>et al.</i> (See McKnight, Henry F., assignor.)						
McLachlan, John, assignor of one-half to A. J. Trunkey, deceased, Chicago, Ill., I. J. Trunkey administratrix. Vehicle-wheel.....	436,374	Sept. 16	1559	409	52	1688
McLachlan, John C., assignor to Massey Manufacturing Company, Limited, Toronto, Canada. Driving mechanism for harvester-binders.....	438,421	Oct. 14	1144	309	53	225
McLain, John, St. Mary's, Ohio. Wash-bench.....	440,958	Nov. 18	2136	553	53	1034
McLanahan, Samuel C., and W. F. Kirk., Hollidaysburg, Pa. Ore-washer.....	419,790	Jan. 21	1703	452	50	358
McLane, Ebenezer, Galena, Kans. Shot-proof structure for cars.....	426,949	Apr. 29	3806	995	51	777
McLane, Ebenezer, Galena, Kans. Hoisting-machine.....	435,239	Aug. 26	2769	731	52	1321
McLane, Hiram H. (See Hurd and McLane.)						
McLane, John. (See Talbot, Sylvanus J., assignor.)						
McLaren, Arthur W., Jefferson, Wis. Removable strainer for churns.....	423,404	May 20	2105	528	51	1242
McLaren, John R., Jr., Montreal, Quebec, Canada. Band-tie.....	427,355	May 6	496	127	51	909
McLaren, William. (See Donnelly, McLaren, and Trask.)						
McLaughlin, Abraham, Pittsburg, Pa. Apparatus for preventing fire in elevator-shafts, &c.....	437,229	Sept. 30	2970	776	52	1970
McLaughlin, George T. (See Fleming and McLaughlin.)						
McLaughlin, James A., Brunswick, Ga. Log-turner for saw-mills.....	439,822	Nov. 4	286	73	53	664
McLaughlin, James F., Philadelphia, Pa. Printing-telegraph.....	420,240	Jan. 28	2419	644 645	50	505
McLaughlin, James F., Philadelphia, Pa. Type-writing machine.....	421,836	Feb. 18	2047	541 542	50	968
McLaughlin, James F., Philadelphia, Pa. Type-writing machine.....	421,837	Feb. 18	2052	542	50	969
McLaughlin, James F., Philadelphia, Pa. Type-writer.....	421,838	Feb. 18	2055	542	50	969
McLaughlin, James F., Philadelphia, Pa. Isolated system of electric lighting.....	424,339	Mar. 25	2973	792	50	1725
McLaughlin, James F., Philadelphia, Pa. Electric railway.....	424,340	Mar. 25	2975	792 793	50	1725
McLaughlin, James F., Philadelphia, Pa. Friction-clutch.....	424,341	Mar. 25	2980	793	50	1725
McLaughlin, James F., Philadelphia, Pa. Electrode for secondary batteries.....	424,809	Apr. 1	582	154	51	113
McLaughlin, James F., Philadelphia, Pa. Electric locomotive.....	424,810	Apr. 1	584	154 155	51	113
McLaughlin, James F., Philadelphia, Pa. Secondary battery.....	425,818	Apr. 15	2104	562	51	427
McLaughlin, James F., Philadelphia, Pa. Secondary-battery electrode.....	425,819	Apr. 15	2105	563	51	427
McLaughlin, James F., Philadelphia, Pa. Secondary-battery electrode.....	427,785	May 13	1157	290	51	1049
McLaughlin, James F., Philadelphia, Pa. Electric locomotive.....	428,175	May 20	1732	439	51	1169
McLaughlin, James F., Philadelphia, Pa. Electric switch.....	428,934	May 27	2890	739	51	1412
McLaughlin, James F., Philadelphia, Pa. Electric switch.....	428,935	May 27	2892	740	51	1413
McLaughlin, James F., Philadelphia, Pa. Assembling secondary-battery electrodes.....	429,049	May 27	3072	793 794	51	1446
McLaughlin, James F., Philadelphia, Pa. Type-writing machine.....	429,359	June 3	390	92, 93	51	1546
McLaughlin, James F., Philadelphia, Pa. Watchman's time-recorder.....	429,360	June 3	392	93, 94	51	1546
McLaughlin, James F., Philadelphia, Pa. Electrode for secondary batteries.....	432,202	July 15	1827	469	52	370
McLaughlin, James F., Philadelphia, Pa. Car-brake.....	432,203	July 15	1828	470	52	371
McLaughlin, James F., Philadelphia, Pa. Means for electric locomotion.....	432,204	July 15	1829	471	52	371
McLaughlin, James F., Philadelphia, Pa. Electric heater.....	432,205	July 15	1833	471	52	371
McLaughlin, James F., Philadelphia, Pa. Commutator-brush.....	432,206	July 15	1835	471	52	372
McLaughlin, James F., Philadelphia, Pa. Electric switch.....	432,207	July 15	1837	472	52	372
McLaughlin, James F., Philadelphia, Pa. Electric-motor car.....	432,208	July 15	1838	472	52	372
McLaughlin, James F., Philadelphia, Pa. Electric clutch.....	432,209	July 15	1840	472	52	372
McLaughlin, James F., Philadelphia, Pa. Rheostat-switch.....	433,359	July 29	3600	928	52	738
McLaughlin, James F., Philadelphia, Pa. Electric switch.....	433,360	July 29	3601	929	52	738
McLaughlin, John, Westfield, Mass. Inscription device for umbrella-sticks.....	436,799	Sept. 23	2255	594	52	1827
McLaughlin, Joseph, Erving, Mass. Spirit-level for bit-braces.....	419,703	Jan. 21	1576	421	50	333
McLaughlin, Willson L., Harvey, Iowa. Rail-joint.....	431,988	July 8	1490	376	52	300
McLauthlin, George T., Boston, Mass. Bark-mill.....	432,550	July 22	2352	606 607	52	479
McLean, Angus H., Saginaw, Mich. Elevator.....	432,952	July 22	2987	707	52	599
McLean, George B., Montpelier, and O. W. Lewis, Barre, Vt.; said McLean assignor to said Lewis. Stone-polishing machine.....	438,635	Oct. 21	1460	394	53	293

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McLean, Horace G., McPherson, Kans., assignor of one-third to E. C. Heggelund. Machine for turning dynamo-commutators.....	429,946	June 10	1262	{ 312 313 }	{ 51	1725
McLean, John. (See Collier, John W., assignor.)						
McLean, Robert, Belvidere, Ill. Vehicle-wheel.....	442,079	Dec. 2	710	191	53	1402
McLean, Seth, Bay City, Mich. Sash-fastener.....	434,520	Aug. 19	1644	431	52	1097
McLean, Seth, Bay City, Mich. Door-securer.....	436,611	Sept. 16	1920	505	52	1754
McLellan, John R. (See Fraser, Duncan A., assignor.)						
McLennan, Kenneth, Red Oak, Iowa. Tank-heater.....	418,744	Jan. 7	125	31	50	28
McLeod, Hedley V. (See Spike and McLeod.)						
McLeod, Henry S., Cambridge, Mass. Welding compound.....	427,786	May 13	1158	.....	51	1049
McLeod, William J., Chicago, Ill. Barrel-washing machine.....	434,607	Aug. 19	1780	465	52	1125
McLimans, William C., assignor of one-half to J. R. Rutter, Gap, Pa. Nut-lock.....	421,960	Feb. 25	2234	587	50	1013
McLoughlin Bros. (See Elson, James, assignor.)						
McLoughlin Brothers. (See Hoyt, Charles N., assignor.)						
McLoughlin Brothers. (See Irwin, William J., assignor.)						
McLoughlin Brothers. (See Jacobs, Maurice, assignor.)						
McLoughlin, James J., et al. (See Ring, John, assignor.)						
McMahon, John M., assignor to J. D. Cheever, New York, N. Y. Method of and apparatus for magnetic separation of ores.....	438,357	Oct. 14	1051	{ 286 287 }	{ 53	207
McMahon, Cowles M., Birmingham, Ala. Fire-place.....	419,704	Jan. 21	1576	422	50	333
McMahon, Cowles M., Birmingham, Ala. Fire-place. (Reissue).....	11,123	Nov. 18	2396	620	53	1086
McMahon, Andrew J. (See Cogswell, William H., assignor.)						
McMahon, James, Kalamazoo, Mich. Wheel-hub.....	439,035	Oct. 21	2100	562	52	413
McMahon, James A., Brooklyn, N. Y. Safety apparatus for hanging clothes.....	427,890	May 13	1332	{ 333 334 }	{ 51	1079
McMahon, John P., Buffalo, N. Y., assignor to McMahon Thermograph Company, Jersey City, N. J. Thermostat.....	436,304	Apr. 22	2844	749	51	580
McMahon, P. J. (See Grandison, James L., assignor.)						
McMahon, Patrick, Whitestone, N. Y. Lock.....	429,361	June 3	396	94	51	1546
McMahon, Patrick J., assignor to Standard Fireless Engine Company, New Orleans, La. Ammoniacal gas motor or engine.....	420,241	Jan. 28	2425	645	50	506
McMahon Thermograph Company. (See McMahon, John P., assignor.)						
McMains, William W., Monongahela City, Pa. Hand printing-roller.....	419,540	Jan. 14	1337	354	50	279
McManes, William, Summit, and G. E. Lum, Chatham, N. J. Railway-tie.....	420,352	Jan. 28	2583	686	50	535
McManman, John A., Milwaukee, Wis. Combined lightning-arrester and cut-out.....	440,361	Nov. 11	1124	289	53	835
McManman, John A., Milwaukee, Wis. Calling device for clock telephone-lines.....	440,898	Nov. 18	2033	{ 523 524 }	{ 53	1016
McMann, John J., and A. Rippon, Wakeman, Ohio. Bolster-bearing for sleds.....	438,706	Oct. 21	1572	423	53	312
McManus, Edwin, Randolph, N. Y. Window-shade exhibitor.....	422,146	Feb. 25	2503	661	50	1063
McManus, John C., Kendallborough, Pa. Packer for oil or gas wells.....	423,337	Mar. 11	1421	388	50	1425
McMaster, Joseph M., Rochester, N. Y. Driving mechanism for locomotives.....	442,821	Dec. 16	1908	490	53	1652
McMaster, Peter. (See Miller and McMaster.)						
McMenamin, Peter, Jersey City, N. J. Vehicle-hub.....	421,051	Feb. 11	941	243	50	751
McMenamin, Peter, Jersey City, N. J. Ticket-clasp.....	429,148	June 3	62	16	51	1484
McMichael, Morgan. (See Ivey and McMichael.)						
McMillan, A. Bruce, et al. (See Leonard, James F., assignor.)						
McMillan, Alfred F., assignor to Benicia Agricultural Works, Benicia, Cal. Gang-plow frame.....	435,567	Sept. 2	291	81	52	1432
McMillan, Angus E., Oakland, Cal. Miter-box.....	434,134	Aug. 12	1045	270	52	970
McMillan, John. (See Lawrie and McMillan.)						
McMillan, John, trustee. (See Lawrie and McMillan, assignors.)						
McMillan, Joshua F., and M. C. McMillan, Wilmington, Ohio. Shock-compressor.....	422,963	Mar. 11	916	239	50	1318
McMillan, Moses C. (See McMillan, Joshua F. and M. C.)						
McMillen, Charles S., Van Wert, Ohio. Car-coupling.....	441,189	Nov. 25	2511	{ 648 649 }	{ 53	1117
McMullan, George, et al. (See Anderson, Lee, assignor.)						
McMullan, James H., Portland, Me., assignor to Sawyer Spindle Company, Boston, Mass. Support for spinning-spindles.....	420,084	Jan. 28	2157	570	50	457
McMullan, James H., Portland, Me., assignor to Sawyer Spindle Company, Boston, Mass. Support for spinning-spindles.....	420,085	Jan. 28	2159	570	50	457
McMullan, James H., Portland, Me., assignor to Sawyer Spindle Company, Boston, Mass. Support for spinning-spindles.....	420,086	Jan. 28	2162	571	50	458
McMullan, James H., Portland, Me., assignor to Sawyer Spindle Company, Boston, Mass. Support for spinning-spindles.....	420,087	Jan. 28	2164	571	50	458
McMullan, James H., Portland, Me., assignor to Sawyer Spindle Company, Boston, Mass. Support for spinning-spindles.....	420,088	Jan. 28	2167	571	50	459
McMullen, Henry. (See Lomasney, William F., assignor.)						
McMullen, John, H. S. Wood, San Francisco, and H. Krusi, Alameda, Cal. Canal-digging machine.....	443,458	Dec. 23	2991	{ 768 769 }	{ 53	1870
McMullen, John T., Bay View, Fla. Fruit-clipper.....	435,240	Aug. 26	2770	731	52	1321
McMunn, Harry W., et al. (See Jarrell, Edwin, assignor.)						
McMunn, James W., et al. (See Jarrell, Edwin, assignor.)						
McMurray, James B. G., Washington, D. C. Cuff-holder.....	441,577	Nov. 25	3150	810	53	1235
McMurray, Thomas J., and W. B. Fisher, Marion, Ohio. Sulky.....	425,239	Apr. 8	1236	329	51	250
McMurray, Thomas J., and W. B. Fisher, Marion, Ohio. Sulky.....	443,401	Dec. 23	2902	746	53	1853
McMurtry, Joseph, assignor to Peerless Lead Glass Works, Pittsburg, Pa. Device for ornamenting the tops of lamp-chimneys, &c.....	440,494	Nov. 11	1369	353	53	881
McMyler, John. (See Hagency, Patrick H., assignor.)						
McMyler, John, Cleveland, Ohio. Hoisting apparatus.....	428,691	May 27	2532	643	51	1341
McNally, Frank C. (See McCarten and McNally.)						
McNally, Hilton E., East Saginaw, Mich. Tub-fastener.....	442,196	Dec. 9	891	237	53	1444
McNamar, James B., North Bennington, Vt. Machine for making paper.....	424,342	Mar. 25	2982	794	50	1726
McNamar, James M., Toledo, Ohio. Time-report sheet.....	436,147	Sept. 9	1195	312	52	1608
McNamara, James. (See Clinton and McNamara.)						
McNamara, Timothy E. (See Ulmer and McNamara.)						
McNeal, Charles, Mishawaka, Ind. Split pulley.....	426,675	Apr. 29	3412	896	51	700
McNeal, Charles, assignor of one-half to E. Skillman, Goshen, Ind. Split pulley.....	427,003	Apr. 29	3889	1015	51	792
McNeal, Charles, assignor of one-half to E. Skillman, Goshen, Ind. Split pulley.....	427,004	Apr. 29	3891	1016	51	792
McNeal, John M., and W. F. Runnells, Rice's, Minn. Mechanical movement.....	432,192	July 15	1813	466	52	368
McNeal, William W., Stockton, N. J. Machine for turning telegraph-pins.....	421,654	Feb. 18	1809	473	50	924
McNeely, T. W. (See Welch, James E., assignor.)						
McNeill, James, et al. (See Morgan, Edward S., assignor.)						
McNelly, Joseph B., Brown's Valley, Ind. Wire-stretcher.....	427,787	May 13	1159	290	51	1049
McNicholl, Samuel, Philadelphia, Pa. Harness-saddle tree.....	433,207	July 29	3393	877	52	685

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McNicol, Archie, Norwich, Conn., assignor of one-half to J. S. Bernheimer, New York, N. Y. Cloth-printing machine	439,676	Nov. 4	75	20, 21	53	622
McNight, John A., Berkley, Va. Switch-lock	425,952	Apr. 15	2322	616	51	467
McNight, John A., Berkley, Va. Railway-train signal and speed-indicator	427,788	May 13	1160	290	51	1049
McNulty, Caleb J., Sedalia, Mo. Horse-collar machine	442,992	Dec. 16	2191	564	53	1708
McNulty, Caleb J., Sedalia, Mo. Machine for stuffing horse-collars	442,993	Dec. 16	2193	564	53	1708
McNutt, George A., Knoxville, Tenn. Thill-coupling	443,715	Dec. 30	3405	875	53	1957
McNutt, John F. (See Winfield and McNutt.)						
McOmber, John A., Bradford, Pa. Disinfectant-cover for dry closets, &c.	424,811	Apr. 1	588	155	51	114
McOmber, Marvin, Ottawa, Kans. Mechanical fire starter or lighter	430,873	June 24	2786	683	51	2037
McOsker, Daniel J., Providence, R. I. Railway-switch	422,610	Mar. 4	367	91	50	1306
McPartland, James H., Houlton, Me. Center-board for vessels	433,955	Aug. 12	767	199	52	916
McPhail, C. C. (See Greene, Frank, assignor.)						
McPhail, Hugh, Dublin, Ireland, E. Simpson, Walton, and C. H. Simpson, Ackworth, Eng. land. Steam-generator	442,197	Dec. 9	892	237	53	1444
McPherson, Horace, Crete, Ill. Side-delivery horse hay-rake	431,171	July 1	208	52	52	43
McPherson, John R. (See Smith, Nathaniel E., assignor.)						
McPherson, Stephen T. M., and G. L. Armbrister, Red Bluff, Va. Car-coupling	440,495	Nov. 11	1370	354	53	881
McPherson, Thomas C., Beaver Falls, Pa. Wire-coiling apparatus	436,256	Sept. 9	1359	354	52	1641
McPherson, Wallace, Atlanta, Ga. Lumber-drier	429,473	June 3	565	138	51	1581
McPherson, William B., and W. Cahoon, Deadwood, S. D. Hydraulic motor	421,605	Feb. 18	1740	455	50	910
McPike, Curtis, Chicago, Ill. Spring clamp and fastener	437,037	Sept. 23	2654	694	52	1904
McQuaid, Edmund J., Darlington, Pa. Knife-grinder for mowing, reaping, and binding machines	434,289	Aug. 12	1285	334	52	1017
McQuarrie, James L., assignor to New England Telephone and Telegraph Company, Boston, Mass. Telephone circuit and apparatus	443,145	Dec. 23	2469	632	53	1767
McQuary, James C., Hays City, Kans. Plow attachment	425,690	Apr. 15	1925	512	51	392
McQueen, Daniel P., Schenectady, N. Y. Steam-boiler	442,080	Dec. 2	711	191	53	1402
McQueney, Peter, East Akron, Ohio. Paper-hanging machine	436,924	Sept. 23	2502	654	52	1873
McQueney, Peter, East Akron, Ohio. Track for wall-paper-pasting machines	439,789	Nov. 4	239	61	53	655
McQuigg, George L., assignor of one-half to F. Dullam, Flint, Mich. Inhaler	418,813	Jan. 7	231	56	50	50
McQuillen, Walter C., Los Angeles, Cal. Grass-catching attachment for lawn-mowers	432,065	July 15	1612	413	52	330
McQuiston, Anna E., Oskaloosa, Iowa. Skirt-protector	419,968	Jan. 21	1976	519	50	414
McQuiston, William, Wilksburg, Pa. Nut-lock	427,479	May 6	681	171	51	946
McRae, William, Montreal, Canada. Car-coupling	436,430	Sept. 16	1642	432	52	1703
McShane, Daniel. (See Smith, James R., assignor.)						
McShane, William, assignor to T. J. and G. McAvity, St. John, New Brunswick, Canada. Injector	431,613	July 8	890	222	52	186
McSwean, Daniel, Ozark, Ala. Cotton-gin-saw sharpener	421,422	Feb. 18	1462	379	50	857
McSwyny, Bryan G., New York, N. Y. Boot or shoe	440,409	Nov. 11	1214	313	53	853
McTammany, John, Worcester, Mass. Mechanical indicator for musicians	422,964	Mar. 11	917	240	50	1319
McTernen, Andrew, Andover, Mass. Hot-water bottle	428,692	May 27	2533	644	51	1341
McTighe, James J., Pittsburg, Pa. Hot-air engine	429,281	June 3	248	62	51	1519
McTighe, James J., Pittsburg, Pa. Hot-air engine	429,282	June 3	256	63	51	1520
McTighe, James J., Pittsburg, Pa. Operating hot-air engines	429,283	June 3	261	63	51	1521
McTighe, Thomas J., assignor of one-half to J. F. Barry, New York, N. Y. Street-railway construction	443,947	Dec. 30	3759	961	53	2026
McTyeire, William C., Hatchechubbee, Ala. Garden-plow	429,219	June 3	172	41	51	1504
McTyeire, William C., Hatchechubbee, Ala. Show-stand	431,190	July 1	234	59	52	49
McVay, Jacob. (See Fulwider, Horace M., assignor.)						
McVean, Daniel, Batavia, N. Y. Car-coupling	431,019	June 24	3008	738	51	2078
McVean, David, Lapeer, Mich. Door-actuating device	432,066	July 15	1613	413	52	330
McWhinney, Marshall D., et al. (See Haines and Curry, assignors.)						
McWhirter, Robert, and E. S. Scheble, Belton, Tex. Apparatus for coupling and uncoupling cars	431,850	July 8	1292	324	52	361
McWhorter, Francis S., Norfolk, Va., assignor of one-half to S. G. and R. H. North, Philadelphia, Pa. Spring cotter-key	433,804	Aug. 5	549	142	52	864
McWilliams, Andrew, Hazzard, Pa. Automatic apparatus for opening and closing doors	432,210	July 15	1842	473	52	373
Meacock, Thomas. (See Rigg and Meacock.)						
Meacom, George, Chelsea, assignor of one-third to W. R. Driver, Beverly, Mass. Armored vessel	432,061	July 15	1607	411	52	328
Mead, Albert G., Boston, assignor to W. B. H. Dowse, trustee, Newton, Mass. Glove-fastener	437,161	Sept. 23	2866	745	52	1943
Mead, John A., Rutland, Vt. Means for attaching casters or wheels to scales or other articles	441,433	Nov. 25	2930	755	53	1194
Mead, John H., Concord, N. H. Band-saw guide	436,143	Sept. 9	1189	311	52	1607
Mead, William S., New York, N. Y. Gas-burner	419,784	Jan. 21	1691	449	50	355
Meador, Benjamin S., assignor to Pawtucket Manufacturing Company, Pawtucket, R. I. Bolt-heading machine	433,483	Aug. 5	66	19	52	769
Meador, George, Fowler, Ind. Well-boring auger	419,955	Jan. 7	614	158	50	129
Meador, Stephen O. (See Jordan and Meador.)						
Meadway, Joseph, Buffalo, N. Y. Device for securing chimneys to lamp-burners	436,069	Sept. 9	1071	277	52	1587
Meaker, John W., assignor, by mesne assignments, to Meaker Manufacturing Company, Chicago, Ill. Fare-register	423,436	Mar. 18	1626	427	50	1461
Meaker Manufacturing Company. (See Meaker, John W., assignor.)						
Meakin, William, San Francisco, Cal. Machine for reducing bituminous rock	442,815	Dec. 16	1890	487	53	1648
Mealand, Arthur J. (See Owesnev, Frank X. and C. C., assignors.)						
Meals, Ezra S., Harrisburg, Pa. Roofing tongs or seamer	428,686	May 27	2527	642	51	1340
Means, Edward C. (See Schmid and Means.)						
Means, Manly L., Lee, Ohio. Coffee-mill	424,120	Mar. 25	2651	706	50	1662
Means, William H., Riverton, Iowa. Door-opening device	418,736	Jan. 7	116	28	50	25
Mearns, Andrew, assignor of one-half to R. E. White, Mount Sterling, Ky. Double-acting bellows for churns	426,509	Apr. 29	3161	831	51	652
Mears, Camden and J. W., Bloomsburg, Pa. Washing-machine	413,778	Dec. 30	3502	899	53	1976
Mears, John M. (See De Loss and Mears.)						
Mears, John W. (See Mears, Camden and J. W.)						
Meats, John T., assignor to Mason Machine Works, Taunton, Mass. Loom for weaving pockets	428,253	May 20	1855	466	51	1193

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Meats, John T., assignor to Mason Machine Works, Taunton, Mass. Take-up mechanism for looms.	430,080	June 10	1495	{ 370 371	51	1770
Mechanical Boiler Cleaner and Manufacturing Company. (See Hornish, Frank W., assignor.)						
Mechanical Manufacturing Company. (See Wells, Thomas F., assignor.)						
Mechanical Manufacturing Company. (See Wells, Webster, assignor.)						
Mechanical Specialties Manufacturing Company. (See Clark, Frank M., assignor.)						
Meckley, John F. (See Bostian, Charles P., assignor.)						
Mecoy, Winfield J., Huntingdon, Tenn. Book-case and student's table	443,713	Dec. 30	3403	874	53	1957
Medalie, Alex. J., Mancelona, Mich. Perpetual calendar	435,664	Sept. 2	450	119	52	1461
Medart, Philip, assignor of one-half to W. Medart, St. Louis, Mo. Friction-clutch	423,333	Mar. 11	1477	387	50	1424
Medart, William. (See Medart, Philip, assignor.)						
Medbery, Horace J., Mechanicsville, assignor to S. C. Medbery, Ballston Spa, N. Y. Machine for molding tubes from pulp	437,497	Sept. 30	3403	{ 891 892	52	2056
Medbery, Stephen C. (See Medbery, Horace J., assignor.)						
Medcraft, John H., Newark, N. J. Apparatus for cleaning sewers	438,254	Oct. 14	889	{ 241 242	53	176
Meddick, Sanford C., Ovid, N. Y. Veterinary instrument	430,137	June 17	1584	394	51	1797
Medford, Thomas, Huntington, W. Va. Fly-paper holder for windows	418,803	Jan. 7	218	53	50	47
Medford, Thomas, Huntington, W. Va. Can for kerosene or other inflammable fluids	431,906	July 8	1367	346	52	276
Medlin, Wenzl, Cleveland, Ohio. Mash-tub	431,372	July 1	521	130	52	105
Mee, Charles, Cortland, N. Y. Wall-pocket or paper-holder	430,138	June 17	1585	394	51	1797
Mee, Gilbert, assignor of one-half to Rogers Iron Manufacturing Company, Muskegon, Mich. Log-rolling machine	430,319	June 17	1698	465	51	1858
Meech, Walter R. (See Herrick, Randall, and Meech.)						
Meedom, Andrew. (See Hartmann and Meedom.)						
Meehan, Patrick W., Providence, R. I. Flushing-valve	437,864	Oct. 7	290	87	53	57
Meeker, Daniel C., Bradford, Pa. Brake-staff support	420,691	Feb. 4	371	98	50	637
Meeker, Henry C., Deshler, Ohio. Washing-machine	426,836	Apr. 29	3666	954	51	748
Meeker, Walter C., and J. Wilson, Jersey City, N. J.; said Wilson assignor to said Meeker. Railway-switch bar	422,241	Feb. 25	2659	702	50	1092
Meeks, John L., Brooklyn, N. Y. Check for vehicle-springs	432,062	July 15	1609	412	52	329
Meerbott, William, Jr., Jersey City, N. J., assignor to S. F. Myers & Co., New York, N. Y. Finger-ring	442,271	Dec. 9	998	263	53	1465
Megeath, Joseph P. (See Iddings and Megeath.)						
Meggs, William W. (See Leaird, Meggs, Pond, and Separk.)						
Megill, Edward L., Brooklyn, N. Y. Feed-gage	438,382	Oct. 14	1082	295	53	213
Megill, Edward L., Brooklyn, N. Y. Feed-gage for printing-presses	438,853	Oct. 21	1835	488	53	361
Megorden, Oliver, Farmington, N. Mex. Ter. Car-coupling	430,967	Nov. 4	520	137	53	709
Mehl & Co., John. (See Peterson, Albert H., assignor.)						
Mehl & Co., John. (See Springmeyer, Theodore, assignor.)						
Mehleck, Edward C., Albany, N. Y. Check receiver and indicator	425,686	Apr. 15	1917	511	51	390
Mehling, John A. (See Ewert and Mehling.)						
Mehnert, Fredrick. (See Schaefer and Mehnert.)						
Mehren, Jacob F., Chicago, Ill. Secondary battery	419,862	Jan. 21	1818	{ 480 481	50	380
Mehren, Jacob F., Chicago, Ill. Galvanic battery	421,081	Feb. 11	980	252	50	758
Mehren, Jacob F., Chicago, Ill. Secondary electric battery	439,301	Oct. 28	2551	682	53	504
Mehren, Jacob F., assignor to American Electric Meter Company, Chicago, Ill. Electric meter	428,280	May 20	1901	479	51	1302
Meier, Beat, Minneapolis, Minn. Belt-stretcher	436,797	Sept. 23	2248	592	52	1826
Meier, Frederick J. (See Silberzahn, John D., assignor.)						
Meier, Herman, assignor to J. Heginbotham Machine Company, Philadelphia, Pa. Automatic take-up for knitting-machines	433,251	July 29	3456	892	52	699
Meier, Josef, Edingen, Germany. Apparatus for mixing and aerating wort and yeast	424,325	Mar. 25	2945	785	50	1719
Meier, Joseph, Newark, N. J. Friction-wheel	443,102	Dec. 23	2395	612	53	1755
Meigs, Arthur, et al. (See Tracy, William P., assignor.)						
Meigs, Arthur, Grand Rapids, Mich. Lumber-strip	432,245	July 15	1885	485	52	381
Meigs, Charles H. (See Brown, David, assignor.)						
Meils, John L. (See Richardson, Shearer, and Meils.)						
Meindl, Joseph, Stapleton, N. Y. Toy bowling-alley	418,737	Jan. 7	116	28	50	25
Meinen, Diedrich, assignor of one-half to J. C. Spreckels, Warrenton, Tex. Liniment	442,667	Dec. 16	1618		53	1596
Meinhardt, Henry W., St. Louis, Mo., assignor of one-half to F. M. Kunz, Helena, Mont. Gate-latch	434,191	Aug. 12	1126	292	52	986
Meinschock, Julius, Milwaukee, Wis. Brake and locking device for cylinder printing-presses	441,504	Nov. 25	3039	782	53	1213
Meirowitz, Leopold, New York, N. Y. Sofa-bed or other folding article	420,206	Jan. 23	2366	{ 628 629	50	496
Meischner, Georg, Freiburg, Germany. Feeding device for sewing-machines	437,784	Oct. 7	172	53	53	35
Meisel, Francis, Boston, Mass., assignor to G. W. Fairchild and M. L. Ford, Oneonta, N. Y. Platen printing-machine	431,274	July 1	367	91, 92	52	75
Meisenbach, Gustave, Jr., St. Louis, Mo. Stair-rod	428,505	May 20	2233	565	51	1266
Melander, Johan, Hvalmsta, Nordingra, Angermannland, Sweden. Sewing-machine	428,035	Apr. 22	2456	648	51	500
Melaney, William H., assignor of one-half to J. Kaufmann & Brothers, Pittsburg, Pa. Boot or shoe sole	430,234	June 17	1729	430	51	1825
Melaney, William H., assignor of one-half to J. Kaufmann & Brothers, Pittsburg, Pa. Boot or shoe heel	430,586	June 17	2294	564	51	1933
Melber, Frederick, Ross, Pa. Construction of towers or bridges	423,067	Mar. 11	1075	280	50	1347
Melder, Wilhelm H., Fussville, Wis. Wheel-plow	436,985	Sept. 23	2580	{ 674 675	52	1889
Meldrum, James J. and T. F., Manchester, county of Lancaster, England. Steam-generator	422,816	Mar. 4	655	{ 167 168	50	1262
Meldrum, Thomas F. (See Meldrum, James J. and T. F.)						
Melendy, Bryant H., Battle Creek, Mich. Dough-kneading machine	423,619	Mar. 18	1889	498	50	1510
Melichar, Oswald E., Brooklyn, assignor to Gibb Brothers & Moran, New York, N. Y. Guide and route book	424,326	Mar. 25	2947	785	50	1720
Melick, James H., Albany, N. Y. Thrashing-machine	425,444	Apr. 15	1545	{ 414 415	51	318
Melin, Gustaf A., Chicago, Ill. Velocipede	422,089	Feb. 25	2412	638	50	1045
Mell, John L. (See Wingate and Mell.)						
Mellen, Edwin D., Cambridge, Mass. Recovering alkali and glycerine from spent soap-lye	422,140	Feb. 25	2494	659	50	1061
Mellen, Edwin D., Cambridge, Mass. Apparatus for making soap and carbonic acid	422,141	Feb. 25	2495	659	50	1061
Mellen, Edwin D., Cambridge, Mass. Simultaneous manufacture of soap and carbonic acid	424,991	Apr. 8	863	229	51	176

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Mellen, Luther E., Middlebury, Vt. Hoof-protector	439,537	Oct. 28	2896	770	53	569
Mellenthin, Richard, Berlin, Germany, assignor to E. Friedheim, New York, N. Y. Car or engine mover	423,437	Mar. 18	1630	428	50	1462
Mellert, Albert H., assignor to Mellert Foundry and Machine Company, (limited,) Reading, Pa. Hydrant	430,081	June 10	1496	371	51	1770
Mellert Foundry and Machine Company. (See Mellert, Albert H., assignor.)						
Mellet, Lemuel, assignor to himself, A. D. Tingloy, A. L. Russell, and A. T. Lighthill, Boston, Mass. Electric valve-closer	434,671	Aug. 19	1904	496 497 665 666 667	52	1147
Mellin, Carl J., New York, N. Y. Steam-separator	424,013	Mar. 25	2503	666 667 310 311	50	1634
Mellin, Carl J., Richmond, Va. Piston-valve	431,818	July 8	1244	969	52	251
Mellon, William T., and J. A. Best, Atlantic City, N. J. Animal-trap	443,970	Dec. 30	3801	969	53	2034
Mellor, Henry N. (See Marchetti and Mellor.)						
Melms, Gustav J. (See Brown, Charles, assignor.)						
Melone, Juliette S., administratrix. (See Melone, Thomas L.)						
Melone, Thomas L., deceased, Chillicothe, Ohio, J. S. Melone, administratrix. Ruffling attachment for sewing-machines	419,339	Jan. 14	1045	276 277	50	221
Meloney, George R., Philadelphia, Pa. Milk-cooler	436,288	Sept. 9	1402	365	52	1650
Meloney, Joseph M., Wilmington, Del. Relief-valve for hydraulic presses	421,182	Feb. 11	1126	288	50	787
Meloon, Herman T., et al. (See Newhall, John F., assignor.) (Reissue.)						
Melounek, Frank J., Chaska, Minn. Chopping-machine	427,594	May 13	860	216	51	990
Melotte, George W., Ithaca, N. Y. Soldering apparatus	420,459	Feb. 4	59	12	50	575
Melotte, George W., Ithaca, N. Y. Refractory bed for soldering	433,252	July 29	3459	892 893	52	699
Melton, Marquess L., and J. H. Webb, Centre Ridge, Ark. Nozzle for cans	432,676	July 22	2554	654	52	518
Melville, John, Connellsville, Pa. Family-Bible cabinet	428,345	May 20	2003	504	51	1222
Menchen, Joseph. (See Zwiesler and Menchen.)						
Mendel, Alfred, Strehlen, near Dresden, Saxony, Germany. Collar for horses	423,566	Mar. 18	1813	478	50	1496
Mendelson, Luis, et al. (See Portlock, Warren, assignor.)						
Mendenhall, Clarkson, Akron, assignor of one-half to W. O. Hershey, Leetonia, Ohio. Road-scraper	428,506	May 20	2234	565	51	1266
Mendenhall, Hiram. (See Ping and Mendenhall.)						
Mendenhall Store Service Company. (See Mendenhall, William, assignor.)						
Mendenhall, Walter S., Covington, Ky. Book and paper rack	431,373	July 1	522	130	52	105
Mendenhall, Walter S., Covington, Ky., assignor to E. Tatum, (administratrix of S. O. Tatum, deceased), Cincinnati, Ohio. Telephone-tablet	435,314	Aug. 26	2903	769	52	1344
Mendenhall, William, assignor to Mendenhall Store Service Company, Cincinnati, Ohio. Store-service apparatus	424,327	Mar. 25	2949	785 786	50	1720
Mendendall, William, assignor to Mendenhall Store Service Company, Cincinnati, Ohio. Store-service apparatus	424,426	Mar. 25	3130	831	50	1756
Menendez, Gabriel A., assignor of two-thirds to W. A. Clark and E. B. Lewis, Marinette, Wis. Drill	423,620	Mar. 18	1891	498	50	1510
Menge, Joseph, New Orleans, La. Pump	421,415	Feb. 18	1455	371	50	856
Menge, Joseph, New Orleans, La. Lamp-stove	427,181	May 6	240	62	51	858
Mengel, Joseph A., McKeansburg, Pa. Ice-harvesting machine	432,421	July 15	2144	551 552	52	429
Mennen, Gerhard, Newark, N. J. Powder-box	441,802	Dec. 2	272	74	53	1317
Menuez, Anthony E., assignor of one-seventh to W. Ruan, St. Paul, Minn. Insulating composition	438,698	Oct. 21	1563		53	311
Menzel, Robert. (See Dahlstrom, Leopold, assignor.)						
Mereadier, Ernest J. P., Paris, France. Multiple telegraphy	420,884	Feb. 4	678	175	50	692
Mercer, Anna, et al. (See Lippitt and Hansdoerfer, assignors.)						
Mercer, Arthur J., Etobicoke, Ontario, Canada. Farm-gate	420,460	Feb. 4	60	13	50	575
Mercer, Charles A., Quincy, Ill. Lime-kiln	443,779	Dec. 30	3504	899	53	1977
Mercer, Frederick D., Alliston, Ontario, Canada. Horse-whipping device	431,847	July 8	1289	323	52	261
Mercer, Frederick D. and J. S., Dereham, Ontario, Canada. Harvester-binder	425,139	Apr. 8	1084	257	51	218
Mercer, George H., Bowling Green, Ky. Frame house	419,056	Jan. 7	615	159	50	129
Mercer, George W., Vibbard, Mo. Sleigh-runner	437,707	Oct. 7	39	12	53	10
Mercer, John S. (See Mercer, Frederick D. and J. S.)						
Mercer, William J., Homer, La. Plow-fastener	422,028	Feb. 25	2324	613	50	1030
Merchant, Edward S., et al. (See Frost, Nathaniel N., assignor.)						
Merchant, Judson N., Chelsea, Mich. Straining device for wire fences	420,819	Feb. 4	568	145	50	672
Merchants Store Service Company. (See Dunn and Walters, assignors.)						
Mercury Typo Writing Machine Company. (See Myers, Frederick, assignor.)						
Meredith, Elmer E., Rochester, Ind. Windmill	440,266	Nov. 11	978	249	53	810
Mereness, Henry E., Albany, N. Y. Carriage-apron support	422,428	Mar. 4	95	26	50	1155
Mergenthaler, Ottmar, Baltimore, Md., assignor to National Typographic Company, of West Virginia. Machine for producing type-bars	425,140	Apr. 8	1086	287 288 289 290 291 471 472 473 474 475 476	51	219
Mergenthaler, Ottmar, Baltimore, Md., assignor to National Typographic Company, of West Virginia. Machine for forming type-bars	436,531	Sept. 16	1787	473 474 475 476 477 478 479 480	52	1730
Mergenthaler, Ottmar, Baltimore, Md., assignor to National Typographic Company, of West Virginia. Machine for producing linotypes, type-matrices, &c.	436,532	Sept. 16	1802	477 478 479 480	52	1733
Mergenthaler, Ottmar, Baltimore, Md., assignor to National Typographic Company, of West Virginia. Linotype-machine	438,354	Oct. 14	1046	285	53	206
Mergott, Julius E., Newark, N. J. Box-fastener	428,726	May 27	2589	656	51	1351
Meriam, Marshall, East Pepperell, Mass. Card-cutting machine	427,098	May 6	110	30	51	833
Meriden Britannia Company. (See McCarthy, Oliver, assignor.)						
Meriden Bronze Company. (See Jones, Augustus H., assignor.)						
Meriden Bronze Company. (See Miller, John C., assignor.)						
Meriden Silver Plate Company. (See Hiller, Louis C., assignor.)						
Mering, Joseph F. v., Strasburg, Germany. Chloralformamide	425,039	Apr. 8	942		51	190
Mering, Joseph F. v., Strasburg, Alsace, Germany. Chloralformamide	425,040	Apr. 8	943		51	190

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Merk, Lawrence A., Rochester, N. Y. Bill-file	436,533	Sept. 16	1816	480	52	1734
Merkel, James, Mount Pleasant, Iowa. Steering paddle-wheel with feathering-blades	421,955	Feb. 25	2228	585	50	1012
Mermod, Frères. (See Campiche, Louis, assignor.)						
Merrell, Daniel B., Canandaigua, N. Y. Manure-spreader	419,463	Jan. 14	1227	326	50	258
Merrell, Daniel B., and J. G. Rippey, Geneva, N. Y.; said Rippey assignor to said Merrell. Thill-coupling	430,782	June 24	2641	648	51	2010
Merrell, Gaius L., Syracuse, N. Y. Machine for separating silks, &c., from green corn	419,696	Jan. 21	1566	419 420	50	331
Merrell, Gaius L., Syracuse, N. Y. Machine for cleaning the tops of cans	436,836	Sept. 23	2320	610 611	52	1839
Merrell, Gaius L., Syracuse, N. Y. Can-cleaning machine	436,860	Sept. 23	2396	625 130	52	1853
Merriam, Henry P., New York, N. Y. Shell for high explosives	431,374	July 1	523	131	52	105
Merriam, Henry P., New York, N. Y. Shell for high explosives	431,375	July 1	526	131	52	106
Merriam, Henry P., New York, N. Y. Detonating mechanism for explosive shells	431,376	July 1	523	132	52	106
Merriam, Henry P., New York, N. Y. Detonating mechanism for explosive shells	431,377	July 1	530	132	52	107
Merriam, Henry P., New York, N. Y. Detonating mechanism for explosive shells	431,378	July 1	532	133	52	107
Merriam, Henry P., New York, N. Y. Shell for high explosives	431,379	July 1	533	133	52	108
Merriam, Lyman W., Fitchburg, Mass. Shutter-fastener	420,461	Feb. 4	61	13	50	576
Merriam, Lyman W., Fitchburg, Mass. Wire screw	426,294	Apr. 22	2826	742	51	576
Merrick, Frank W., Somerville, assignor to Merrick Manufacturing Company, Boston, Mass. Eyeletting-machine	422,351	Feb. 25	2834	747 748	50	1124
Merrick, Frank W., assignor to Merrick Manufacturing Company, Boston, Mass. Eyeletting-machine	427,340	May 6	475	122	51	905
Merrick, Isaac J., Leesville, Ohio. Post-hole digger	428,507	May 20	2235	566	51	1266
Merrick Manufacturing Company. (See Merrick, Frank W., assignor.)						
Merrifield, Lewis C., et al. (See Vining, Charles J., assignor.)						
Merrifield, Preston V., assignor to J. Perry, H. W. Long, and J. Kleinhaus, Grand Rapids, Mich. Non-interference fire-alarm signal-box	442,383	Dec. 9	1170	304 305	53	1496
Merrill, Anson P., assignor of one-half to C. A. Hicks, Fall River, Mass. Air-valve for pipes	442,529	Dec. 9	1406	359	53	1544
Merrill, Charles A., and A. D. Linn, Grand Rapids, Mich. School-desk, &c	432,319	July 15	2008	513	52	402
Merrill, Charles A., and A. D. Linn, Grand Rapids, Mich. Folding chair	442,128	Dec. 9	768	212 213	53	1424
Merrill, Charles L., Indianapolis, Ind. Pump	429,464	June 3	543	131	51	1577
Merrill & Co., S. K. (See Peck, Charles H., assignor.)						
Merrill, David E., and W. T. Falconer, Jamestown, N. Y. Washing-machine	438,081	Oct. 7	635	173	53	122
Merrill, Edward W., et al. (See Bass, James, assignor.)						
Merrill, Eugene C., West Oakland, Cal. Car-lock	422,817	Mar. 4	656	168	50	1262
Merrill, Ezra F., Stratford, N. H., assignor to Haverhill Roller Toboggan Company, Haverhill, Mass. Roller toboggan-slide and toboggan-car	430,587	June 17	2295	564	51	1934
Merrill, Frank M., Oakland, Cal. Compressed-air street-car motor	435,020	Aug. 26	2461	651 652	52	1261
Merrill, George D., East Orange, N. J. Toy	431,211	July 1	273	68	52	56
Merrill, George W., Brooklyn, assignor to R. Merrill's Sons, New York, N. Y. Adjusting-binnacle	438,777	Oct. 21	1697	455	53	336
Merrill, Gilbert D., Mechanicsville, N. Y. Door-latch	419,966	Jan. 21	1974	519	50	413
Merrill, Herbert W. (See Moore, Charles R., assignor.)						
Merrill, Ira J., Winthrop, Iowa. Skate-sharpener	438,699	Oct. 21	1564	420	53	311
Merrill, John C. and L., Westphalia, Kans. Farm-gate	431,275	July 1	370	93	52	75
Merrill, Jonathan G., Quincy, Mass. Composition for fire-proof paper or board	424,328	Mar. 25	2951	786	50	1721
Merrill, Joshua. (See Merrill, Rufus S., assignor.)						
Merrill, Luther. (See Merrill, John C. and L.)						
Merrill, Manning, et al. (See Bass, James, assignor.)						
Merrill, Parker, St. Louis, Mich. Surface cattle-guard	426,193	Apr. 22	2693	707	51	548
Merrill, Parker, St. Louis, Mich. Cattle-guard	431,119	July 1	130	33	52	28
Merrill, Rufus S., Wakefield, Mass. Fabric roofing material	437,033	Sept. 23	2649	139	52	1903
Merrill, Rufus S., Wakefield, assignor of one-half to J. Merrill, Boston, Mass. Railway-spike	427,436	May 6	628	157	51	936
Merrill, Rufus S., Wakefield, assignor of one-half to C. F. Quincy, Boston, Mass. Car or other roof	431,474	July 1	678	169	52	136
Merrill, Thomas B., assignor to himself and J. Quinn, Portland, Me. Boiler-bearing	432,950	July 22	2925	766	52	399
Merrill, William. (See Danielson and Merrill.)						
Merrill, William, assignor of one-half to S. S. Mitts, East Saginaw, Mich. Wood cutting and conveying machine	426,946	Apr. 29	3802	994	51	776
Merrill, William E. T., assignor to W. A. Laverty, Philadelphia, Pa. Buckle	440,432	Nov. 11	1267	328	53	861
Merrill, William E. T., assignor to J. W. Bruff, M. Loeb, J. M. Waldauer, and D. Bachrach, Philadelphia, Pa. Suspender-buckle	437,498	Sept. 30	3406	892	52	2057
Merrill's Sons, Robert. (See Merrill, George W., assignor.)						
Merriman, Arthur C., Leominster, Mass. Combined ruler, ink-eraser, and paper-cutter	432,632	July 22	2471	635	52	501
Merriman, Francis E. (See Alley, Henry, assignor.)						
Merritt, Amos C., Allentown, N. Y. Car-coupling	429,539	June 3	662	162	51	1598
Merritt, Charles E. (See Yost and Merritt.)						
Merritt, Henry A. (See Ide, Fred B., assignor.)						
Merritt, Jacob. (See Harkins, James S., assignor.)						
Merritt, James S., Philadelphia, Pa. Iron or steel fence-post	434,549	Aug. 19	1692	443	52	1107
Merritt, Jesse T., Fayetteville, Tenn. Buckle	429,768	June 10	998	245	51	1675
Merritt, John, and W. E. Spencer, Brooklyn, N. Y. Photographic camera	426,295	Apr. 22	2826	743 744 744	51	577
Merritt, John, and W. E. Spencer, Brooklyn, N. Y. Photographic camera	426,296	Apr. 22	2828	745 746	51	577
Merritt Manufacturing Company. (See Merritt, Mortimer G., assignor.)						
Merritt Manufacturing Company. (See Young, Frank A., assignor.)						
Merritt, Mortimer G., Springfield, Mass. Type-writing machine	434,991	Aug. 26	2416	639	52	1253
Merritt, Mortimer G., Springfield, Mass. Type-writing machine	440,360	Nov. 11	1123	288	53	835
Merritt, Mortimer G., Springfield, Mass. Type-bar and hanger for type-writing machines	440,574	Nov. 11	1469	384	53	904
Merritt, Mortimer G., Springfield, Mass. Paper-holding device for type-writing machines	442,633	Dec. 16	1569	405	53	1556
Merritt, Mortimer G., assignor to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine	421,183	Feb. 11	1127	288 289	50	787
Merritt, Mortimer G., and G. S. Heath, Springfield, Mass. Mechanism for rotating the platens of type-writing machines	442,129	Dec. 9	769	213	53	1426
Merritt, Samuel F., Springfield, Mass. Combined hair-pin and holder for eyeglasses	423,438	Mar. 18	1630	429	50	1462
Merritt, Samuel F., Springfield, Mass. Plating on solid wire	428,727	May 27	2591	656	51	1351

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Merritt, William H. (See Chapman, George T., assignor.)						
Merritt, William S., Auburn, N. Y. Latch	423,938	Mar. 25	2382	634	50	1611
Morrow, Arthur P., et al. (See Smart, Fred A. J., assignor.)						
Morrow, Daniel F., et al. (See Chaimey, Amédé, assignor.)						
Morrow, Frank J., Amboy, Ill. Sulky-plow	422,605	Mar. 4	360	89	50	1205
Morrow, Joseph M. (See Morley, Joseph D., assignor.)						
Morrow, Joseph M., Merrow, Conn. Looped fabric	422,142	Feb. 25	2496	660	50	1061
Morrow, Joseph M., Merrow, Conn. Crocheting or oversewing machine	428,508	May 20	2236	566	51	1266
Morrow, Joseph M., Mansfield, Conn. Crocheting-machine	441,315	Nov. 25	2747	710	53	1157
Morrow, Oscar L., and A. E. Sanborn, assignors of one-half to D. and J. O'Shea, Jr., Laclede, N. H. Splicing-thread attachment for knitting-machines	434,156	Aug. 12	1081	278	52	977
Merryman, William F., Denver, Colo. Air-accumulator	441,119	Nov. 18	2392	620	53	1085
Mersereau, William T., South Orange, N. J. Stand for fire-sets	426,624	Apr. 29	3338	874 875	51	686
Mershon, Edward C., East Saginaw, Mich. Beading attachment for planing-machines	418,920	Jan. 7	427	105	50	89
Mersick, Edwin F., New Haven, Conn., assignor to English & Mersick. Speaking-tube	434,672	Aug. 19	1905	497	52	1147
Mertens, Henry E., St. Paul, Minn. Bridge construction	424,427	Mar. 25	3133	832	50	1757
Mertsheimer, Frederick, Kansas City, Kans. Exhaust-nozzle for locomotives	432,422	July 15	2146	552	52	430
Mertsheimer, Frederick, Kansas City, Kans., and J. Follens, Kansas City, Mo. Railway-signal holder	429,933	June 10	1248	309	51	1722
Mertz, Emile, Basle, Switzerland. Apparatus for moistening air	424,652	Apr. 1	331	86	51	65
Mertz, Emile, Basle, Switzerland. Spraying-nozzle	434,518	Aug. 19	1641	430	52	1097
Mertz, Emile, Basle, Switzerland. Filter	437,443	Sept. 30	3330	869	52	2040
Merz Capsule Company. (See Merz, Theodore C., assignor.)						
Merz, Theodore C., assignor to Merz Capsule Company, Detroit, Mich. Capsule-drying apparatus	433,991	Aug. 12	818	214	52	924
Mesa, Jose R., Yuga Santa Catalina, Cuba. Combined sugar-cane cutter and crusher	430,806	June 24	2683	657 658	51	2017
Meschle, Harry. (See Osborn, David L., assignor.)						
Mesick, Elizabeth H. (See Mesick and Ayer, assignors.)						
Mesick, Peter, Stuyvesant, N. Y., and A. E. Ayer, Boston, Mass., assignors to E. H. Mesick, Stuyvesant, N. Y. Type-writing machine	442,323	Dec. 9	1079	283 284	53	1479
Mesker, Bernard T., St. Louis, Mo. Building-front	435,761	Sept. 2	588	156 157	52	1488
Mesker, Bernard T., St. Louis, Mo. Building-front	437,671	Sept. 30	3652	953	52	2105
Mesker & Bro. (See Mesker and Edwards, assignors.)						
Mesker & Bro. (See Symonds, Herbert, assignor.)						
Mesker, Frank, St. Louis, Mo. Building-front column	435,848	Sept. 2	721	194	52	1514
Mesker, Frank, St. Louis, Mo. Building-front column	435,849	Sept. 2	722	194	52	1514
Mesker, Frank, and H. F. Edwards, assignors to Mesker & Bro., St. Louis, Mo. Plate-metal column	437,669	Sept. 30	3651	952	52	2105
Mesker, Frank, and H. F. Edwards, assignors to Mesker & Bro., St. Louis, Mo. Plate-metal column	437,670	Sept. 30	3651	953	52	2105
Mesle, Francis J., Chicago, Ill. Ecraseur	421,082	Feb. 11	981	252	50	758
Messenger, Thomas, Dover, county of Kent, England. Peat-machine	423,261	Mar. 11	1363	354 355	50	1403
Messer, Jeremiah C., and A. Garner, San Marcos, Tex. Plow	434,938	Aug. 26	2342	619	52	1239
Messer, Jeremiah C., A. Garner, and J. W. Williams, Staple's Store, Tex. Cultivator	437,309	Sept. 30	3095	811	52	1994
Messerer, Stephen, Newark, N. J. Cash-drawer and desk	443,257	Dec. 23	2670	684 685	53	1808
Messier, Luke. (See Dubé and Messier.)						
Messina, John A., and P. Burgos, Key West, Fla. Cigar-maker's gage	435,073	Aug. 26	2542	670	52	1277
Messinger, Josef, and G. Vortmann, Aix-La-Chapelle, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Substitute for iodoform	436,250	Sept. 9	1352	365	52	1639
Messmer, Alexander L. H., Hammond, Ind. Metallic wheel-hub	428,312	May 20	1953	490	51	1211
Messmer, Alexander L. H., and C. H. Luthman, Hammond, Ind. Vehicle-wheel	428,313	May 20	1955	490	51	1211
Messmore, Rienzi W., assignor of one-half to L. C. Coffman, Washington Court-House, Ohio. Convertible hammock and chair	424,329	Mar. 25	2952	786	50	1721
Mestern, Heinrich. (See Fayod and Mestern.)						
Mestern, Hugo, Munich, Germany. Thermal battery	434,640	Aug. 19	1847	483	52	1138
Meston, Alexander W., St. Louis, Mo. Champagne-tap	425,480	Apr. 15	1601	428	51	328
Meston, Alexander W., assignor to Emerson Electric Manufacturing Company, St. Louis, Mo. Electric meter	442,705	Dec. 16	1690	433 434	53	1610
Metallic Grain Door Company. (See Bronner, Potts, and Pungs, assignors.)						
Metallic Grain Door Company. (See Pungs, William A., assignor.)						
Metcalf, Foster M., assignor to Battle Creek Machinery Company, Battle Creek, Mich. Steam-engine	442,905	Dec. 16	2060	529	53	1680
Metcalf, Henry B., et al. (See Campbell, Duncan H., assignor.)						
Metcalf, Ira A. (See Hamblin, Ephraim, assignor.)						
Metcalf, John C. (See Burnham, John F., assignor.)						
Metcalf, John S., assignor to Metcalf-Macdonald Company, Chicago, Ill. Elevator-building construction	422,029	Feb. 25	2325	614	50	1030
Metcalf-Macdonald Company. (See Metcalf, John S., assignor.)						
Metcalf & Mackey Company. (See Rigdon, Isaac, assignor.)						
Meteor Despatch Company. (See Miller, Hugh, assignor.)						
Metheany, Richard R., Grand Rapids, Mich. Railway passenger-ticket	436,289	Sept. 9	1403	365	52	1650
Metric Metal Company. (See Wallace, Jacob B., assignor.)						
Metropolitan Elevator Company. (See Sawyer, William A., assignor.)						
Mets, John D., Dubuque, Iowa. Automatic car-brake	441,015	Nov. 18	2212	571	53	1050
Mettlen, Henry S., et al. (See Cullens, John T., assignor.)						
Metzenaur, Emil, Little Rock, Ark. Paper-bag machine	434,939	Aug. 26	2344	619 620	52	1240
Metzger, Alphonse, Milton, Pa. Permutation-lock	442,778	Dec. 16	1827	473	53	1637
Metzger, Charles E., Williamsport, Pa. Ferrule for umbrellas or parasols	436,251	Sept. 9	1352	352	52	1639
Metzger, John A., Hamlet, Ark. Harrow and cultivator	426,837	Apr. 29	3667	954	51	749
Metzger, Martin L., and A. Cooper, assignors to W. O. Hickey Manufacturing Company, Harrisburg, Pa. Paper-rolling machine	432,633	July 22	2472	635 636	52	501
Metzing, Henry W., assignor to National Pneumatic Tool Company, New York, N. Y. Pneumatic engine	441,103	Nov. 18	2365	613	53	1079
Meizler, August J., Brooklyn, assignor to C. C. Puffer, Rochester, N. Y. Manufacturing beer	436,534	Sept. 16	1818	.....	52	1735
Meizler, August J., Brooklyn, assignor to C. C. Puffer, Rochester, N. Y. Making beer	436,535	Sept. 16	1820	.....	52	1735
Meizler, August J., Brooklyn, assignor to C. C. Puffer, Rochester, N. Y. Manufacturing beer	436,536	Sept. 16	1821	52	1735

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Metzler, August J., Brooklyn, assignor to C. C. Puffer, Rochester, N. Y. Preparing rubber for market.	436,537	Sept. 16	1822	-----	52	1735
Metzler, Frederick B. (See Burke, Solon W., assignor.)						
Metzler, Henry F., Brooklyn, N. Y. Clothes-line adjuster	426,731	Apr. 29	3505	916	51	718
Metzler, Joseph. (See Watts, Robert J., assignor.)						
Metzner, William C., Chicago, Ill. Stove-grate	418,848	Jan. 7	297	73	50	62
Metzner, William C., Chicago, Ill. Stove-grate	418,849	Jan. 7	298	73	50	63
Metzner, William C., Chicago, Ill. Stove-center	443,166	Dec. 23	2507	641	53	1774
Meurisse Alfred de, Philadelphia, Pa. Watchman's time-recorder	431,723	July 8	1094	{ 272 273 }	52	223
Mewborn, Joseph L., Memphis, Tenn. Re-enforcing mallet for dental pluggers	442,070	Dec. 2	639	188	53	1399
Mewborn, Joseph L., Memphis, Tenn. Dental plugger	443,399	Dec. 23	2859	746	53	1852
Mey, Fredrick H. C., Buffalo, N. Y. Conveyor	431,232	July 1	307	75	52	62
Meyenberg, Max, Hoboken, N. J., and G. Simon, New York, N. Y. Woven fabric	435,150	Aug. 26	2650	701	52	1298
Meyer, August, assignor of one-half to D. H. Miller, Jr., Baltimore, Md. Rotary engine	442,634	Dec. 16	1571	406	53	1586
Meyer, Bernhard H., New York, N. Y. Making long-filler cigar-bunches	435,510	Sept. 2	194	53	52	1412
Meyer, Bernhard H., New York, N. Y. Cigar-bunching machine	436,369	Sept. 16	1551	407	52	1686
Meyer, Carl. (See Büttner and Meyer.)						
Meyer, Fred W., Louisville, Ky. Stop and waste cock	430,869	June 24	2781	682	51	2036
Meyer, George, Gravesend, N. Y. T-head mouth-piece for bridle-bits	443,533	Dec. 30	3109	800	53	1902
Meyer, George F., New York, N. Y. Making ice	435,566	Sept. 2	289	80	52	1431
Meyer, George U., Providence, R. I. Plated metal	431,848	July 8	1289	324	52	261
Meyer, George U., Providence, R. I. Plating metal	440,847	Nov. 18	1951	501	53	999
Meyer, George U., Providence, R. I. Plated wire	441,884	Dec. 2	398	105	53	1343
Meyer, George U., Providence, R. I. Plated wire	441,885	Dec. 2	399	105	53	1343
Meyer, George U., Providence, R. I. Plated wire	441,886	Dec. 2	400	105	53	1343
Meyer, George U., Providence, R. I. Arbor	441,887	Dec. 2	401	106	53	1343
Meyer, George U., Providence, R. I. Drawing seamless wire	441,888	Dec. 2	402	106	53	1343
Meyer, George U., Providence, R. I. Arbor	441,889	Dec. 2	403	106	53	1344
Meyer, George U., Providence, R. I. Plated wire	443,698	Dec. 30	3383	869	53	1953
Meyer, Harry. (See Kehm and Meyer.)						
Meyer, Henry, Brooklyn, N. Y. Zither-table	433,801	Aug. 5	546	141	52	863
Meyer, Isaac, <i>et al.</i> (See Little, Robert H., assignor.)						
Meyer, John, Covington, Ky. Vent bung and bushing	433,015	July 29	3098	795	52	627
Meyer, John W. (See Shepherd and Meyer.)						
Meyer, John W., Rock Island, Ill., and F. H. Shepherd, Davenport, Iowa. Water-cooler	433,739	Aug. 5	437	113	52	841
Meyer, Joseph P., Rochester, N. Y. Registering attachment for harbers' chairs	424,992	Apr. 8	864	229	51	176
Meyer, Louis, Urica, N. Y. Lawn-mower	425,687	Apr. 15	1921	511	51	391
Meyer, Louis E., St. Louis, assignor to H. F. Priesmeyer, Jefferson City, Mo. Guard for bedsteads	421,103	Feb. 11	1014	259	50	765
Meyer, Michael. (See Degnan and Meyer.)						
Meyer, Richard, Brooklyn, N. Y. Potato-parer	430,139	June 17	1586	395	51	1798
Meyer-Sniffen Company. (See Bunting, William, Jr., assignor.)						
Meyer, William, Beaver Falls, Pa. Curtain-rack	425,336	Apr. 8	1379	367	51	277
Meyer, William C. (See French and Meyer.)						
Meyers, Albert. (See Briggs, Harrison T., assignor.)						
Meyers, Frank B., Fort Plain, N. Y. Combined oil and water vaporizer and burner	433,870	Aug. 5	640	166	52	882
Meyers, Frank B., Fort Plain, N. Y. Hydrocarbon-burner	433,871	Aug. 5	642	167	52	882
Meyers, Franklin E., Garrett, Pa. Educational appliance	421,992	Feb. 25	2230	586	50	1012
Meyers, Hermann J., Brooklyn, N. Y. Electric locking attachment	427,341	May 6	478	123	51	906
Meyers, John H., Galveston, Tex. Mosquito-bar frame	433,253	July 29	3460	892	52	700
Meyler, Nicholas. (See Heinzelman and Meyler.)						
Meyrowitz, Emil B. (See Buchhop and Allibone, assignors.)						
Meysenburg, Theodore A., St. Louis, Mo., and W. Garrett, Cleveland, Ohio. Red-rolling mill	419,592	Jan. 14	1396	{ 373 374 }	50	293
Miannay, Eugene. (See David, Augustin O., assignor.)						
Michael, Averit W., Benton Harbor, Mich. Pulley	426,036	Apr. 22	2457	649	51	500
Michaels, Oliver J., and C. Baeder, assignors of one-third to E. Roberts, Pittsburg, Pa. Glass-cutting machine	427,002	Apr. 29	3888	1015	51	792
Michales, Alwilda, <i>et al.</i> (See Michales, Moses A., assignor.)						
Michales, Moses A., Allegheny, assignor to O. S. Weddell, McKeesport, and A. Michales, Allegheny, Pa. Mining-machine	421,594	Feb. 18	1722	{ 448 449 }	50	907
Michaud, Onesime E., St. Louis, Mo. Chair	432,423	July 15	2148	553	52	430
Michaud, Onesime E., St. Louis, Mo. Railway mileage-recorder	438,933	Oct. 21	1946	{ 518 519 }	53	382
Michaux, Adèle, Paris, France. Closure for vessels	439,249	Oct. 28	2455	658	53	486
Michél, Pierre, <i>et al.</i> (See Campbell, James A., assignor.)						
Michell, Carlton C., Montclair, N. J. Combination organ-stop action	441,370	Nov. 25	2822	{ 728 729 }	53	1171
Michener, John H., Jr., Philadelphia, Pa. Soldering apparatus	419,785	Jan. 21	1694	449	50	356
Michigan Lubricator Company. (See Krantz, Friedrich W., assignor.)						
Michigan Washing Machine Company. (See Glidden, Oscar F., assignor.)						
Mickler, Jacob H., assignor of two-thirds to J. E. Klotz and W. Stahlschmidt, Preston, Ontario, Canada. Drilling-machine	421,416	Feb. 18	1456	377	50	856
Mickler, Jacob H., assignor of two-thirds to W. Stahlschmidt and J. E. Klotz, Preston, Ontario, Canada. Three-spindle boring-machine	421,417	Feb. 18	1456	377	50	856
Mickow, George, Chicago, Ill. Puzzle	425,041	Apr. 8	944	252	51	190
Middleby, Joseph, Boston, Mass. Portable oven	434,023	Aug. 12	856	226	52	932
Middlekauff, Charles D. (See Young and Middlekauff.)						
Middlekauff, Ellsworth D., Stockton, Cal. Automatic cork-puller	427,099	May 6	113	31	51	834
Middlekauff, Ellsworth D., Stockton, Cal. Churn	438,482	Oct. 14	1227	333	53	242
Middlekauff, Ellsworth D., and C. D. Harsin, Stockton, Cal. Gate	440,177	Nov. 11	836	215	53	782
Middleton, Alice G., Philadelphia, Pa. Transfer apparatus for traction-cable cars	422,352	Feb. 25	2838	748	50	1124
Middleton, Arthur R. (See White and Middleton.)						
Middleton, John W., Kingston, Jamaica, West Indies. Whip	437,127	Sept. 23	2793	728	52	1931
Middleton, Lee, Clarksville, Mo. Water-wheel	427,885	May 13	1316	332	51	1078
Middleton, William, and W. Wilson, Liversedge, county of York, England. Apparatus for grinding card-teeth for carding fibers	429,044	May 27	3064	790	51	1445
Midgley, Albert, assignor of one-half to M. Leach, Bradford, England. Apparatus for beating and cleaning carpets	435,850	Sept. 2	722	194	52	1514
Midgley, George W. (See Johns, Will R., assignor.)						
Midgley, George W., and H. E. Harbaugh, Rockford, Ill. Drilling-machine	431,606	July 8	881	219	52	184

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Midgley, Thomas, Beaver Falls, Pa. Wire cable	432,804	July 22	2768	708	52	558
Midgley, Thomas, assignor to H. W. Hartman, Beaver Falls, Pa. Wire mat.	422,960	Mar. 11	912	239	50	1318
Miehle, Robert, Chicago, Ill. Sheet-delivery apparatus for printing-machines	419,593	Jan. 14	1397	374 375	50	293
Miehle, Robert, Chicago, Ill. Mechanical movement	429,694	June 10	891	216 217	51	1654
Miehle, Robert, Chicago, Ill. Mechanical movement for converting motion	429,695	June 10	892	217 218	51	1654
Miehle, Robert, Chicago, Ill. Air-cushioning apparatus for printing-presses, &c	430,665	June 24	2446	596 597	51	1971
Miesse, Americus, assignor of one-half to J. Hubbard, Lima, Ohio. Alarm for gas-pipes ..	423,385	Mar. 11	1544	406	50	1437
Mignola, John. (See Vecchio and Mignola.)						
Milan Agricultural Company. (See Begole, Gordon W., assignor.)						
Milar, Theodore, and H. Pritchard, Atkinson, Ill. Elevated hay-carrier	429,934	June 10	1249	309	51	1723
Milatz, William, New York, N. Y. Spring-retainer for umbrellas or parasols	432,887	July 22	2878	737	52	580
Milburn, Charles F. (See Millen and Milburn.)						
Milburn, Charles F., Toledo, Ohio. Self-lubricating vehicle-axle	438,778	Oct. 21	1698	455	53	337
Milburn Wagon Company. (See Millen and Milburn, assignors.)						
Mileham, Joseph N. (See Watson and Mileham.)						
Mileham, Joseph N., Rutherford, N. J. Anti-friction bearing	438,442	Oct. 14	1170	316	53	230
Miles, Alfred S., Brooklyn, N. Y. Soap-cake	437,818	Oct. 7	224	68	53	44
Miles, Coit E., Chicago, Ill. Furnace for boilers	426,037	Apr. 22	2458	649	51	501
Miles Cutlery and Machine Company. (See Miles, William J., Jr., assignor.)						
Miles, Frederick B., assignor to himself, C. S., W. P., and F. Bement, Philadelphia, Pa. } Drilling-machine	430,082	June 10	1498	371 372	51	1771
Miles, Frederick B., assignor to himself, C. S., W. P., and F. Bement, Philadelphia, Pa. } Mechanism for operating clutching and belt-shifting devices	439,080	Oct. 21	2175	584	53	428
Miles, Harry S., and F. Haas, Philadelphia, Pa. Binding for books	421,595	Feb. 18	1724	450	50	907
Miles, Purches, Brooklyn, N. Y., assignor to H. W. Putnam, Bennington, Vt. Bottle-stop- per	421,957	Feb. 25	2232	587	50	1012
Miles, Purches, Brooklyn, N. Y., assignor to Clinton Wire Cloth Company, Clinton, Mass. Wire lath	429,935	June 10	1250	310	51	1723
Miles, R. A. (See Stukes, John M., assignor.)						
Miles, Samuel J., Chicago, Ill. Furnace	426,038	Apr. 22	2459	649	51	501
Miles, Stephen A., Merrimac Point, Ill. Stamp-canceler	420,580	Feb. 4	216	56	50	806
Miles, William J., Jr., Kansas, Ill. Compound for converting wrought-iron into steel ..	435,940	Sept. 9	873	52	52	1549
Miles, William J., Jr., Newton, Kans., assignor to Miles Cutlery and Machine Company, Kansas, Ill. Composition for converting malleable cast-iron into steel	428,687	May 27	2529	51	51	1340
Millard, William A., assignor to A. S. Parke, Bay City, Mich. Saw-swage	425,895	Apr. 15	2218	589	51	447
Mill, Friederich. (See Irwin, Mill, and Hitch.)						
Miller, Charles F., Shirehampton, England. Metallic hurdle	437,444	Sept. 30	3331	869	52	2040
Millard, Philip A. (See Sims, Lewis C., assignor.)						
Millard, William, assignor to E. C. Atkins & Company, Indianapolis, Ind. Adjustable base for grooving-saws	429,142	June 3	55	14, 15	51	1482
Millard, William J., et al. (See Anderson, Charles A., assignor.)						
Millbourn, James, assignor to C. Gould, New York, N. Y. Portable fog-burn	435,363	Aug. 26	2985	791 792	52	1360
Millen, Edgar T., Anburndale, and C. F. Milburn, assignors to Milburn Wagon Company, Toledo, Ohio. Vehicle-wheel	424,121	Mar. 25	2652	706	50	1663
Millen, George H. (See Casey, Mantion, and Millen.)						
Millen, James D. (See Bowker and Millen.)						
Miller, Addie D., Portland, Oreg. Dish-washing machine	442,906	Dec. 16	2061	529	53	1681
Miller, Alexander, assignor of one-half to R. Deeley, New York, N. Y. Apparatus for manufacturing salt	428,121	May 20	1661	421	51	1156
Miller, Alexander, assignor of one-half to R. Deeley, New York, N. Y. Evaporating ap- paratus	428,281	May 20	1904	479	51	1202
Miller, Alexander, assignor of one-half to R. Deeley, New York, N. Y. Manufacturing salt	428,282	May 20	1907	480	51	1203
Miller, Alfred K., Millersport, Ohio. Saw-mill dog	427,342	May 6	481	123	51	906
Miller, Alice W., Ashland, Oreg. Fruit-boiler	432,320	July 15	2009	514	52	403
Miller, Alonzo J., Oneida, Ill. Grain registering and loading attachment	436,585	Sept. 16	1892	497	52	1748
Miller, Anauel M., Fairfield, Tex. Trace-carrier	430,740	June 24	2571	629	51	1995
Miller, Amos D., et al. (See Tripp, Jonathan, assignor.)						
Miller, Andrew C., Auburn, N. Y. Ball of cord, twine, &c	425,381	Apr. 8	1448	388	51	290
Miller, Andrew C., Auburn, N. Y. Machine for balling twine	443,103	Dec. 23	2396	612	53	1755
Miller, Andrew J., Meriden, Conn. Stove-polish	419,533	Jan. 14	1320	50	50	277
Miller, Anthony, Huntingburg, Ind. Revolving-book machine	419,863	Jan. 21	1821	481	50	381
Miller, Augustus, Hoboken, N. J. Mosquito-canopy	429,355	June 3	385	91	51	1544
Miller, Austin E., Sprague, Wash. Tricycle	438,273	Oct. 14	927	251	53	182
Miller Bras & Toms. (See Dwinell, David L., assignor.)						
Miller, Carmi A. and J. H., Spring Valley, Ill. Road-cart	438,700	Oct. 21	1565	421	53	311
Miller, Carmi A. and J. H., Spring Valley, Ill. Road-cart	438,701	Oct. 21	1566	421	53	311
Miller, Carmi A. and J. H., Spring Valley, Ill. Portable rack for sledges, picks, and other tools	438,735	Oct. 21	1629	437	53	323
Miller, Charles, Washington, Mo. Pipe-cutter	438,702	Oct. 21	1567	421	53	311
Miller, Charles, assignor of one-fourth to C. Wheeler, Jr., Auburn, N. Y. Harvester	436,798	Sept. 23	2250	592 593 594	52	1826
Miller, Charles, Brooklyn, and C. Hanimann, New York, N. Y. Brake for children's car- riages	422,245	Feb. 25	2666	704	50	1093
Miller, Charles C., New York, N. Y. Split loose pulley	423,068	Mar. 11	1077	280	50	1348
Miller, Charles F., Lancaster, Pa. Furnace	418,955	Jan. 7	477	118 119	50	100
Miller, Charles F., assignor of five-eighths to B. J. McGraun, Lancaster, and A. J. Dull, Harrisburg, Pa. Furnace	432,542	July 22	2338	604	52	476
Miller, Charles H., et al. (See Dwinell, David L., assignor.)						
Miller, Charles H., Erie, Pa. Stove or range door opening and closing mechanism	440,848	Nov. 18	1955	501 502	53	1000
Miller, Charles L. (See Miller, Samuel H. and C. L.)						
Miller, Charles S. (See Miller, Blue, and Miller.)						
Miller, Charles W., assignor to J. A. Jeffrey, Columbus, Ohio. Drive-chain	436,608	Sept. 16	1917	504	52	1753
Miller, Christopher C., Richland, and J. W. Rowe, Martinsville, Ill. End-gate	441,575	Nov. 25	3147	809	53	1234
Miller, Columbus, J. W. Blue, and C. S. Miller, Keystone, Mo. Churn	429,356	June 3	386	91	51	1545

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Miller & Company, Edward. (See Baldwin, George W., assignor.)						
Miller & Company, Edward. (See Brewer, Roland L., assignor.)						
Miller & Company, Edward. (See Homan, William C., assignor.)						
Miller & Company, Edward. (See Johnson, John I., assignor.)						
Miller & Company, Edward. (See Maschmeyer, Charles, assignor.)						
Miller & Company, Edward. (See Rhind, Frank, assignor.)						
Miller Company, William P. (See Miller, William P., assignor.)						
Miller, Decatur H. (See Meyer, August, assignor.)						
Miller, Du Brul & Peters Manufacturing Company. (See Browning, Clinton, assignor.)						
Miller, Edward, St. Paul, Minn. Whip-socket	443,483	Dec. 23	3035	780	53	1879
Miller, Edward B., assignor of one-half to A. F. Robbins, Orange, Mass. Calendar-clock	422,090	Feb. 25	2415	639	50	1046
Miller, Ellis L. (See Lewis, James S., assignor.)						
Miller, Emerson L. (See Shaw and Miller.)						
Miller, Eugene M., and L. B. Shultz, St. Louis; said Miller assignor to C. A. Pilley, Iron Mountain, Mo. Flue-brush	431,526	July 1	761	190	52	152
Miller, F. W. (See Sherman, Abram, assignor.)						
Miller, Flory, Napoleon, Ohio. Windmill	427,100	May 6	114	31	51	834
Miller, Francis M. (See McCracken, Edwin D., assignor.)						
Miller, Frank C., Belvidere, N. J. Car-coupling	419,207	Jan. 14	842	221	50	181
Miller, Frank C., Belvidere, N. J. Car-coupling	425,445	Apr. 15	1548	415	51	318
Miller, Frank H., Stanwood, Iowa. Paper-hanging machine	421,596	Feb. 18	1725	450	50	907
Miller, Frank W., Beaver Dams, N. Y. Car-step	423,262	Mar. 11	1366	355	50	1403
Miller, Fred J., Plainfield, assignor of one-half to F. F. Hemenway, Jersey City, N. J. Index-center	420,278	Jan. 28	2483	659	50	516
Miller, Frederick D., assignor of one-half to A. Steffen, Chicago, Ill. Curling-iron	429,279	June 3	245	61	51	1519
Miller, Frederick R., Williamsport, Pa. Combined account-book and manifold blotter	427,182	May 6	241	62	51	859
Miller, Frederick W., and J. J. Newman, Elkhart, Ind. Couch-roll for paper-making machines	439,538	Oct. 28	2898	770	53	569
Miller, Fredrick C., Newport, Ky. Cigar-bunch roller	421,296	Feb. 11	1281	331	50	815
Miller, Fredrick C., Newport, Ky. Cigar-rolling apron	431,007	July 8	1368	346	52	276
Miller, Fredrick C., Newport, Ky. Cigar-rolling apron	431,908	July 8	1368	346	52	276
Miller, George A., et al. (See Dwinell, David L., assignor.)						
Miller, George C., et al. (See Knobelspies, Rudolph, assignor.)						
Miller, George E. (See Miller, John W., assignor.)						
Miller, George E., St. Louis, Mo. Spring-bed	422,030	Feb. 25	2326	614	50	1030
Miller, George E., Lynn, Mass. Electrical conductor	423,527	Mar. 18	1763	463	50	1487
Miller, George J. (See Gross, Jacob, assignor.)						
Miller, George L., et al. (See Lewis, James, assignor.)						
Miller, George W., Woonsocket, R. I. Brushing attachment for cloth-pressing machines	418,804	Jan. 7	219	53, 54	50	48
Miller, George W., Woonsocket, R. I. Cloth-pressing machine	418,805	Jan. 7	220	54	50	48
Miller, George W., Woonsocket, R. I. Cloth-pressing apparatus	420,885	Feb. 4	683	{ 175 176 }	50	692
Miller, George W., Woonsocket, R. I. Cloth-pressing machine	442,706	Dec. 16	1693	{ 434 435 }	53	1610
Miller, George W., Meriden, Conn. Faucet	419,153	Jan. 7	752	199	50	157
Miller, Grant C. (See Miller, Horace G. and G. C.)						
Miller Grate Company. (See Miller, Peter, assignor.)						
Miller, Henry D. N. (See Spahn and Miller.)						
Miller, Henry J., Goshen, N. Y. Road-cart	428,014	May 13	1503	382	51	1115
Miller, Horace G. and G. C., Mount Vernon, Iowa, assignors of one-half to W. C. Blinn, Rockford, Ill. Lawn-mower	439,806	Nov. 4	261	66	53	659
Miller, Hugh, Rockaway, assignor to Meteor Despatch Company, New York, N. Y. Pneumatic cash and parcel carrier	429,143	June 3	56	14, 15	51	1483
Miller, Isaac N., Cincinnati, Ohio. Fusible cut-out	430,967	June 24	2923	718	51	2062
Miller, Jacob, Canton, Ohio. Harvesting and binding machine	418,898	Jan. 7	389	95, 96	50	81
Miller, Jacob, Canton, Ohio. Grain-binder	419,128	Jan. 7	712	{ 187 188 }	50	150
Miller, Jacob, deceased, Canton, Ohio; L. and R. A. Miller administrators. Harvesting and binding machine	429,045	May 27	3065	{ 790 791 }	51	1445
Miller, Jacob, deceased, Canton, Ohio; L. and R. A. Miller administrators. Grain-binder	429,046	May 27	3068	792	51	1445
Miller, Jacob D., and J. A. Dofflemeyer, Gunnison, Colo. Electric device for slaughtering animals	431,777	July 8	1174	292	52	238
Miller, James, Lafayette, Ind. Car-door	419,057	Jan. 7	616	{ 159 160 }	50	129
Miller, James A., et al. (See Briggs, Orlando P., assignor.)						
Miller, James A., Hartford, Conn. Lamp	430,870	June 24	2782	682	51	2036
Miller, James A., Hartford, Conn. Lamp-support	439,671	Nov. 4	69	18, 19	53	621
Miller, James A., Hartford, Conn. Lantern	439,672	Nov. 4	70	19	53	621
Miller, James E., Syracuse, N. Y. Skinning-knife	431,233	July 1	308	76	52	62
Miller, James K., Emporia, Kans. Rope or twine book	436,252	Sept. 9	1354	352	52	1640
Miller, James M., Vacaville, Cal. Verge-wire for clocks	438,355	Oct. 14	1047	285	53	206
Miller, James M. A., and P. McMaster, San Mateo, Fla. Insecticide and making the same	430,393	June 17	2012		51	1880
Miller, John C., assignor to Meriden Bronze Company, Meriden, Conn. Hanging lamp	421,184	Feb. 11	1132	289	50	788
Miller, John C., assignor to Meriden Bronze Company, Meriden, Conn. Mount-holder for central-draft lamps	430,871	June 24	2783	682	51	2036
Miller, John E., Monmouth, Ill. Corn-husker	421,083	Feb. 11	983	252	50	759
Miller, John F. (See Anderson and Miller.)						
Miller, John F., et al. (See Bobemerith, Lewis E., assignor.)						
Miller, John F., Lee, assignor of one-half to J. L. Carr, White County, Ind. Music-holder	423,789	Mar. 18	2150	567	50	1560
Miller, John G., Champaign, Ill. Trace-carrier	425,235	Apr. 8	1232	328	51	249
Miller, John H. (See Burnham and Miller.)						
Miller, John H. (See Miller, Carmi A. and J. H.)						
Miller, John H., San José, Cal. Ore-concentrator	443,836	Dec. 30	3600	925	53	1996
Miller, John J., Cleveland, Ohio, assignor to J. P. Langley, East Saginaw, Mich. Electric signaling apparatus for hotels	426,134	Apr. 22	2601	684	51	530
Miller, John P. (See Sleeper and Miller.)						
Miller, John W. (See Walker, William H., assignor.)						
Miller, John W., Newton Falls, Ohio. Drill-operating device	420,692	Feb. 4	372	98	50	637
Miller, John W., assignor to G. E. Miller, Mount Sterling, Ky. Bit-chuck	423,386	Mar. 11	1545	406	50	1437
Miller, Joseph. (See Schneider and Miller.)						
Miller, Joseph A., Jr. (See Readie, Arthur J. E., assignor.)						
Miller, Joseph J. (See Mahoney, Edward S., assignor.)						
Miller, Karl, Newark, N. J. Furniture	435,941	Sept. 9	874	229	52	1549
Miller, Karl, Newark, N. J. Plumb-level	441,772	Dec. 2	228	59	53	1308

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Miller, Lee A., Portage, assignor to S. B. Fuller, Watertown, Wis. Sewing-machine shuttle	436,837	Sept. 23	2322	611	52	1840
Miller, Lee A., Portage, assignor of one-half to S. B. Fuller, Watertown, Wis. Spool-holder for sewing-machines	438,854	Oct. 21	1836	488	53	361
Miller, Lemuel D. and P. W., Collamer, Pa., assignors of one-third to E. H. Bates, Washington, D. C. Measuring-pump	437,162	Sept. 23	2867	{ 745 746 }	52	1943
Miller, Levi H., Wilmington, Del. Spoke-socket	425,141	Apr. 8	1096	291	51	220
Miller, Lewis. (See Ellinwood, Augustus E., assignor.)						
Miller, Lewis. (See Robb, Eliakim T., assignor.)						
Miller, Lewis, <i>et al.</i> , administrators. (See Miller, Jacob.)						
Miller, Lewis, Akron, Ohio. Grain-binder	419,154	Jan. 7	755	{ 200 201 }	50	157
Miller, Lewis, Akron, Ohio. Harvester cutter-bar	420,628	Feb. 4	288	76	50	620
Miller, Lewis, Akron, Ohio. Grain-binding harvester. (Reissue)	11,064	Mar. 4	811	{ 207 208 209 209 }	50	1291
Miller, Lewis, Akron, Ohio. Grain-binding harvester. (Reissue)	11,065	Mar. 4	815	{ 210 211 }	50	1291
Miller, Lewis, Akron, Ohio. Grain-platform for harvesters	434,641	Aug. 19	1849	{ 483 484 }	52	1138
Miller, Lewis, Akron, Ohio. Grain-binding harvester	434,642	Aug. 19	1852	{ 484 485 }	52	1138
Miller, Lewis, assignor of two-thirds to H. V. Spencer and M. L. Wright, Mexico, N. Y. Carriage-pole	435,364	Aug. 26	2987	792	52	1360
Miller, Lewis, and J. H. B. Bryan, Philadelphia, Pa. Hydraulic valve	424,718	Apr. 1	433	115	51	86
Miller, Lewis, and A. E. Ellinwood, Akron, Ohio; said Ellinwood assignor to said Miller. Harvester-reel driving and adjusting mechanism	420,627	Feb. 4	286	76	50	619
Miller, Lewis, and A. E. Ellinwood, Akron, Ohio; said Ellinwood assignor to said Miller. Grain-binder mechanism trip	438,703	Oct. 21	1568	{ 421 422 }	53	312
Miller Lock Company, D. K. (See Jackson, Milton, assignor.)						
Miller, Louis L., Newport, assignor of one-half to F. H. Perkins, Covington, Ky. Sewing-machine	424,330	Mar. 25	2953	{ 787 788 }	50	1721
Miller, Louis L., Newport, assignor of one-half to F. H. Perkins, Covington, Ky. Sewing-machine	424,490	Apr. 1	78	22, 23	51	18
Miller, Louis L., Newport, assignor of one-half to F. H. Perkins, Covington, Ky. Tube-support for box-loop sewing-machines	433,690	Aug. 5	369	94	52	828
Miller, Luther L. (See Shoudy and Miller.)						
Miller, Martin D., Leavenworth, Kans. Retort vaporizer and burner for oil and water	435,236	Aug. 26	2765	730	52	1320
Miller, Martin S., assignor of one-half to J. Kelland, Pittsburg, Pa. Animal-trap	432,493	July 15	2258	584	52	453
Miller, Norman R. (See Shattuck, Charles A., assignor.)						
Miller, Oliver A. (See Burbank, Jotham H., assignor.)						
Miller, Oliver A. (See Fowler, Alfred B., assignor.)						
Miller, Oliver A. (See Stone and Wellman, assignors.)						
Miller, Oliver A. (See Sumner, Clarence A., assignor.)						
Miller, Oliver A. (See Wellman, Alexander R., assignor.)						
Miller, Oliver D. (See Bishop and Miller.)						
Miller, Orlando E., and G. S. Bennett, Denver, Colo. Truss	438,169	Oct. 14	764	{ 208 209 }	52	153
Miller, Parker, J., Mount Gilead, Ohio. Combined husking-bench and fodder-binder	429,936	June 10	1251	310	51	1723
Miller, Peter, assignor to Miller Grate Company, Cleveland, Ohio. Ventilating-grate	422,887	Mar. 4	789	202	50	1287
Miller, Peter, assignor to Miller Grate Company, Cleveland, Ohio. Ventilating-grate	438,274	Oct. 14	930	251	53	183
Miller, Peter J., Upper Lehigh, Pa. Miner's lamp	435,120	Aug. 26	2609	690	52	1289
Miller, Philip, Norwich, Conn. Anger	424,565	Apr. 1	200	55	51	41
Miller, Philip C., Clayton, Ohio. Fence-building machine	433,299	July 29	3523	909	52	712
Miller, Philip W. (See Miller, Lemuel D. and P. W.)						
Miller Range and Furnace Company, William. (See Miller, William, assignor.)						
Miller, Robert. (See Simpson, William, assignor.)						
Miller, Robert A., <i>et al.</i> (See Rose, William P., assignor.)						
Miller, Robert A., <i>et al.</i> , administrators. (See Miller, Jacob.)						
Miller, Robert B., <i>et al.</i> (See Briggs, Orlando P., assignor.)						
Miller, Robert E., Chicago, Ill. Filtering apparatus	436,044	Sept. 9	1034	269	52	1580
Miller, S. Samuel, <i>et al.</i> (See Chassagne, Paul J., assignor.)						
Miller, S. Samuel, <i>et al.</i> (See Layng, William H., assignor.)						
Miller, Samuel, <i>et al.</i> (See Dasher, Hiram D., assignor.)						
Miller, Samuel H. and C. L., Stockton, Cal. Hay-press	433,484	Aug. 5	67	20	52	770
Miller, Samuel L., Ithaca, assignor of one-third to C. A. Smith, St. Louis, Mich. Sawdust-burner	421,744	Feb. 18	1924	505	50	946
Miller, Simon, Philadelphia, Pa. Shirt	440,407	Nov. 11	1213	313	53	853
Miller, Thomas, Springborough, and N. E. Lupton, Ridgeville, Ohio. Poke	425,446	Apr. 15	1552	415	51	319
Miller, Thomas M., Medford, Wis. Fracture apparatus	432,888	July 22	2879	737	52	580
Miller, Thomas S., New York, N. Y. Cable hoisting and conveying machinery	434,550	Aug. 19	1693	443	52	1107
Miller, Thomas S., Brooklyn, N. Y., assignor to Link-Belt Machinery Company, Chicago, Ill. Slatted-apron conveyor	423,069	Mar. 11	1078	280	50	1348
Miller, Thomas S., Brooklyn, N. Y., and J. Foster, assignors to Link-Belt Machinery Company, Chicago, Ill. Tension-carriage for endless-rope transmission	419,208	Jan. 14	843	222	50	181
Miller, Walter, Cleveland, Ohio. Steam and hand steering apparatus	418,921	Jan. 7	429	105	50	89
Miller, William, assignor to W. Miller Range and Furnace Company, Cincinnati, Ohio. Range	435,703	Sept. 2	508	134	52	1473
Miller, William, and T. Anderson, Avondale, Pa. Plow	420,350	Jan. 28	2581	685	50	534
Miller, William A., Springdale, Ark. Folding step for vehicles	432,424	July 15	2148	553	52	430
Miller, William A., Wapinitia, Oreg. Crosscut-saw	434,352	Aug. 12	1370	552	52	1035
Miller, William A., Wapinitia, Oreg. Circular saw	437,128	Sept. 23	2794	728	52	1931
Miller, William C., Albany, N. Y. Trolley	432,063	July 15	1610	412	52	329
Miller, William F. (See Lyford, Francis, assignor.)						
Miller, William H. (See Waddell, Alexander P., assignor.)						
Miller, William H., Sr., Wyandotte, Ark. Block and clevis for log-wagons	431,778	July 8	1175	292	52	238
Miller, William K., Troy, Kans. Adjustable swing	442,489	Dec. 9	1339	345	53	1531
Miller, William L. (See Doty, William, assignor.)						
Miller, William O., Quincy, Ill. Loop-forming machine	429,540	June 3	664	162	51	1598
Miller, William P., assignor to W. P. Miller Company, Brooklyn, N. Y. Lubricator	420,911	Feb. 4	728	187	50	701
Miller's Falls Company. (See Lanfair, Herbert D., assignor.)						
Miller's Falls Company. (See McCoy, William H., assignor.)						
Miller's Falls Company. (See Pratt, Henry L., assignor.)						
Millhanser, Benedict, Scranton, Pa. Anti-friction bearing	420,951	Feb. 11	788	205	50	722

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Millholland, John M., Steele City, assignor of one-half to A. L. Thompson, Beatrice, Nebr. Stove for burning trash.....	420,279	Jan. 28	2485	659	50	516
Milliechamp, Wallace. (See Nixon, Emery, assignor.)						
Millidge, John. (See Wildhagen, Louis, assignor.)						
Millidge, John, Bailey's Harbor, Wis., and M. L. Johnson, Mears, Mich. Draw-bridge gate.....	428,927	May 27	2882	737	51	1411
Milligan, Henry C., South Orange, N. J. Water-proof collar or cuff.....	421,137	Feb. 11	1061	272	50	774
Milligan, Thomas P., South Orange, N. J. Apparatus for dissolving glue-stock.....	420,163	Jan. 28	2290	{ 606 607 }	50	482
Milliken, Charles H. (See Edgecomb, Edward F., assignor.)						
Milliken, Foster, New York, N. Y. Metallic post.....	431,276	July 1	372	93	52	75
Milliken, Foster, New York, N. Y. Metallic post.....	438,082	Oct. 7	636	173	53	122
Million, Henry. (See Perret, Gros, and Million.)						
Millis, Henry L., et al. (See Appleyard, Arthur E., assignor.)						
Millross, Albert J. (See Deverenz, James, assignor.)						
Mills, Abner F., Cambridge, Iowa. Stylus-holder for railway-train-order signals.....	442,707	Dec. 16	1695	435	53	1610
Mills Adjustable Parlor Car Chair Company. (See Mills, William F., assignor.)						
Mills, Aleck F. (See Addison, Robert, assignor.)						
Mills, Anson, U. S. Army. Mechanism for utilizing tide-power.....	424,566	Apr. 1	201	55	51	42
Mills, D. P. (See Williams, Leonard L., assignor.)						
Mills, Daniel, Philadelphia, Pa., assignor, by mesne assignments, to Barred End Button Hole Attachment Company, Camden, N. J. Button-hole attachment for sewing-machines.....	424,804	Apr. 1	575	153	51	112
Mills, Dwight P., Naugatuck, Conn. Circular-knitting machine.....	433,132	July 29	3286	846	52	663
Mills, Ellen, et al. (See Mills, James, assignor.)						
Mills, Frank W., Chicago, Ill. Door-opening apparatus for fire-chambers.....	424,072	Mar. 25	2581	629	50	1649
Mills, Isaac N., Clayton, Del. Cork-extractor.....	434,192	Aug. 12	1126	293	52	987
Mills, James, assignor to A. S. Smith and E. Mills, Cincinnati, Ohio. Adjustable crank-pin.....	421,297	Feb. 11	1282	331	50	816
Mills, Job X., Pine Village, Ind. Feed-rack.....	427,343	May 6	432	123	51	907
Mills, Joel L., Brooklyn, N. Y. Lawn-mower.....	436,738	Sept. 16	2122	558	52	1794
Mills, John. (See Donnell and Mills.)						
Mills, Johnson, Prestwich, county of Lancaster, England. Water-tube steam-boiler.....	423,790	Mar. 18	2151	{ 567 568 569 }	50	1560
Mills, Johnson, Prestwich, county of Lancaster, England. Steam-boiler.....	423,791	Mar. 18	2152	{ 568 569 570 }	50	1560
Mills, Johnson, Prestwich, county of Lancaster, England. Steam-boiler.....	423,792	Mar. 18	2153	569	50	1560
Mills, Joseph L., Baldwin's Gardens, Gray's Inn Road, county of Middlesex, England. Engraving and mezzotinting printing-surfaces.....	424,073	Mar. 25	2582	690	50	1650
Mills, Joseph L., Baldwin's Gardens, Gray's Inn Road, county of Middlesex, England. Apparatus for engraving.....	429,280	June 3	246	61	51	1519
Mills, Joseph L., Baldwin's Gardens, Gray's Inn Road, county of Middlesex, England. Lithographing by means of sand-blast.....	434,157	Aug. 12	1083	279	52	978
Mills, Lloyd M., Grand Rapids, Mich. Cash indicator and recorder.....	434,799	Aug. 19	2085	{ 545 546 547 }	52	1183
Mills, Mortimer B., Chicago, Ill. Railway-gate.....	424,074	Mar. 25	2585	690	50	1650
Mills, Mortimer B., Chicago, Ill. Railway-crossing gate.....	438,322	Oct. 14	999	271	53	197
Mills, Mortimer B., Chicago, Ill. Fluid-actuated gravity shifting apparatus.....	439,884	Nov. 4	324	100	53	682
Mills, Mortimer B., Chicago, Ill. Valve device.....	439,885	Nov. 4	325	100	53	682
Mills, Mortimer B., Chicago, Ill. Railway-gate.....	442,755	Dec. 16	1793	464	53	1629
Mills, Mortimer B., Chicago, Ill. Gate.....	442,756	Dec. 16	1795	465	53	1629
Mills, Mortimer B., assignor to M. Weston, trustee, Chicago, Ill. Railway pneumatic switch and signal appliance.....	419,786	Jan. 21	1695	450	50	356
Mills, Thomas, Philadelphia, Pa. Machine for granulating nut-kernels.....	422,818	Mar. 4	657	{ 168 169 170 }	50	1263
Mills, Thomas, Philadelphia, Pa. Ice-breaking machine.....	432,758	July 22	2695	{ 688 689 690 }	52	544
Mills, Thomas B. (See Payne, Edward F., assignor.)						
Mills, W. Columbus, Oxford, Ind. Adding-machine.....	421,745	Feb. 18	1925	506	50	946
Mills, Warren F., San Francisco, Cal. Device for loading ships.....	423,070	Mar. 11	1079	281	50	1348
Mills, Willard F., Kalamazoo, Mich. Sheet-metal bar for glazed structures.....	437,129	Sept. 23	2795	729	52	1932
Mills, William, Philadelphia, and E. B. Moore, West Chester, Pa., assignors to said Moore. Button-hole sewing machine.....	439,599	Oct. 28	2990	{ 794 795 796 }	53	588
Mills, William F., Manhattan, Ill., assignor to Mills Adjustable Parlor Car Chair Company. Reclining-chair.....	434,193	Aug. 12	1127	293	52	987
Millward, William H. (See Foster and Millward.)						
Milne, James H., et al. (See Smith, Walter, assignor.)						
Milner, George, assignor of one-half to T. B. Shapter, Philadelphia, Pa. Combined broiler and baker.....	427,519	May 6	742	185	51	959
Milroy, William C., and J. H. Hoak, Shickley, Nebr. Lister cultivator.....	429,541	June 3	667	162	51	1599
Milstead, Andrew J., Tallassee, Ala. Quill and bobbin supporter.....	423,793	Mar. 18	2154	569	50	1560
Milsted, William N., New York, N. Y. Gas-meter.....	430,431	June 17	2060	508	51	1890
Milton, Joseph S., and M. Pressnall, Detroit, Minn. Ox-yoke.....	439,760	Nov. 4	197	51	53	647
Milton, Samuel A., Clinton, Mo. Dental apparatus.....	419,787	Jan. 21	1698	{ 450 451 452 }	50	357
Milwaukee Harvester Company. (See Graham, James A., assignor.)						
Milwaukee Hay Tool Company. (See Gutenkunst, William, assignor.)						
Milwaukee Rotating Engine Company. (See Farmer, Julius M., assignor.)						
Minahan, William B., Oshkosh, Wis. Boot or shoe.....	418,922	Jan. 7	431	105	50	90
Mindeleff, Demitry, San Francisco, Cal. Explosive compound.....	437,499	Sept. 30	3407	.....	52	2057
Mindeleff, Demitry, San Francisco, Cal. Explosive.....	440,921	Nov. 18	2074	.....	53	1023
Miner & Elbreg. (See Elbreg, Henry H., assignor.)						
Miner, Howard A., Philadelphia, Pa., assignor of one-half to G. W. Lord, Haddonfield, N. J. Boring-machine.....	433,577	Aug. 5	201	53, 54	52	795
Miner, James H., Baton Rouge, La., assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw-level.....	429,144	June 3	57	15	51	1483
Miner, Willard M., Plainfield, N. J. Electric soldering-iron.....	421,185	Feb. 11	1133	289	50	788
Miner, Willard M., Plainfield, assignor to J. M. Seymour, Brick Church, N. J. Receiving-instrument for telegraphy.....	437,930	Oct. 7	394	111	53	76
Mingle, George W., Philadelphia, Pa. Cut-out.....	443,195	Dec. 23	2579	662	53	1792
Mining and General Electric Lamp Company. (See Fitz Gerald and Hough, assignors.)						
Mink, Fritz, Philadelphia, Pa. Watch-case.....	423,939	Mar. 25	2383	634	50	1611
Mink, Fritz, Philadelphia, Pa. Watch-bow fastener.....	425,382	Apr. 8	1449	388	51	290
Mink, Fritz, Philadelphia, Pa. Watch-case.....	425,383	Apr. 8	1450	388	51	290
Mink, Fritz, assignor to Keystone Watch Case Company, Philadelphia, Pa. Watch-case.....	424,491	Apr. 1	80	23	51	18
Mink, Fritz, Philadelphia, Pa., assignor to Keystone Watch Case Company, of Pennsylvania. Watch-bow fastener.....	433,532	Aug. 5	130	37	52	782

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Mink, Fritz, Philadelphia, Pa., assignor to Keystone Watch Case Company, of Pennsylvania. Watch-bow fastener.	439,414	Oct. 28	2715	724	53	535
Minneapolis Electro-Matrix Company. (See Goodson, George A., assignor.)						
Minneapolis Electro-Matrix Company. (See Goodson, Capehart, and Travis, assignors.)						
Minneapolis Electro-Matrix Company. (See Street, Willoughby W., assignor.)						
Minneapolis Electro-Matrix Company. (See Travis, Charles L., assignor.)						
Minneapolis Sash and Door Company. (See Lord and Gillett, assignors.)						
Minnich, Mary C. (See Minnich, Simon B., assignor.)						
Minnich, Simon B., Landisville, Pa. Drip-cup for umbrellas.	424,122	Mar. 25	2653	706	50	1663
Minnich, Simon B., assignor to M. C. Minnich, Landisville, Pa. Centering device.	419,738	Jan. 21	1699	451	50	357
Minniss, Thomas S., Meadville, Pa. Combined head-rest and cane.	418,806	Jan. 7	223	54	50	48
Minniss, Thomas S., Meadville, Pa. Combined head-rest and cane.	432,759	July 22	2697	689	52	545
Minniss, Thomas S., Meadville, Pa. Combined head-rest and walking-cane.	433,016	July 29	3099	795	52	627
Minnix, William H., Washington, D. C. Mechanism for operating wheeled vehicles.	435,665	Sept. 2	452	120	52	1461
Mino, Joseph, Denver, Colo. Guard for incandescent-electric-light globes.	442,071	Dec. 2	700	188	53	1399
Minor, Enos, Jefferson, N. Y. Sap feeder and regulator.	430,968	June 21	2925	718	51	2162
Minot, Kendall J., Galveston, Tex. Combined easel and phonograph-horn tripod.	434,286	Aug. 12	1279	332	52	1016
Minton, Albert K., assignor of two-thirds to D. A. Abrams and W. E. Gray, Denver, Colo. Duplex safety-envelope.	424,123	Mar. 25	2654	707	50	1663
Minton, Hugh M., St. Louis, Mo. Means for regulating the elasticity of car-springs and means for storing air.	439,302	Oct. 28	2554	682	53	504
Miro, Fidel, Cienfuegos, Cuba. Insulator.	438,934	Oct. 21	1948	519	53	383
Mistelski, Theodor, Allegheny, Pa. Sand-molding machine.	430,666	June 24	2448	597 598	51	1971
Mistrot, Felix E., Bryan, Tex. Shirt-bosom.	442,986	Dec. 16	2180	561	53	1705
Mitchell, Alexander, Waldrup, Tex. System of road-drainage.	442,072	Dec. 2	701	188	53	1399
Mitchell, David W. (See Phillips, Darius T., assignor.)						
Mitchell, Elliott L., Paducah, Ky. Egg-tray.	436,538	Sept. 16	1823	480	52	1735
Mitchell, Frederick J., New York, N. Y. Flashing-light advertising sign.	422,819	Mar. 4	659	169	50	1263
Mitchell, Frederick J., assignor to C. L. Cohn, New York, N. Y. Air forcing and compressing apparatus for atomizers or other devices.	435,043	Aug. 26	2497	660	52	1268
Mitchell, Frederick J., assignor to C. L. Cohn, New York, N. Y. Apparatus for regulating the flow of liquids.	441,681	Dec. 2	76	21	53	1277
Mitchell, Frederick J., assignor to C. L. Cohn, New York, N. Y. Valve.	441,682	Dec. 2	78	21	53	1277
Mitchell, Frederick J., assignor to C. L. Cohn, New York, N. Y. Disinfecting apparatus.	442,073	Dec. 2	702	188	53	1399
Mitchell, George P., assignor of two-thirds to J. E. Stuart and D. A. Pyatt, Newark, N. J. Bread-pan.	431,909	July 8	1369	347	52	276
Mitchell, Henry G., Racine, Wis. Wagon-axle.	429,385	June 3	436	103	51	1554
Mitchell, Henry J., Minneapolis, Minn. Privy-seat.	429,145	June 3	58	15	51	1483
Mitchell, James H., Philadelphia, Pa. Cake-machine.	434,604	Aug. 19	1774	464	52	1124
Mitchell, James H., Philadelphia, Pa. Stripping device for cracker and cake machines.	441,890	Dec. 2	404	106	53	1344
Mitchell, James H., Philadelphia, Pa. Continuous dough-sheeting machine.	443,862	Dec. 30	3628	934	53	2002
Mitchell, James V., Martinsville, Ind. Toe-weight.	443,723	Dec. 30	3417	878	53	1959
Mitchell, James W., San Francisco, Cal. Incrustation-preventive.	428,015	May 13	1504		51	1115
Mitchell, John, Auckland, New Zealand. Corrugated structure.	429,937	June 10	1252	310	51	1723
Mitchell, John B., Portland, Me., assignor to Central City Soap Company, Jackson, Mich. Combined brush and soap.	419,275	Jan. 14	939	248	50	199
Mitchell, John B., assignor of one-fourth to J. L. Rackleff, Portland, Me. Combination article.	428,398	May 20	2095	526	51	1240
Mitchell, John B., assignor of one-fourth F. J. Rollins, Portland, Me. Combined hammer and scraper.	433,740	Aug. 5	438	113	52	841
Mitchell, John B., assignor of one-fourth to S. C. Perry, Portland, Me. Tobacco-cutter.	434,194	Aug. 12	1128	293	52	957
Mitchell, John H., Bloomfield, Iowa. Lock for hoops.	427,104	Feb. 11	1015	260	50	765
Mitchell, John H., assignor of one-half to N. Bunch, Washington, D. C. Hoof-salve.	431,401	Sept. 30	3250		52	2023
Mitchell, Joseph, Rochester, Ind. Construction of bridges.	440,490	Nov. 11	1363	351	53	880
Mitchell, Joseph, assignor of one-half to L. H. Hoopes, Chadd's Ford, Pa. Tricycle.	443,292	Dec. 23	2729	701	53	1819
Mitchell, Joseph T., Shelbyville, assignor of one-half to J. S. Baird, Murfreesborough, Tenn. Manufacture of pulleys.	422,606	Mar. 4	362	89	50	1205
Mitchell, Kerr M., St. Joseph, assignor of one-half to J. Dell, St. Louis, Mo. Apparatus for the manufacture of gas.	433,802	Aug. 5	546	141	52	863
Mitchell, Kerr M., St. Joseph, assignor of one-half to J. Dell, St. Louis, Mo. Gas-retort furnace.	437,611	Sept. 30	3571	933	52	2088
Mitchell, Lillian M. (See Tyler, Wallace, assignor.)						
Mitchell, Nathaniel C., Philadelphia, Pa. Grinding-mill for reducing old rubber-stock.	419,464	Jan. 14	1229	327	50	259
Mitchell, Nathaniel C., Philadelphia, Pa. Apparatus for washing rubber-stock and separating fine impurities therefrom.	419,465	Jan. 14	1231	327	50	259
Mitchell, Nathaniel C., Philadelphia, Pa. Reclaiming rubber from waste-rubber goods.	419,697	Jan. 21	1568		50	332
Mitchell, Nathaniel C., Philadelphia, Pa. Restoring rubber.	430,820	Feb. 4	569	146	50	672
Mitchell, Nathaniel C., Philadelphia, Pa. Apparatus for use in restoring rubber.	420,821	Feb. 4	572	146	50	673
Mitchell, Nathaniel C., Philadelphia, Pa. Production of restored or devulcanized rubber.	423,071	Mar. 11	1080		50	1348
Mitchell, Nathaniel C., Philadelphia, Pa. Reclaiming rubber from waste rubber stock.	425,896	Apr. 15	2219	589	51	448
Mitchell, Nathaniel C., Philadelphia, Pa., and S. P. Sharples, Cambridge, Mass.; said Sharples assignor to said Mitchell. Apparatus for washing rubber-stock.	420,515	Feb. 4	124	31	50	587
Mitchell, Pleasant J. (See Murphy and Mitchell.)						
Mitchell, Robert J., Girard, Ill. Anti-rattler for thill-couplings.	431,277	July 1	373	93	52	76
Mitchell, Robert L., Booneville, assignor of one-eighth to C. A. Williamson, St. Louis, Mo. Shaft.	440,121	Nov. 4	742	196	53	754
Mitchell, Roderick B., Jr., et al. (See Godfrey, William L., assignor.)						
Mitchell, Samuel. (See Slining, George J., assignor.)						
Mitchell, Thomas A. (See Hutchinson and Mitchell.)						
Mitchell, Thomas A. (See Rountree, Joseph W., assignor.)						
Mitchell, Truman A. (See Haviland and Mitchell.)						
Mitchell, William, assignor to King Iron Bridge and Manufacturing Company, Cleveland, Ohio. Die for upsetting the heads of eye-bars.	438,112	Oct. 7	679	185	53	131
Mitchell, William A., Nevada, Mo. Device for conveying and elevating ladles.	419,698	Jan. 21	1570	420	50	332
Mitchell, William D., McComb City, Miss. Trace-carrier.	436,253	Sept. 9	1354	353	52	1640
Mitchell, William F., San Francisco, Cal. Leaf-turner.	434,718	Aug. 19	1977	515	52	1161
Mitchell, William H., Bar Harbor, Me. Clothes-tongs.	426,039	Apr. 22	2460	649	51	501
Mitchell, William J., Princeton, Ky. Planter and fertilizer-distributor.	423,794	Mar. 18	2155	570	50	1561
Mitchell, William L., New York, N. Y. Grate.	439,968	Nov. 4	521	137	53	709
Mitchell, Willis. (See Butterfield and Mitchell.)						
Mitchener, Edward P., et al. (See Hartmann, Henry, assignor.)						
Mitchener, James P., et al. (See Hartmann, Henry, assignor.)						
Mitsch, John A., Boston, Mass. Nut-lock.	442,589	Dec. 9	1501	386	53	1564

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Mitting, Ebenezer K., assignor to J. S. Kirk & Co., Chicago, Ill. Purifying salt. (Reissue)	11,125	Nov. 18	2401	53	1087
Mitting, Ebenezer K., assignor to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Recovering glycerine from spent soap-lye	428,509	May 20	2240	.....	51	1267
Mitting, Ebenezer K., assignor to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Recovering glycerine from spent soap-lye	428,510	May 20	2241	.....	51	1267
Mitting, Ebenezer K., assignor to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Treatment of metallic precipitates	428,566	May 20	2321	.....	51	1282
Mitting, Ebenezer K., assignor to J. S. Kirk & Co., Chicago, Ill., and A. Domeier, London, England. Purifying salt	431,986	July 8	1487	.....	52	300
Mitting, Ebenezer K., Chicago, Ill., assignor to A. Domeier, London, England, J. A., J. B., M. W., and W. F. Kirk, Chicago, Ill. Recovering salt and crude glycerine from spent soap-lye	419,610	Jan. 14	1427	.....	50	299
Mitts, Sylvanis S. (See Merrill, William, assignor.)						
Mixson, William H., Charleston, S. C. Packing-case	424,567	Apr. 1	203	56	51	42
Moan, William J., Brooklyn, N. Y. Folding table	432,425	July 15	2149	553	52	430
Moberly, Joseph W., Montrose, Mo. Washing-machine	432,832	July 22	2801	716	52	564
Mobley, Robert F., Rome, Ga. Gin-saw gunner	419,276	Jan. 14	939	248	50	199
Mobley, Watson C., Allegheny, Pa. Rope-clamp	427,782	May 13	1152	289	51	1048
Mock, George, assignor of one-fourth to J. W. Lewis, Springfield, Ky. Car-coupling	426,415	Apr. 22	3030	793	51	617
Modern Tobacco Barn Company. (See Vernou, William G., assignor.)						
Moe, Andrew. (See Heckstadt and Moe.)						
Moe, Zoraida M., Nanuet, N. Y. Ventilating apparatus for kitchen or other apartments	430,667	June 24	2451	598	51	1972
Moebus, George, Detroit, Mich. Sash-cord fastener	428,122	May 20	1663	421	51	1156
Moebus, Jacob. (See Bechtel and Moebus.)						
Moehle, Henry, St. Mary's, Ohio. Tile-kiln	426,732	Apr. 29	3506	917	51	718
Moeller, John R., Grand Island, Nebr. Photo-negative bath-dish	422,143	Feb. 25	2497	660	50	1062
Moeller, John R., Grand Island, Nebr. Tripod	435,315	Aug. 26	2903	769	52	1344
Moening, Emil F., San Francisco, Cal. Safety device for elevators	434,453	Aug. 19	1547	403	52	1077
Moëssard, Paul, Paris, France. Panoramic photograph-camera	429,792	June 10	1032	253	51	1680
Moffet, John, Bayonne, N. J. Reversible engine	440,491	Nov. 11	1364	{ 351 352 }	{ 53 53 }	880
Moffett, Hodgkins & Clarke. (See Shannon, Andrew R., assignor.)						
Moffitt, Robert W., Denver, Colo. Anti-friction journal-bearing	435,074	Aug. 26	2543	671	52	1277
Moffitt, John R., Chinese Camp, Cal. Ore-roasting apparatus	430,741	June 24	2571	630	51	1995
Moffitt, John W., assignor to Wilmington Dental Manufacturing Company, Philadelphia, Pa. Dental articulator	431,849	July 8	1291	324	52	261
Mogk, Victor F., Seattle, Wash. Vehicle-wheel	442,779	Dec. 16	1829	473	53	1637
Mohler, Johannes, assignor to Society of Chemical Industry, Basle, Switzerland. Blue dye	420,164	Jan. 28	2292	.....	50	483
Mohn, Eugene, Bladensburg, Ohio. Car-coupling	441,184	Nov. 25	2503	646	53	1115
Mohn, Sebastian S., Clyde, Ohio. Wood-sawing machine	430,669	Sept. 16	2025	529	52	1774
Mohring, Gottfried, Detroit, Mich. Baking-oven	441,961	Dec. 2	515	138	53	1364
Mohring, John, Lancaster, Pa. Gage-knife	435,632	Sept. 2	399	107	52	1450
Mohs, Julius, Philadelphia, Pa. Gas-engine	426,297	Apr. 22	2832	746	51	578
Mohs, Julius, assignor to M. Eschenbek, Philadelphia, Pa. Box-making machine	441,104	Nov. 18	2366	{ 613 614 }	{ 53 53 }	1080
Mohs, Julius, assignor to M. Eschenbek, Philadelphia, Pa. Machine for and process of making boxes	441,105	Nov. 18	2369	{ 614 615 }	{ 53 53 }	1080
Molander, Swan B. (See Sundeen and Molander.)						
Mole, Frederick M., Birmingham, England. Bronzing attachment for printing-machines	434,719	Aug. 19	1979	515	52	1161
Molin, Charles G., Brooklyn, N. Y. Velocipede	434,605	Aug. 19	1776	464	52	1124
Moline Plow Company. (See Lindgren, August, assignor.)						
Molitor, Aaron F. (See North and Molitor.)						
Molitor, Aaron F., assignor to E. Bement & Sons, Lansing, Mich. Plow	424,492	Apr. 1	82	23	51	19
Mollart, Lobegott. (See Parks and Mollart.)						
Mollencoff, Christopher, Malta, Ill. Sweat-pad for horse-collars	426,674	Apr. 29	3411	895	51	700
Möller, Oscar, Hamburg, Germany. Apparatus for measuring and drawing off liquids	419,340	Jan. 14	1048	277	50	222
Molloy, James F., West Haven, Conn. Buckle	436,501	Sept. 16	1749	462	52	1724
Moltrup, Stephen and W., Beaver Falls, Pa. Die and die-holder for drawing steel rods	423,334	Mar. 11	1478	387	50	1424
Moltrup, William. (See Moltrup, Stephen and W.)						
Molyneux, Barton S., Minneapolis, Minn. Coin-controlled cyclorama	438,170	Oct. 14	765	209	53	154
Monat, John D., Detroit, Mich. Water-heater	443,104	Dec. 23	2399	612	53	1756
Monchamont, Paul, Paris, France. Machine for notching keys or wedges	420,729	Feb. 4	420	{ 111 112 }	{ 50 50 }	647
Moncrief, Aralize C., Brooklyn, N. Y. Raisin-seeder	425,142	Apr. 8	1096	291	51	220
Monday, Robert, Lampasas, assignor of one-half to J. P. Devine, San Antonio, Tex. Animal-shears	435,044	Aug. 26	2498	{ 660 661 }	{ 52 52 }	1269
Monfort, Abram C., assignor of one-half to W. H. Peck, Pawtucket, R. I. Champagne or mineral-water tap	426,510	Apr. 29	3162	831	51	652
Monfort, Abram C., and W. H. Peck, Pawtucket, R. I. Combined hair-curler and comb	420,081	Jan. 28	2155	570	50	456
Monheimer, John. (See Graham and Monheimer.)						
Monier, Elizabeth. (See Monier, Fredrick and E.)						
Monier, Fredrick, New Britain, Conn. Spur	424,719	Apr. 1	434	115	51	86
Monier, Fredrick and E., New Britain, Conn. Jar-cover fastening	424,720	Apr. 1	435	115	51	86
Monjeau, Cleophas, Middletown, Ohio. Sand screen or filter	426,502	Sept. 16	1750	462	52	1724
Monk, Frank, Cincinnati, Ohio. Leather-scouring machine	427,101	May 6	116	31	51	834
Monk, Joseph, Chicago, Ill. Fly-net for horses or cattle	430,742	June 24	2574	{ 630 631 }	{ 51 51 }	1996
Monk, William, and D. T. Shaw, Fall River, Mass. Shaft-box fastening	441,850	Dec. 2	351	93	53	1333
Monmonier, William D., et al. (See Blackburn, Charles W., assignor.)						
Monnett, John P., Long Pine, Nebr. Thrashing-machine and separator	426,182	Sept. 9	1248	326	52	1618
Monnier, Alfred P., Greenfield, Mich. Water-heater	436,254	Sept. 9	1355	353	52	1640
Monohan Brothers. (See Banewetz, Mathias B., assignor.)						
Monrath, Gustav, and W. M. Gibbons, assignors to said Gibbons and C. C. Bateson, Chicago, Ill. Electro-therapeutic appliance	434,024	Aug. 12	857	226	52	932
Monroe, Charles F., Meriden, Conn. Lamp-shade	433,017	July 29	3100	705	52	627
Monroe, Charles S., and C. E. Yeager, Kinzie, Ind. Car-coupling	419,341	Jan. 14	1049	277	50	222
Monroe, David M., assignor to R. T. Smith, Baltimore, Md. Gas blow-pipe	418,507	Jan. 7	224	55	50	49
Monroe, Halsey H., Thomaston, assignor to I. C. Wyman Company, Portland, Me. Rotary harrow	440,178	Nov. 11	836	216	53	782
Monroe, Halsey H., Rockland, assignor to J. C. Wyman Company, Portland, Me. Rotary harrow	441,851	Dec. 2	352	93	53	1333
Monroe, Hartley L., assignor of one-half to W. Pulver, Marshfield, Mo. Wagon-brake	443,371	Dec. 23	2859	735	53	1845

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Monroe, John P., Louisville, Ky. Grain-binder.....	429,465	June 3	544	{ 131 132 133 134 284 }	51	1577
Monroe, William R., Cleveland, Ohio. Latch.....	431,752	July 8	1136	284	52	231
Monsanto, Mauricio M., Hoboken, N. J., assignor of one-half to C. F. Burger, New York, N. Y. Purifying brines.....	436,633	Sept. 16	1959	.....	52	1762
Monsanto, Mauricio M., Hoboken, N. J., assignor to National Salt and Chemical Company. Apparatus for the vaporization of liquids.....	441,106	Nov. 18	2371	615	53	1081
Monsey, John H., Walker's, Ohio, assignor of one-half to J. W. Baxter. Coffee or tea boiler.....	436,485	Sept. 16	1731	456	52	1721
Montague, Alford L. (See Carpenter and Montague.)						
Montague, Rice D. (See Williams, George H., assignor.)						
Montecino, Paul, Donaldsonville, La. Cultivator and planter.....	425,337	Apr. 8	1379	368	51	277
Monteverde, Florencio E., San Francisco, Cal. Pulp-distributor.....	431,607	July 8	883	220	52	184
Montomerie, John, Partick, county of Lanark, Scotland. Making malted bread.....	423,263	Mar. 11	1367	.....	50	1403
Montgomery, Charles E., et al. (See Sanborn, Edmond B., assignor.)						
Montgomery, Edward F., assignor of one-half to S. E. Bauder and J. F. MacCrystal, Sandusky, Ohio. Slate-pencil sharpener.....	433,533	Aug. 5	130	37	52	782
Montgomery, Floyd E., assignor of one-half to J. S. Smith, Clarinda, Iowa. Cultivator.....	433,018	July 29	3101	796	52	627
Montgomery, George V., Amsterdam, N. Y. Road-cart.....	422,057	Feb. 25	2369	626	50	1038
Montgomery, James A. (See Chapman and Montgomery.)						
Montgomery, James H., Denver, Colo. Hoisting mechanism.....	434,903	Aug. 19	2269	595	52	1219
Montgomery, James W., assignor of one-half to G. Benich, Chicago, Ill. Bicycle.....	438,935	Oct. 21	1949	{ 519 520 }	53	383
Montgomery, John M. (See Benson, Samuel, assignor.)						
Montgomery, Joseph, et al. (See Look, Luther, assignor.)						
Montgomery, Joseph A., assignor to Sandusky Tool Company, Sandusky, Ohio. Machine for scooping wedges for planes.....	431,380	July 1	536	{ 133 134 }	52	108
Montgomery, Joseph A., assignor to Sandusky Tool Company, Sandusky, Ohio. Machine for dressing the throats of wooden planes.....	431,381	July 1	538	134	52	109
Montgomery, Joseph A., assignor to Sandusky Tool Company, Sandusky, Ohio. Machine for sawing the mouths of molding-planes.....	431,382	July 1	540	{ 134 135 }	52	109
Montgomery, Joseph A., assignor to Sandusky Tool Company, Sandusky, Ohio. Machine for beveling the so-called wedge-grips of wooden planes.....	431,383	July 1	541	135	52	109
Montgomery, Levi J., and C. P. Townsend, Broken Bow, Nebr. Washing-machine.....	422,144	Feb. 25	2498	660	50	1062
Montgomery, Roderick N., Melbourne, Victoria. Means for closing and locking or unlocking railway-carriage doors.....	437,708	Oct. 7	41	13	53	11
Montgomery, Samuel, New York, N. Y. Claw.....	441,316	Nov. 25	2749	711	53	1158
Montgomery, Thomas W., and J. Warnke, New Orleans, La. Apparatus for washing the fumes of sulphur.....	433,534	Aug. 5	131	37, 38	52	782
Montgomery, Willard C. (See Reeves, Charles W., assignor.)						
Montgomery, William E., Utica, assignor of one-half to W. Rein, Deerfield, N. Y. Paper-pail.....	440,643	Nov. 18	1608	413	53	936
Montigny, Emile J., Columbus, Ohio. Ribbon-display case.....	435,974	Sept. 9	922	243	52	1558
Monto, Joseph, Chelsea, Mass., assignor, by mesne assignments, to Steel Edge Stamping and Retinning Company, Portland, Me. Machine for regulating the coating of one metal with another.....	421,597	Feb. 18	1726	{ 450 451 }	50	907
Monto, Joseph, Chelsea, Mass., assignor, by mesne assignments, to Steel Edge Stamping and Retinning Company, Portland, Me. Pliers.....	421,598	Feb. 18	1729	451	50	908
Monto, Joseph, Chelsea, assignor, by mesne assignments, to Steel Edge Stamping and Retinning Company, Boston, Mass. Machine for immersing tinner's articles in the grease-pot.....	421,599	Feb. 18	1730	{ 451 452 }	50	908
Monto, Joseph, Chelsea, assignor, by mesne assignments, to Steel Edge Stamping and Retinning Company, Boston, Mass. Machine for immersing tinner's articles in the grease-pot.....	421,600	Feb. 18	1734	453	50	909
Monto, Joseph, Chelsea, assignor, by mesne assignments, to Steel Edge Stamping and Retinning Company, Boston, Mass. Machine for immersing tinner's articles in the grease-pot.....	421,601	Feb. 18	1735	{ 453 454 }	50	909
Monto, Joseph, Chelsea, assignor to Steel Edge Stamping and Retinning Company, Boston, Mass. Apparatus for immersing tinned articles in grease.....	433,300	July 29	3524	{ 909 910 }	52	713
Monto, Joseph, Chelsea, assignor to A. L. Hollander, C. H. Bradshaw, Somerville, and J. S. Folsom, Millis, Mass. Machinery for tinning or retinning pans. (Reissue).....	11,111	Sept. 23	2885	{ 751 752 }	52	1947
Montrichard, Gerard de, Montmédy, France. Pump.....	432,426	July 15	2150	554	52	431
Montrose, Emma A. (See Montrose, Frederick F., assignor.)						
Montrose, Frederick F., assignor to E. A. Montrose, Kansas City, Mo. Toy-gun game apparatus.....	421,357	Feb. 11	1373	355	50	832
Moodey, Nathan W., Fresno City, Cal. Fuse-cap fastener.....	432,427	July 15	2152	554	52	431
Moodie, Elhanan L., New York, N. Y. Toilet-paper safe.....	421,620	Nov. 25	3223	831	53	1250
Moody, Alexander, and E. A. Delano, Chicago, Ill.; said Delano assignor to said Moody. Dough-mixer.....	442,448	Dec. 9	1272	329	53	1518
Moody, Arthur F., Lynn, Mass. Feed-bucket.....	428,622	May 27	2415	614	51	1320
Moody, Clarence S. (See Swain and Moody.)						
Moody, Henry T., et al. (See Rand, Joseph A., assignor.)						
Moody, James M. and S. B., Harwich, Mass. Ice harvesting or cutting machine.....	433,953	Aug. 19	764	{ 198 199 }	52	915
Moody, James M. and S. B., Harwich, Mass. Combined latch and lock.....	434,563	Aug. 19	1710	447	52	1111
Moody, Sidney B. (See Moody, James M. and S. B.)						
Moody, Walter S. (See Lemp and Moody.)						
Moore, Daniel S. (See Rose and Moore.)						
Moomaw, Henry E., assignor of one-half to E. T. Hinote, Caryville, Fla. Car-coupling.....	428,928	May 27	2883	737	51	1411
Moomaw, Henry E., assignor of one-half to E. T. Hinote, Caryville, Fla. Car-coupling.....	433,902	Aug. 5	684	178	52	890
Mooney, Joseph G., Erie, Pa. Ice-cream freezer.....	434,940	Aug. 26	2347	621	52	1240
Moon, George W., London, England. Car-coupling.....	443,582	Dec. 30	3193	{ 820 821 }	53	1918
Moon, Thomas E., Sabina, Ohio. Automatic clamp.....	432,543	July 22	2339	604	52	477
Mooney, Benjamin F., Olean, N. Y. Clapboard-holder.....	421,746	Feb. 18	1928	507	50	947
Mooney, James, Clarion, Pa. Car-coupling.....	422,031	Feb. 25	2327	{ 614 615 }	50	1030
Mooney, Richard, Sharon, Pa. Wheel.....	432,833	July 22	2801	716	52	565
Mooney, Thomas H., Dayton, Ohio. Composition of matter for treating artificial stone.....	424,805	Apr. 1	577	.....	51	112
Mooney, Thomas H., Dayton, Ohio. Mold.....	424,892	Apr. 1	712	189	51	137
Moor, Cresacre G., Truro, England. Making fertilizer from sewage-sludge.....	440,490	Dec. 9	1341	345	53	1532
Moore, Alfred, and G. Norwood, Boston, Mass. Car-brake.....	442,235	Dec. 9	947	250	53	1455

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Moore, Alfred M., Malden, Mass. Boot-tree.....	420,308	Jan. 28	2522	669	50	524
Moore, Alfred M., Lockport, N. Y. Cutter-head.....	432,321	July 15	2010	514	52	403
Moore, Ambrose L. and G. D., New Orleans, La. Excelsior-machine.....	436,255	Sept. 9	1357	{ 353 354 }	52	1641
Moore, Andrew R., assignor of one-half to W. J. Byers, Charlotte, Mich. Animal-poko.....	422,820	Mar. 4	662	169	50	1264
Moore, Arthur, Toronto, Canada. Grain scourer and cleaner.....	443,372	Dec. 23	2-60	736	53	1845
Moore, Burchell R., Kansas City, Kans. Street-car motor.....	419,534	Jan. 14	1321	{ 352 353 }	50	277
Moore, Charles, <i>et al.</i> (See Torrey, Augustus, assignor.)						
Moore, Charles, assignor to H. Basch, Elizabeth, N. J. Ear-muff.....	428,511	May 20	2242	567	51	1268
Moore, Charles C., Lancaster, Ohio. Metallic ceiling.....	438,323	Oct. 14	1001	{ 271 272 }	53	197
Moore, Charles E., Boston, Mass., assignor to G. N. Fletcher, Detroit, Mich., and A. M. Putnam, Boston, Mass. Machine for forging horseshoe-nails.....	432,634	July 22	2474	636	52	502
Moore, Charles E., assignor to A. M. Putnam, Boston, Mass., and G. N. Fletcher, Detroit, Mich. Machine for forging horseshoe-nails.....	442,987	Dec. 16	2181	{ 561 562 }	53	1706
Moore, Charles J. (See Yost and Moore.)						
Moore, Charles R., assignor to himself and H. W. Merrill, Newport, Vt. Thill-coupling.....	420,015	Jan. 21	2052	541	50	427
Moore, Charles R., assignor of one-half to J. A. Lorimer, Newport, Vt. Fastening for storm-windows.....	424,014	Mar. 25	2505	667	50	1634
Moore, Charles T., Washington, D. C. Type-writing machine.....	419,864	Jan. 21	1822	{ 481 482 483 }	50	381
Moore, Clarence W., Philadelphia, Pa. Steam-boiler indicator.....	433,872	Aug. 5	644	167	52	883
Moore, Delevan E., <i>et al.</i> (See Young, Otis W., assignor.)						
Moore, Edward B. (See Chabot, Rehfuß, and Moore.)						
Moore, Edward B. (See Mills and Moore.)						
Moore, Edward B., West Chester, and G. Rehfuß, Philadelphia, Pa., assignors to said Moore. Sewing-machine.....	439,168	Oct. 28	2309	620	53	458
Moore, Edward J., Philadelphia, Pa. Vertical boiler.....	426,838	Apr. 29	3668	954	51	749
Moore, Edward J., Philadelphia, Pa. Vertical boiler.....	426,839	Apr. 29	3669	955	51	749
Moore, Edward W., Emporia, Kans. Washing-machine.....	436,716	Sept. 16	2090	550	52	1788
Moore, Edward Y., Milwaukee, Wis. Clamp for sliding doors.....	439,886	Nov. 4	387	100	53	683
Moore, Edward Y., Milwaukee, Wis. Lock.....	443,780	Dec. 30	3505	899	53	1977
Moore, Edward Y., assignor to Moore Manufacturing and Foundry Company, Milwaukee, Wis. Door-hanger.....	426,298	Apr. 22	2834	746	51	578
Moore, Emma R. and J. R., Philadelphia, Pa. Fire-extinguishing apparatus.....	435,316	Aug. 26	2905	769	52	1344
Moore, Enos L., Portsmouth, Ohio. Boiler-furnace.....	425,236	Apr. 8	1233	328	51	249
Moore, Everett D. (See Chappell and Moore.) (Reissue.)						
Moore, Frank. (See Welsh, Clark, and Moore.)						
Moore, Frank, Pittsburg, Pa. Gas-holder.....	442,324	Dec. 9	1084	284	53	1480
Moore, Frank, Pittsburg, Pa. System of gas storage and delivery.....	442,325	Dec. 9	1085	285	53	1480
Moore, Frank, Pittsburg, Pa. System of gas-delivery mains.....	442,326	Dec. 9	1087	285	53	1481
Moore, Frank, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Triple valve for automatic brake mechanism.....	435,762	Sept. 2	589	158	52	1488
Moore, Frank, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Triple valve for automatic brake mechanism.....	435,763	Sept. 2	591	158	52	1489
Moore, Frank, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Compound pumping-engine.....	441,185	Nov. 25	2504	{ 646 647 }	53	1115
Moore, Frank, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Compound pumping-engine.....	441,186	Nov. 25	2506	647	53	1116
Moore, Frank A., and F. Schreyer, Logansport, Ind. Bouquet-holder.....	425,082	Apr. 8	1000	267	51	202
Moore, Frederic H., Boston, Mass. Apparatus for purifying water.....	424,124	Mar. 25	2655	707	50	1663
Moore, Frederick W., assignor to J. T. Barnes, Philadelphia, Pa. Composition for coating coffee. (Reissue.)	11,093	July 1	789	.....	52	156
Moore, George. (See Nute, Leander M., assignor.)						
Moore, George B., Springfield, Mass. Slow-closing valve.....	443,052	Dec. 16	2280	585	53	1725
Moore, George C., Easthampton, Mass. Elastic woven fabric.....	441,107	Nov. 18	2373	615	53	1081
Moore, George C., assignor of one-half to J. W. Green, Jr., Easthampton, Mass. Elastic woven fabric.....	440,868	Nov. 18	1982	511	53	1005
Moore, George D. (See Moore, Ambrose L. and G. D.)						
Moore, George R., Philadelphia, Pa. Oil-burner.....	428,759	May 27	2635	667	51	1361
Moore, George R., assignor of one-half to Z. T. Hall, Philadelphia, Pa. Surface-leakage water-vessel.....	443,781	Dec. 30	3505	900	53	1977
Moore, Gilpin, assignor to Deere & Company, Moline, Ill. Device for attaching colters to plow-beams.....	427,102	May 6	116	31, 32	51	834
Moore, Gilpin, assignor to Deere & Company, Moline, Ill. Wheel-plow.....	440,644	Nov. 18	1609	414	53	936
Moore, Herbert, <i>et al.</i> (See Genett, Louis J., assignor.)						
Moore, James S., Bar Harbor, Me. Blacking-brush.....	440,433	Nov. 11	1267	328	53	861
Moore, Jehiel T., Minneapolis, Minn. Holder for phone-receivers.....	436,717	Sept. 16	2090	550	52	1788
Moore, John. (See Groble, James, assignor.)						
Moore, John C. (See Wroughton and Moore.)						
Moore, John H., Plessis, N. Y. Hay-stacker.....	428,850	May 27	2768	703	51	1387
Moore, John R. (See Moore, Emma R. and J. R.)						
Moore, John R., Scottville, Ill. Whiffletree-plate.....	427,702	May 13	1019	256	51	1022
Moore, John W. (See Gardner and Moore.)						
Moore, John W., and J. A. White, Philadelphia, Pa. Clutch.....	427,344	May 6	483	124	51	907
Moore, Jonathan J., and J. T. McKim, Thorntown, Ind. Heating-stove.....	440,716	Nov. 18	1729	443	53	959
Moore, Joseph B., Reading, Pa. Injector oil-burner.....	426,400	Apr. 22	2460	630	51	501
Moore, Joseph B., Minneapolis, Minn. Electric-light holder.....	442,685	Dec. 16	1649	424	53	1602
Moore, Joseph H., Altoona, Pa. Steam-engine.....	439,750	Nov. 4	180	46	53	643
Moore, Linn B., and M. S. Love, Morley, Mo. Plant-protector.....	436,183	Sept. 9	1250	326	52	1618
Moore Manufacturing and Foundry Company. (See Moore, Edward Y., assignor.)						
Moore Manufacturing and Foundry Company. (See Tefft, Henry B., assignor.)						
Moore, Mark C., Bunker Hill, Ohio. Harrow.....	425,447	Apr. 15	1553	416	51	319
Moore, Morris W., assignor to F. Zuchtman and W. P. Draper, Springfield, Mass. Fountain-pen.....	435,900	Sept. 8	815	216	52	1533
Moore, Myron E., Deering Centre, and A. F. Hill, Portland, Me. Ash-sifter.....	423,485	Mar. 18	1095	447	50	1475
Moore, Myron E., Deering Centre, assignor of one-half to E. G. Gould, Woodford's, Me. Ventilating-shutter.....	424,015	Mar. 25	2507	667	50	1634
Moore, Nathaniel V., Fredonia, Kans. Corn-planter.....	442,988	Dec. 16	2184	{ 562 563 }	53	1706
Moore, Patrick J., San Francisco, Cal. Oil-can.....	437,865	Oct. 7	292	88	53	57
Moore, Samuel, assignor, by mesne assignments, to United States Twist Drill Company, Providence, R. I. Machine for making twist-drills.....	432,635	July 22	2477	637	52	502

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Moore, Samuel, assignor, by mesne assignments, to United States Twist Drill Company, Providence, R. I. Machine for straightening and sizing twist-drills	432,636	July 22	2479	{ 637 638 }	52	503
Moore, Samuel G. (See Hooper and Moore.)						
Moore, Theodore F. (See Kiernan and Moore.)						
Moore, Thomas A. L., Richmond, Va. Truss-rod yoke	430,588	June 17	2297	565	51	1934
Moore, Thomas J., and E. A. Warren, Brooklyn, N. Y. Book for indexes	443,196	Dec. 23	2581	663	53	1792
Moore, Thomas T., Kansas City, Mo. Spiral smoke, heating, and ventilating flue	432,544	July 22	2341	605	52	477
Moore, Thomas W., Plainfield, N. J., assignor to T. W. Moore, Jr., Fairhaven, Wash. Con- ductor's fare-box	439,600	Oct. 23	2999	{ 795 796 }	53	590
Moore, Van Zandt M., Milwaukee, Wis. Chain	431,819	July 8	1246	311	52	252
Moore, Viola, San Francisco, Cal. Music stand and portfolio. (Reissue)	11,066	Mar. 11	1581	414	50	1445
Moore, William, Kokomo, Ind. Apparatus for separating liquids from natural gas	428,399	May 20	2097	526	51	1240
Moore, William E. (See Cameron, Neill A., assignor.)						
Moore, William W., Philadelphia, Pa. Window or door screen	439,751	Nov. 4	180	47	53	643
Moorhead, Robert J. (See Peck, Henry S., assignor.)						
Moors, Bernardus P., Hague, Holland. Gas-meter	429,313	June 3	321	76	51	1532
Moors, George F., Owensborough, Ky. Furnace-door opener	426,461	Apr. 29	3092	811	51	639
Moorthamers, Louis, Brussels, Belgium. Dry galvanic battery	423,335	Mar. 11	1479	388	50	1425
Moos, Joseph B., Chicago, Ill. Vending apparatus	434,606	Aug. 19	1777	464	52	1124
Mootz, Nicholas. (See Tindall, Charles, assignor.)						
Moran Flexible Steam Joint Company. (See Moran, Thomas W., assignor.)						
Moran, Horace S., Alledo, Tex. Wire fence	423,336	Mar. 11	1480	388	50	1425
Moran, John, Adair, Mo. Burglar-alarm	425,143	Apr. 8	1097	292	51	220
Moran, Thomas W., assignor to Moran Flexible Steam Joint Company, Louisville, Ky. Steam-coupling for railway-cars	422,311	Feb. 25	2766	729	50	1111
Moran, Thomas W., assignor to Moran Flexible Steam Joint Company, Louisville, Ky. Double coupling for pipes	441,108	Nov. 18	2374	616	53	1081
Moran, Thomas W., assignor to Moran Flexible Steam Joint Company, Louisville, Ky. Cylinder coupling-joint	443,946	Dec. 30	3758	960	53	2026
Morant, Robert. (See Rylands, Crowder, and Morant.)						
Morava, Wensel, Chicago, Ill. Gas-washer	434,941	Aug. 26	2348	621	52	1241
Morden, William J., Chicago, Ill. Combined cable and steam track crossing	426,840	Apr. 29	3670	955	51	750
Morden, William J., Chicago, Ill. Switch and signal stand	436,503	Sept. 16	1752	462	52	1724
Morden, William S., assignor of one-half to R. Hoffman, Montague, Mich. Machine for cutting corn	440,409	Nov. 4	642	171	53	734
Morden, William S., and R. Hoffman, Montague, Mich. Corn-cutter	439,969	Nov. 4	522	138	53	709
Morden, William S., and R. Hoffman, assignors of one-half to G. E. Dowling, Montague, Mich. Machine for driving fence-posts	437,500	Sept. 30	3408	892	52	2057
Mordey, William M., Lambeth, England. Electric generator	437,501	Sept. 30	3412	893	52	2058
More, Jones & Co. (See Yard, Frank A., assignor.)						
More, Wilson S., Ellicott, and J. G. Rogers, Jamestown, N. Y. Hydrocarbon-burner	427,595	May 13	861	216	51	991
Moreau, Eugène, Philadelphia, Pa., assignor to T. W. Sterling, New York, N. Y. Strik- ing or hammering mechanism	440,744	Nov. 18	1766	{ 454 455 456 }	53	967
Moreau, Eugène, Philadelphia, Pa., assignor to T. W. Sterling, New York, N. Y. Rock- drilling machine	440,745	Nov. 18	1771	{ 456 457 458 }	53	967
Morehead, J. Turner. (See Guernant, George M., assignor.)						
Morehead, John, Detroit, Mich. Steam-trap	420,822	Feb. 4	575	147	50	673
Morehead, John, Detroit, Mich. Electric low-water alarm	428,688	May 27	2529	642	51	1340
Morel, Edward, Auburn, and F. T. Lomont, deceased, Fort Wayne, Ind.; M. P. Lomont administratrix. Road-scraper	433,482	Aug. 5	62	19	52	768
Moreland, Henry J., assignor of one-half to T. H. Hunter, Pittsburg, Pa. Cutting-tool for lathes	442,907	Dec. 16	2063	529	53	1681
Morell, James F., Camden, N. J. Anti-friction journal, journal-box, and bearing	428,400	May 20	2098	527	51	1241
Morey, Albert G., La Grange, Ill. Gas-burner	421,602	Feb. 18	1736	454	50	909
Morey, John G., New York, N. Y. Dental separator	426,733	Apr. 29	3507	917	51	718
Morfit, Alfred, and C. Butterfield, Nottingham, England. Platen printing-machine	439,281	Oct. 28	2508	{ 672 673 }	53	495
Morgan, Aldis O., and J. B. Gates, Hermon, N. Y. Device for aerating milk	418,956	Jan. 7	478	119	50	100
Morgan, Amos W., Buffalo, N. Y. Street water and gas box	429,733	June 10	947	233	51	1665
Morgan, Benjamin B., Ypsilanti, Mich. Machine for making garment-stays	438,855	Oct. 21	1836	{ 488 489 }	53	361
Morgan, Charles. (See Morgan, Edgar H. and C.)						
Morgan, Charles, et al. (See Hoefler, Frederick W., assignor.)						
Morgan, Charles, et al. (See Redlinger, Michael, assignor.)						
Morgan, Charles and E. H., Freeport, Ill. Coffee-mill	425,815	Apr. 15	2099	{ 561 562 }	51	426
Morgan, Charles H., West Chester, Pa. Curtain-pole fixture	425,688	Apr. 15	1923	512	51	391
Morgan, Charles H., West Chester, Pa. Combined cane and umbrella	442,491	Dec. 9	1342	346	53	1532
Morgan, Charles H., Buffalo, N. Y. Gear-wheel	427,103	May 6	118	32	51	835
Morgan, Charles H., assignor to W. Baynes, Buffalo, N. Y. Journal-box	437,364	Sept. 30	3198	833	52	2012
Morgan & Company, D. S. (See Becker, Frederick G., assignor.)						
Morgan, Edgar H. (See Morgan, Charles and E. H.)						
Morgan, Edgar H., et al. (See Hoefler, Frederick W., assignor.)						
Morgan, Edgar H., et al. (See Redlinger, Michael, assignor.)						
Morgan, Edgar H. and C., Freeport, Ill. Paper-file	429,938	June 10	1254	310	51	1724
Morgan, Edward S., Dublin, assignor of one-half to J. McNeill and S. O. Leeson, Richmond, Ind. Wire-fence machine	432,951	July 22	2986	767	52	599
Morgan, Elisha, Springfield, Mass. Roll-paper holder	432,738	July 22	2650	677	52	536
Morgan Envelope Company. (See Allen, Frank H., assignor.)						
Morgan Envelope Company. (See Hicks, Oliver H., assignor.)						
Morgan, Everard H., assignor to L. P. Wilcox, Chicago, Ill. Car-starter	422,888	Mar. 4	790	202	50	1287
Morgan, Frank E. (See Lane, Frederic A., assignor.)						
Morgan, Frank E., and F. A. Lane, New Haven, Conn. Electric-circuit closer for rail- way-signals	427,783	May 13	1153	289	51	1046
Morgan, Harry E. (See Potter and Morgan.)						
Morgan, Henry P., assignor to Norwalk Iron Works Company, South Norwalk, Conn. Valve-gear	443,782	Dec. 30	3507	900	53	1977
Morgan, James, Niles, Ohio. Corn-planter and fertilizer-distributor	440,492	Nov. 11	1366	{ 352 353 }	53	880
Morgan, James B., Davenport, Iowa. Match-box	428,623	May 27	2416	614	51	1320
Morgan, Jiles D., and W. Daffron, Inman, Ala. Railway-joint	441,683	Dec. 2	79	21	53	1277
Morgan, John H., Liverpool, county of Lancaster, England. Apparatus for opening and closing grabs, buckets, &c.	426,600	Apr. 29	3297	865	51	678

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Morgan, John H., assignor of one-half to E. N. Wycoff, Lebanon, Ind. Shackle claw-bar	438,083	Oct. 7	637	173	53	123
Morgan, John W., Washington, D. C. Starching-machine	423,940	Mar. 25	2384	634	50	1612
Morgan, Joseph, Jr., Johnstown, Pa. Apparatus for drawing and charging blooms	437,819	Oct. 7	224	68 69 70	53	45
Morgan, Lewis C., assignor of one-half to W. J. Piero, Canton, Ohio. Connecting-rod	442,293	Dec. 9	1029	272	53	1470
Morgan, Robert A., Jr., Boston, Mass. Safety device for overhead conductors	442,816	Dec. 16	1891	487	53	1648
Morgan, Sidney J., Orneville, Me. Cow-tail holder	424,016	Mar. 25	2507	667	50	1635
Morgan, Stephen A. (See Casey and Morgan.)						
Morgan, Thomas H., Reading, Pa. Paint-mill	436,370	Sept. 16	1552	407 408 375 376 377	52	1687
Morgan, Waitman M., Kansas City, Mo. Elevated railway	419,594	Jan. 14	1399	441 442	50	294
Morgan, Waitman M., Kansas City, Mo. Elevated cable railway	425,518	Apr. 15	1652	441 442	51	339
Morgan, William J. (See Robinson and Morgan.)						
Morgenroth, Edwin, Boltonville, Wis. Hame-fastener	427,596	May 13	863	216	51	991
Morgenstern, Millard, <i>et al.</i> (See Smith, Presley B., assignor.)						
Morgenthauer, George A., Dayton, Ohio, assignor to A. Pollmann, New York, N. Y. Harmonica-holder	439,415	Oct. 28	2716	725	53	535
Morian, Carlos C. (See Coon, Morian, and Fellett.)						
Moriarty, John H., Washington, D. C. Adjustable garment-pattern	432,322	July 15	2012	514 515 516 517	52	403
Moriarty, John H., Washington, D. C. Adjustable sleeve-pattern	441,684	Dec. 2	80	21, 22	53	1278
Morison, Alexander, assignor of one-half to G. G. Speechly, Alpena, Mich. Car-stake	428,567	May 20	2322	589	51	1282
Morison, Edward J. (See Runyan, Milo B., assignor.)						
Morlan, Walter B., Urich, Mo. Paper-bag holder	426,194	Apr. 22	2694	707	51	548
Morley Button Sewing Machine Company. (See Bennett, Walter E., assignor.)						
Morley, Joseph D., Philadelphia, Pa., assignor to J. M. Merrow, Merrow, Conn. Trimming for fabrics	424,568	Apr. 1	203	56	51	42
Morley, Joseph D., Philadelphia, Pa. assignor to J. M. Merrow, Merrow, Conn. Sewing-machine for bordering the edges of fabrics	432,739	July 22	2651	677	52	536
Morningstar, Benjamin F., New York, N. Y. Belt-stretcher	420,462	Feb. 4	62	13	50	576
Morningstar, Charles A., assignor to W. A. Gill, Columbus, Ohio. Sheet-metal box and die therefor	420,912	Feb. 4	729	187 188	50	701
Morrall, Samuel H., Philippi, W. Va. Belt-fastener	430,668	June 24	2453	598	51	1972
Morrell, Henry L., Brooklyn, assignor to International Manufacturing Association, New York, N. Y. Car-ventilating device	428,624	May 27	2416	614 615	51	1320
Morrell, Henry L., Brooklyn, N. Y., assignor to International Manufacturing Association. Ventilator	435,544	Sept. 2	250	69, 70	52	1423
Morrell, James A., Lansdale, Pa. Press for fruit, vegetables, &c.	433,691	Aug. 5	370	94	52	828
Morrell, James A., Lansdale, assignor of one-half to G. W. Marsh, Philadelphia, Pa. Concentrating solutions	441,317	Nov. 25	2750	711	53	1158
Morrell, James A., Lansdale, assignor of one-half to G. W. Marsh, Philadelphia, Pa. Apparatus for evaporating liquids	441,318	Nov. 25	2751	711	53	1158
Morrell, James A., Lansdale, assignor of one-half to G. W. Marsh, Philadelphia, Pa. Evaporating liquids	441,319	Nov. 25	2752	711	53	1159
Morrell, James A., Lansdale, assignor of one-half to G. W. Marsh, Philadelphia, Pa. Apparatus for evaporating liquids	441,320	Nov. 25	2753	712	53	1159
Morrell, James A., Lansdale, assignor of one-half to G. W. Marsh, Philadelphia, Pa. Apparatus for evaporating liquids	441,321	Nov. 25	2754	712	53	1159
Morrell, James A., Lansdale, assignor of one-half to G. W. Marsh, Philadelphia, Pa. Concentrating and evaporating liquids	441,371	Nov. 25	2826	729	53	1172
Morrell, James A., Lansdale, assignor of one-half to G. W. Marsh, Philadelphia, Pa. Apparatus for concentrating solutions and extracting solids therefrom	441,621	Nov. 25	3224	832	52	1251
Morrill, Charles, New York, N. Y. Saw-set	441,962	Dec. 2	516	138	53	1365
Morrill, Charles, New York, N. Y. Saw-set	441,963	Dec. 2	517	138	53	1365
Morrill, Charles F., Boston, Mass. Watch-case pendant	441,322	Nov. 25	2755	712	53	1159
Morrill, Charles F., Boston, Mass. Watch-bow fastener	441,431	Nov. 25	2931	755	53	1194
Morrill, Charles F., Boston, Mass. Watch-case pendant	441,435	Nov. 25	2933	755	53	1194
Morrill, Charles F., Boston, Mass. Watch-case pendant	441,436	Nov. 25	2934	756	53	1194
Morris, Abraham, San Francisco, Cal. Bed-lounge	431,002	June 24	2977	730	51	2073
Morris, Abraham, San Francisco, Cal. Child's bed-lounge	439,083	Oct. 21	2180	585	53	429
Morris, Alice. (See Morris, George W., assignor.)						
Morris, Benjamin W., Asheville, N. C. Tobacco-hanger	428,512	May 20	2243	567	51	1268
Morris, Charles W., <i>et al.</i> (See Earnest, George H., assignor.)						
Morris, Curtis. (See Hall, Morris, and Hamilton.)						
Morris, Ellis H., Canton, Ohio. Band-cutter and feeder	435,942	Sept. 9	876	229 230	52	1550
Morris, Elmer P., Cincinnati, Ohio. Suspension-hanger for electric lamps	428,929	May 27	2884	738	51	1411
Morris, Elmer P., Cincinnati, Ohio. Suspension for trolley wires	428,930	May 27	2884	738	51	1411
Morris, Evan. (See Fitz and Rehfsuss, assignors.)						
Morris, Frank E., Grand Rapids, Mich. Folding bed-lounge	441,251	Nov. 25	2638	684	53	1138
Morris, George B. (See Watson, William W., assignor.)						
Morris, George M., assignor to E. S. Hotchkiss, Bridgeport, Conn. Strap-holder for parcels	424,806	Apr. 1	578	153	51	112
Morris, George M., Cohoes, assignor, by mesne assignments, to National Machine Company, Troy, N. Y. Button-hole attachment for sewing-machines	440,179	Nov. 11	838	216	53	783
Morris, George W., Pittsburg, Pa. Car-axle-box lid	423,795	Mar. 18	2158	570	50	1561
Morris, George W., Richmond, Va. Train or boat reflecting device	440,493	Nov. 11	1367	353	53	881
Morris, George W., assignor to A. French Spring Company, (limited), Pittsburg, Pa. Door-hanger	420,238	Jan. 28	2415	643	50	505
Morris, George W., assignor to A. Morris, Brantford, Canada. Feeder and band-cutter	410,180	Nov. 11	84	217	53	783
Morris, Henrietta, <i>et al.</i> (See Morris, John H. and H., assignors.)						
Morris, Henry. (See Morris, John H. and H.)						
Morris, Henry B., assignor to Morris Weaving Company, Geneva, N. Y. Loom	427,104	May 6	119	32, 33	51	835
Morris, Henry R., Geneva, N. Y., assignor to Morris Weaving Company, of New York. Loom	427,105	May 6	124	33, 34	51	836
Morris, Henry B., Geneva, assignor of sixty-five one-hundredths to A. M. Patterson, Watertown, N. Y. Wire-netting machine	441,437	Nov. 25	2936	756 757	53	1195
Morris, Henry B., Geneva, assignor to Autophone Company, Ithaca, N. Y. Machine for preparing music-rollers	442,130	Dec. 9	791	213 214	53	1424

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Morris, Henry G., Philadelphia, Pa. Forming secondary-battery plates.....	432,834	July 22	2802	717	52	565
Morris, Jacob H., New York, N. Y. Buckle.....	427,886	May 13	1317	332	51	1078
Morris, James E., assignor of one-half to W. H. Williams, Chester, Pa. Cable-gripper and means for carrying the same over crossing cables.....	434,673	Aug. 19	1906	{ 497 498 }	{ 52 52 }	{ 1148 1148 }
Morris, James W., New York, N. Y. Combined spring-hinge and door-check.....	424,613	Apr. 1	272	71	51	55
Morris, James W., New York, N. Y. Combined spring-hinge and door-check.....	424,614	Apr. 1	274	72	51	55
Morris, James W., New York, N. Y. Shutter-fastener.....	427,345	May 6	484	124	51	907
Morris, James W., New York, N. Y. Preserving bivalves.....	431,212	July 1	274	69	52	56
Morris, John B., Cincinnati, Ohio. Tablet for telephones.....	424,493	Apr. 1	83	23, 24	51	19
Morris, John B., Cincinnati, Ohio. Tablet for telephones and clamp attachment for the same.....	426,462	Apr. 29	3093	811	51	639
Morris, John B., and G. Voll, Cincinnati, Ohio; said Voll assignor to said Morris. Device for elevating and lowering electric lamps.....	428,401	May 20	2100	527	51	1241
Morris, John H. and H., assignors to M. G. and H. Morris, Seward, Nebr. Combination-lock.....	437,658	Sept. 30	3634	{ 949 950 }	{ 52 52 }	{ 2101 2101 }
Morris, Joseph L., Lawrence, Kans. Apparatus for washing photographs.....	431,120	July 1	131	34	52	28
Morris, Maggie G., et al. (See Morris, John H. and H., assignors.)						
Morris, Marion A., assignor to Scovill Manufacturing Company, Waterbury, Conn. Hinge.....	428,402	May 20	2103	527	51	1242
Morris, Miles H., Chicago, Ill. Pump-cylinder and valve mechanism therefor.....	433,019	July 29	3105	{ 796 797 }	{ 52 52 }	{ 628 628 }
Morris, Nelson, Waterbury, Conn. Sponge-holder.....	436,838	Sept. 23	2324	611	52	1840
Morris, Patrick P. (See McCarty, Charles, assignor.)						
Morris, Richard, et al. (See Trump, John G., assignor.)						
Morris, Richard, Doncaster, county of York, and W. T. Gent, Misterton, county of Nottingham, England. Paint.....	424,653	Apr. 1	333	-----	51	65
Morris, Stephen, Jerico Springs, Mo. Harrow.....	442,131	Dec. 9	795	214	53	1425
Morris, Theodore, Chicago, Ill., assignor to Automatic Gas Governor Company, of Illinois. Pipe-coupling for flasks, &c.....	423,242	Feb. 25	2660	702	50	1092
Morris, Thomas D., Seward, Nebr. Door-check.....	442,989	Dec. 16	2187	563	53	1707
Morris Weaving Company. (See Morris, Henry B., assignor.)						
Morris, William B., assignor of one-half to E. Dietz, Indianapolis, Ind. Corner-iron for trucks.....	436,986	Sept. 23	2581	675	52	1889
Morris, William F. (See Kane and Weidaw, assignors.)						
Morris, William F. (See Weidaw and Kane, assignors.)						
Morrison, Archy, Leesburg, Ohio. Wire-stretcher.....	419,865	Jan. 21	1838	484	50	385
Morrison, Arthur. (See Bredeken and Morrison.)						
Morrison, David B., Kansas City, Mo. Wire-coupling.....	428,123	May 20	1665	422	51	1156
Morrison, Ebenezer, and J. P. Herron, Washington, D. C. Fabric-testing machine.....	422,145	Feb. 25	2500	{ 660 661 }	{ 50 50 }	{ 1062 1062 }
Morrison, Franklin P., Big Skin Creek, W. Va. Box-lifter.....	423,621	Mar. 18	1893	498	50	1511
Morrison, Franklin P., Big Skin Creek, W. Va. Fertilizer-distributor.....	431,608	July 8	885	220	52	184
Morrison, Frederick D. (See Powell Samuel L., assignor.)						
Morrison, Gardner L., Brooklyn, and G. D. Sanford, Peekskill, N. Y. Mantel-stove.....	426,393	Apr. 22	2984	781	51	609
Morrison, George R., assignor of one-half to J. C. Ertel, Indianapolis, Ind. Folding clothes-bracket.....	424,569	Apr. 1	205	56	51	42
Morrison, James A., Spencer, Mass. Flushing-tank.....	422,961	Mar. 11	913	239	50	1318
Morrison, James J., Floyd, Tex. Valve.....	440,181	Nov. 11	843	217	53	784
Morrison, John, assignor of one-half to A. Lohmann, Kansas City, Mo. Stalk-cutting attachment.....	439,169	Oct. 28	2310	621	53	459
Morrison, Major B., North Yakima, Wash. Doubletree.....	419,535	Jan. 14	1322	353	50	278
Morrison, Robert D., assignor of one-half to W. O. Nelson, Baltimore, Md. Vehicle-top-coupling.....	436,900	Sept. 23	2462	{ 642 643 644 }	{ 52 52 51 }	{ 1866 1866 1340 }
Morrison, Robert T., Jr., Medina, assignor of one-half to D. P. Eells, Cleveland, Ohio. Car-coupling.....	428,609	May 27	2530	{ 642 643 644 }	{ 51 51 51 }	{ 1340 1340 1340 }
Morrison, William, assignor to Hess Electric Storage Battery Company, Des Moines, Iowa. Automatic regulator for electric currents.....	439,417	Oct. 28	2718	725	53	535
Morrison, William, and L. Schmidt, assignors to Hess Electric Storage Battery Company, Des Moines, Iowa. Making storage-battery plates.....	439,416	Oct. 28	2717	725	53	535
Morrison, William N., St. Louis, Mo. Dental polishing-disk.....	425,897	Apr. 15	2220	589	51	448
Morrison, Zachary T. (See Penney, Herbert E., assignor.)						
Morrow, Charles, assignor to Chicago Spring Butt Company, Chicago, Ill. Spring-hinge.....	434,877	Aug. 19	2205	577	52	1207
Morrow, Harvey, administrator. (See Mardis and Britton.)						
Morrow, Henry W. (See Barnes, John W., assignor.)						
Morrow, Henry W., Wilmington, Del. Manufacture of parchmentized fiber.....	439,970	Nov. 4	524	-----	53	709
Morrow, James. (See Morrow, Richard H. and J.)						
Morrow, John, and F. Curtis, Jr., Ingersoll, Ontario, Canada. Self-heating sad-iron.....	428,403	May 20	2104	528	51	1242
Morrow, Richard H. and J., Washington Court-House, Ohio. Harness-pad.....	424,893	Apr. 1	714	190	51	138
Morrow, Richard H. and J., Washington Court-House, Ohio. Horse-collar pad.....	439,539	Oct. 28	2899	{ 770 771 }	{ 53 53 }	{ 569 569 }
Morse, Charles L., Athol, Mass. Valve-reseating machine.....	429,939	June 10	1255	311	51	1724
Morse, Charles S., assignor to Aluminum Brass and Bronze Company Bridgeport, Conn. Machine for drawing wire.....	420,165	Jan. 28	2293	607	50	483
Morse, David R., et al. (See Solano, Renaldo, assignor.)						
Morse, Edward P. (See Simoneau, Joseph M., assignor.)						
Morse, Everett F., Trumansburg, N. Y. Two-wheeled vehicle.....	432,889	July 22	2881	738	52	581
Morse, John F., Chicago, Ill. Combination-setting for precious stones.....	420,499	Feb. 4	103	25	50	583
Morse, John H., Shady Grove, Ky. Button case and exhibitor.....	418,808	Jan. 7	226	55	50	49
Morse, Leonard W., Mystic River, Conn. Paper-cutting machine.....	425,519	Apr. 15	1660	443	51	340
Morse, Leonard W., assignor of one-half to F. Foote, Mystic River, Conn. Umbrella rack and lock.....	428,814	May 27	2715	{ 688 689 }	{ 51 51 }	{ 1376 1376 }
Morse, Orville M., Jackson, Mich. Grain-separator.....	429,634	June 10	804	196	51	1637
Morse, Orville M., Jackson, Mich. Automatic grain-scales.....	431,703	July 8	1066	267	52	217
Morse, Orville M., Jackson, Mich. Separating-machine.....	441,372	Nov. 25	2828	{ 729 730 }	{ 53 53 }	{ 1173 1173 }
Morse, Preston C., Natick, and H. D. Winton, Wellesley Hills, Mass., assignors, by mesne assignments, to Hall Signal Company, Portland, Me. Railway-signal.....	436,371	Sept. 16	1555	408	52	1687
Morse, Sherburne, Arkansas City, Kansas. Windlass for raising and lowering lamps.....	432,545	July 22	2342	605	52	477
Morse, Stewart J., St. James, La. Railway-track.....	433,803	Aug. 5	547	141	52	863
Morse Twist Drill and Machine Company. (See Smalley, Orric, Jr., assignor.)						
Morse, William R., Chicago, Ill. Check-row planter.....	420,280	Jan. 28	2486	660	50	517
Morse, William R., Chicago, Ill. Line-holder.....	424,075	Mar. 25	2587	690	50	1650
Morse, William R., Chicago, Ill. Trace-fastening.....	429,606	June 10	895	218	51	1655
Morsman, John J., and E. H. Higby, Mapleton, Kans. Vehicle-wheel.....	425,898	Apr. 15	2221	590	51	448
Morton, Albert H., Providence, R. I. Grinding-machine.....	439,418	Oct. 28	2719	{ 725 726 }	{ 53 53 }	{ 536 536 }

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Morton, Albert S., Suisun, Cal. Wine-cooler	439,084	Oct. 21	2180	586	53	429
Morton, David H. (See Floyd and Morton.)						
Morton, Edgar H. (See Johnston, Samuel, assignor.)						
Morton, Henry, Branford, assignor to J. J. Kennedy, New Haven, Conn. Door lock and latch	425,237	Apr. 8	1234	328	51	250
Morton, Horace J., and R. B. Andrews, Chicago, Ill. Lumber-drier	426,463	Apr. 29	3097	812	51	639
Morton, John S., New York, N. Y. Propelling vessels	426,299	Apr. 22	2835	747	51	578
Morton, John S., New York, N. Y. Means for propelling vessels	426,300	Apr. 22	2838	{ 747 748 }	51	579
Morton, Matthew, Romeo, Mich. Universal cutter-head	439,673	Nov. 4	72	19	53	621
Morton, Melvin, De Witt, Iowa. Combined platform and signal lantern	426,041	Apr. 22	2462	650	51	501
Morton, Michael J., T. Blankensop, and S. Hipkins, Jr., Martin's Ferry, Ohio. Glass-mold for casting feet to blown bowls	423,264	Mar. 11	1369	356	50	1403
Morton, Michael J., T. Blankensop, and S. Hipkins, Jr., Martin's Ferry, Ohio. Mold for casting hollow glassware	424,331	Mar. 25	2958	{ 788 789 }	50	1722
Morton, Nathaniel. (See Bradford, Cornelius F., assignor.)						
Morton, Richard N. (See Dicks, William, Sr., assignor.)						
Morton, Thomas M., Baltimore, Md. Conduit for underground wires	437,445	Sept. 30	3332	869	52	2040
Morton, William A., assignor of one-half to N. Maun, Leavenworth, Kans. Copy-holder	420,913	Feb. 4	730	188	50	702
Morton, William E., Flushing, N. Y. Upholsterer's web-stretcher	432,428	July 15	2152	554	52	431
Mortorff, Noah W., Jennings, Mich. Saw-swaging machine	419,342	Jan. 14	1050	{ 277 278 }	50	222
Mortorff, Noah W., Jennings, Mich. Saw-stretching machine	419,699	Jan. 21	1572	420	50	332
Mortorff, Noah W., Jennings, Mich. Circular-saw-smithing machine	437,221	Sept. 30	2958	773	52	1968
Mortson, George, Bridgeport, Conn. Bicycle-support	418,923	Jan. 7	432	106	50	90
Mortson, George, Bridgeport, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Triangular paper bag	426,841	Apr. 29	3671	955	51	750
Mortson, George, Bridgeport, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Triangular paper bag	426,842	Apr. 29	3672	956	51	750
Mortson, George, Bridgeport, Conn., assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machinery	426,843	Apr. 29	3673	956	51	750
Morvay, Bernhard, Vienna, Austria-Hungary, assignor to L. Hirschfeld, New York, N. Y. Chair and sofa bed	427,597	May 13	864	{ 216 217 }	51	991
Moseley, Arthur R., and C. Benbon, La Crosse, Kans. Nut-lock	439,540	Oct. 28	2900	771	53	570
Moseley, Charles F., Bergen, N. Y. Tag	428,314	May 20	1956	491	51	1212
Moseley, Jerome S., Syracuse, N. Y. Saw-filing machine	431,070	July 1	62	15, 16	52	14
Moseley, Joseph, and B. Blundstone, Manchester, county of Lancaster, England. Engine-packing	425,042	Apr. 8	944	252	51	191
Moseley, Leeroy, Collinsville, Miss. Cotton-planter	435,317	Aug. 26	2906	770	52	1344
Moser, Albert F. (See Moser, Jacob and A. F.)						
Moser, Jacob and A. F., Sigel, Ill. Adjustable barrow-truck	426,195	Apr. 22	2695	707	51	548
Moser, Jacob P., Louisville, Ky. Composition for paint	420,082	Jan. 28	2156	.....	50	457
Moser, Leopold. (See Krampa and Moser.)						
Moses, James C., Decatur, Ind. Mold-board	427,346	May 6	485	124	51	907
Moses, Walter D. (See Cordley, William J., assignor.)						
Mosher, Ann M. (See Mosher, John A., assignor.)						
Mosher, Benjamin F., New York, N. Y. Window-awning	420,604	Feb. 4	251	68	50	613
Mosher, Charles D., Amesbury, Mass. Steam-generator	432,760	July 22	2697	{ 689 690 691 }	52	545
Mosher, George D., Birmingham, Conn. Buckle-guard	424,721	Apr. 1	436	116	51	86
Mosher, John A., assignor of one-fourth to A. M. Mosher, Abilene, Kans. Arc lamp	437,502	Sept. 30	3415	894	52	2058
Mosher, Miner G., Wichita, Kans. Roller crushing-mill	429,146	June 3	59	15, 16	51	1483
Mosher, Miner G., Wichita, Kans. Shaking-bolt	429,147	June 3	60	16	51	1484
Mosher, Oscar M., Glidden, assignor of one-third to M. W. Beach, Carroll County, Iowa. Wire-stretching machine	437,612	Sept. 30	3572	933	52	2089
Mosher, Shaw & Craig. (See Shaw, Elton R., assignor.)						
Moshier Bros. (See Wilcox and Moshier, assignors.)						
Moshier, William D. (See Wilcox and Moshier.)						
Moskovits, Maximilian H., Kansas City, Mo. Furnace-grate. (Reissne)	11,126	Nov. 18	2404	621	53	1087
Mosler Bank Safe Company. (See King, Phineas F., assignor.)						
Mosley, John H. (See Scarritt and Mosley.)						
Mosley, Woodson, Toledo, Ark. Padlock	426,734	Apr. 29	3508	917	51	718
Mosman, David, Meriden, Conn. Cam rein-slide	428,625	May 27	2419	615	51	1321
Mosman, David, Meriden, Conn. Buckle	434,720	Aug. 19	1980	515	52	1161
Mosquera Julia Food Company. (See Marcano, Vicente, assignor.)						
Moss, Albert A., Tunkhannock, Pa. Car-coupling	440,950	Nov. 18	2134	552	53	1034
Moss, Charles M., Lancaster, Pa. Tire-shrinker	430,872	June 24	2784	682	51	2036
Moss, Charles S., Kansas City, Mo. Cable-railway brake	430,140	June 17	1587	395	51	1798
Moss, James W., and H. B. Dillenback, Grand Rapids, Mich. Cutter-head	422,607	Mar. 4	364	90	50	1206
Moss, Lincoln. (See Bryson, Pendleton, and Moss.)						
Moss, Lincoln. (See Pendleton, Bryson, and Moss.)						
Mossberg, Frank. (See Crosby and Mossberg.)						
Mossop, William F., Philadelphia, Pa., assignor of one-half to M. M. Hirsh, Chicago, Ill. Convertible freight-car	432,890	July 22	2882	738	52	581
Mott, Abram C., and T. I. Rankin, assignors to A. Cox Stove Company, Philadelphia, Pa. Heating-stove	432,835	July 22	2802	717	52	565
Mott, Charles F. (See Downend, Franklin L., assignor.)						
Mott Iron Works, J. L. (See Butler, Theodore, assignor.)						
Mott Iron Works, J. L. (See Demarest, John, assignor.)						
Mott Iron Works, J. L. (See Hammann, Edward, assignor.)						
Mott Iron Works, J. L. (See Hammann and Susemihl, assignors.)						
Mott Iron Works, J. L. (See Hutter, George, assignor.)						
Mott Iron Works, J. L. (See Reid, John, assignor.)						
Mott Iron Works, J. L. (See Susemihl, Theodore, assignor.)						
Mott Iron Works, J. L. (See Taylor, George, assignor.)						
Mott, Samuel L., assignor of two-thirds to C. B. and C. G. Campbell, Newark, N. J. Running-board for freight-cars	423,567	Mar. 18	1814	478	50	1496
Mott, Samuel L., assignor of two-thirds to C. B. and C. G. Campbell, Newark, N. J. Running-board for freight-cars	427,598	May 13	866	217	51	991
Motten, Zacharias, Erie, Pa. Jar-lifter	436,086	Sept. 9	1097	284	52	1591
Motter, Milton P., Oswego, Kans. Grain-drill	440,182	Nov. 11	844	217	53	784
Mouck, Andrew B., et al. (See Vail, William T., assignor.)						
Moule, Howard L., Rock Creek, Wyo. Ter. Attachment for anchors	427,347	May 6	486	124	51	908

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Moulton, Alvin D., and D. F. Crofut, Bridgeport, Conn., assignors to Hartley & Grabam, New York, N. Y. Ammunition-charger.....	422,243	Feb. 25	2661	703	50	1092
Moulton, George W., administrator. (See Matzeliger, Jan E.)						
Moulton, John S. (See Chace, Albert P., assignor.)						
Moulton, Luther V., and H. L. Boyle, assignors to C. E. Westlake, Grand Rapids, Mich. Vending apparatus for liquids.....	424,428	Mar. 25	3135	832	50	1757
Moulton, Stillman A., Campbell, Cal. Tray for drying fruit.....	425,816	Apr. 15	2102	562	51	426
Mowbray, George M., North Adams, Mass. Preparing nitro-cellulose.....	443,105	Dec. 23	2401		53	1756
Mowbray, George M., North Adams, Mass., assignor to American Zylonite Company, New York, N. Y. Manufacturing nitro-cellulose.....	434,287	Aug. 12	1280	333	52	1016
Mowbray, George M., North Adams, Mass., assignor to American Zylonite Company, New York, N. Y. Machine for the continuous manufacture of nitro-cellulose.....	434,288	Aug. 12	1283	333	52	1016
Mower, J. K. (See Normand, Joseph M., assignor.)						
Mower, Samuel E., assignor to H. G. Thompson & Sons, New Haven, Conn. Electric-motor mechanism.....	433,903	Aug. 5	685	178	52	890
Mower, Samuel E., assignor to H. G. Thompson & Sons, New Haven, Conn. Electric-motor mechanism.....	440,717	Nov. 18	1730	443 444	53	959
Mower, Samuel E., assignor to H. G. Thompson & Sons, New Haven, Conn. Electric-motor mechanism.....	440,718	Nov. 18	1732	444	53	959
Mower, Samuel E., and G. J. Spencer, assignors to H. G. Thompson & Sons, New Haven, Conn. Electric-motor mechanism.....	433,904	Aug. 5	687	178	52	891
Mowers, Eugene P., St. Paul, Minn., assignor to himself, and M. L. Grovenor, Salt Lake City, Utah Ter. Printer's rule.....	438,255	Oct. 14	890	242	53	176
Mowll, Charles F., Cambridge, Mass. Drain-cabinet for liquid-measures.....	418,738	Jan. 7	117	28	50	26
Mowry, Daniel C., Holliston, Mass. Hat.....	432,805	July 22	2769	708 709	52	558
Moxham, Arthur J., Johnstown, Pa. Rail-chair for street-railways.....	423,072	Mar. 11	1081	281	50	1349
Moxham, Arthur J., Johnstown, Pa. Rail and rail chair.....	427,348	May 6	487	125	51	908
Moxham, Arthur J., Johnstown, Pa. Rolling-mill.....	427,349	May 6	488	125	51	908
Moxham, Arthur J., Johnstown, Pa. Securing girder-rails in tracks.....	435,704	Sept. 2	509	134	52	1473
Moxham, Arthur J., Johnstown, Pa. Chair for girder-rails.....	436,987	Sept. 23	2582	675	52	1889
Moxham, Arthur J., Johnstown, Pa. Rail-chair.....	436,988	Sept. 23	2582	675	52	1889
Moxley, John O. (See Fleming, Will A., assignor.)						
Moxley, John O., Lewiston, Idaho. Mailing-case.....	438,736	Oct. 21	1630	438	53	323
Moyer, Frank H., Buffalo, N. Y. Bottle and stopper therefor.....	435,975	Sept. 9	923	243	52	1558
Moyer, Henry L., assignor of one-half to A. G. Road, Shickshinny, Pa. Whiffletree.....	425,546	Apr. 15	1694	452	51	347
Moytahan, Daniel, Brooklyn, N. Y. Temporary binder.....	427,350	May 6	489	126	51	908
Mrazek, Josef. (See McDuff and Mrazek.)						
Mücke, Johann. (See Stern and Mücke.)						
Muckenhirn, Charles H., assignor to Detroit Sanitary Supply Company, Detroit, Mich. Apparatus for casting traps.....	431,609	July 8	885	220	52	184
Muckle, John S. (See Muckle and Smith, assignors.)						
Muckle, Mark R., Jr., and T. C. Smith, assignors to themselves and J. S. Muckle, Philadelphia, Pa. Switch-box.....	422,244	Feb. 25	2663	703	50	1093
Muckle, William. (See Malings and Muckle.)						
Mudd, John W., Vicksburg, Miss. Insect-powder duster.....	419,343	Jan. 14	1052	278	50	223
Mudford, Charles, Texarkana, Tex. Pad for the backs of horses.....	426,042	Apr. 22	2463	651	51	502
Muehe, George L. H., St. Joseph, Mo. Window.....	428,851	May 27	2769	704	51	1388
Muehlberg, Charles O., Pittsburg, assignor of one-half to H. Stamm, Mount Oliver, Pa. Insulator.....	434,992	Aug. 26	2417	639	52	1254
Mueller, Andrew. (See Weddendorf, John F., assignor.)						
Mueller, Casper, Boston, Mass. Oil-feeder.....	434,113	Aug. 12	1010	262	52	964
Mueller, Charles M. (See Hirschheimer and Mueller.)						
Mueller, Emil T., La Crosse, Wis. Ream or attachment for die-stocks.....	431,610	July 8	887	221	52	185
Mueller, Frederick T., New York, N. Y. Separator.....	425,448	Apr. 15	1555	416	51	320
Mueller, George C., St. Louis, Mo. Ore-feeder.....	428,346	May 20	2005	504	51	1222
Mueller, Hieronymus, Decatur, Ill. Tapping-machine.....	436,609	Sept. 16	1918	504	52	1753
Mueller, Jacob, Des Moines, Iowa. Smoke-consumer.....	438,704	Oct. 21	1570	422	53	312
Mueller, Mary. (See Müller, Joseph, assignor.)						
Mueller, Max. (See Mayer and Mueller.)						
Muench, Otto L., Washington, assignor to W. T. Haydock, St. Louis, Mo. Road-cart.....	439,541	Oct. 28	2901	771	53	570
Mueseler, Albert. (See Bakenbus and Mueseler.)						
Muesse, Robert, Fayetteville, Tex. Plow.....	435,045	Aug. 26	2499	661	52	1269
Muessel, George C., South Bend, Ind. Suspending device for pails.....	441,187	Nov. 25	2508	648	53	1116
Mühl, Ernst, Philadelphia, Pa. Rocking and reclining chair or lounge.....	426,601	Apr. 29	3298	865	51	679
Mühl, Ernst, Philadelphia, Pa. Rest for rocking-chairs.....	426,602	Apr. 29	3300	866	51	679
Muhlhauser, John, Rochester, N. Y. Cabinet-file.....	418,957	Jan. 7	479	119	50	101
Muhlhauser, John, Rochester, N. Y. Cabinet-file.....	420,239	Jan. 28	2416	643 644	50	505
Muhlhauser, John, Rochester, N. Y. Cabinet-file.....	439,971	Nov. 4	525	138 139	53	709
Muhr, Philip, Philadelphia, Pa. Watch-case spring.....	423,174	Mar. 11	1242	323	50	1380
Muhr's Sons, H. (See Hathaway, Charles W., assignor.)						
Muir, Alfred, Manchester, county of Lancaster, England. Metallic collar.....	427,887	May 13	1318	332	51	1079
Muir, Alfred, Manchester, England. Chuck.....	441,071	Nov. 18	2315	599	53	1070
Muirhead, Alexander, London, England. Telegraphy.....	435,851	Sept. 2	724	194	52	1515
Muirhead, John, Pittston, Pa. Drill.....	439,972	Nov. 4	530	139	53	710
Muldoon, Lawrence, et al. (See Clark, Edwin M., assignor.)						
Mulford, Charles J., New York, N. Y. Chocolate-pot.....	430,783	June 24	2642	648	51	2010
Mulford, Charles J., New York, N. Y. Chocolate-pot.....	430,784	June 24	2643	648	51	2010
Mullaley, Thomas J., Chicago, Ill. Stencil.....	429,734	June 10	948	233	51	1665
Mullan, William. (See Preston, De Russett, Mullan, and McKirdy.)						
Mullen, Charles A. (See Shetter, Egbert P., assignor.)						
Mullen, Francis M. (See Mullen, Winfield W. and F. M.)						
Mullen, Peter J., Boston, Mass. Railway-car seat.....	431,147	July 1	167	42	52	36
Mullen, Robert H., assignor of one-half to Pearce, Atkins & Co., Cincinnati, Ohio. Mop-wringer.....	435,705	Sept. 2	510	135	52	1473
Mullen, Robert H., assignor of one-half to Pearce, Atkins & Co., Cincinnati, Ohio. Device for wringing mops.....	435,976	Sept. 9	925	243	52	1559
Mullen, Winfield W. and F. M., Bauer Hill, Ind. Cultivator.....	427,888	May 13	1319	333	51	1079
Müller, Carl L., Ludwigshafen-on-the-Rhine, assignor to Badische Anilin und Soda Fabrik, Mannheim, Germany. Preparing diazo dyes.....	430,533	June 17	2215		51	1919
Müller, Carl L., Ludwigshafen-on-the-Rhine, assignor to Badische Anilin und Soda Fabrik, Mannheim, Germany. Red to brown dye.....	430,534	June 17	2217		51	1919

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Müller, Carl L., Ludwigshafen-on-the-Rhine, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Yellow dye	430,535	June 17	2218	51	1919
Muller, Edward A., assignor to Bradford Mill Company, Cincinnati, Ohio. Feed mechanism for lathes	421,866	Feb. 18	2105	552	50	979
Muller, Edward A., assignor to Bradford Mill Company, Cincinnati, Ohio. Friction-clutch	431,121	July 1	132	34	52	28
Müller, Emanuel, New York, N. Y. Self-setting time-piece	439,419	Oct. 23	2721	726	53	536
Müller, Ernst J., Milwaukee, Wis. Saw-mill carriage	424,017	Mar. 25	2508	668	50	1635
Müller, Frederick A., assignor to L. H. Müller, Brooklyn, N. Y. Folding bed and other similar articles	439,973	Nov. 4	531	140	53	710
Müller, Friedrich D. F., assignor to L. Müller, New York, N. Y. Corset-stay	442,530	Dec. 9	1407	360	53	1544
Muller, George, Philadelphia, Pa. Veveering with fabric	421,298	Feb. 11	1284	.....	50	816
Muller, George, Philadelphia, Pa. Distributer for flock, sand, tinsel, &c.	425,338	Apr. 8	1380	368	51	277
Müller, Gottlieb. (See Whittemore and Müller.)						
Müller, Henry, assignor of one-half to A. Graff, San Francisco, Cal. Tuning-pin for pianos	420,914	Feb. 4	732	188	50	702
Müller, Hermann. (See Wilking and Müller.)						
Muller, Hermann J., New York, N. Y. Desk attachment	438,856	Oct. 21	1841	489	53	362
Müller & Holzweissig. (See Thorne, Bernhard, assignor.)						
Müller, Hugo, Morshach, near Aachen, Prussia, Germany. Manufacturing coke	421,299	Feb. 11	1285	331	50	816
Müller, Joseph, North St. Paul, assignor to M. Mueller, St. Paul, Minn. Folding bed	438,743	Oct. 21	1650	442	53	326
Müller, Louise. (See Müller, Friedrich D. F., assignor.)						
Müller, Louise H. (See Müller, Frederick A., assignor.)						
Müller, Ludwig, assignor to Deutsche Patentfeilen-Fabrik Meyer, Focke & Company, Dresden, Saxony, Germany. File	424,018	Mar. 25	2510	668	50	1635
Müller, Susanna, Aussersihl, Zurich, Switzerland. Cooking apparatus	430,394	June 17	2014	496	51	1881
Müller, Theodor, assignor of one-half to D. Marks, Philadelphia, Pa. Mattress	433,905	Aug. 5	688	178	52	891
Müller, Wendelin, Newark, N. J. Sleigh-runner for chairs	433,535	Aug. 5	132	38	52	783
Mulligan, John, Rouse, Colo. Car-wheel	436,876	Sept. 23	2425	632	52	1859
Mulligan, John, Rouse, Colo. Car-axle	442,817	Dec. 16	1893	488	53	1649
Mullins, William E., Chicago, Ill. Butcher's implement	426,541	Apr. 29	3211	842	51	661
Mulvaney, John J., Jr., Riverside, assignor to J. W. Strehli, trustee, Cincinnati, Ohio. Barrel-heading machine	437,785	Oct. 7	172	53	53	35
Mulvey, Oliver, Wichita, Kans. Flush-tank siphon	443,783	Dec. 30	3508	900	53	1978
Mumford, Joseph A., Hantsport, Nova Scotia, Canada. Lubricator for steam-engines	431,704	July 8	1067	267	52	217
Mumford, William B., Kansas City, Mo. Fish-trap	424,494	Apr. 1	85	24	51	19
Mumma, David D., Harrisburg, Pa. Button	427,703	May 13	1020	257	51	1022
Mummary, Edwin G., Detroit, Mich. Vapor-burner	442,693	Dec. 16	1661	427	53	1604
Muncaster, Walter J., assignor of one-half to M. McKaig, Cumberland, Md. Machine for polishing shafting	432,144	July 15	1742	{ 447 448 }	{ 52 52 }	{ 355 355 }
Muncaster, Walter J., assignor of one-half to M. McKaig, Cumberland, Md. Metal-working lathe	437,866	Oct. 7	293	88	53	57
Munch, Arthur, Milwaukee, Wis. Caliper adjustment	441,685	Dec. 2	82	22	53	1278
Münch, Henry W., Somerville, Mass. Fountain window-cleaner	422,429	Mar. 4	96	27	50	1155
Munday, Henry. (See Walker, Henry, assignor.)						
Mundell, James. (See Dean and Mundell.)						
Mundell, John, et al. (See Dean, Henry W., assignor.)						
Mundell, John, et al. (See Dean and Mundell, assignors.)						
Munden, William J., London, England. System of locomotion and conveyance	421,186	Feb. 11	1134	290	50	788
Mundhenk, Henry W., Gilman, Iowa. Paper-hanging machine	436,144	Sept. 9	1190	311	52	1607
Munde, William J., Germantown, Nebr. Combination hasp-lock	437,034	Sept. 23	2650	693	52	1903
Mundy, Arthur J., New York, N. Y. Pencil-sharpener	441,016	Nov. 18	2213	572	53	1050
Mundy, Eusebius B., Henrietta, Tex. Rotary letter and paper file case	418,809	Jan. 7	227	55	50	49
Mundy, John A. (See Hisley and Mundy.)						
Mundy, William A., Philadelphia, Pa. Water-trap	431,384	July 1	543	135	52	110
Munger, Alfred S. and L. A., Woodhaven, N. Y. Registering toy savings bank or safe	423,528	Mar. 18	1765	464	50	1487
Munger, Cary R., and G. H. Cornell, Chicago, Ill. Two-part coffee-pot	424,607	Apr. 1	579	153	51	112
Munger, Louis A. (See Munger, Alfred S. and L. A.)						
Munger, Reuben C., Chebanse, Ill. Fruit-can	430,349	June 17	1946	477	51	1867
Munger, Royal L., assignor of one-half to T. R. Capwell, Brocton, N. Y. Running-gear for vehicles	427,351	May 6	492	126	51	908
Munger, Verrence, Ansonia, Conn. Desk-furniture	426,542	Apr. 29	3212	842	51	661
Munger, William A. (See Cash and Brace, assignors.)						
Mungiven, James M., Brooklyn, assignor to S. A. Hisley, New York, N. Y. Safety-treadle for power-presses	421,747	Feb. 18	1929	507	50	947
Municipal Signal Company. (See Martin, Morris, assignor.)						
Municipal Signal Company. (See Wilson, John C., assignor.)						
Municipal Signal Company. (See Wilson and Noyes, assignors.)						
Munn, Schuyler J. (See Depp and Munn.)						
Munnell, Thomas, Mount Sterling, Ky. Cash-register	436,290	Sept. 9	1404	{ 365 366 367 }	{ 52 52 52 }	{ 1650 1650 1650 }
Munro, William, Davenport, Iowa. Road-cart	437,503	Sept. 30	3417	894	52	2058
Munroe, Robert, and W. M. Hamilton, Allegheny, Pa. Flanging-machine	418,983	Jan. 7	513	128	50	108
Munroe, Stephen L. (See Taft and Day, assignors.)						
Munsie, James F., Chicago, Ill., assignor to T. L. Coles, New York, N. Y. Apparatus for hauling through electric cables	426,196	Apr. 22	2696	708	51	548
Munsie, James F., Chicago, Ill., assignor to T. L. Coles, New York, N. Y. Underground conduit	426,197	Apr. 22	2698	708	51	548
Munsie, James F., assignor to T. L. Coles, Brooklyn, N. Y. Insulator	426,198	Apr. 22	2700	708	51	549
Munsie, James F., assignor to T. L. Coles, Brooklyn, N. Y. Duct for electric conductors	426,199	Apr. 22	2702	709	51	549
Munsie, James F., assignor to T. L. Coles, Brooklyn, N. Y. Flexible connector	426,200	Apr. 22	2704	709	51	549
Munsie, James F., Brooklyn, assignor to T. L. Coles, New York, N. Y. Insulating-lining	426,201	Apr. 22	2705	709	51	550
Munsie, James F., Brooklyn, assignor to T. L. Coles, New York, N. Y. Insulating compound	426,202	Apr. 22	2706	.....	51	550
Munsie, James F., Brooklyn, assignor to T. L. Coles, New York, N. Y. Insulator	426,203	Apr. 22	2707	{ 709 710 }	{ 51 51 }	{ 550 550 }
Munsie, James F., Brooklyn, assignor to T. L. Coles, New York, N. Y. Binding-post	426,204	Apr. 22	2709	710	51	551
Munsie, James F., Brooklyn, assignor to T. L. Coles, New York, N. Y. Duct for electric conductors	426,205	Apr. 22	2710	710	51	551
Munsie, James F., Brooklyn, assignor to T. L. Coles, New York, N. Y. Man-hole for underground electric conduits	426,206	Apr. 22	2711	710	51	551
Munsing, George D., Minneapolis, Minn. Driving-wheel for machinery	428,728	May 27	2591	657	51	1351
Munson, Albert L., New York, N. Y. Slide paper box	422,032	Feb. 25	2328	615	50	1031
Munson, Anson L., Oakland, Cal. Treating coal-tar	440,830	Nov. 18	1928	495	53	995
Munson, Katharine C., Winthrop, Mass. Berth for vessels	431,385	July 1	544	{ 135 136 }	{ 52 52 }	{ 110 110 }

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Manson, Leverett, Saybrook, Ohio. Truss.....	423,941	Mar. 25	2385	634	50	1612
Munyan, Jonathan. (See Dancel, Christian, assignor.)						
Munz, Charles W., Detroit, Mich. Game.....	434,674	Aug. 19	1910	498	52	1148
Munz, Theodore C. (See Burgess and Munz.)						
Munz, Theodore C., Toledo, Ohio. Road-cart.....	442,384	Dec. 9	1172	305	53	1497
Munz, Theodore C., assignor to American Steel Gear Company, Toledo, Ohio. Vehicle-axle.....	420,730	Feb. 4	422	112	50	647
Munz, William. (See Williams, Warren, assignor.)						
Muuzer, Hngo. (See Van Alstine and Munzer.)						
Munzer, Richard W. (See Quigley, Walter C., assignor.)						
Murbarger, William E., Indianapolis, Ind. Pipe-wrench.....	441,188	Nov. 25	2509	648	53	1117
Murchison, James W. (See Levi and Murchison.)						
Murdock, Edwin F., Washington, D. C. Toy.....	420,389	Jan. 28	2636	700	50	545
Murdock, Edwin F., Washington, D. C. Forming concrete pavements.....	423,796	Mar. 18	2160	571	50	1561
Murdock, George J., and A. L. Lesher, assignors to said Lesher, New York, N. Y. Button and button-fastener.....	422,962	Mar. 11	914	239	50	1318
Murdock, Horace B., assignor to American Injector Company, Detroit, Mich. Steam-injector.....	440,183	Nov. 11	845	217	53	784
Murdock, Horace B., assignor to American Injector Company, Detroit, Mich. Injector.....	440,184	Nov. 11	846	218	53	785
Murdock, Isabella, Buffalo, N. Y. Combined slate and satchel.....	433,536	Aug. 5	133	38	52	783
Murdock, Joseph L., Anderson County, Tex. Planter, chopper, and cultivator.....	443,293	Dec. 23	2732	702	53	1820
Murphey, Charles H., Madisonville, Ky. Bottle-washer.....	424,894	Apr. 1	715	190 191	51	138
Murphey, Frank P. (See Murphey, George W. and F. P.)						
Murphey, George W. and F. P., Decatur, Ill. Corn-planter.....	426,043	Apr. 22	2464	651	51	502
Murphy, Charles J., Eastport, Md. Fruit-jar.....	439,170	Oct. 28	2311	621	53	459
Murphy, Edward, assignor to Kruse & Murphy Manufacturing Company, New York, N. Y. Slack-thread-controlling device for sewing-machines.....	436,486	Sept. 16	1731	457	52	1721
Murphy, Edward E., and W. Berkel, East Somerville, Mass. Apparatus for making vinegar.....	432,190	July 15	1809	465	52	367
Murphy, Elam T., et al. (See Bow, Lafayette T., assignor.)						
Murphy, Frank J. (See White and Murphy.)						
Murphy, Frank J., and A. M. Randle, Danbury, Conn. Machine for stiffening bats.....	426,135	Apr. 22	2603	684 685	51	530
Murphy, George R., London, England. Mechanism for controlling torpedoes, &c.....	442,327	Dec. 9	1088	285	53	1481
Murphy, George W. (See Snedeker, Ralph C., assignor.)						
Murphy, H. A., et al. (See Bolding, Arch, assignor.)						
Murphy, James, Brooklyn, N. Y. Tool for operating upon valve-seats.....	442,818	Dec. 16	1893	488	53	1649
Murphy, John, Malone, N. Y. Horseshoe.....	427,183	May 6	242	63	51	859
Murphy, John, Columbus, Ohio. Grout.....	442,132	Dec. 9	796	214	53	1425
Murphy, John C., South Evanston, Ill. Street or station indicator.....	439,674	Nov. 4	73	20	53	621
Murphy, John J., Jr., Franklin County, Mo. Railway-switch.....	435,881	Sept. 2	784	208	52	1526
Murphy, John L., Montgomery, Minn. Hook.....	420,207	Jan. 28	2369	629	50	496
Murphy, John L., Springfield, Mass. Machine-gun.....	427,239	May 6	334	86	51	876
Murphy, John L., Springfield, Mass. Gage.....	435,348	Aug. 26	2962	786	52	1355
Murphy, Leander, and J. A. Kennedy, Jr., Independence, Mo. Clasp for knotting horses' tails.....	419,536	Jan. 14	1323	353	50	278
Murphy, M. J. (See Harley, John, assignor.)						
Murphy, Mary, administratrix. (See Murphy, Nicholas.)						
Murphy, Nicholas, deceased; M. Murphy, Chicago, Ill., administratrix. Smoke and dry house for meats.....	441,576	Nov. 25	3148	809	53	1235
Murphy, Oscar C., and P. J. Mitchell, Janesville, Iowa. Stalk-cutter.....	420,581	Feb. 4	217	56	50	607
Murphy, Richard, assignor to T. Gibson Company, Cincinnati, Ohio. Ball-cock.....	425,619	Apr. 15	1813	485	51	370
Murphy, Robert E., assignor of one-half to W. M. J. Crossmyer, St. Louis, Mo. Galvanic battery.....	438,586	Oct. 14	1376	373	53	271
Murphy, Thomas S., Jr., and W. H. Davison, assignors to B. I. Stanton, Albany, N. Y. Temporary binder.....	440,110	Nov. 4	722	191	53	750
Murphy, William, St. John, New Brunswick, Canada. Mitering-machine.....	422,608	Mar. 4	364	90	50	1206
Murr, George M., Concord, N. C. Car-coupling.....	433,357	July 29	3593	928	52	727
Murray, A. H. (See Grant, Frank, assignor.)						
Murray, Alexander K., Bradford, Pa. Fuel-block.....	419,866	Jan. 21	1839		50	386
Murray, Alexander K., Bradford, Pa. Fuel composition.....	419,867	Jan. 21	1840		50	386
Murray, Alexander K., Bradford, Pa. Fire-kindler.....	419,868	Jan. 21	1840		50	386
Murray, Alexander K., Bradford, Pa. Artificial fuel.....	419,869	Jan. 21	1842		50	386
Murray, Bernard W., Seattle, Wash. Construction of drains or sewers.....	419,277	Jan. 14	942	248	50	200
Murray, Charles T., Kansas City, Mo. Apparatus for stereotyping.....	436,372	Sept. 16	1557	408	52	1688
Murray, David A., Princeton, N. J. Type-writing machine.....	423,622	Mar. 18	1894	499 500 501	50	1511
Murray, Edward M., assignor to Bicycle Step-Ladder Company, Davenport, Iowa. Store-service ladder.....	442,531	Dec. 9	1408	360	53	1544
Murray, James A. (See Edie, Alexander, assignor.)						
Murray, James C., Scranton, Miss. Shoe or glove fastener.....	424,683	Apr. 1	377	99	51	73
Murray, James E. (See Murray, James W. and J. E.)						
Murray, James H., assignor to A. T. Stearns, Boston, Mass. Door.....	427,599	May 13	867	217	51	992
Murray, James W. and J. E., assignors of one-half to S. T. Murray, St. George, and J. Campbell, King's Parish, New Brunswick, Canada. Cover for kitchen utensils.....	426,844	Apr. 29	3674	957	51	750
Murray, John E., Worcester, Mass. Hook.....	431,753	July 8	1138	284	52	232
Murray, John I., St. Louis, Mo. Mower.....	423,942	Mar. 25	2386	635	50	1612
Murray, John N., assignor of one-half to J. S. Burchill, Sault Ste. Marie, Mich. Combined expander and flue-cutter.....	426,044	Apr. 22	2465	651	51	502
Murray, John W., Saginaw, Mich. Switch for the moving contacts of electric railways.....	437,613	Sept. 30	3573	933	52	2089
Murray, Samuel J., Indianapolis, Ind. Paper box.....	434,878	Aug. 19	2207	577	52	1207
Murray, Samuel T., et al. (See Murray, James W. and J. E., assignors.)						
Murray, Peter, Jr., assignor to New Jersey Ventilating and Power Company, Newark, N. J. Fan.....	428,779	May 27	2662	675 676 329 330	51	1366
Murray, William F., San Francisco, Cal. Portable hoisting mechanism.....	442,449	Dec. 9	1273	322 323	53	1518
Murrey, Jasper, Cleveland, Ohio. Traveling crane.....	441,686	Dec. 2	83	22	53	1278
Murrin, William E., Franklin, Pa. Device for mixing aeriform fluids.....	421,603	Feb. 18	1737	45	50	910
Murtha, Harry T., assignor of one-half to R. W. Fridham, Newark, N. J. Tire-tightener.....	442,272	Dec. 9	1000	264	53	1465
Murtha, Thomas, et al. (See Weiss, Louis T., assignor.)						
Muse, Maggie A., Mount Carmel, Ky. Soot-catcher.....	429,047	May 27	3070	792	51	1446
Musgrave, James, and J. P. Clark, Buenos Ayres, Argentine Republic. Portable chute.....	426,301	Apr. 22	2842	748	51	579
Musham, William H., Chicago, Ill. Combination-tool.....	432,323	July 15	2014	518	52	403

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Musie, Georg, Berlin, Germany. Advertising-automaton for store-windows	420,351	Jan. 28	2582	686	50	535
Musick, William, assignor of two-thirds to H. H. Treon and D. R. Zartman, Sunbury, Pa. Fire-grate	418,810	Jan. 7	227	55	50	49
Muskegon Chemical Fire Engine Company. (See Van Valkenburg, Randall T., assignor.)	432,324	July 15	2015	518	52	403
Müissen, Ferdinand, Warstein, near Arnsberg, Germany. Folding-umbrella	436,458	Sept. 16	1688	444	52	1712
Musser, William J., Orangeville, Ill. Feed-trough	441,323	Nov. 25	2756	712 713	53	1159
Musser, William R., Lynchburg, Va. Signal-lantern	436,428	Sept. 16	1640	431	52	1702
Mussey, George D., Detroit, Mich. Mop-wringer	423,568	Mar. 18	1815	478	50	1496
Mussinan, Oscar, Jr., assignor to E. Faber, New York, N. Y. Erasive pencil-tip	439,787	Nov. 4	236	60	53	654
Mussinan, Oscar, Jr., assignor to E. Faber, New York, N. Y. Lead or crayon holder	422,821	Mar. 4	663	169	50	1264
Muterspaugh, Andrew R., Leaton, assignor of two-thirds to A. S. Contant and E. J. Adams, Mount Pleasant, Mich. King-bolt supporter	427,352	May 6	492	126	51	909
Muther, Lorenz, Oak Park, assignor to Union Special Sewing Machine Company, Chicago, Ill. Welt-guide for sewing-machines	420,915	Feb. 4	733	188	50	702
Mutimer, Frederick, assignor of one-half to Rockford Bolt Works, Rockford, Ill. Bolt-heading machine	427,437	May 6	628	158	51	936
Mutimer, Frederick, assignor of one-half to Rockford Bolt Works, Rockford, Ill. Bolt-trimming machine	442,074	Dec. 2	704	189	53	1400
Mutimer, Frederick, assignor of one-half to Rockford Bolt Works, Rockford, Ill. Bolt-heading machine	428,347	May 20	2006	504	51	1222
Mutton, James, Frisco, Utah Ter. Car-coupling	440,185	Nov. 11	848	218	53	785
Mutual District Telegraph Company. (See Bleoo, John H., assignor.)	428,852	May 27	2769	704 705	51	1388
Myers, Albert, <i>et al.</i> (See Briggs, Harrison T., assignor.)	423,943	Mar. 25	2387	635	50	1612
Myers, Andrew J., Bellaire, Ohio. Extension step-ladder	441,687	Dec. 2	85	23, 24	53	1279
Myers & Bro., F. E. (See Myers, Lewis Y., assignor.)	439,171	Oct. 28	2312	621 622	53	459
Myers, Charles F., McKinstry's Mills, Md. Time-lock	442,819	Dec. 16	1894	488 489	53	1649
Myers & Co., S. F. (See Meerbott, William, Jr., assignor.)	442,820	Dec. 16	1899	489 490	53	1650
Myers, David, North Manchester, Ind. Automatic boiler-cleaner	419,209	Jan. 14	844	222	50	181
Myers, Francis M., <i>et al.</i> (See Horrall, William A., assignor.)	419,278	Jan. 14	942	249	50	200
Myers, Frederick, Liverpool, county of Lancaster, England. Type-writing machine	429,940	June 10	1256	311	51	1724
Myers, Frederick, Liverpool, England. Type-writing machine	426,136	Apr. 22	2608	685	51	532
Myers, Frederick, Liverpool, England. Type-writing machine	424,332	Mar. 25	2961	789 790	50	1723
Myers, Frederick, Liverpool, England. Type-writing machine	426,207	Apr. 22	2714	711	51	552
Myers, Frederick, Liverpool, county of Lancaster, assignor to Mercury Type Writing Machine Company, (limited,) London, England. Type-writing machine	440,602	Nov. 11	1543	397	53	912
Myers, Frederick, New York, N. Y., assignor to Mercury Type Writing Machine Company, (limited,) London, England. Type-writing machine	430,141	June 17	1588	395	51	1798
Myers, Henry, <i>et al.</i> (See Newhall, John F., assignor.) (Reissue.)	421,187	Feb. 11	1138	291	50	789
Myers, Henry, Philadelphia, Pa. Iron for shirts	419,279	Jan. 14	945	249	50	209
Myers, Hiram, Springfield, Ohio. Cultivator	432,546	July 22	2343	605	52	477
Myers, Jacob H., Rochester, N. Y. Voting-machine	436,429	Sept. 16	1641	432	52	1703
Myers, Jonathan C., Cleveland, Ohio. Can-opener	421,009	Feb. 11	881	227	50	740
Myers, Lewis Y., Canton, assignor to F. E. Myers & Bro., Ashland, Ohio. Hay-carrier track	421,010	Feb. 11	882	228	50	740
Myers, Noah W., Wawaka, Ind. Trestle	427,704	May 13	1021	257	51	1022
Myers, Phares S., assignor of part to N. E. Homan, G. M. Fasig, and E. B. Barr, Reading, Pa. Double-roof-seaming tool	420,825	Feb. 4	580	148 149	50	674
Myers, Philip A., Ashland, Ohio. Hay-carrier	437,403	Sept. 30	3252	847	52	2023
Myers, Theodore A., assignor of one-half to A. T. Sweeney, Wheeling, W. Va. Filter	420,516	Feb. 4	126	31	50	588
Myers, Thomas B. (See Davis, Samuel B., assignor.)	420,517	Feb. 4	126	32	50	588
Myers, William H. (See Schneider and Carson, assignors.)	440,111	Nov. 4	794	192	53	750
Myers, William M., Cosby, Mo. Whiffletree-clip	442,994	Dec. 16	2197	565	53	1709
Myrick, George, and W. Roller, assignors to Myrick, Roller & Holbrook, Philadelphia, Pa. Etching and oxidizing gold-plated silver-ware	421,749	Feb. 18	1931	508	50	948
Myrick, George, and W. Roller, assignors to Myrick, Roller & Holbrook, Philadelphia, Pa. Etching gold-plated silver-ware	419,705	Jan. 21	1577	422	50	334
Myrick, Roller & Holbrook. (See Myrick and Roller, assignors.)	428,053	May 13	1560	394 395	51	1126
Mytton, Richard G. V., Birmingham, Ala. Valve-gearing	432,166	July 15	1775	456	52	361
Nacey, Patrick, Graceville, Minn., assignor of one-half to Sheffield Velocipede Car Company, Three Rivers, Mich. Weed-mowing hand-car	420,952	Feb. 11	789	205	50	722
Nacke, Arnold, and A. Brinkmann, Philadelphia, Pa. Clamp	431,724	July 8	1097	273	52	224
Nadeau, Jean B., Etchemin, Quebec, Canada. Lumber-lifting machine	432,326	July 15	2017	519	52	404
Nadeau, Jean B., Etchemin, Quebec, Canada. Means for loading lumber	439,421	Oct. 28	2730	728	53	537
Nadler, Johann, Vienna, Austria-Hungary. Lift or elevator	430,808	June 24	2685	658 659	51	2018
Nagel, Charles, Pittsburg, Pa. Apparatus for removing obstructions from street-car tracks	421,749	Feb. 18	1931	508	50	948
Nagel, Junius. (See Greenfield and Nagel.)	419,705	Jan. 21	1577	422	50	334
Nagel, Junius, New York, N. Y., assignor to A. J. Kletzker, St. Louis, Mo. Roll holding, severing, and printing apparatus	428,053	May 13	1560	394 395	51	1126
Nagengast, Joseph. (See Kampfe and Nagengast.)	432,166	July 15	1775	456	52	361
Nagle, Augustus F., Chicago, Ill. Sprinkler for automatic fire-extinguishers	420,952	Feb. 11	789	205	50	722
Nagle, Augustus F., assignor to Nagle Automatic Sprinkler Company, Chicago, Ill. Automatic sprinkler	431,724	July 8	1097	273	52	224
Nagle, Augustus F., assignor to Nagle Automatic Sprinkler Company, Chicago, Ill. Automatic sprinkler	432,326	July 15	2017	519	52	404
Nagle Automatic Sprinkler Company. (See Nagle, Augustus F., assignor.)	439,421	Oct. 28	2730	728	53	537
Nagle, Henry R., Grand Ridge, Ill. Automatic swinging straw-stacker	430,808	June 24	2685	658 659	51	2018
Nagle, Henry R., Grand Ridge, Ill. Automatic swinging straw-stacker	421,749	Feb. 18	1931	508	50	948
Nagle, Richard, Lynn, Mass. Upper	419,705	Jan. 21	1577	422	50	334
Nahl, Perham W., San Francisco, Cal. Navigable air-ship	428,053	May 13	1560	394 395	51	1126
Nail City Lantern Company. (See Hobbs, George P., assignor.)	432,166	July 15	1775	456	52	361
Nail City Lantern Company. (See Quinn, William J., assignor.)	420,952	Feb. 11	789	205	50	722
Nail City Lantern Company <i>et al.</i> (See Paull, Archibald W., assignor.)	431,724	July 8	1097	273	52	224
Naish, Joseph L., New York, N. Y. Orthopedic marching-machine	432,326	July 15	2017	519	52	404
Nalls, John T. (See Wharton and Nalls.)	439,421	Oct. 28	2730	728	53	537
Nance, Arthur G., Savannah, Mo. Window-guard	430,808	June 24	2685	658 659	51	2018
Nance, William T., Fall Creek, Tenn. Self-turning well-drill attachment	421,749	Feb. 18	1931	508	50	948

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Nangle, Joseph R. (See Angus, Charles, assignor.)						
Nangle, Joseph R. (See Angus and Nangle.)						
Napier, James L., <i>et al</i> (See Bristow, Thomas A., assignor.)						
Napier, William D., Mountain Home, Ark. Wagon-tongue support	429,050	May 27	3075	794	51	1447
Napier, William D., Mountain Home, Ark. Harrow	434,290	Aug. 12	1286	334	52	1017
Naples, Joseph W., Highlands, Colo. Cultivator	435,514	Sept. 2	199	55	52	1413
Naramore, Henry L., Sharon, Mass. Harness-pad	423,797	Mar. 18	2161	571	50	1562
Naramore, Henry L., Sharon, Mass. Ball-catcher's glove	436,540	Sept. 16	1825	481	52	1736
Naramore, Truman C., Los Angeles, Cal. Wave-motor	428,283	May 20	1909	480	51	1203
Nase, John, assignor to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Spring-clasp	418,924	Jan. 7	435	106	50	91
Nase, John, assignor to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Spring-clasp	421,750	Feb. 18	1933	508	50	918
Nash, Charles J., <i>et al</i> . (See Schnetzer, Conrad, assignor.)						
Nash, George, London, England. Flexible covering for stair-treads	442,256	Dec. 9	976	257	53	1461
Nash, George W., Chelsea, Mass. Bagatelle-board	436,488	Sept. 16	1733	437	52	1721
Nash, John M., Hudson, Wis. Machine for smoothing curved surfaces	430,398	June 17	2018	{ 497 498 827 828 }	{ 51 52 }	{ 1882 649 }
Nash, Lewis H., Brooklyn, assignor to National Meter Company, New York, N. Y. Water-meter with revolving piston	443,088	July 29	3215			
Nash, Oscar F., <i>et al</i> . (See Schnetzer, Conrad, assignor.)						
Nashua Saddlery Hardware Company. (See Taber, Orrin, assignor.)						
Nashua Saddlery Hardware Company. (See Taber and Low, assignors.)						
Nason, Carleton W. (See Walworth and Nason.)						
Nason, Carleton W., New York, N. Y. Manufacture of radiators	427,240	May 6	336	86	51	877
Nason, John B. (See Nason, William A., assignor.)						
Nason, Joseph H., Somerville, assignor of one-half to E. W. Jones, Medford, Mass. Self-threading shuttle for looms	432,167	July 15	1777	457	52	361
Nason, William A., Pleasantville, assignor of one-third to J. B. Nason, Venango County, Pa. Vehicle-seat back	431,004	June 24	2982	732	51	2074
Nason, William C., North Waterborough, Me. Car-truck	440,645	Nov. 18	1610	{ 414 415 }	{ 53 }	{ 936 }
Nathan Manufacturing Company. (See James, William, assignor.)						
National Blank Book Company. (See Honey, Horace D., assignor.)						
National Cash Register Company. (See Blanchard, Allen I., assignor.)						
National Cash Register Company. (See Boyer and Ham, assignors.)						
National Cash Register Company. (See Boyer and Riggs, assignors.)						
National Cash Register Company. (See Grimes, Charles D., assignor.)						
National Cash Register Company. (See Parkhurst, Edward B., assignor.)						
National Cash Register Company. (See Patterson, Frank J., assignor.)						
National Cash Register Company. (See Patterson, John H., assignor.)						
National Cash Register Company. (See Renwick, Henry B., assignor.)						
National Cotton Seed Oil and Huller Company. (See Faulkner, James J., assignor.)						
National Electric Head Light Company. (See Pyle, George C., assignor.)						
National Embossing Machine Company. (See Alleigh, Edward W., assignor.) (Reissue.)						
National Finance Company. (See Johnson, Frank B., assignor.)						
National Fly Paper Company. (See Trenner, Alfred B., assignor.)						
National Hollow Brake Beam Company. (See Bayley, Richard W., assignor.)						
National Hollow Brake Beam Company. (See Robischung, Henry B., assignor.)						
National Loom Harness Company. (See Ladd, Calvin P., assignor.)						
National Loom Harness Company. (See Thompson and Lund, assignors.)						
National Machine Company. (See Hallenbeck, Joseph P., assignor.)						
National Machine Company. (See Morris, George M., assignor.)						
National Meter Company. (See Nash, Lewis H., assignor.)						
National Milk Sugar Company. (See Bennett and Boynton, assignors.)						
National Needle Company. (See Berry, John, assignor.)						
National Pneumatic Tool Company. (See Metzger, Henry W., assignor.)						
National Salt and Chemical Company. (See Monsanto, Mauricio M., assignor.)						
National Sewing Machine Company. (See Harlow, Philander, assignor.)						
National Sewing Machine Company. (See Stiles, George A., assignor.)						
National Surface Guard Company. (See Hall, James T., assignor.)						
National Surface Guard Company. (See Whittemore, James, assignor.)						
National Switch and Signal Company. (See Lattig, Jacob W., assignor.)						
National Switch and Signal Company. (See Raub, James W., assignor.)						
National Tube Works Company. (See Patterson, Peter, assignor.)						
National Typographic Company. (See Mergenthaler, Ottmar, assignor.)						
National Vulcan Burner Company. (See Jaegle, William C., assignor.)						
National Weighing Machine Company. (See Lancaster, Frederick J. and J. H., assignors.)						
National Wire Mat Company. (See Proctor, David R., assignor.)						
National Worsted Mills <i>et al</i> . (See Shanahan, John J., assignor.)						
Natural Gas Fuel Company. (See Cornell, Elijah B., assignor.)						
Nau, John B. (See Bochkoltz, Constant, assignor.)						
Naughton, Addie A. (See Smith, Addison, assignor.)						
Nauman, George, Canton, Ohio. Machine for shaping sheet metal	419,344	Jan. 14	1053	278	50	223
Nauman, George, Canton, Ohio. Machine for forming bicycle-tires	421,423	Feb. 18	1463	379	50	857
Nauman, George, Canton, Ohio. Machine for forming ridge-bars	421,961	Feb. 25	2235	583	50	1013
Nauman, George, Canton, Ohio. Machine for forming ridge-bars	421,052	Feb. 11	942	243	50	751
Naumburg, Simson J., Newark, N. J. Railway-switch						
Naylor, Addison A., assignor to A. Naylor, New Sharon, Iowa. Band-cutter and feeder for thrashing-machines	423,624	Mar. 18	1900	501	50	1512
Naylor, Albert. (See Naylor, Addison A., assignor.)						
Naylor, Ernest W., New York, N. Y. Hydraulic press	437,933	Oct. 7	397	113	53	76
Naylor, Ernest W., New York, N. Y. Punching and flanging machine	440,051	Nov. 4	644	{ 171 172 }	{ 53 }	{ 734 }
Naylor, James, Jr., Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Blind	428,570	May 20	2325	590	51	1283
Naylor, James, Jr., Poughkeepsie, assignor, by mesne assignments, to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeder	434,643	Aug. 19	1854	{ 485 486 }	{ 52 }	{ 1139 }
Naylor, John, Freeport, Ill. Feed-boiler and water-heater	430,673	June 24	2459	600	51	1973
Naylor, Stephen, Newark, N. J. Pole-chain	425,577	Apr. 15	1739	466	51	355
Naylor, William H., assignor of one-half to T. B. Luzier, Philadelphia, Pa. Driving-band-twisting machine	422,611	Mar. 4	368	91	50	1206
Naylor, John J., Chicago, Ill. Bracket	420,518	Feb. 4	127	32	50	588
Neal, Columbus M. (See Jackson and Neal.)						
Neal, George W. B. (See Brown, Orville W., assignor.)						
Neale, George F., Crystal City, Mo. Glass-finishing machine	419,468	Jan. 14	1237	328	50	290

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Nealey, Everett T., and M. H. Rideout, Bangor, Me. Railway-gate.....	427,106	May 6	131	34	51	837
Neall, Alfred C. (See Bagley and Neall.)						
Neall, Catharine E., administratrix. (See Bagley and Neall.)						
Needham, Charles F., Tampico, Ill. Attachment for windmills.....	424,812	Apr. 1	589	155	51	114
Neeld, Nathan M., <i>et al.</i> (See Wheat, John J., assignor.)						
Neeley, Joseph P., Bridgeport, Ill. Adjustable fire-box for stoves.....	424,896	Apr. 1	717	191	51	138
Neely, Samuel M., Smith's Turn Out, assignor of one-half to W. L. Roddey, Rock Hill, S. C. Hand-planer.....	426,735	Apr. 29	3510	918	51	719
Neely, William A., Lynn, Mass. Boot or shoe.....	431,123	July 1	135	35	52	29
Neely, William A., Lynn, Mass., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Loop-taking apparatus for sewing machines.....	419,541	Jan. 14	1329	355	50	279
Neely, William D., Waxahachie, Tex. Broom-rack.....	430,674	June 24	2460	600	51	1974
Neer, Adam, St. Paris, Ohio. Thill-coupling.....	443,649	Dec. 30	3302	851	53	1939
Neff, Ard D., Petersburg, Pa. Gate for wire fences.....	443,146	Dec. 23	2475	632	53	1768
Neff, Charles A. (See Frame and Neff.)						
Neff, Elijah, Rochester, Ind. Vehicle-spring.....	430,745	June 24	2580	632	51	1997
Neffen, Paul H., Keyser, W. Va. Watch-hand remover.....	440,496	Nov. 11	1371	354	53	881
Negraval, Louis A., Jersey City, N. J. Pencil attachment.....	426,950	Apr. 29	2807	995	51	777
Negraval, Louis A., Jersey City, N. J. Cuff-holder.....	434,944	Aug. 26	2354	623	52	1242
Nehr, Herman F., Newark, N. J., assignor to Cable Motor Traction Company. Cable railway.....	437,711	Oct. 7	49	15	53	12
Nehring, William, Evansville, Ind. Lock.....	440,187	Nov. 11	851	219	53	785
Nehring, William, assignor of one-half to G. W. Warren, Evansville, Ind. Soldering-iron heater.....	419,058	Jan. 7	618	160	50	130
Neil, Moses H., <i>et al.</i> (See Drake, Lewis B., assignor.)						
Neil, William H., <i>et al.</i> (See Rose, William P., assignor.)						
Neill, George T., Duluth, Minn. Joint-fastening device.....	426,048	Apr. 22	2471	653	51	504
Neilson, John G. (See Henry, John, assignor.)						
Neilson, Robert, Reynoldton, Pa. Toothed wheel.....	426,394	Apr. 22	2985	782	51	609
Neilson, Robert, Reynoldton, Pa. Pipe-welding tongs.....	432,211	July 15	1842	473	52	373
Neiman, Alvin B., and C. A. Shetter, York, Pa. Whiffletree-hook.....	429,284	June 3	263	64	51	1522
Neiswanger, Joseph E., Chicago, Ill. Coin-controlled apparatus.....	423,073	Mar. 11	1082	281	50	1349
Nelle, Frederick W. (See Scholer, Wilhelm, assignor.)						
Nellensteijn, Gysbert D., Amsterdam, Netherlands. Extracting bad odors from vegetables, &c.....	431,278	July 1	374	93	52	76
Nellinger, Andrew, Wichita, Kans. Holder for hitching-straps.....	425,144	Apr. 8	1099	292	51	221
Nelsen, Herman O., Knoxville, Tenn. Machine for making iron picket fences.....	442,822	Dec. 16	1909	490 491	53	1652
Nelson, Abraham T. A. (See Atkins, John, assignor.)						
Nelson, Adolph, Armourdale, Kans. Combined sulky plow and pulverizer.....	421,189	Feb. 11	1141	291 292	50	789
Nelson, Charles, Brooklyn, N. Y. Pharaoh's serpent.....	418,814	Jan. 7	232	56	50	50
Nelson, Charles, Brooklyn, N. Y. Surprise picture.....	420,582	Feb. 4	218	57	50	607
Nelson, Charles, Brooklyn, N. Y. Torpedo.....	434,291	Aug. 12	1288	334	52	1018
Nelson, Charles H. (See Emerson, Leander C., assignor.)						
Nelson, Charles R., Portland, Me. Damper-regulator.....	422,091	Feb. 25	2421	639	50	1046
Nelson, Charles R., Portland, Me. Radiator.....	422,092	Feb. 25	2422	640	50	1047
Nelson, Charles W., and J. A. Levisay, Jackson, Ohio. Book-support.....	419,870	Jan. 21	1842	484	50	386
Nelson, Christian, Pittsburg, Pa. Cork-machine.....	432,212	July 15	1844	473	52	373
Nelson, Clark B., Crawfordsville, Ind. Cresting for roofs.....	428,315	May 20	1957	491	51	1212
Nelson, David C., Quincy, and W. R. Eaton, Cambridge, Mass. Trolley-carrier.....	430,675	June 24	2460	600	51	1974
Nelson, Elihu, New York, N. Y. Treating heated liquid wastes and apparatus therefor.....	440,410	Nov. 11	1215	314	53	853
Nelson, George. (See Nelson, Martin and G.)						
Nelson, George A., Woods, Tex. Baling-press.....	433,629	Aug. 5	276	73	52	810
Nelson, John. (See Blake, Jesse H., assignor.)						
Nelson, John F., Brooklyn, assignor, by mesne assignments, to Magic Introduction Company, New York, N. Y. Lighting device.....	442,534	Dec. 9	1412	361	53	1545
Nelson, Louis E., Cahery, Ill. Windmill-regulator.....	437,712	Oct. 7	51	16	53	12
Nelson, Magnus, Tottenham, Canada. Pendulum-indicator for sights.....	442,908	Dec. 16	2064	529	53	1681
Nelson Manufacturing Company, N. O. (See Stifel, Herman C., assignor.)						
Nelson Manufacturing Company, N. O. (See Vosburgh, Jacob, assignor.)						
Nelson, Martin, Quincy, Mass. Chalk-line and reel.....	433,956	Aug. 12	768	199	52	916
Nelson, Martin and G., Chicago, Ill. Window-screen.....	435,943	Sept. 9	878	230	52	1550
Nelson, Nels, assignor of one-half to J. G. Weatherway, Aberdeen, Wash. Snap-hook.....	429,362	June 3	398	94	51	1546
Nelson, Oliver R., assignor to Wright & Hills Linseed Oil Company, Chicago, Ill. Machine for mixing and tempering linseed-meal.....	442,081	Dec. 2	712	191	53	1402
Nelson, Peter A., <i>et al.</i> (See Griffith, William A., assignor.)						
Nelson, Robert F., Mansfield, Mass. Bouquet-holder.....	420,953	Feb. 11	791	206	50	723
Nelson, Robert H., Tront Dale, Va. Railway-gate.....	434,564	Aug. 19	1712	448	52	1111
Nelson, Robert L., Battle Creek, Mich. Wheelbarrow.....	428,176	May 20	1735	439	51	1169
Nelson, Robert S., and A. Kreuter, Chicago, Ill. Ironing-machine.....	441,373	Nov. 25	2830	730	53	1173
Nelson, William D., Traver, Cal. Slat-protector for drapers.....	434,565	Aug. 19	1715	448	52	1112
Nelson, William J., Bloomfield, Ky. Pruning implement.....	425,820	Apr. 15	2106	563	51	427
Nelson, William O. (See Morrison, Robert D., assignor.)						
Nelson, William O., Baltimore, Md. Combined caliper and centering gage.....	439,975	Nov. 4	536	141	53	711
Nelson, Wilfred, New York, N. Y. Means for distinguishing vessels in fogs.....	425,145	Apr. 8	1100	292	51	221
Nemon, Luther M., Dunbar, Pa. Bottle-crate.....	442,535	Dec. 9	1413	361	53	1545
Nencki, Marcel V., Berne, Switzerland, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Gallacetophenone.....	443,402	Dec. 23	2902		53	1853
Neeninger, Robert F., Newark, N. J. Pyrotechnic spinning-top.....	421,424	Feb. 18	1464	379	50	857
Neeninger, Robert F., Newark, N. J. Condenser for furnace-fumes.....	426,465	Apr. 29	3099	812 813	51	640
Neeninger, Robert F., Newark, N. J., assignor to New Jersey Furnace and Smelting Company, of New Jersey. Metallurgical furnace.....	432,280	July 15	1945	497 498	52	392
Neeninger, Robert F., Newark, N. J., assignor to New Jersey Furnace and Smelting Company, of New Jersey. Apparatus for producing highly-heated gas.....	432,281	July 15	1947	498 499	52	393
Nentrup, John H., Covington, Ky., assignor, by mesne assignments, to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter.....	423,798	Mar. 18	2162	571	50	1562
Neppert, Francis, New York, N. Y. Piano-stool.....	441,964	Dec. 2	518	139	53	1365
Nesbit, David M., <i>et al.</i> (See Stabler, James P., assignor.)						
Nesler, Charles L. (See Adams, George B., assignor.)						
Nesmith, Joseph A., Snickersville, Va. Combined torch and hand-warming cane.....	440,849	Nov. 18	1956	502	53	1000
Nessle, John P., Newark, N. J. Caster.....	439,546	Oct. 28	2912	774	53	572
Nessle, John P., Newark, N. J. Railway-rail.....	443,784	Dec. 30	3511	900	53	1978

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Nester, Herschel M. (See Fridley and Nester.)						
Neszier, Heinrich T., Chemnitz, Saxony, assignor to F. Pretzel & Co., Berlin, Germany. Apparatus for throwing belts over their pulleys	429,861	June 10	1144	283	51	1702
Netterfield, William W., Springfield, Mass. Vaporizer	423,388	Mar. 11	1547	407	50	1438
Nettlefold, Hugh, and J. Sheldon, assignors to Nettlefolds, Limited, Birmingham, England. Manufacture of screw-blanks	438,938	Oct. 21	1954	520 521	53	384
Nettlefolds. (See Nettlefold and Sheldon, assignors.)						
Nettlefolds. (See Sheldon, John, assignor.)						
Netto, Curt, Dresden, Germany. Making aluminium	431,912	July 8	1372	347	52	277
Neu, Gustave S., New York, assignor of one-half to C. H. Simmons, Brooklyn, N. Y. Electric leak or flow detector	442,385	Dec. 9	1173	305	53	1497
Neuburger, Markus, M. A. Perlinsky, and G. H. Gaylord, Chicago, Ill. Glove	433,630	Aug. 5	277	73	52	810
Neuerburg, Heinrich. (See Vogel and Neuerburg.)						
Neuert, Charles A. (See Regan and Neuert.)						
Neuhaas, Christiana, Chicago, Ill. Abacus	422,612	Mar. 4	371	92	50	1207
Neumann & Co., R. (See Zimmer, Solomon S., assignor.)						
Neumann, Frederick W., St. Louis, Mo. Adjustable sash for windows	436,184	Sept. 9	1250	326	52	1618
Neumann, John. (See Whitmore, Solomon S., assignor.)						
Nevens, Frank W., Minneapolis, Minn. Trousers	432,891	July 22	2884	738	52	581
Nevill, William B., Salisbury, Tex. Tire-heater	433,021	July 29	3111	797	52	629
Neville, Asa G., Lazeurville, W. Va. Revolving mold for glassware	443,403	Dec. 23	2903	747	53	1853
Nevin, Robert E., assignor to Vulcan Iron Works, San Francisco, Cal. Saw-mill set-works	425,386	Apr. 8	1453	389	51	291
Nevins, John H., Minneapolis, Minn. Hot-air furnace	427,006	Apr. 29	3893	1016	51	793
Nevins, Thomas F., assignor of one-half to J. W. Carter and H. Carey, Brooklyn, N. Y. Secondary battery	427,789	May 13	1161	291	51	1049
New, John, Howard, Kans. Well-curb	427,267	May 6	374	97	51	884
New Departure Bell Company. (See Rockwell, Albert F., assignor.)						
New England Butt Company. (See McCabe, John, assignor.)						
New England Telephone and Telegraph Company. (See McCoy, John A., assignor.)						
New England Telephone and Telegraph Company. (See McQuarrie, James L., assignor.)						
New Haven Carriage Company. (See Spare, George E., assignor.)						
New Haven Clock Company. (See Lane, Frederic A., assignor.)						
New Haven Wire Goods Company. (See Perkins, William C., assignor.)						
New Haven Wire Goods Company. (See Perkins, William C., assignor.) (Reissue.)						
New Jersey Furnace and Smelting Company. (See Nenninger, Robert F., assignor.)						
New Jersey Ventilating and Power Company. (See Murray, Peter, Jr., assignor.)						
New Jersey Wire Cloth Company. (See Orr, William, assignor.)						
New Process Steel Hardening Company. (See Pickett, Byron M., assignor.)						
New Wire Wove Roofing Company. (See Ford, Alfred N., assignor.)						
New York Electrical Device Company. (See Malmberg, Ernst R., assignor.)						
New York & New Jersey Liquor Maturing Company. (See Hasbronck, Julian A. H., assignor.)						
New York Safety Steam Power Company. (See Davis, David P., assignor.)						
New York Steel Mat Company. (See Leavitt, Frank M., assignor.)						
New York Steel Mat Company. (See Spelman, William C., assignor.)						
New York Twine Holder Company. (See Candee, William N., assignor.)						
New York Wood Fibre Company. (See Hull and McEwan, assignors.)						
Newark District Telegraph Company. (See Fearey and Speicher, assignors.)						
Newark District Telegraph Company. (See Speicher, John, assignor.)						
Newark District Telegraph Company. (See Speicher and Fearey, assignors.)						
Newark Filtering Company. (See Hyatt, John W., assignor.) (Reissue.)						
Newark Hat Block Company. (See Larkin, George F., assignor.)						
Newberry, Edmund, and J. W. Sharp, assignors of one-half to T. H. Salmon and F. Jackson, Kettering, county of Northampton, England. Last	431,614	July 8	892	222 223	52	186
Newberry, George W., Chicago, Ill., assignor of one-half to E. A. and J. O. Hayes, San José, Cal. Music-sheet cabinet	429,769	June 10	999	245	51	1675
Newbery, James C., Melbourne, Victoria, and C. T. J. Vantin, London, England. Process of and apparatus for the separation of finely-divided mineral or metallic matters from the liquids in which they are suspended	439,173	Oct. 28	2318	622	53	460
Newbery, Thomas J., assignor of one-half to W. Henderson, Perdue Hill, Ala. Tetter-salve	438,636	Oct. 21	1462		53	293
Newbury, Alfred J., New York, N. Y. Combined book and index	433,208	July 29	3394	877	52	685
Newbury, Jay H. (See Chapman and Newbury.)						
Newbury, Jay H., and G. A. Chapman, Guilderland, N. J. Cutting screw-threads	437,713	Oct. 7	52	16	53	13
Newby, Albert S., assignor to R. M. Clark and W. J. Keyte, Kansas City, Mo. Stove	439,677	Nov. 4	77	21	53	622
Newcomb, Elisha and E. B., Cumberland Mills, Me. Car-replacer	423,622	Apr. 15	1816	486	51	370
Newcomb, Erwin B. (See Newcomb, Elisha and E. B.)						
Newcomb, Obadiah W., Welda, Kans. Holder for edge-tools	441,325	Nov. 25	2760	713	53	1160
Newell, Augustus. (See Zeidler and Newell.)						
Newell, Augustus, Chicago, Ill. Veneering-press	423,074	Mar. 11	1084	281 282 283	50	1349
Newell, Augustus, Chicago, Ill. Applying celluloid to key-boards	423,075	Mar. 11	1088	283 284	50	1350
Newell, Augustus, Chicago, Ill. Key-board	423,076	Mar. 11	1091	284 285	50	1350
Newell, Augustus, Chicago, Ill. Gas-holder	428,125	May 20	1666	422 423	51	1157
Newell, Augustus, Chicago, Ill. Means for operating elevator-gates	428,126	May 20	1672	424	51	1157
Newell, Augustus, Chicago, and C. Kehr, Winnetka, Ill.; said Kehr assignor to said Newell. Gas-holder	428,127	May 20	1675	424 425	51	1158
Newell, Augustus W., Bradford, Pa. Oil or gas well packer	423,338	Mar. 11	1482	388	50	1425
Newell, Isaiah, Haverhill, Mass. Burring attachment for carding-machines	419,211	Jan. 14	851	223	50	183
Newell, Lorenzo B., Newton Centre, Mass. Power-press	437,038	Sept. 23	2655	694	52	1904
Newell, William H., Philadelphia, Pa. Water-closet bowl	423,175	Mar. 11	1243	323	50	1380
Newhall, Cebert H., Philadelphia, Pa. Hammer	436,612	Sept. 16	1921	505	52	1754
Newhall, George T., New Haven, Conn. Vehicle	428,815	May 27	2717	689	51	1376
Newhall, John F., Lynn, Mass. Shutter-worker	429,793	June 10	1033	253 254	51	1681
Newhall, John F., assignor of one-half to W. R. Knowles, C. G. Hiller, J. E. Tucker, C. M. Shaw, J. E. Nicholson, H. T. Meloon, J. S. Crowley, T. Williams, J. Nicholson, and H. Myers, Lynn, Mass. Shutter-worker. (Reissue.)	11,131	Dec. 9	1519	390	53	1576
Newhouse, Casey, Modesto, and L. Hansen, Newman, Cal. Sofa-bed	428,177	May 20	1735	439	51	1169
Newhouse, Frederick, Toledo, assignor to Harris Metal Wheel Company, Anburndale, Ohio. Velocipede	420,826	Feb. 4	581	149 150	50	674

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Newhouse, Frederick, Toledo, assignor to Harris Metal Wheel Company, Auburndale, Ohio. Vehicle-wheel.....	425,240	Apr. 8	1237	329	51	250
Newhouse, Milford J., Oneida, N. Y. Burglar-alarm.....	425,045	Apr. 8	948	253	51	191
Newhouse, Neil M. (See Wheeler and Newhouse.)						
Newland, George F., Detroit, Mich. Attachment for telephones.....	421,011	Feb. 11	884	228	50	740
Newlin, Finley. (See Farmer, Henry, assignor.)						
Newlove, John, assignor of one-half to W. C. Looker, Union Mills, Ind. Street-sweeper.....	433,538	Aug. 5	135	39	52	783
Newman, Abraham L., New York, N. Y., assignor to I. and J. J. Newman, New Haven, Conn. Button-hole strip.....	428,571	May 20	2328	590	51	1284
Newman, Isaac, <i>et al.</i> (See Newman, Abraham L., assignor.)						
Newman, Jacob J., <i>et al.</i> (See Newman, Abraham L., assignor.)						
Newman, John J. (See Miller and Newman.)						
Newman, Lawson S., Peoria, N. Y. Fence.....	431,706	July 8	1070	267	52	218
Newman, Nelson, assignor of two-thirds to G. A. Sanders and S. J. Willett, Springfield, Ill. Automatic gas-extinguisher.....	425,953	Apr. 15	2324	616	51	467
Newman, Nelson, assignor of two-thirds to G. A. Sanders and S. J. Willett, Springfield, Ill. Car-coupling.....	429,051	May 27	3076	794	51	1447
Newman, Nelson, assignor of two-thirds to G. A. Sanders and S. J. Willett, Springfield, Ill. Automatic gas lighter and extinguisher.....	436,990	Sept. 23	2584	676	52	1890
Newman, Rush L. and B. L. Ozmun, Lansing, N. Y. Stove-pipe guard and register.....	425,439	Mar. 18	1631	429	50	1462
Newman, William C., Charlevoix, Mich. Bridge-guard.....	442,133	Dec. 9	796	215	53	1425
Newmon, James, Skipperville, Ala. Plow-collar.....	424,897	Apr. 1	718	192	51	139
Newnam, Thomas, Columbia, Fla. Lumber-measuring device.....	426,305	Apr. 22	2845	750	51	581
Newstrom, Andrew, Red Wing, Minn. Bob-sled.....	433,742	Aug. 5	448	116	52	843
Newton, Charles O., Homer, N. Y. Car-heater.....	429,363	June 3	99	94, 95	51	1547
Newton, Charles O., Homer, N. Y. Hay-press.....	437,404	Sept. 30	3252	848	52	2024
Newton, Edward C., Little Rock, Ark. Steam dynamo-electric machine.....	436,148	Sept. 9	1196	313	52	1608
Newton, Edwin, and J. Palmer, assignors to Davis, Moore & Co., Leicester, England. Splicing attachment for knitting-machines.....	431,913	July 8	1374	348	52	277
Newton, Frederick P., <i>et al.</i> (See Garland, Frank M., assignor.)						
Newton, James D., Thayer, Mo. Oil-can.....	440,188	Nov. 11	853	219	53	786
Newton, James F., Bardstown, Ky. Truss.....	437,788	Oct. 7	181	57	53	37
Newton, John. (See Quiggin, Daniel A., assignor.)						
Newton, John R., Carthage, Ill. Checkrein-hook.....	422,433	Mar. 4	100	27	50	1156
Newton, Lewis H., <i>et al.</i> (See Gray, William S., assignor.)						
Newton, Melville A. (See Newton, Samuel O. and M. A.)						
Newton, Nelson A., <i>et al.</i> (See Wilson, Thomas H., assignor.)						
Newton, Richard R., Rahway, N. J. Glass-beveling machine.....	423,799	Mar. 18	2163	{ 571 572 }	50	1562
Newton, Robert, Providence, R. I. Fuel-economizer.....	428,405	May 20	2106	528	51	1242
Newton, Robert W., Providence, R. I. Can-opener.....	434,676	Aug. 19	1912	499	52	1149
Newton, Samuel O. and M. A., North Pitcher, N. Y. Extension device for incandescent lamps.....	438,779	Oct. 21	1699	456	53	337
Newton, Theodore, Hartford, Conn. Sash-fastener.....	432,639	July 22	2482	388	52	504
Newton, W. S., <i>et al.</i> (See Webster, George L., assignor.)						
Newton, William H., Chicago, Ill. Child's carriage.....	439,303	Oct. 28	2555	682	53	504
Ney, Albert, and J. Baumgartner, Dubuque, Iowa. Folding door.....	423,176	Mar. 11	1244	324	50	1380
Nézérax, Placide, Paris, France. Centrifugal pump.....	441,252	Nov. 25	2639	{ 685 686 }	53	1138
Niagara Stamping and Tool Company. (See Juergens, Frederick A., assignor.)						
Nial, John C., <i>et al.</i> (See Burke, Stephen L., assignor.)						
Nice, David, Wooster, Ohio. Duplicating check-book.....	420,353	Jan. 28	2584	687	50	535
Nice, Eugene. (See Allsop and Nice.)						
Nicholas, James, Benton, Wis. Motive power for jigging-machines.....	432,892	July 22	2884	739	52	582
Nicholls, Edward, <i>et al.</i> (See Hall, William H., assignor.)						
Nichols, Albert E., Leeds, England. Electric ceiling-block.....	437,789	Oct. 7	183	57	53	37
Nichols, Charles B., Springfield, Ill. Dial-printing machine.....	423,077	Mar. 11	1094	285	50	1351
Nichols, Cyvetous, Helena, Mont. Bob-sleigh.....	436,257	Sept. 9	1360	354	52	1641
Nichols, Ed. A. (See Saunders, Theodore, assignor.)						
Nichols, Eliza A., Stormville, Tex. Wagon-stap.....	429,635	June 10	805	196	51	1637
Nichols, Emory L., assignor, by mesne assignments, to I. Stewart and F. E. Tremper, San Francisco, Cal. Electric rotary pump.....	425,106	Apr. 8	1030	275	51	208
Nichols, George, Jr., South Onondaga, N. Y. Hay-carrier.....	442,635	Dec. 16	1572	406	53	1587
Nichols, George D., New Canaan, Conn. Corset.....	429,542	June 3	668	163	51	1600
Nichols, George D., New Canaan, Conn. Corset-clasp.....	430,874	June 24	2787	683	51	2037
Nichols Harvester Company. (See Nichols, Marion L., assignor.)						
Nichols, Henry, assignor of three-fourths to J. W. and E. E. Ruark and A. J. Bird, Mount Meridian, Ind. Car-coupling.....	427,007	Apr. 29	3895	1017	51	793
Nichols, Henry B., assignor of one-half to J. W. Linzee, Jr., Boston, Mass. Cement-lined pipe.....	429,947	June 10	1263	313	51	1725
Nichols, John H., Unionville, Tenn. Horse-detacher.....	436,185	Sept. 9	1252	327	52	1619
Nichols, Joseph A. (See Cleathero and Nichols.)						
Nichols, M. V., <i>et al.</i> (See Lottridge, William, assignor.)						
Nichols, Marion L., Batavia, assignor to Nichols Harvester Company, New York, N. Y. Grain-binder.....	423,267	Mar. 11	1374	{ 357 358 359 360 361 }	50	1404
Nichols, Marion L., assignor to Nichols Harvester Company, New York, N. Y. Grain-binder.....	423,389	Mar. 11	1549	407	50	1438
Nichols, Martin V., Port Arthur, Ontario, Canada. Hame.....	427,891	May 13	1323	334	51	1079
Nichols, Myron A. (See Gagin and Nort, assignors.)						
Nichols, Reuben E., Philadelphia, Pa. Car-heater.....	430,875	June 24	2789	683	51	2037
Nichols, Robert C. (See Maiden, Henry P., assignor.)						
Nichols & Shepard Company. (See Flagg, Eli W., assignor.)						
Nichols & Shepard Company. (See Shepard, Freedom G., assignor.)						
Nichols & Shepard Company. (See Thomson, Andrew, assignor.)						
Nichols, Thomas V., Auburn, Mass. Apparatus for stretching and smoothing trousers.....	422,059	Feb. 25	2372	627	50	1038
Nichols, William A. (See Barnes, Lewis, assignor.)						
Nichols, William P., assignor of one-half to J. N. Sperry, Bolivar, Mo. Meat-tenderer.....	440,603	Nov. 11	1544	398	53	913
Nicholson, Charles W., Assamoose, Va. Fertilizer-distributor.....	443,864	Dec. 30	3630	935	53	2003
Nicholson, Ezra, Cleveland, Ohio. Hoisting and conveying machine.....	433,805	Aug. 5	549	142	52	864
Nicholson, James, <i>et al.</i> (See Newhall, John F., assignor.) (Reissue.)						
Nicholson, John E., <i>et al.</i> (See Newhall, John F., assignor.) (Reissue.)						
Nicholson, Malcolm, Goderich, Canada. Hot-water boiler.....	443,329	Dec. 23	2793	{ 717 718 }	53	1831

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Nicholson, William H., Wilkes-Barré, Pa. Shaft-coupling	443,627	Dec. 30	3263	840	53	1931
Nickerson, Fred A. (See Bullard and Nickerson.)						
Nickerson, Hiram B., New Bedford, Mass. Piano-forte straining-pin	441,438	Nov. 25	2939	757	53	1195
Nickerson, Will T., Worthington, Ind. Gripper-perforator	442,536	Dec. 9	1413	361	53	1545
Nickum, George S., assignor to Dayton Fan and Motor Company, Dayton, Ohio. Fan attachment	425,449	Apr. 15	1555	416	51	320
Nicol, Robert, Jr., Chicago, Ill. Curling-iron heater	419,469	Jan. 14	1237	328	50	260
Nicolai, Ludwig. (See Saltzkorn and Nicolai.)						
Niedringhaus, Alexander, St. Louis, Mo. Enameled sheet-metal ware	429,578	June 3	720	174	51	1610
Nield, William. (See Bentley, Thomas, assignor.)						
Nielsen, Carl E., Salt Lake City, Utah. Plumb-level	420,242	Jan. 28	2427	646	50	507
Nielsen, Frederik. (See Vincent, Linneas O., assignor.)						
Nielsen, John F. (See Lauritzen and Nielsen.)						
Nielsen, Niels P., Bridgeport, Conn. Knife	443,534	Dec. 30	3110	801	53	1902
Niemann, Henry, Denver, Colo. Car-coupling	436,722	Sept. 16	2098	552	52	1789
Niemann, Henry, Denver, Colo. Car-coupling	437,790	Oct. 7	184	57, 58	53	37
Niermann, Franz H., Jefferson, Mo. Machine for cutting irregular shapes	443,535	Dec. 30	3111	801	53	1902
Niesen, Frank, Cincinnati, Ohio. Catch-basin	433,134	July 29	3290	847	52	664
Nietzki, Rudolf, Basle, Switzerland, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Brown carbon-dye	424,019	Mar. 25	2510		50	1635
Nightingale, William O., assignor of one-half to W. H. Lee and W. H. Jackson, Johnstown, Pa. Pipe-tongs	441,017	Nov. 18	2216	572	53	1050
Nightingale, Harry. (See Klots and Nightingale.)						
Nightingale, John. (See Klots and Nightingale, assignors.)						
Nightingale, John and J. Paterson, N. J. Mechanism for facilitating tying-in warp in looms	431,989	July 8	1491	376	52	300
Nightingale, Joseph. (See Nightingale, John and J.)						
Nightingale, Willard F., Latrobe, Cal. Axle-set	429,245	June 3	206	51	51	1511
Niland, James J., Port Jervis, N. Y. Apparatus for agitating abrading and polishing material, &c.	420,243	Jan. 28	2429	646	50	507
Nile, John. (See Legg and Nile.)						
Niles, Arthur J., Lancaster, N. H. Watch-shipping case	434,945	Aug. 26	2355	623	52	1242
Niles, Harry B., Union Springs, N. Y. Electric motor	419,059	Jan. 7	620	161	50	130
Niles, Harry B., Union Springs, N. Y., and J. B. Ford, Creighton, Pa. Treating plate-glass	433,254	July 29	3461	893	52	700
Niles, Milton C., Oak Park, Ill. Rail-joint	432,551	July 22	2353	607	52	479
Niles, Milton C., Chicago, Ill. Rail-joint	432,552	July 22	2355	607	52	479
Niles, Milton C., Oak Park, Ill. Rail-joint	438,707	Oct. 21	1573	423	53	313
Niles Tool Works. (See Reiss, George T., assignor.)						
Niles Tool Works. (See Remmers, Bernhard, assignor.)						
Nill, Jacob P., et al. (See Snee, William, assignor.)						
Nilson, Nils, Minneapolis, Minn. Pipe-coupling	420,281	Jan. 28	2489	660	50	517
Nilson, Nils, Minneapolis, assignor to Northwestern Modern Car Heating and Lighting Company, St. Paul, Minn. Pipe-coupling for railway-cars	420,209	Jan. 28	2370	629	50	496
Nilson, Nils, Minneapolis, assignor to Northwestern Modern Car Heating and Lighting Company, St. Paul, Minn. Steam-pipe coupling	420,210	Jan. 28	2372	630	50	497
Nilson, Nils, Minneapolis, assignor to Northwestern Modern Car Heating and Lighting Company, St. Paul, Minn. Automatic pipe-coupling	427,520	May 6	743	185	51	959
Nilson, Peter F., Phoenix, Ariz. Calendar-clock	420,519	Feb. 4	129	32	50	588
Nilsson, Nils G., New York, N. Y. Bracket for pianos, melodeons, &c.	438,256	Oct. 14	892	242	53	176
Nilsson, Per A., Gothenburg, Sweden, assignor to J. H. Ehlers, Bahrenfeld, Germany. Machine for the manufacture of horseshoe and other nails	438,556	Oct. 14	1334	361	53	263
Nilsson, Per A., Gothenburg, Sweden, assignor to J. H. Ehlers, Bahrenfeld, Germany. Apparatus for the manufacture of nails	438,557	Oct. 14	1335	361	53	264
Nimmo, George, Allegheny, Pa. Manufacture of saw-plates	443,785	Dec. 30	3512	901	53	1978
Nipfler, Francis E. (See Adams, Arthur W., assignor.)						
Nippert, Charles. (See Burbank and Nippert.)						
Nisbett, William, Bath Beach, N. Y. Motor for churns	436,489	Sept. 16	1734	457	52	1721
Nisley, Frank, Middletown, Pa. Ruler	422,033	Feb. 25	2330	615	50	1031
Nisson, Hans, Sacramento, Cal. Fender for feed-troughs	424,020	Mar. 25	2511	668	50	1635
Niswonger, Franklin J., Neoga, Ill. Spring-motor for vehicles	419,060	Jan. 7	622	161	50	131
Nitschke, Charles E., et al. (See Nitschke, George H., assignor.)						
Nitschke, George H., assignor of three-fourths to J. F., J. W., and C. E. Nitschke, Columbus, Ohio. Quoin	419,212	Jan. 14	852	223	50	183
Nitschke, James W., et al. (See Nitschke, George H., assignor.)						
Nitschke, John F., et al. (See Nitschke, George H., assignor.)						
Nittigroer, Carl, Langensalza, Prussia, Germany. Fire-escape	419,542	Jan. 14	1330	355	50	280
Nix, William M., Fulton, Ky. March	436,877	Sept. 23	2426		52	1859
Nixon, Emery, assignor of one-half to W. Millicham, Toronto, Ontario, Canada. Power indicator and recorder	424,218	Mar. 25	2782	741	50	1688
Nixon, George. (See Manning, Chesterfield, assignor.)						
Nixon, Phebe M., Topeka, Kans. Heat-concentrator	439,251	Oct. 28	2457	658	53	486
Nixon, Samuel E. (See Conrad, John, assignor.)						
Nixon, William G., Bristol, England. Metallic packing	434,418	Aug. 12	1493	389	52	1060
Noack, August W., Jr., Washington, D. C. Bottle-lock	420,918	Feb. 4	737	189	50	703
Noack, Otto, Latum, Tex. Cultivator	420,694	Feb. 4	373	99	50	637
Noack, Otto, Stamford, Conn. Vise	422,613	Mar. 4	372	92	50	1208
Nobbs, Edward P., assignor to American Ring Company, Waterbury, Conn. Handle	421,751	Feb. 18	1935	508	50	948
Nobes, George, and R. H. Jackson, London, England. Apparatus for clearing the rails of railways, &c.	442,995	Dec. 16	2197	565	53	1710
Noble, Eric M., et al. (See Carl, Frederick, assignor.)						
Noble, Frank, Minneapolis, Minn. Gravity-scalper	440,883	Nov. 18	2008	516	53	1010
Noble, Frank B., Monroe, Wis. Carpet-stretcher	424,495	Apr. 1	87	24	51	20
Noble, George R., Birmingham, Conn. Lining boilers, &c., with lead	427,892	May 13	1324		51	1080
Noble, Henry C., Brooklyn, N. Y. Apparatus for sanding railways	424,933	Apr. 1	770	205	51	150
Noble, James G., Colorado Springs, Colo. Temporary binder	420,089	Jan. 28	1616	571	50	459
Noble, John. (See Main, Fred F., assignor.)						
Noble, William J., New York, N. Y. Coffin-fastener	421,106	Feb. 11	2169	260	50	765
Nodder, Samuel, and W. H. Petford, assignors to J. Harrison, Birmingham, England. Velocipede-saddle	423,800	Mar. 18	2165	572	50	1562
Nedler, Henry L., Covington, Ky. Switch-movement for street-railways	426,306	Apr. 22	2846	750	51	581

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Noechel, Frank J., Rochester, N. Y. Sled-propeller	438,819	Oct. 21	1772	{ 474 475 }	53	350
Noël, Pierre B., Paris, France. Means for preventing the fraudulent refilling of bottles	431,148	July 1	169	43	52	36
Noelle, Ewald, Lüdenscheid, Germany. Button-fastening machine	429,052	May 27	3077	795	51	1447
Noerdlinger, Hugo, Stuttgart, Germany. Preparing acidulated oil	441,803	Dec. 2	273	.....	53	1318
Nogar, Russell H., Dundee, Mich. Furnace	425,221	Apr. 15	2108	{ 563 564 }	51	428
Nogar, Russell H., Dundee, Mich. Sawdust-burner	426,847	Apr. 29	3677	958	51	751
Nolan & Craig. (See Nolan, James, assignor.)						
Nolan, Edward J., Chicago, Ill. Type-writing machine for the blind	422,614	Mar. 4	373	92, 93	50	1208
Nolan, James, assignor to Nolan & Craig, Detroit, Mich. Poultry-car	425,241	Apr. 8	1238	{ 329 330 }	51	250
Nolan, James, assignor of one-half to J. G. Craig, Detroit, Mich. Stock-car for transporting poultry	425,242	Apr. 8	1240	330	51	251
Noland, Erastus C., Crawfordsville, Ind. Incrustation-preventive	419,470	Jan. 14	1239	.....	50	261
Noland, John W., Rich Hill, Mo. Aque remedy	435,046	Aug. 26	2500	.....	52	1269
Nolden, Edward, Boston, Mass. Bathing apparatus	423,801	Mar. 18	2166	573	50	1563
Noll, Mathias, and F. A. Lowe, Atchison, Kans. Physician's cabinet	428,406	May 20	2108	528	51	1242
Noller, Fred. (See Chapman, Ernest E., assignor.)						
Nolley, David D., Wilson, N. C. Paper-bag and twine holder	428,936	May 27	2894	740	51	1413
Nonantum Worsted Company. (See Parker, Edwin W., assignor.)						
Noonan, Daniel J. (See Jones and Noonan.)						
Noonan, Patrick, assignor of one-half to B. Vitalis, Cleveland, Ohio. Furnace	440,112	Nov. 4	726	192	53	750
Noppel, Emil, Philadelphia, Pa., assignor of one-half to B. Grosché, New York, and J. Bigler, Newburg, N. Y. Apparatus for refining oil	437,659	Sept. 30	3636	950	52	2102
Norcross, Henry L., Boston, Mass. Elevated railway	437,230	Sept. 30	2971	{ 776 777 }	52	1970
Norcross, Orlando W., Worcester, Mass. Fire-proof floor	429,770	June 10	1000	245	51	1676
Norcross, William M., assignor to Hale & Kilburn Manufacturing Company, Philadelphia, Pa. Car-seat	436,313	Sept. 9	1437	{ 374 375 }	52	1657
Nordberg, Bruno V., Milwaukee, Wis. Exhaust-valve	421,606	Feb. 18	1742	476	50	910
Nordberg, Bruno V., Milwaukee, Wis. Valve-gear	428,316	May 20	1958	{ 491 492 }	51	1212
Nordberg, Bruno V., and C. M. Conradson, Milwaukee, Wis. Adjustable bearing	430,143	June 17	1592	396	51	1799
Nordberg, Bruno V., assignor to B. Nordberg Company, Milwaukee, Wis. Steam-pump	433,992	Aug. 12	819	{ 214 215 }	52	925
Nordberg, Bruno V., assignor to B. Nordberg Company, Milwaukee, Wis. Steam-pump	433,993	Aug. 12	821	216	52	925
Nordberg, Bruno V., assignor to B. Nordberg Company, Milwaukee, Wis. Steam-pump	433,994	Aug. 12	822	216	52	925
Nordberg, Bruno V., assignor to B. Nordberg Company, Milwaukee, Wis. Steam-pump	433,995	Aug. 12	823	216	52	925
Nordberg, Bruno V., assignor to B. Nordberg Company, Milwaukee, Wis. Steam-pump	433,996	Aug. 12	824	217	52	926
Nordberg Company, Bruno. (See Claassen, Hans F., assignor.)						
Nordberg Company, Bruno. (See Nordberg, Bruno V., assignor.)						
Nordenfelt, Per. (See Holmström and Nordenfelt.)						
Nordenfelt, Per, assignor to Maxim-Nordenfelt Guns and Ammunition Company, Limited, Westminster, England. Apparatus for controlling the recoil and running out of guns	436,375	Sept. 16	1560	409	52	1689
Nordenfelt, Per, assignor to Maxim-Nordenfelt Guns and Ammunition Company, Limited, Westminster, England. Apparatus for controlling the recoil and running out of guns	436,376	Sept. 16	1561	{ 409 410 }	52	1689
Nordenfelt, Thorsten, assignor to Maxim-Nordenfelt Guns and Ammunition Company, (limited), Westminster, England. Gun-mounting for field-artillery	418,925	Jan. 7	436	106	50	91
Nordenfelt, Thorsten, assignor to Maxim-Nordenfelt Guns and Ammunition Company, (limited), Westminster, England. Breech mechanism for ordnance	422,965	Mar. 11	920	{ 240 241 242 243 }	50	1319
Nordenfelt, Thorsten, assignor to Maxim-Nordenfelt Guns and Ammunition Company, (limited), Westminster, England. Base-fuse for projectiles	423,802	Mar. 18	2167	573	50	1563
Nordenfelt, Thorsten, assignor to Maxim-Nordenfelt Guns and Ammunition Company, (limited), Westminster, England. Mounting for field-artillery	424,496	Apr. 1	88	24, 25	51	20
Nordenfelt, Thorsten, assignor to Maxim-Nordenfelt Guns and Ammunition Company, (limited), Westminster, England. Apparatus for operating heavy ordnance	425,623	Apr. 15	1818	{ 466 467 }	51	371
Nordenholt, Claus, Brooklyn, N. Y. Fishing-reel	425,243	Apr. 8	1243	331	51	251
Nordenström, Johan O., assignor of one-half to P. E. Fredeen, Cambridge, Minn. Sled	435,944	Sept. 9	880	231	52	1550
Nordmann, Friedrich G., Cincinnati, Ohio. Tuvère	431,005	June 24	2982	732	51	2074
Nordmann, Friedrich G., assignor of one-half to J. L. Roth, Cincinnati, Ohio. Water-tuvère	421,867	Feb. 18	2107	553	50	979
Nordmann, Prosper. (See Schlatter, Charles, assignor.)						
Nordyke & Marmon Company. (See Warrington, Jesse, assignor.)						
Noreau, Joseph G., Quebec, Canada. Pneumatic telephone	424,684	Apr. 1	379	{ 99 100 }	51	74
Norman, Thomas W., Boston, Mass. Art and means for covering and insulating wire	443,536	Dec. 30	3116	802	53	1903
Normand, Joseph M., assignor of one-half to J. K. Mower, Springfield, Ohio. Pump	422,535	Mar. 4	244	63	50	1182
Norris, Almon E., Cambridge, Mass. Cut-off valve	438,637	Oct. 21	1462	395	53	293
Norris, Elson H., Bucyrus, Ohio. Baggage-truck	424,898	Apr. 1	719	{ 190 191 }	51	139
Norris, George E., Troy, assignor of one-half to A. P. Adams, Albany, N. Y. Machine for making match-splints	436,991	Sept. 23	2585	{ 676 677 }	52	1890
Norris, Leonard F., Brockton, Mass. Shutter-worker	425,450	Apr. 15	1557	417	51	320
North American Cigar Machinery Company. (See Boehm, David J., assignor.)						
North American Electric Company. (See Doyle, John, assignor.)						
North, Charles M., Brooklyn, N. Y. Type-writing machine	435,349	Aug. 26	2964	{ 786 787 }	52	1355
North & Company, O. B. (See North, William B., assignor.)						
North & Company, O. B. (See Smith, Charles H., assignor.)						
North & Company, O. B. (See Smith and North, assignors.)						
North, Ford J., and A. F. Molitor, Lansing, Mich. Spring-tooth harrow	435,706	Sept. 2	512	135	52	1474
North & Judd Manufacturing Company. (See Herrick, Frank J., assignor.)						
North, Oliver B. (See Smith and North.)						
North, Ralph H., et al. (See McWhorter, Francis S., assignor.)						
North, Ralph H., Philadelphia, Pa. Cash-recorder for store-service	435,241	Aug. 26	2770	732	52	1321
North, Robert, Bloomer, Mich. Portable recorder	431,820	July 8	1246	312	52	252
North, Selden G., et al. (See McWhorter, Francis S., assignor.)						
North, William B., assignor to O. B. North & Company, New Haven, Conn. Manufacture of waist-belt loops	421,752	Feb. 18	1935	509	50	948
Northcott, Arthur. (See Serjeant and Northcott.)						
Northbridge, George W. (See Crandall, Jesse A., assignor.)						
Northrop, Henry S., New York, N. Y. Metal ceiling	434,353	Aug. 12	1372	358	52	1035

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Northrop Manufacturing Company. (See Copeland, Lucius D., assignor.)						
Northrop, William B., Charleston, S. C. Type-cleaning attachment for writing-machines.	425,387	Apr. 8	1455	390	51	291
Northrup, Hiram D. (See Bigelow and Northrup.)						
Northrup, Julius D., Giddings, Tex. Riding-saddle.	443,241	Dec. 23	2649	680	53	1804
Northwestern Modern Car Heating and Lighting Company. (See Nilson, Nils, assignor.)						
Northwood, Harry, Martin's Ferry, Ohio. Mold for ornamental glass manufacture.	431,388	July 1	549	137	52	111
Norton, Abram D., Delta, Idaho. Door-securer.	436,940	Sept. 23	2523	661	52	1877
Norton, Anson P., <i>et al.</i> (See Snee, William, assignor.)						
Norton, Charles D., <i>et al.</i> (See Reckenzaun, Anthony, assignor.)						
Norton, Charles H., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Grinding-machine.	429,697	June 10	895	{ 218 219 }	{ 51 51 }	{ 1655 1656 }
Norton, Charles H., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Grinding-machine.	429,698	June 10	899	{ 219 220 }	{ 51 51 }	{ 1656 1656 }
Norton, Charles H., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Grinding-machine.	434,115	Aug. 12	1012	{ 263 264 }	{ 52 52 }	{ 964 964 }
Norton Door Check and Spring Company. (See Sherman, John A., assignor.)						
Norton, E. D., <i>et al.</i> (See Anderson, James J., assignor.)						
Norton, Edwin, <i>et al.</i> (See Hodgson, John G., assignor.)						
Norton, Edwin, <i>et al.</i> (See Jordan, Peter, assignor.)						
Norton, Edwin, <i>et al.</i> (See Jordan and Hodgson, assignors.)						
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Pouring-nozzle for sheet-metal cans.	437,231	Sept. 30	2972	777	52	1971
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Pouring-nozzle for sheet-metal cans.	437,232	Sept. 30	2974	777	52	1971
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Pouring-nozzle cap for cans.	437,233	Sept. 30	2976	777	52	1971
Norton, Edwin, and J. G. Hodgson, assignors to said E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Can-cap-soldering machine.	432,434	Mar. 4	101	28	50	1156
Norton, Edwin, Maywood, and E. Adcock, assignors to said Norton, and O. W. Norton, Chicago, Ill. Apparatus for making metal tubing.	441,374	Nov. 25	2832	{ 730 731 }	{ 53 53 }	{ 1173 1173 }
Norton, Edwin, Maywood, and E. Adcock, assignors to said Norton, and O. W. Norton, Chicago, Ill. Making metal tubing.	441,375	Nov. 25	2834	{ 731 732 }	{ 53 53 }	{ 1174 1174 }
Norton, Gerrit, New York, N. Y. Cap for mustard-bottles.	433,209	July 29	3395	877	52	686
Norton, Harrison I. (See Hall and Norton.)						
Norton, Henry. (See Shambarger, Stephen D., assignor.)						
Norton, James J., assignor of sixty-five one-hundredths to E. W. Kelley, Lowell, Mass. Window.	431,279	July 1	375	94	52	76
Norton, James P., assignor to Detroit Electrical Works, Detroit, Mich. Electric switch.	426,049	Apr. 22	2472	654	51	504
Norton, James W., Washington, D. C., assignor of one-half to G. H. Dieterich, Crawford, Nebr. Railway-switch.	440,793	Nov. 18	1860	479	53	982
Norton, James W., assignor of four-sixths to J. Tempany, C. A. Stedman, and M. B. Hughes, Fort Robinson, Nebr. Railway-switch.	419,543	Jan. 14	1331	356	50	280
Norton, John A., assignor to J. M. Orford, Bridgeport, Conn. Electric switch.	430,252	June 17	1761	438	51	1831
Norton, John A., Bridgeport, assignor to J. C. English, New Haven, Conn. Electric switch.	435,152	Aug. 26	2652	702	52	1298
Norton, Lemuel F., Lebanon, Ind. Fence-post.	422,034	Feb. 25	2330	615	50	1031
Norton, Lemuel F., assignor of one-half to W. K. Fraley, Lebanon, Ind. Fence-post.	442,636	Dec. 16	1573	407	53	1587
Norton, Oliver W. (See Norton, Edwin, assignor.)						
Norton, Oliver W. (See Norton and Adcock, assignors.)						
Norton, Oliver W., <i>et al.</i> (See Hodgson, John G., assignor.)						
Norton, Oliver W., <i>et al.</i> (See Jordan, Peter, assignor.)						
Norton, Oliver W., <i>et al.</i> (See Jordan and Hodgson, assignors.)						
Norton, Oliver W., <i>et al.</i> (See Norton and Hodgson, assignors.)						
Norton, Patrick, Jersey City, N. J., and J. H. McClure, Brooklyn, N. Y. Ash and garbage receptacle.	434,196	Aug. 12	1134	295	52	988
Norton, Richard H. (See Conway, Richard, assignor.)						
Norton, Sheldon. (See Ball and Norton.)						
Norton, Theodore M. (See Locke and Lapp, assignors.)						
Norwalk Iron Works Company. (See Morgan, Henry P., assignor.)						
Norwalk Lock Company. (See Taylor, Thomas, assignor.)						
Norwood, Clarence L., assignor to J. A. Creelman, Rochester, N. Y. Square.	443,459	Dec. 23	2993	769	53	1870
Norwood, George. (See Moore and Norwood.)						
Noteman, Alonzo, Toledo, Ohio, assignor to A. H. Calkins, Evanston, Ill. Hydrocarbon-burner.	427,893	May 13	1326	334	51	1080
Nothstine, Elias W., Dundee, Mo. Ironing-table.	431,191	July 1	234	59	52	49
Nottley, John L., Santa Cruz, Cal. Decorticating-machine for removing outer covering from coffee.	435,854	Sept. 2	730	195	52	1516
Nott, Henry W., assignor to T. M. and N. Cass, Cameron, Tex. Power device for baling-presses.	421,107	Feb. 11	1618	260	50	766
Nott, John V. H., Kingston, N. Y. Latch.	428,348	May 20	2008	505	51	1223
Nott, Wilbur F. (See Gaquin and Nott.)						
Nott, Wilfred E., Hartford, Conn. Roll-paper holder and cutter.	432,246	July 15	1886	485	52	381
Notteberg, William, and C. Schmitt, Kansas City, Mo.; said Notteberg assignor to said Schmitt. Automatic lubricator.	424,343	Mar. 25	2986	794	50	1727
Nonailhac-Pioch, Fernand, Paris, France. Apparatus for discharging or throwing excavated or other material.	426,848	Apr. 29	3678	{ 958 959 }	{ 51 51 }	{ 751 751 }
Nourse, James K. P., assignor to himself, L. Daniels, Boston, and J. A. Fogg, South Weymouth, Mass. Electric railway.	440,362	Nov. 11	1126	289	53	835
Novelty Electric Company. (See Hamilton, Cornelius J., assignor.)						
Novotny, John, Cedar Rapids, Iowa. Cloth-piling machine.	428,128	May 20	1677	425	51	1158
Nowak, Joseph. (See Cervený and Nowak.)						
Nowlan, Francis, London, England. Camera.	441,018	Nov. 18	2216	{ 572 573 }	{ 53 53 }	{ 1051 1051 }
Nowotny, John S., assignor of one-half to J. J. Watrous, Cincinnati, Ohio. Galvanic battery.	428,781	May 27	2666	676	51	1366
Noxon, Charles P., <i>et al.</i> (See Redfield, Lewis H., assignor.)						
Noxon, James, Woodstock, Canada. Seeding-machine.	437,234	Sept. 30	2977	778	52	1972
Noxon, Thomas H., Ingersoll, Ontario, Canada. Seeding-machine.	434,292	Aug. 12	1288	{ 334 335 }	{ 52 52 }	{ 1018 1018 }
Noyes, Bernice J. (See Wilson and Noyes.)						
Noyes, Bernice J., Boston, Mass. Electro-magnetic cut-out.	433,032	July 29	3112	798	52	629
Noyes, Bernice J., Boston, Mass. Municipal signal system.	433,485	Aug. 5	70	21	52	770
Noyes, Bernice J., Boston, Mass. Municipal signal apparatus.	433,486	Aug. 5	71	21	52	771
Noyes, Clarence E., Chester, Vt. Safety-pin.	436,377	Sept. 16	1563	411	52	1689
Noyes, Edward I. K. (See Kelsea, Joseph N., assignor.)						
Noyes, George H., Easton, Pa. Air-valve for steam-radiators.	437,616	Sept. 30	3576	934	52	2089

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Noyes, La Verne W. (See Perry, Thomas O., assignor.)						
Noyes, La Verne W., Chicago, Ill. Book-holder	440,816	Nov. 18	1898	488	53	989
Nuckolls, Shelley S., Conyers, Ga. Vehicle-wheel	425,900	Apr. 15	2223	590	51	448
Nugent, Richard C., and S. H. Stupakoff, Pittsburg, Pa. Machine for flanging and nozzle metal plates	422,615	Mar. 4	375	93, 94	50	1208
Nugent, William, Philadelphia, Pa. Valve	419,471	Jan. 14	1239	329	50	261
Nugent, William L. (See Marshall, Charles K., assignor.)						
Numsen, Nathaniel G., Baltimore, Md. Soldering-iron for capping cans	425,691	Apr. 15	1926	512	51	392
Numsen, Nathaniel G., Baltimore, Md. Pea-grader	435,153	Aug. 26	2654	702	52	1298
Nuneviller, William. (See Richards, George H., assignor.)						
Nunn, Arthur C., assignor to E. F. Abbott, Lowestoft, England. Kettle	432,067	July 15	1615	414	52	330
Nute, Leander M., Great Falls, N. H., assignor of one-fourth to G. Moore, Berwick, Me. Boot or shoe	431,990	July 8	1492	377	52	300
Nuthurst, E. O., et al. (See Bull, James E., assignor.)						
Nutt, Joseph, Danbury, Conn. Machine for bending hat-wires	439,890	Nov. 4	393	{ 102 103 }	{ 53	684
Nuttall, Eneas F., Dublin, Ireland. Dog-collar	426,137	Apr. 22	2609	685	51	532
Nuttall, Robert D., Allegheny, Pa. Candy-machine	442,732	Dec. 16	1760	{ 455 456 }	{ 53	1622
Nutting Electric Manufacturing Company. (See Nutting, Samuel E., assignor.)						
Nutting, Samuel E., Chicago, Ill. Speed-regulator for dynamos	436,901	Sept. 23	2464	643	52	1866
Nutting, Samuel E., assignor to Nutting Electric Manufacturing Company, Chicago, Ill. Thermo-electric resistance-regulator	421,053	Feb. 11	943	243	50	752
Nutting, Samuel E., assignor to Nutting Electric Manufacturing Company, Chicago, Ill. Electro-mechanical movement	420,954	Feb. 11	791	206	50	723
Nutting, Samuel E., assignor to Nutting Electric Manufacturing Company, Chicago, Ill. Electro-mechanical movement	420,955	Feb. 11	794	206	50	723
Nutting, Samuel E., assignor to Nutting Electric Manufacturing Company, Chicago, Ill. Arc lamp	440,604	Nov. 11	1544	398	53	914
Nutting, Samuel H., E. Parsons, East Windsor, and G. W. Bower, Enfield, Conn. Closet	425,083	Apr. 8	1001	268	51	202
Nütz, George W., assignor to H. D. Justi, Philadelphia, Pa. Inhaler	433,418	July 29	3680	951	52	745
Nye, Albert M. (See Brinkerhoff, Stevens, Swart, Stevens, and Nye.)						
Nye, Frank A., assignor to G. E. Nye and E. Tredick, Philadelphia, Pa. Circular-knitting machine	440,869	Nov. 18	1983	511	53	1006
Nye, George E., et al. (See Nye, Frank A., assignor.)						
Nye, George E., Austin, Ill. Steam and vacuum pump	440,719	Nov. 18	1733	{ 444 445 }	{ 53	959
Nye & Tredick. (See Cochran, Philip W., assignor.)						
Nye & Tredick. (See Townsend, Arthur, assignor.)						
Nylen, Andrew, Des Moines, Iowa. Calipers for fitting watch-crystals	421,138	Feb. 11	1062	273	50	775
O'Beirne, William H., and C. B. Fitch, Fort Wayne, Ind. Railway-ticket	426,849	Apr. 29	3681	959	51	752
O'Bolger, Thomas, Rochester, N. Y., assignor to W. S. King, Minneapolis, Minn. Lasting-tack	430,034	June 10	1414	351	51	1755
O'Boylan, Bernard M., and J. Thompson, Corning, Ohio. Neck-yoke	443,374	Dec. 23	2865	736	53	1846
O'Brian, Leonard W., assignor to Fremont Cultivator Company, Bellevue, Ohio. Horse-rake	430,035	June 10	1414	{ 351 352 }	{ 51	1755
O'Brian, Leonard W., assignor to Fremont Cultivator Company, Bellevue, Ohio. Wheel horse-rake	430,483	June 17	2136	525	51	1904
O'Brien, A. E., et al. (See McIntyre, Innes T., assignor.)						
O'Brien, Andrew P., assignor of one-half to A. D. Ledoux, Richmond, Va. Bag-holder	442,537	Dec. 9	1415	361	53	1545
O'Brien, Edward J., Texarkana, Tex., assignor to C. W. Brega, Chicago, Ill. Cotton-seed linter	433,874	Aug. 5	648	168	52	883
O'Brien, Eugene, assignor to H. Pooley & Son, Liverpool, county of Lancaster, England. Apparatus for weighing grain	428,816	May 27	2720	{ 689 690 691 }	{ 51	1377
O'Brien, James, Minneapolis, Minn. Checkrein safety-loop	431,672	July 8	1006	250	52	206
O'Brien, James P., New York, and H. Cooper, Brooklyn, assignors to said O'Brien and B. Van Leer, New York, N. Y. Coin-controlled blow-tester	437,382	Sept. 30	3224	{ 840 841 }	{ 52	2018
O'Brien, John, New York, N. Y. Electric switch	442,996	Dec. 16	2198	565	53	1710
O'Brien, John F., Youngstown, and S. H. Harrington, Cleveland, Ohio. Railway time-signal	433,906	Aug. 5	689	179	52	891
O'Brien, John J. (See Egan and O'Brien.)						
O'Brien, John T., Philadelphia, Pa. Attachment for scaffolds	437,934	Oct. 7	398	113	53	77
O'Brien, John T., Philadelphia, Pa. Movable scaffold	437,935	Oct. 7	399	113	53	77
O'Brien, John T., Philadelphia, Pa. Ladder	437,936	Oct. 7	400	113	53	77
O'Brien, Joseph, assignor to J. Carew, Boston, Mass. Machine for cutting teeth of stone-cutters' tools	421,962	Feb. 25	2236	588	50	1013
O'Brien, Joseph, assignor to J. Carew, Boston, Mass. Anvil	429,149	June 3	63	16	51	1484
O'Brien, Michael F. C., Louisville, Ky. Freight-handling machine	443,054	Dec. 16	2283	585	53	1726
O'Brien, Thomas E., Chicago, Ill. Spring bed-bottom	442,236	Dec. 9	948	250	53	1456
O'Brien, Thomas E., Chicago, Ill. Spring bed-bottom	442,237	Dec. 9	949	251	53	1456
O'Brien, William T., Rolling Prairie, Ind. Collar-pad	439,678	Nov. 4	78	21	53	623
O'Connell, James. (See Edwards, Charles L., assignor.)						
O'Connell, Joseph J., Chicago, Ill. Testing apparatus for telephone-exchange switches	420,091	Jan. 28	2170	572	50	460
O'Connell, Joseph J., Chicago, Ill. Telephone-exchange apparatus	430,747	June 24	2582	{ 632 633 }	{ 51	1997
O'Connell, Joseph J., Chicago, Ill. Telephone-exchange key-board apparatus	430,748	June 24	2589	{ 633 634 }	{ 51	1999
O'Connor, Edward L., Cincinnati, Ohio. Extension-foot	428,220	May 20	1801	452	51	1182
O'Connor, Henry P., and A. Leduc, Manistee, Mich. Saw-swaging machine	418,958	Jan. 7	482	120	50	101
O'Connor, James, assignor of one-half to J. Reynolds, New Haven, Conn. Machine for catching star-fish	436,541	Sept. 16	1826	481	52	1736
O'Connor, John J., Wellsville, N. Y. Barrel-cover	420,309	Jan. 28	2523	669	50	524
O'Connor, Patrick, assignor to J. Reynolds, New Haven, Conn. Molding-machine	438,821	Oct. 21	1776	{ 475 476 }	{ 53	351
O'Connor, Patrick, and W. T. McConnell, Youngstown, Ohio. Computing-machine	438,820	Oct. 21	1774	475	53	351
O'Connor, Peter, Goshen, Ohio. Halter	437,867	Oct. 7	297	88	53	58
O'Dell, Erie, Erie, Pa. Carpet-stretcher	430,399	June 17	2021	498	51	1882
O'Dell, Oren W., assignor of two-thirds to L. and T. P. Barnum, Fenton, Mich. Hoisting and conveying device	428,349	May 20	2008	505	51	1223
O'Doherty, Matt., et al. (See Whiteford, Robert, assignor.)						
O'Donnell, James. (See McHenry and O'Donnell.)						
O'Donnell, John P. (See Hill, Smith, and O'Donnell.)						
O'Donnell, John P. (See Smith and O'Donnell.)						
O'Donnell, John P., New Malden, county of Surrey, England. Interlocking railway point and signal levers	419,157	Jan. 7	762	202	50	151

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O'Donnell, John P., New Malden, county of Surrey, England. Apparatus for working railway signals and switches	423,878	Mar. 18	2282	602	50	1585
O'Grosky, Ernst, Owatonna, Minn. Disintegrating pine-needles	436,007	Sept. 9	967		52	1567
O'Halloran, Eugene E., Waipawa, New Zealand. Apparatus for drafting patterns for garments	431,781	July 8	1178	{ 294 295 }	52	239
O'Hara, Charles E., <i>et al.</i> (See Carpenter, James H., assignor.)						
O'Hara, Daniel, administrator. (See Woerd, Charles V.)						
O'Hara, Daniel, assignor to American Waltham Watch Company, Waltham, Mass. Manufacture of watch-case centers	432,761	July 22	2701	691	52	545
O'Hara, Daniel, assignor to American Waltham Watch Company, Waltham, Mass. Chain-guard for watch-bows	432,762	July 22	2702	691	52	546
O'Hara, Daniel, assignor to American Waltham Watch Company, Waltham, Mass. Watch-case	433,693	Aug. 5	372	95	52	829
O'Hara, Daniel, Waltham, Mass., assignor to American Waltham Watch Company. Watch-case hinge	433,765	Sept. 2	596	158	52	1489
O'Hara, Walter W., Toronto, Canada. Combined splash-back and towel-rack	439,846	Nov. 4	326	83	53	671
O'Hara, Walter W., Boston, Mass., assignor to Carter & Company, Limited, Niagara Falls, N. Y. Manifold memorandum-book	442,328	Dec. 9	1091	286	53	1481
O'Hare, Hugh, assignor to J. F. Leech, Mount Pleasant, Iowa. Road-scraper	435,365	Aug. 26	2988	792	52	1360
O'Hara, Frank C., Plain City, Ohio. Corn cutting and shocking machine	431,615	July 8	893	223	52	186
O'Haver, Edward F., Carbondale, Ill. Car-coupling	438,443	Oct. 14	1172	317	53	230
O'Keefe, Andrew, New York, N. Y. Latch	429,150	June 3	64	17	51	1484
O'Kelly, James M., assignor of one-half to G. D. Bayand, New York, N. Y. Coin-lock for weighing-scales	419,544	Jan. 14	1333	356	50	280
O'Leary, Dennis, San Bernardino, Cal. Ventilator and center-piece for ceilings	420,542	Feb. 4	162	40	50	595
O'Leary, Jeremiah J., Worcester, Mass. Boat-seat	430,218	June 17	1705	424	51	1821
O'Leary, Michael J., Green Bay, Wis. Steam-boiler	443,786	Dec. 30	3513	901	53	1978
O'Leary, Timothy, New York, N. Y. Forging-die	435,855	Sept. 2	732	196	52	1516
O'Mahoney, Ellen. (See Mahoney, Thomas O., assignor.)						
O'Marra, Patrick A., Kingston, N. Y. Paper-weighing scales and desk-ruler combined	440,959	Nov. 18	2137	553	53	1035
O'Meara, Jeremiah, New York, N. Y. Electric steam-generator	419,282	Jan. 14	951	251	50	201
O'Meara, Jeremiah, New York, N. Y. Electric damper-regulator	443,716	Dec. 30	3406	875	53	1957
O'Meara, John U. (See Dieterich, Fred G., assignor.)						
O'Meara, Patrick, West Bend, Wis. Transplanter	433,957	Aug. 12	770	200	52	917
O'Neil, Frank. (See Henery, William, assignor.)						
O'Neil, James C., <i>et al.</i> (See Thompson, Robert W., assignor.)						
O'Neil, John, New York, N. Y. Self-registering ship's log	441,578	Nov. 25	3151	810	53	1235
O'Neil, John, New York, N. Y. Apparatus for and method of registering and indicating the course and position of marine vessels	441,579	Nov. 25	3152	{ 810 811 812 }	53	1235
O'Neil, John A., New Britain, Conn. Brush	435,766	Sept. 2	597	159	52	1490
O'Neil, Joseph, Taylorstown, Pa. Automatic check for oil-wells	429,317	June 3	328	77	51	1533
O'Neil, William, Glade, Pa. Ejector for oil-wells	425,624	Apr. 15	1820	487	51	372
O'Neill, Augustus J., and H. Reinhart, Butte City, Mont. Wrench	440,435	Nov. 11	1271	328	53	861
O'Neill, Charles, and J. Linstrom, Galesburg, Ill. Combined lawn-rake and grass-carrier	432,168	July 15	1778	457	52	361
O'Neill, Henry G., Louisville, Ky., assignor of three-fourths to Standard Recorder Company, of New York. Recording-machine	435,318	Aug. 26	2907	{ 770 771 772 }	52	1345
O'Neill, James J., Boston, Mass. Harness-support	433,998	Aug. 12	826	217	52	926
O'Neill, John, assignor to W. E. Jones, Cleveland, Ohio. Can-spout	440,052	Nov. 4	646	173	53	734
O'Neill, Robert, Charlevoix, Mich. Automatic gill-net puller	423,627	Mar. 18	1904	{ 502 503 504 505 }	50	1513
O'Quinn, Bryant J., Kissimmee, Fla. Door-securer	435,589	Sept. 2	320	89	52	1437
O'Shaughnessy, Frank T., Camden, N. J. Toy puzzle	426,569	Apr. 29	3251	853	51	669
O'Shea, Dennis, <i>et al.</i> (See Merrow and Sanborn, assignors.)						
O'Shea, John, Jr., <i>et al.</i> (See Merrow and Sanborn, assignors.)						
O'Shea, John S. (See Wilson, William T., assignor.)						
O'Shea, Joseph M., <i>et al.</i> (See Ashmead, Seely W., assignor.)						
O'Sullivan, Michael, <i>et al.</i> (See Whiteford, Robert, assignor.)						
O'Toole, Patrick H., Chicago, Ill. Window-cleaner	427,896	May 13	1330	{ 335 336 }	51	1081
Oakes, F. S., <i>et al.</i> (See Warner, Marcellus K., assignor.)						
Oakes, Francis J. (See Scully, Thomas, assignor.)						
Oakes, Francis J., Astoria, N. Y. Feed-water heater	419,213	Jan. 14	853	224	50	183
Oakley, Frederick, Toronto, Ontario, Canada. Toy	420,463	Feb. 4	63	14	50	576
Oakley, Nelson C., Deposit, N. Y. Meat-knife	420,090	Jan. 28	2170	572	50	460
Oakman, Joseph C. (See Brown, John, assignor.)						
Oakman, Samuel, Melrose, Mass. Insulator	430,296	June 17	1861	457	51	1850
Oakman, Samuel, Melrose, Mass. Electric insulator	434,879	Aug. 19	2208	578	52	1207
Oaks, William A. C., assignor to Goodell Company, Antrim, N. H. Fork-guard	424,021	Mar. 25	2512	668	50	1636
Oaks, William A. C., assignor to Goodell Company, Antrim, N. H. Fruit-parer	434,398	Aug. 12	1451	378	52	1051
Oath, Charles, Jr., Mount Vernon, Ind. Corn-sheller	422,035	Feb. 25	2331	616	50	1031
Oatman, Charles D., Brooklyn, N. Y. Signal-lantern	425,244	Apr. 8	1243	331	51	251
Oatman, Charles D., Brooklyn, N. Y. Nozzle for bags or pouches	430,746	June 24	2581	632	51	1997
Obach, Theobald, Vienna, Austria-Hungary. Cable-gripping mechanism	423,803	Mar. 18	2168	573	50	1563
Ober, George H., Chagrin Falls, Ohio. Lathe for turning wood	433,023	July 29	3113	{ 798 799 }	52	630
Oddie, Philip F. (See Skinner, Henry, assignor.)						
Odell, Hiram B. (See Tathill, Daniel S., assignor.)						
Odell, John B., Chicago, Ill. Valve-controller	426,466	Apr. 29	3100	813	51	640
Odell, John B., Chicago, Ill. Street-railway car-truck	431,072	July 1	67	16	52	15
Odell, John B., Chicago, Ill. Electric apparatus for railways	433,210	July 29	3396	878	52	686
Odell, John B., Chicago, Ill. Mechanism for effecting the movements of ships' rudders	435,608	Sept. 2	346	96	52	1442
Odell, John B., assignor of one-half to H. N. May, Chicago, Ill. Electric-railway apparatus	425,388	Apr. 8	1456	390	51	291
Odell, John B., assignor to Printing Telegraph Company of Illinois, Chicago, Ill. Recording-telegraph	434,880	Aug. 19	2209	{ 578 579 580 581 582 583 }	52	1208
Odell, John B., assignor to Printing Telegraph Company of Illinois, Chicago, Ill. Printing-telegraph	434,881	Aug. 19	2224	{ 583 584 585 }	52	1210

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Odell, John B., assignor to Printing Telegraph Company of Illinois, Chicago, Ill. Printing-telegraph.....	436,740	Sept. 16	2126	{ 559 560 561 }	52	1795
Odell, John B., assignor of two-thirds to H. N. May and N. S. Jones, Chicago, Ill. Machine for perforating strips for use in automatic type-setting apparatus.....	431,280	July 1	376	94	52	76
Odell, John B., assignor of two-thirds to H. N. May and N. S. Jones, Chicago, Ill. Type-setting machine.....	434,942	Aug. 26	2351	622	52	1241
Odell, Levi J., Lake Geneva, Wis. Type-writing machine.....	437,791	Oct. 7	186	58	53	37
Oden, Andrew A. (See Rogers and Oden.)						
Odenbrett, John H., Chicago, Ill. Corset.....	436,431	Sept. 16	1644	432	52	1703
Odenheimer, Sigmund, New Orleans, La. Machine for winding bagging.....	420,354	Jan. 28	2585	687	50	535
Odkolek, Adolf, Vienna, Austria-Hungary. Magazine fire-arm.....	422,327	Feb. 25	2794	735	50	1116
Oeburg, Friedrich W., New York, N. Y. Wagon-brake.....	423,695	Mar. 18	2022	{ 533 534 }	50	1535
Oechelhaeuser, Wilhelm von, Dessau, Prussia, Germany. Operating gas-engines.....	440,922	Nov. 18	2075	536	53	1023
Oehlecker, Heinrich C. F., Hamburg, Germany. Tooth-pick.....	435,350	Aug. 26	2967	787	52	1356
Oefinger, John, and B. F. Butler, Greenfield, Mass. Harmonica.....	443,607	Dec. 30	3232	831	53	1926
Oehrle, George F., Monongahela City, Pa. Fire-escape.....	439,976	Nov. 4	537	141	53	712
Oehrle Bros. & Co. (See Oehrle, William E., assignor.)						
Oehrle, William E., Philadelphia, Pa., assignor to Oehrle Bros. & Co. Electric conductor.....	436,432	Sept. 16	1645	432	52	1703
Oelkuck, Edward, East Hartford, Conn. Harness-pad.....	441,253	Nov. 25	2641	666	53	1138
Oellig, Lewis A. (See Bridenbaugh and Oellig.)						
Oesterling, Charles, Barnhart's Mill, Pa. Gate.....	438,939	Oct. 21	1956	522	53	384
Oeters, John C., et al. (See Künzel, Charles A., assignor.)						
Ortzmann, Frederick A., London, England. Dish.....	433,539	Aug. 5	136	39	52	784
Office Specialty Manufacturing Company. (See Jewell, Charles E., assignor.)						
Office Specialty Manufacturing Company. (See Jewell, Major R., assignor.)						
Office Specialty Manufacturing Company. (See Yawman, Philip H., assignor.)						
Offner, John A., assignor of one-fourth to A. J. Abrams, Baltimore, Md. Support for fire-hose.....	443,460	Dec. 23	2994	769	53	1871
Ofutt, Milton W. (See McBlair, Charles R., assignor.)						
Ogden, George H., assignor of one-third to C. S. Britton, Cleveland, Ohio. Cover for way-bills, &c.....	418,815	Jan. 7	233	57	50	50
Ogden, William, Clay Centre, Kans. Cord-holder for grain-binders.....	420,092	Jan. 28	2175	572	50	460
Ogden, William J., Baltimore, Md. Furnace-grate.....	421,963	Feb. 25	2237	568	50	1014
Ogden, William W., et al. (See Horne, Samuel E., assignor.)						
Ogilvy, George H., New York, N. Y. Wire-link cable.....	429,174	June 3	102	24	51	1492
Ogilvy, George H., New York, N. Y. Compound tubular shafting.....	429,175	June 3	103	24	51	1492
Ogle, George W., Morgan Park, Ill. Breech-loading fire-cracker pistol.....	427,356	May 6	496	127	51	909
Ohio Rake Company. (See Little, Peter E., assignor.)						
Ohl, George A., Newark, N. J. Rolling shutter or blind.....	433,694	Aug. 5	374	95	52	829
Ohlinger, Frederick W., Haines City, Fla. Irrigator.....	434,834	Aug. 19	2135	559	52	1193
Ohlson, Magnus, Chicago, Ill. Railway-car.....	441,629	Nov. 25	3237	835	53	1253
Ohm, Charles H., San Francisco, Cal. Railway-switch.....	423,944	Mar. 25	2388	635	50	1613
Ohmer, Michael, Dayton, Ohio. Finishing house interiors.....	432,553	July 22	2357	608	52	480
Ohmer, Wilfred I., Dayton, Ohio. Cabinet.....	423,625	Mar. 18	1901	502	50	1512
Ohmer, Wilfred I., Dayton, Ohio. Cabinet.....	425,822	Apr. 15	2109	564	51	428
Ohmer, Wilfred I., Dayton, Ohio. Cabinet.....	425,823	Apr. 15	2110	564	51	428
Ohmer, Wilfred I., Dayton, Ohio. Cabinet.....	425,824	Apr. 15	2112	564	51	429
Ohmer, Wilfred I., Dayton, Ohio. Document-file.....	425,825	Apr. 15	2114	565	51	429
Ohmer, Wilfred I., Dayton, Ohio. Catch for file-cabinets.....	425,997	Aug. 12	825	217	52	926
Ohmer, Wilfred I., assignor to M. Ohmer's Sons, Dayton, Ohio. Combined letter-file and binding-case.....	440,646	Nov. 18	1613	415	53	937
Ohmer's Sons, M. (See Ohmer, Wilfred I., assignor.)						
Ohr, Fread G., Monroe, Mich. Running-gear.....	437,504	Sept. 30	3418	894	52	2059
Okey, Arthur S., and J. A. Scroggins, Morrisville, Mo. Car-coupling.....	421,425	Feb. 18	1465	379	50	858
Okonite Company. (See Candee, Willard L., assignor.)						
Okonite Company. (See Cheever, John H., assignor.)						
Okonite Company. (See Parmelee, Dubois D., assignor.)						
Olcuse, Charles F., Chicago, Ill. Window attachment.....	420,956	Feb. 11	796	{ 206 207 }	50	723
Olcott, William W., assignor to C. S. Dakin, Buffalo, N. Y. Buckle.....	430,785	June 24	2645	649	51	2011
Oldenbusch, Ernst, assignor to W. Schimper & Co., New York, N. Y. Hinged cover for purses.....	426,951	Apr. 29	3808	993	51	777
Oldenbusch, Ernst, assignor to W. Schimper & Co., New York, N. Y. Snap-lock for pocket-books.....	427,790	May 13	1162	291	51	1050
Oldenbusch, Ernst, Jersey City, N. J., assignor to W. Schimper & Co., New York, N. Y. Bag-lock.....	441,439	Nov. 25	2940	757	53	1195
Olds, Charles H., Sayre, Pa. Car-coupling.....	424,655	Apr. 1	336	87, 88	51	65
Olds, Henry G., Fort Wayne, Ind. Fifth-wheel for vehicles.....	437,505	Sept. 30	3420	894	52	2059
Olin, Fred C., Buffalo, N. Y. Balanced governor-valve.....	443,107	Dec. 23	2403	613	53	1756
Olin, Fred C., assignor of one-half to Danforth & Clark, Buffalo, N. Y. Steam pump and motor.....	426,511	Apr. 29	3163	{ 831 832 }	51	652
Olin, Fred H., et al. (See Madison, Frank S., assignor.)						
Olin, William F., Chicago, Ill. Grain-binding harvester.....	434,521	Aug. 19	1645	431	52	1097
Olinger, G. C. (See Walter, William, assignor.)						
Oliphant, David S., Toronto, Canada. Marking textile fabrics.....	443,375	Dec. 23	2866		53	1846
Olivarius, De Fine, New York, N. Y. Combined sash and belt.....	437,340	Sept. 30	3143	822	52	2003
Oliver, Andrew J., and R. M. Wren, Oakland, Cal. Wagon-jack.....	428,350	May 20	2011	506	51	1223
Oliver, Doctor F., San Francisco, Cal. Hay-ricker.....	436,741	Sept. 16	2134	562	52	1796
Oliver, Doctor F., Oakland, assignor to T. Hooker & Co., San Francisco, Cal. Vehicle-seat.....	439,325	Oct. 28	2585	690	53	510
Oliver, Garritt H., and E. L. Brooks, Chicago, Ill., assignors of one-fourth to R. S. Hobbs, Brooklyn, N. Y. Bottle-stopper.....	429,579	June 3	721	175	51	1610
Oliver, Henry W., New York, N. Y. Folding T-square.....	430,809	June 24	2693	{ 659 660 }	51	2019
Oliver, Horace M., et al. (See Boris, Pierre J., assignor.)						
Oliver, James, and C. Anderson, assignors to South Bend Iron Works, South Bend, Ind. Molding-flask.....	433,361	July 29	3606	930	52	729
Oliver, Moses W., Lawrence, Mass. Railway-rail support.....	426,050	Apr. 22	2473	654	51	504
Oliver, Moses W., Lawrence, Mass. Railway.....	426,051	Apr. 22	2474	654	51	504
Oliver, Moses W., Lawrence, Mass. Railway.....	426,052	Apr. 22	2476	654	51	504
Oliver, Thomas. (See Heisey and Oliver.)						
Olivieri, Leonida, Chicago, Ill. Surgical instrument.....	442,386	Dec. 9	1175	305	53	1497

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Olmstead, Chauncey L., West Brookfield, Mass. Corset.....	430,876	June 24	2790	684	51	2037
Olmstead, Chauncey L., West Brookfield, Mass. Corset.....	438,858	Oct. 21	1843	490	53	362
Olmsted, David, assignor of one-half to W. H. Semon, Minneapolis, Minn. Coin-controlled postage-stamp machine.....	427,005	Apr. 29	3892	1016	51	792
Olmsted, David, Minneapolis, Minn., assignor of one-half to W. E. Allington, East Saginaw, Mich., and W. H. Curtis, Chicago, Ill. Coin-operated vending device.....	435,901	Sept. 2	817	{ 216 217 }	{ 52 52 }	1533
Olney, William D., Waltham, Mass. Apparatus for testing watch-balances.....	429,699	June 10	902	220	51	1656
Olney, William D., assignor to American Waltham Watch Company, Waltham, Mass. Device for testing watch-balances.....	422,616	Mar. 4	380	{ 94, 95 168 169 }	{ 50 52 }	1209
Olpherts, Wybrants G., London, England. Chair-sleeper for railways.....	433,875	Aug. 5	651	{ 168 169 }	{ 52 52 }	884
Olsen, Engelbrecht, assignor to J. Broughton, Walkerville, Mont. Device for cleaning, sifting, and stemming fruit.....	438,940	Oct. 21	1957	522	53	384
Olsen, Lewis, and N. E. Burns, River Falls, Wis. Metal-working machine.....	420,827	Feb. 4	582	150	50	675
Olsen, Tinius. (See Vedøe, August, assignor.)						
Olson, Andrew B., Kansas City, Mo. Corn-popper.....	428,626	May 27	2420	615	51	1321
Olson, Andrew G., and J. S. Lindquist, Swedeburg, Nebr. Draft-tug.....	419,545	Jan. 14	1335	357	50	281
Olson, Charles J., assignor of one-half to C. Larsen, Chicago, Ill. Feed mechanism for wood-working machines.....	428,284	May 20	1910	481	51	1203
Olson, John A., et al. (See Carlson, Carl, assignor.)						
Olson, Nils, Superior, Wis. Brick-protector.....	432,430	July 15	2155	555	52	431
Olzendam, A. P., et al. (See Young, Charles H., assignor.)						
Omer, Wilson, Cainsville, Mo. Motor for churns.....	436,992	Sept. 23	2589	677	52	1890
Omstead, David J., assignor of one-half to L. F. La Selle, Beatrice, Nebr. Means for reversing the motion of fans.....	439,036	Oct. 21	2101	563	53	413
Oncken, Gustav A., Jackson, Mich. Stave-cutting machine.....	423,626	Mar. 18	1903	502	50	1512
Oncken, Gustav A., Frankenthal, Bavaria, Germany. Wood-working machinery.....	420,886	Feb. 4	685	{ 176 177 363 364 }	{ 50 52 }	692
Oncken, Gustav A., Frankenthal, Bavaria, Germany. Machine for cutting veneers.....	431,952	July 8	1431	{ 176 177 363 364 }	{ 52 52 }	288
Oncken, Gustav A., Frankenthal, Bavaria, Germany. Furnace or appliance for burning or drying barrels.....	433,876	Aug. 5	852	169	52	884
Oncken, Gustav A., Frankenthal, Germany. Veneer and board cutting machine.....	437,039	Sept. 23	2657	{ 694 695 }	{ 52 52 }	1905
Oneida Community. (See Ellis, Ferrand F., assignor.)						
Oneida Community. (See Kelley, Harry E., assignor.)						
Ongley, Charles E., New York, N. Y. Non-interfering signaling system.....	443,725	Dec. 30	3421	{ 878 879 }	{ 53 53 }	1960
Ongley, Charles E., New York, N. Y. Electrical signal system.....	443,726	Dec. 30	3424	879	53	1961
Ongley, Charles E., New York, N. Y. Electric valve-controller.....	443,789	Dec. 30	3521	903	53	1980
Ongley, Charles E., Yonkers, N. Y. Watchman's electric time-recorder.....	443,787	Dec. 30	3514	{ 901 902 903 904 }	{ 53 53 53 53 }	1979
Ongley, Charles E., Yonkers, N. Y. Electric protective and signaling system.....	443,790	Dec. 30	3522	{ 903 904 }	{ 53 53 }	1981
Ongley, Charles E., Yonkers, assignor to himself, and T. W. Robertson, New York, N. Y. Electric fire-alarm and extinguishing apparatus.....	429,318	June 3	329	78	51	1533
Ongley, Charles E., assignor of one-half to T. W. Robertson, New York, N. Y. Electrical fire alarm and extinguishing system.....	443,724	Dec. 30	3418	878	53	1959
Ongley, Charles E., assignor of one-half to T. W. Robertson, New York, N. Y. Safety device for dynamo-stations.....	443,727	Dec. 30	3426	880	53	1961
Ongley, Charles E., assignor of one-third to T. W. Robertson, New York, N. Y. Watchman's electric time-recorder.....	443,788	Dec. 30	3518	{ 902 903 904 }	{ 53 53 53 }	1980
Ongley, Eugen, Memel, Prussia, Germany. Elastic chain-link.....	427,605	May 13	874	{ 219 220 }	{ 51 51 }	993
Onzon, Francois P., San Antonio, Tex. Car-coupling.....	438,484	Oct. 14	1228	333	53	242
Ondyke, Stacy B., New Haven, Conn. Eyeglasses.....	426,625	Apr. 29	3338	875	51	687
Oplinger, William H., Wadsworth, Ohio. Flange for stove-pipes.....	431,754	July 8	1139	284	52	232
Oppen, Ole K., Eaton, Wis. Harrow.....	419,158	Jan. 7	764	202	50	159
Oppenheim, Louis, assignor to S. Oppenheim, New York, N. Y. Folding bed.....	436,723	Sept. 16	2100	552	52	1790
Oppenheim, Louis, assignor to S. Oppenheim, New York, N. Y. Extension-table.....	442,997	Dec. 16	2199	566	53	1710
Oppenheim, Sarah. (See Oppenheim, Louis, assignor.)						
Oppenheimer, Oscar, Philadelphia, Pa. Suspender-buckle.....	443,258	Dec. 23	2674	686	53	1809
Oram, John W., Baltimore, Md. Whitewash-brush.....	430,877	June 24	2791	684	51	2038
Orbeton, Louisa A. (See Orbeton, William W. S., assignor.)						
Orbeton, William W. S., Saugus, assignor to L. A. Orbeton, Chelsea, Mass. Sash-balance.....	441,019	Nov. 18	2218	573	53	1051
Orcutt, Charles H., assignor of one-half to Clark Chemical Works, Springfield, Ohio. Folding chair.....	442,591	Dec. 9	1503	387	53	1564
Orcutt, Edward L., Somerville, Mass. Electric connector.....	434,943	Aug. 26	2353	623	52	1241
Orcutt, William, Abilene, Kans. Window-washer.....	419,871	Jan. 21	1844	484	50	386
Ord, Craven R., Montreal, Canada. Air-pump governor.....	442,492	Dec. 9	1344	346	53	1532
Ordner, Joseph F., assignor of two-thirds to W. E. Burns and F. W. Torreyson, McKeesport, Pa. Tag.....	423,177	Mar. 11	1246	324	50	1381
Ordner, Leo, New York, N. Y. Paper-file.....	428,937	May 27	2895	740	51	1413
Ordway, Oscar H., Mattapoisett, Mass. Spring rocking-chair.....	426,053	Apr. 22	2477	655	51	505
Orem, Frederick S., Baltimore, Md. Train-signal.....	440,053	Nov. 4	647	173	53	734
Orendorff, Oliver H. and W. A., Bloomington, Ill. Bridle-bit.....	441,505	Nov. 25	3041	782	53	1214
Orendorff, William A. (See Orendorff, Oliver H. and W. A.)						
Orford, John M. (See Norton, John A., assignor.)						
Orford, John M. (See Platt and Orford.)						
Orlikowski, Frank. (See Buettner and Orlikowski.)						
Ormsbee, John M., et al. (See Drodzewski, Julius R., assignor.) (Reissue.)						
Ormsby, Alexander, assignor of one-half to H. Eberhart, Buffalo, N. Y. Stop-cock box.....	420,413	Jan. 28	2667	707	50	551
Ormsby, John H., Bolton Landing, N. Y. Holdback for vehicles.....	427,694	May 13	1327	334	51	1080
Ormsby, William D., Waltham, Mass. Machine for grinding spherical balls.....	422,966	Mar. 11	922	{ 243 244 }	{ 50 50 }	1320
Orndorf, H. W., et al. (See Shaw, Oliver H., assignor.)						
Orne, Edward T., Chicago, Ill. Speaking-tube.....	425,046	Apr. 8	949	253	51	191
Orpin, James H. (See Crosby, John B., assignor.)						
Orr, Alexander, Glasgow, county of Lanark, Scotland. Making white lead.....	428,017	May 13	1506		51	1116
Orr, Frank, East Springfield, Ohio. Grain-meter.....	442,134	Dec. 9	798	215	53	1426
Orr, James A., Dubuque, Iowa. Jacket.....	429,344	Mar. 25	2988	795	50	1727
Orr, James P., Pittsburg, Pa. Crossing for cable railways.....	429,547	Oct. 28	2913	775	53	572
Orr, Jesse, assignor to Reading Stove Works, Orr, Painter & Co., Reading, Pa. Ash-sifter.....	420,414	Jan. 28	2668	707	50	551
Orr, Thomas W., Jonesborough, Ga. Grain-cradle.....	424,899	Apr. 1	721	192	51	139

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Orr, Walker P., assignor of one-half to W. P. Harwell, Bradshaw, Tenn. Carpenter's gage.	436,101	Sept. 9	1116	290	52	1595
Orr, William, Trenton, N. J. Metallic lathing	425,245	Apr. 8	1245	{ 331 332 }	51	252
Orr, William, assignor to New Jersey Wire Cloth Company, Trenton, N. J. Cotton-bale cover	443,619	Dec. 30	3248	{ 834 835 }	53	1928
Orr, William, assignor to New Jersey Wire Cloth Company, Trenton, N. J. Cotton-bale cover	443,620	Dec. 30	3251	835	53	1929
Orr, William A. (See Reynolds and Orr.)						
Orrick, Nicholas C., Canton, Miss. Harrow and cultivator	419,214	Jan. 14	854	224	50	183
Orswell, George B., Mitchell, S. D. Carpenter's tool	436,542	Sept. 16	1827	481	52	1736
Orth, Henry, administrator. (See Broncs, Bela.)						
Ortmayer, Carl G., Chicago, Ill. Horse-collar fastener	431,394	July 1	555	139	52	112
Orvis, Orland D. (See Bower, John F., assignor.)						
Osborn, Arthur T., et al. (See Darrow, Charles E., assignor.)						
Osborn, Benjamin F., Nora, Ind. Breeding-pen for swine	436,902	Sept. 23	2466	643	52	1866
Osborn, David L., assignor to H. Meschle, Kansas City, Mo. Stove-pipe damper	428,129	May 20	1678	425	51	1158
Osborn, Frederick G., Newark, N. J., assignor to E. Faber, New York, N. Y. Ruler	426,138	Apr. 22	2610	686	51	532
Osborn, George L. (See Armstrong, Bigelow, and Osborn.)						
Osborn, Henry R., et al. (See Danks, Frank, assignor.)						
Osborn, Rufus, Tekonsha, Mich. Railway-tie	439,174	Oct. 28	2320	622	53	461
Osborn, Samuel, Wilton, Conn. Checking and unchecking device	422,617	Mar. 4	383	95	50	1209
Osborn, William A. (See Leever, George W., assignor.)						
Osborn, William B., Clarksburg, W. Va. Steam-engine	428,729	May 27	2592	657	51	1352
Osborn, William E., et al. (See Darrow, Charles E., assignor.)						
Osborne, Abel C., assignor to A. E. Kirby, trustee, East Saginaw, Mich. Barber's appliance	427,241	May 6	338	87	51	877
Osborne, Charles R., Danbury, Conn. Type-writing machine	427,791	May 13	1163	{ 291 292 }	51	1050
Osborne & Cheesman Company. (See Kelly, Fergus, assignor.)						
Osborne & Cheesman Company. (See Kennedy, John, assignor.)						
Osborne & Company, D. M. (See Salzmann, Christian H., assignor.)						
Osborne, Frank S., Chicago, Ill. Photographic-negative-film holder	426,054	Apr. 22	2478	655	51	505
Osborne, John W., Washington, D. C. Making matrices	436,314	Sept. 9	1439	375	52	1657
Osborne, John W., Washington, D. C., assignor, by mesne assignments, to Pneumatic Dynamite Gun Company, of New York. Valve for pneumatic cannon	427,895	May 13	1328	335	51	1080
Osborne, John W., Washington, D. C., assignor of one-third to C. Edelman, Philadelphia, Pa. Papier-maché-matrix-drying apparatus	440,923	Nov. 18	2078	537	53	1023
Osborne, William, Brooklyn, assignor, by mesne assignments, to F. S. M. Blun, New York, N. Y. Pointed knit fabric	420,695	Feb. 4	374	99	50	638
Osgood, Charles M., Amherst, Mass. Device for pressing hats	421,190	Feb. 11	1142	292	50	789
Osgood, Frank L., Bangor, Me. Lathe-dog	435,945	Sept. 9	881	231	52	1551
Osgood, Irving, Ellsworth, Me. Snow-plow	424,616	Apr. 1	277	72	51	56
Osgood, James H. (See Hall, Walter S., assignor.)						
Osgood, Joseph H., Peabody, Mass. Type-writing machine	423,945	Mar. 25	2391	636	50	1613
Osgood, Miles D., Cincinnati, Ohio. Device for cleaning flues	423,268	Mar. 11	1383	361	50	1405
Osius, George. (See Stroh and Osius.)						
Osmer, William H., St. Louis, Mo. Horse-boot	421,964	Feb. 25	2238	589	50	1014
Osmundson, Gabriel S., Renville, Minn. Car-coupling	429,151	June 3	65	17	51	1485
Ostermann, Carl, Bremen, Germany. Adjustable drying-frame for matrices or molds for stereotypes	436,925	Sept. 23	2504	655	52	1874
Ostrom, Freeland W. (See Dial and Ostrom.)						
Ostrom, Freeland W., Bridgeport, Conn. Gaging attachment for button-hole-stitching machines	419,283	Jan. 14	953	251	50	202
Ostrom, Freeland W., Bridgeport, Conn. Die for compressing soap around an anchor	434,031	Aug. 12	867	228	52	935
Ostrom, Freeland W., Bridgeport, Conn. Securing anchors within cakes of soap	435,946	Sept. 9	882	231	52	1551
Ostrom, Freeland W., Bridgeport, Conn. Anchor attachment for soap-cakes	436,490	Sept. 16	1735	458	52	1721
Ostrom, Freeland W., Bridgeport, Conn. Device for attaching soap cakes to chains	439,175	Oct. 28	2321	623	53	461
Ostrom, Freeland W., Bridgeport, Conn. Cutting mechanism for button-hole sewing-machines	439,679	Nov. 4	79	21, 22	53	623
Ostrom, Freeland W., Bridgeport, Conn. Sewing-machine	439,680	Nov. 4	83	22, 23	53	624
Ostrom, Freeland W., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Cutting mechanism for button-hole sewing-machines	430,786	June 24	2646	649	51	2011
Ostrom, Freeland W., assignor to Wheeler and Wilson Manufacturing Company, Bridgeport, Conn. Mechanism for stitching and cutting button-holes	431,527	July 1	762	190	52	152
Oswald, Joseph, assignor to Harris, Oswald & Noble, San Francisco, Cal. Sprinkler	425,340	Apr. 8	1383	368	51	278
Oswald, Richard W., Bloomsburg, Pa. Manufacturing chilled car-wheels	422,435	Mar. 4	104	28	50	1157
Oswell, William, Akron, Ohio. Chair	437,235	Sept. 30	2978	778	52	1972
Otis, Benjamin H., assignor of one-half to N. M. Case, Joplin, Mo. Gate	419,546	Jan. 14	1336	357	50	281
Otis Brothers & Company. (See Blanchard, Silas W., assignor.)						
Otis Brothers & Company. (See Smith, Randolph C., assignor.)						
Otis Brothers & Company. (See Venn, Isaac H., assignor.)						
Otis, Charles H., assignor to Smyth Manufacturing Company, Hartford, Conn. Needle and cast-off for book-sewing machines	435,609	Sept. 2	349	97	52	1442
Otis, Charles R., Yonkers, N. Y., assignor to Hydraulic Elevator Company, Chicago, Ill. Hydro-pneumatic elevator	418,875	Jan. 7	344	83, 84	50	72
Otis, Clark, Farmer Village, N. Y. Steam-boiler	437,040	Sept. 23	2639	695	52	1905
Otis & Gorsline. (See English, Albert R., assignor.)						
Otis, James C., et al. (See Walter, David C., assignor.)						
Otis, Norton P. (See Underwood, Walter H., assignor.)						
Otis, Samuel G., Springfield, and C. F. Peirce, Lynn, Mass.; said Peirce assignor to said Otis. Fire-extinguisher	429,053	May 27	3078	795	51	1448
Otis, Samuel L., Amsterdam, N. Y. Interrupt-feed mechanism for knitting-machines	429,319	June 3	330	78	51	1533
Otis, Willard D., Blue Springs, Nebr. Calculator	421,108	Feb. 11	1018	261	50	766
Ott, Charles F. X., Cornwall, Canada. Cloth-napping machine	437,715	Oct. 7	56	17, 18	53	14
Ott, Frederick, Gloucester City, N. J. Napped cotton fabric	435,445	Sept. 2	100	28	52	1394
Ott, Genisa, Scotia, Nebr. Heating-drum	431,782	July 8	1181	295	52	239
Ott, John F., Orange, N. J. Speed-varying mechanism	434,882	Aug. 19	2929	585	52	1210
Ott, Louis, Harrisburg, Pa. Gas-cock	441,190	Nov. 25	2513	649	53	1117
Ott, Philipp, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Prussia, Germany. Azo dye	423,569	Mar. 18	1816	.....	50	1496
Ott, Samuel A. (See Brodsky and Ott.)						
Ott, William F. (See Fowler and Ott.)						
Ottawa Glass Company. (See Zellers, Theodor A., assignor.)						
Otten, John H., Milwaukee, Wis. Endless conveyer	437,506	Sept. 30	3421	895	52	2059

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Ottman, William, assignor to Chicago Bank Note Company, Chicago, Ill. Production of prints on triangular sheets.....	424,813	Apr. 1	590	156	51	114
Ottman, William H., <i>et al.</i> (See Ennis, Henry J., assignor.)						
Otto, Emil, Magdeburg, Prussia, Germany. Spirit-burner.....	431,395	July 1	556	139	52	113
Otto, Gustav, Jersey City, N. J. Hypodermical syringe.....	422,436	Mar. 4	105	29	50	1157
Otto, Gustav, Jersey City, N. J. Syringe.....	422,437	Mar. 4	106	29	50	1157
Otto, Henry, Bloomington, Ill. Wind-motor.....	419,345	Jan. 14	1054	279	50	223
Otto, Nicolaus A., Cologne, Prussia, assignor to Gas-Motoren-Fabrik-Deutz, Deutz, Germany. Igniting apparatus for gas or oil motor engines.....	424,345	Mar. 25	2988	795	50	1727
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Deutz-on-the-Rhine, Germany. Apparatus for regulating the speed of gas or oil motor engines.....	425,692	Apr. 15	1927	513	51	392
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Motor-engine worked by oil-vapor.....	433,806	Aug. 5	551	143	52	864
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Motor-engine worked by oil-vapor.....	433,807	Aug. 5	554	143	52	864
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Apparatus for governing gas or petroleum motor engines.....	433,808	Aug. 5	557	144	52	865
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Gas or oil motor engine.....	433,809	Aug. 5	558	145	52	865
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Gas or oil motor engine.....	433,810	Aug. 5	559	145	52	865
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Gas or oil motor engine.....	433,811	Aug. 5	561	146	52	866
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Gas or oil motor engine.....	433,812	Aug. 5	562	146	52	866
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Gas or oil motor engine.....	433,813	Aug. 5	564	146	52	866
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Gas or oil motor engine.....	433,814	Aug. 5	565	147	52	867
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Petroleum or oil motor engine.....	437,507	Sept. 30	3421	895	52	2059
Otto, Nicolaus A., Cologne, assignor to Gas-Motoren-Fabrik-Deutz, Köln-Deutz, Germany. Gas or oil motor engine.....	437,508	Sept. 30	3423	895	52	2059
Otto & Sons, F. G. (See Colgate, Arthur E., assignor.)						
Otto, William, Newark, N. J. Razor-cleaning device.....	419,547	Jan. 14	1337	357	50	281
Oulton, Joseph, and J. Edmondson, Bradford, county of York, England. Electric meter.....	430,432	June 17	2061	508	51	1890
Ourdan & Kolb Engraving Machine, Engraving and Mercantile Company. (See Ourdan, Vincent L., assignor.)						
Ourdan & Kolb Engraving Machine, Engraving and Mercantile Company. (See Ourdan & Kolb, assignors.)						
Ourdan, Vincent L., Washington, D. C., assignor to Ourdan & Kolb Engraving Machine, Engraving and Mercantile Company, of Virginia. Engraving-machine.....	435,244	Aug. 26	2780	736	52	1323
Ourdan, Vincent L., Washington, D. C., assignor to Ourdan & Kolb Engraving Machine, Engraving and Mercantile Company, of Virginia. Engraving-machine.....	435,246	Aug. 26	2785	737	52	1324
Ourdan, Vincent L., and C. A. Kolb, Washington, D. C., assignors to Ourdan & Kolb Engraving Machine, Engraving and Mercantile Company, of Virginia. Pantograph.....	435,242	Aug. 26	2773	733	52	1321
Ourdan, Vincent L., and C. A. Kolb, Washington, D. C., assignors to Ourdan & Kolb Engraving Machine, Engraving and Mercantile Company, of Virginia. Engraving apparatus.....	435,243	Aug. 26	2775	734	52	1322
Ourdan, Vincent L., and C. A. Kolb, Washington, D. C., assignors to Ourdan & Kolb Engraving Machine, Engraving and Mercantile Company, of Virginia. Engraving-machine.....	435,245	Aug. 26	2782	736	52	1323
Outlet, John, Toronto, Canada. Till-lock.....	439,548	Oct. 28	2915	775	53	573
Overbaugh, Charles B., St. Louis, Mo. Machine for making confection-molds.....	428,513	May 20	2244	567	51	1268
Overgaard, Thomas, Sydney, New South Wales. Joint for box-edges.....	426,149	Sept. 9	1197	313	52	1608
Overholt, Abraham, Philadelphia, Pa. Scholar's companion.....	421,012	Feb. 11	884	228	50	740
Overman, Albert H. (See Watts, Samuel, assignor.)						
Overman, Albert H., Springfield, assignor to Overman Wheel Company, Chicopee Falls, Mass. Cycle-wheel.....	436,993	Sept. 23	2590	672	52	1890
Overman, Albert H., Springfield, Mass., assignor to Overman Wheel Company, Hartford, Conn. Tire for cycle-wheels.....	437,447	Sept. 30	3334	870	52	2041
Overman, Albert H., Springfield, Mass., assignor to Overman Wheel Company, Hartford, Conn. Wheel.....	438,383	Oct. 14	1083	296	53	213
Overman, Albert H., Springfield, Mass., assignor to Overman Wheel Company, Hartford, Conn. Velocipede.....	442,387	Dec. 9	1176	306	53	1498
Overman Carriage Company. (See Armstrong, Albert, assignor.)						
Overman, Charles R. (See Woodward and Overman.)						
Overman, Eugene V., Cincinnati, Ohio. Vehicle running-gear.....	420,606	Feb. 4	254	68	50	614
Overman Wheel Company. (See Bowley, Arthur S., assignor.)						
Overman Wheel Company. (See Elliott, Sterling, assignor.)						
Overman Wheel Company. (See McCarthy, Oxley, assignor.)						
Overman Wheel Company. (See Overman, Albert H., assignor.)						
Overman Wheel Company. (See Woodward, Charles E. W., assignor.)						
Overman Wheel Company. (See Woodward and Overman, assignors.)						
Overpeck, Lucien C. (See Hemsley, Alexander, assignor.)						
Overton, Jesse M. (See Seaton, Benjamin C., assignor.)						
Overton, Winfield S., Whitestone, N. Y. Pumping attachment for buoys or vessels.....	434,354	Aug. 12	1372	359	52	1035
Owen, Charles N., Mechanicsburg, Pa. Combined gleaner, binder, and swathing-machine.....	426,952	Apr. 29	3609	996	51	777
Owen, Edmund B., Jersey City, N. J. Means for attaching door-knobs to sockets.....	428,265	May 20	1912	481	51	1204
Owen, Edward A., <i>et al.</i> (See Church, Frank S., assignor.)						
Owen, Edward A., East Saginaw, Mich. Switch-board.....	424,995	Apr. 8	874	231	51	177
Owen, Frederick W. (See Eate and Owen.)						
Owen, James. (See Hewlett, Maddra J., assignor.)						
Owen, Joseph, assignor to R. W. Vining, Liverpool, England. Apparatus for receiving payment and delivering value in exchange therefor.....	428,514	May 20	2246	568	51	1268
Owen, Oliver W. (See Colby, Albert H., assignor.)						
Owen, Peter M., Bowling Green, Ky. Mosquito-bar frame.....	443,108	Dec. 23	2404	613	53	1757
Owen, Robert O., Lynchburg, Va. Automatic electric railway-signal.....	441,773	Dec. 2	229	59	53	1308
Owen, Samuel A., West Berkeley, Cal. Propulsion of vessels.....	441,965	Dec. 2	519	139	53	1365
Owen, Thomas G. (See Smith, Richmond P., assignor.)						
Owens, George, Albany, N. Y. Merchandise-package.....	422,967	Mar. 11	924	244	50	1320
Owens, George, Albany, N. Y. Trunk.....	437,716	Oct. 7	58	18	53	14

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Owens, Henry C. (See Trego, Joseph R., assignor.)						
Owens, Owen T., San Francisco, assignor to Benicia Agricultural Works, Benicia, Cal.	429,220	June 3	173	42	51	1504
Owens, Richard K. (See Evans, Thomas, assignor.)						
Owens, Samuel T., Pittsburg, Pa. Apparatus for shearing metals.	426,677	Apr. 29	3414	896	51	700
Owens, William J., assignor to Kernan Furnace Company, Utica, N. Y. Grate	440,605	Nov. 11	1546	398	53	914
Owens, William J., assignor to Kernan Furnace Company, Utica, N. Y. Grate-bar	443,461	Dec. 23	2995	770	53	1871
Owesney, Charles C. (See Owesney, Frank X. and C. C.)						
Owesney, Frank X. and C. C.; said C. C. Owesney assignor to A. J. Mealand, Canton, Ohio. Bolt-fastener	421,965	Feb. 25	2239	589	50	1014
Oxley, Walter, Hamilton, Ontario, Canada. Head and shoulder rest for beds or lounges.	428,938	May 27	2-96	740	51	1413
Ozler, Joseph D. (See Reeder, James A., assignor.)						
Ozmun, Burt L. (See Newman and Ozmun.)						
Paal, Carl, Erlanger, assignor to Kalle & Co., Biebrich, Germany. Phenylidihydroquinazoline	428,286	May 20	1913		51	1204
Paca, William S., assignor to Eastern Electric Company, Baltimore, Md. Electric annunciator-call	426,307	Apr. 22	2848	750	51	581
Pace, Jeff. D., Gibsland, La. Fire-kindler	438,558	Oct. 14	1338	363	53	264
Pace, Jeff. D., Gibsland, La. Ironing-table	441,966	Dec. 2	520	139	53	1365
Pace, Richard R., Ironaton, Ala. Cotton-copper	439,176	Oct. 28	2322	623	53	461
Paci, Giuseppe, assignor of one-half to G. Cella and E. Friedman, New York, N. Y. Machine for shelling peas	433,302	July 29	3528	910	52	713
Packard, Cyrus, Fresno, Cal. Guiding attachment for agricultural implements	421,885	Feb. 18	2129	558	50	984
Packard, Henry R., assignor of one-half to A. Field Tack Company, Taunton, Mass. Heel-nail	424,430	Mar. 25	3138	833	50	1758
Packard, James W. (See Kammer, John von der, assignor.)						
Packard, James W., New York, N. Y. Pump operating apparatus	426,417	Apr. 22	3033	794	51	618
Packard, James W., New York, N. Y., assignor to Westinghouse Electric Company, of Pennsylvania. Incandescent electric lamp	426,055	Apr. 22	2479	655	51	505
Packer, Edmund H. (See Johnson and Packer.)						
Packer, George W., Rock Falls, Ill. Racking-machine	426,056	Apr. 22	2480	655	51	505
Packer, John F., Chicago, Ill. Radiator	430,083	June 10	1495	372	51	1771
Packer, John F., assignor to D. Bradley Manufacturing Company, Chicago, Ill. Helm for plows	440,647	Nov. 18	1615	416	53	937
Packer, John F., assignor to D. Bradley Manufacturing Company, Chicago, Ill. Plow-clevis	440,648	Nov. 18	1616	416	53	938
Packer, John F., and W. H. Gaede; said Gaede assignor to J. H. Bradley, Chicago, Ill. Apparatus for heating buildings	419,969	Jan. 21	1977	520	50	414
Packer, John F., and W. H. Gaede, assignors to said Packer and J. H. Bradley, Chicago, Ill. Apparatus for heating buildings	419,994	Jan. 21	2018	534	50	421
Packham, Frank R., assignor to Superior Drill Company, Springfield, Ohio. Grain-drill	429,320	June 3	332	79	51	1534
Paddack, James R., Cincinnati, Ohio. Die for forming metal articles	422,313	Feb. 25	2770	729	50	1112
Paddock, Gustavus A., Beaver Dam, Wis. Harness-buckle	436,186	Sept. 9	1254	327	52	1619
Padfield, Harry V., Dallas, Tex. Hame-fastener	440,054	Nov. 4	649	173	53	735
Padget, George W. (See Gilmore and Padget.)						
Padgett, Jesse D., Dallas, Tex. Stirrup-leather stay	425,184	Apr. 8	1165	307	51	236
Padgett, Jesse D., Dallas, Tex. Stirrup-leather stay	438,485	Oct. 14	1230	334	53	242
Paez, Yndalecio, Alameda, Cal. Calendar	430,036	June 10	1417	352	51	1755
Page, Albert A. (See Shaw and Page.)						
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Latch	429,948	June 10	1264	313	51	1725
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Transom-lifter	430,400	June 17	2021	498	51	1883
Page, Alfred, and S. S. Bloom, Philadelphia, Pa. Artificial tooth	429,285	June 3	264	64	51	1522
Page, Charles L., assignor to C. C. Cronise, Chicago, Ill. Fire-place	428,287	May 20	1913	481	51	1204
Page, Clark D., Rochester, N. Y. Limekiln	443,865	Dec. 30	3631	935	53	2003
Page, Frederick H. (See Holmes, Charles E., assignor.)						
Page, George F., Concord, N. H. Machine-belt	439,282	Oct. 28	2511	673	53	496
Page, Harry L., Wells, N. Y. Ice-creper	430,537	June 17	2220	545	51	1919
Page, Harvey S., St. Louis, Mo. Machine for marking round objects	431,477	July 1	683	170	52	137
Page, Marvin J., Buffalo, N. Y. Slicer	441,440	Nov. 25	2942	757	53	1196
Page, Rescue B., Oakland, Cal. Wheel for road-engines	442,780	Dec. 16	1830	473	53	1637
Page Steel Wheel Company. (See Debth, William W., assignor.)						
Page, Thomas C., et al. (See Thomas, George H., assignor.)						
Page, William E., Kansas City, Mo. Fingering device for guitars	421,426	Feb. 18	1466	380	50	858
Page, William H., Philadelphia, Pa. Mailing-cage for boxes	439,177	Oct. 28	2323	623	53	461
Page, William H., Burlington, N. J. Bottle-stopper	440,649	Nov. 18	1617	416	53	938
Page, William H., assignor to W. H. Page Wood Type Company, Norwich, Conn. Sectional steam-boiler	430,589	June 17	2298	565	51	1934
Page, William H., assignor to W. H. Page Wood Type Co., Norwich, Conn. Furnace-grate	433,419	July 29	3682	951	52	745
Page, William H. W. (See Fanst, Adolph A., assignor.)						
Page, William L., assignor of forty-nine one-hundredths to F. M. White, Boston, Mass. Low-water indicator	423,879	Mar. 18	2223	603	50	1526
Page, William L., assignor of forty-nine one-hundredths to F. M. White, Boston, Mass. Metallic packing	424,814	Apr. 1	591	156	51	114
Page, William L., assignor of forty-nine one-hundredths to F. M. White, Boston, Mass. Metallic packing	432,327	July 15	2018	519	52	404
Page Wood Type Company, William H. (See Page, William H., assignor.)						
Pagenstecher, Albrecht, Jersey City, N. J., assignor to G. Frank, New York, N. Y. Artificial fuel	435,076	Aug. 26	2546		52	1278
Paget, Leonard, assignor of one-half to C. J. Kintner, New York, N. Y. Bunsen gas-burner	425,246	Apr. 8	1249	333	51	253
Pagett, Philip C., Wilmington, Ohio. Die for forming plow-points and mold-boards	429,543	June 3	669	163	51	1600
Pagnoul, John M., Bridgeton, N. J. Device for charging furnaces	429,200	June 3	144	35	51	1498
Paige, David O., Detroit, Mich. Safe or vault	425,451	Apr. 15	1558	417	51	321
Paige, David O., Detroit, Mich. Crane-tongs	425,452	Apr. 15	1559	417	51	321
Paige, David O., Detroit, Mich. Flanging-machine	425,453	Apr. 15	1561	418	51	321
Paige Tube Company. (See Bray, Thomas J., assignor.)						
Paicao, Joseph V., Syracuse, N. Y. Top-prop for carriages	434,455	Aug. 19	1549	404	52	1077
Paine, Alvin F., deceased, South Wellfleet, Mass.; I. Paine, administrator. Ocean signal-station	427,480	May 6	682	171	51	946
Paine, Alvin F., deceased, South Wellfleet, Mass.; I. Paine, administrator. Storm-rig for vessels	435,568	Sept. 2	291	81, 82	52	1432

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Paine & Francis. (See Bush, Arthur R., assignor.)						
Paine, Halbert E., Washington, D. C. Street-sweeper	433,958	Aug. 12	771	{ 200 201 202 }	52	917
Paine, Isaac, administrator. (See Paine, Alvin F.)						
Paine, Milton K., Windsor, Vt. Alarm-easel	430,084	June 10	1501	373	51	1771
Paine, Walter J., Boston, Mass. Electrically-controlled elevator	422,968	Mar. 11	925	{ 244 245 }	50	1321
Painter, George B., Middletown, assignor of one-half to E. I. Bell, Portland, Conn. Car-coupling	440,746	Nov. 18	1778	459	53	968
Painter, Jacob A., Decatur, Ill. Center and mortise gage	432,328	July 15	2019	519	52	404
Painter, Robert F., assignor to Warner Manufacturing Company, Greenfield, Mass. Canopy-holder	424,572	Apr. 1	209	58	51	43
Painter, William, Baltimore, Md. Bottling-machine	438,708	Oct. 21	1575	424	53	313
Painter, William, assignor to Bottle Seal Company, Baltimore, Md. Bottle-stopper	438,709	Oct. 21	1579	424	53	314
Painter, William, assignor to Bottle Seal Company, Baltimore, Md. Bottle-stopper extractor	438,710	Oct. 21	1580	424	53	314
Painter, William, assignor to Bottle Seal Company, Baltimore, Md. Bottle-stopper fastener	438,711	Oct. 21	1581	425	53	314
Painter, William, assignor to Bottle Seal Company, Baltimore, Md. Machine for inserting wire loops in bottle-seals, &c	438,712	Oct. 21	1582	{ 425 426 }	53	314
Painter, William, assignor to Bottle Seal Company, Baltimore, Md. Tool for forming the necks of bottles	443,728	Dec. 30	3428	880	53	1962
Paiste, Harry T., West Chester, Pa. Ceiling-block	442,451	Dec. 9	1276	330	53	1518
Paiste, Harry T., Philadelphia, Pa. Ceiling-block	442,452	Dec. 9	1277	330	53	1518
Pajeau, Joseph, Chicago, Ill. Tile	420,731	Feb. 4	424	112	50	647
Palacio, Martin A. de. (See Arnodin and Palacio.)						
Paley, George, Preston, county of Lancaster, England. Traverse-bar-actuating mechanism in machines for preparing and spinning cotton, &c	419,872	Jan. 21	1845	{ 484 485 }	50	386
Palica, Frank J., Racine, Wis. Trunk	425,247	Apr. 8	1250	333	51	253
Palica, Frank J., Racine, Wis. Trunk	436,566	Sept. 16	1856	{ 488 489 }	52	1742
Pallé, Albert, Paris, France. Blasting-cartridge	424,685	Apr. 1	383	100	51	75
Palm, Andrew G. A., Akron, Iowa. Roll-paper holder and cutter	442,823	Dec. 16	1913	491	53	1653
Palm, Carl S., near Foster, La. Device for handling cane	426,308	Apr. 22	2849	750	51	581
Palm, Fred, Red Lake, S. D. Bundle-carrier	432,068	July 15	1617	414	52	330
Palmer, Albert E., assignor to L. E. Woodard, Owosso, Mich. Coffin-fastener	424,346	Mar. 25	2989	795	50	1727
Palmer, Amos B., Port Alleghany, Pa. Saw-tooth	422,969	Mar. 11	933	245	50	1321
Palmer, Chester M., Lamartine, Wis. Whetstone for animal-clippers	432,431	July 15	2156	555	52	432
Palmer, Chester M., Lamartine, Wis. Animal-shears	432,432	July 15	2156	555	52	432
Palmer, Chester M., Lamartine, Wis. Animal-clipper	432,433	July 15	2157	555	52	432
Palmer, Don A., Chicago, Ill. Pneumatic door-opener	442,198	Dec. 9	896	239	53	1444
Palmer, E. C., et al. (See Lewis, James, assignor.)						
Palmer, Edwin J., Kalamazoo, Mich. Tool for turning round rods	430,144	June 17	1594	397	51	1799
Palmer, Frank J., Central Village, Mass. Incubator	442,294	Dec. 9	1031	272	53	1470
Palmer, Frederic A., Port Jervis, N. Y. Apparatus for supplying abrading and polishing materials to cutting and polishing tools	419,346	Jan. 14	1057	{ 279 280 }	50	224
Palmer, Henry H., et al. (See Castleman, Morris N., assignor.)						
Palmer, Henry H., et al. (See Palmer, Samuel D., assignor.)						
Palmer, Horace A., Erie, Pa. Sewer-trap	418,816	Jan. 7	234	57	50	51
Palmer, Isaac E., Middletown, Conn. Cloth-tentering machine	430,749	June 24	2592	634	51	1999
Palmer, James. (See Newton and Palmer.)						
Palmer, John W., assignor of three-fourths to D. H. Latham and A. P. Tenney, Kansas City, Kans. Card-case and game-counter	424,126	Mar. 25	2658	708	50	1664
Palmer, Joshua C., Lanham, Tex. Pen-holder	433,303	July 29	3531	911	52	714
Palmer, Lansing A., and J. Baier, Kansas City, Mo. Steam-pipe covering	437,041	Sept. 23	2660	695	53	1905
Palmer, Milton J., Toledo, Ohio. Apparatus for making soap	437,448	Sept. 30	3336	870	52	2041
Palmer, Reuben T., Jr., New London, Conn. Brushing-machine	443,179	Dec. 23	2527	647	53	1779
Palmer, Samuel D., et al. (See Castleman, Morris N., assignor.)						
Palmer, Samuel D., assignor of two-thirds to H. H. Palmer and G. E. King, Rockford, Ill. Churn-closure fastening	423,489	Mar. 18	1703	449	50	1477
Palmer, Samuel D., assignor of two-thirds to H. H. Palmer and G. E. King, Rockford, Ill. Churn	441,441	Nov. 25	2944	758	53	1196
Palmer, Seymour C., South Norwalk, Conn. Dipping apparatus for hat-forming machines	425,901	Apr. 15	2224	590	51	448
Palmer, Stephen F., Jr., Ogdensburg, N. Y. Hatch-roller	436,046	Sept. 9	1037	270	52	1581
Palmer, Theron H., San Bernardino, Cal. Desk, toilet, and display bottle	438,016	Oct. 7	528	148	53	100
Palmer, Thomas J., Lancaster, county of Lancaster, England. Apparatus for embossing and the like	425,826	Apr. 15	2116	{ 565 566 }	51	429
Palmer, Thomas J., Lancaster, England. Manufacturing decorative material	440,055	Nov. 4	650	174	53	735
Palmer, Wales L. (See Thompson, Isaac F., assignor.) (Reissue.)						
Palmer, Wilbert M., Rock Falls, Ill. Tool for turning chair legs, rounds, and the like	419,873	Jan. 21	1846	485	50	387
Palmer, William B. (See Wade, George H., assignor.)						
Palmer, William H. (See Daniel, William H., assignor.)						
Palmer, William H., Yale, Mich. Sickle-bar for harvesters	443,791	Dec. 30	3526	904	53	1982
Palmer, William R., et al. (See Chassagne, Paul J., assignor.)						
Palmer, William R., et al. (See Layng, William H., assignor.)						
Palmersten, Louis, Milwaukee, Wis. Calendar	429,949	June 10	1265	313	51	1726
Palinquist, Charlie A., Spokane Falls, Wash. Device for transmitting motion	437,717	Oct. 7	60	19	53	14
Palson, Magnus J., assignor to himself and W. H. Perkins, Gloucester, Mass. Mucilage or paste distributor	427,897	May 13	1332	336	51	1081
Pamphlett, William F., Portsea, county of Hants, England. Apparatus for producing fresh water from sea-water	419,215	Jan. 14	855	{ 224 225 }	50	184
Pancoast, Richard M., Camden, N. J. Game apparatus	420,732	Feb. 4	425	112	50	647
Pancoast, Richard M., Camden, N. J. Ventilated car	422,618	Mar. 4	384	95, 96	50	1210
Pangborn, Henry and J. K., assignors to Dunning, Pangborn Manufacturing Company, Menominee, Mich. Combined skidding tongs and dray	420,733	Feb. 4	426	113	50	648
Pangborn, James K. (See Pangborn, Henry and J. K.)						
Pankhurst, John F., Cleveland, Ohio. Steam ash-ejector	438,173	Oct. 14	771	210	53	155
Panknin, Charles F. (See Falconer, William F., assignor.)						
Pannill Drainer Company. (See Pannill, Henry, assignor.)						
Pannill, Henry, assignor, by mesne assignments, to Pannill Drainer Company, Petersburg, Va. Drainer for liquid-measures	421,754	Feb. 18	1937	509 { 871 872 873 }	50	948
Panter, William, J. C. Taite, and T. W. Carlton, London, England. Brake apparatus for vehicles	437,449	Sept. 30	3338	{ 871 872 873 }	52	2041
Paoli, John, Hoboken, N. J. Odometer	442,388	Dec. 9	1177	306	53	1498

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Paoli, John, assignor to W. Keuffel and H. Esser, Hoboken, N. J. Leveling-instrument...	434,399	Aug. 12	1452	378	52	1051
Paragon Slate Company. (See Marks, Solomon, assignor.)						
Parcelle, Albert L., Boston, Mass., assignor to Florence Motor Company, of Maine. Electro-motor traction-wheel	433,180	July 29	3355	867	52	677
Parcelle, Albert L., Boston, Mass., assignor to Florence Motor Company, of Maine. System of electrical transportation	433,181	July 29	3356	868	52	678
Pardee, George W., G. and R. H. Leaman, Lower Lake, Cal. Wagon-brake	419,548	Jan. 14	1338	357	50	281
Pardee, William H., Antigo, Wis. Device for holding carbon-paper for copying purposes	428,856	May 27	2778	706	51	1389
Pardee, William H., Antigo, Wis. Tablet or book holder	428,857	May 27	2779	706	51	1390
Pardy, George, deceased; W. Pardy, San Francisco, Cal., executor. Riveting-machine	434,677	Aug. 19	1913	499	52	1149
Pardy, William, executor. (See Pardy, George.)						
Parham, Charles, Philadelphia, Pa. Car-seat lock	429,176	June 3	104	25	51	1492
Paridy, Charles, East St. Louis, Ill., and L. A. Brown, St. Louis, Mo., assignors to J. B. Ulrich, F. R. Peters, W. P. H. Turner, J. A. Pollock, and D. E. McKay. Band-cutter and feeder for thrashing-machines	422,353	Feb. 25	2839	749	50	1125
Paris, Alfred W., Minneapolis, Minn. Refrigerator	423,946	Mar. 25	2393	636	50	1614
Parish, Jane, Leicester, county of Leicester, England. Stencil-drum	422,889	Mar. 4	791	203	50	1287
Park, Ambrose B., Adrian, Mich. Store-service apparatus	418,926	Jan. 7	437	107	50	91
Park, David. (See Park, James and D.)						
Park, Edward E. (See Davis, Brice S., assignor.)						
Park, Edward E., San Francisco, Cal. Rotary blotter	434,135	Aug. 12	1046	270	52	970
Park, Gilbert, assignor of one-half to J. G. Avery, Spencer, Mass. Let-off mechanism for looms	429,580	June 3	722	175	51	1611
Park, Gilbert, assignor of one-half to J. G. Avery, Spencer, Mass. Let-off mechanism for looms	431,707	July 8	1072	268	52	218
Park, Harvey S., Chicago, Ill. Electrical watchman's clock	435,185	Aug. 26	2703	{ 714 715 }	52	1307
Park, Harvey S., Chicago, Ill., assignor to Westinghouse Air Brake Company, Allegheny County, Pa. Car-reservoir relief-valve for air-brakes	421,427	Feb. 18	1467	380	50	858
Park, James and D., Newark, N. J. Line-tightener	424,022	Mar. 25	2513	669	50	1636
Park, James A., Lansing, Mich. Snap-hook	435,247	Aug. 26	2789	739	52	1324
Park, Rufus H., et al. (See Martin, Washington A., assignor.)						
Park, Walter E., Brooklyn, assignor to American Pneumatic Tool Company, New York, N. Y. Calking-bit	435,077	Aug. 26	2546	671	52	1278
Parke, Amos S. (See Milford, William A., assignor.)						
Parke, John S., U. S. Army. Rapid-transit apparatus	443,972	Dec. 30	3804	970	53	2034
Parke, Kate, Chicago, Ill. Bicycle-lock	436,800	Sept. 23	2256	535	52	1827
Parke & Lacy. (See Dodge, Miles B., assignor.)						
Parker, Alfred J., New York, N. Y. Letter for signs	429,813	June 10	1068	263	51	1687
Parker, Alfred J., New York, N. Y. Cork-pulling appliance	441,804	Dec. 2	274	74	53	1318
Parker, Alfred J., New York, N. Y. Receptacle or holder in hats	441,805	Dec. 2	274	74	53	1318
Parker, Charles D., Worcester, Mass. Telescoping bag	438,358	Oct. 14	1053	287	53	207
Parker, Charles F., Wallaston, Mass. Manufacture of india-rubber boots	425,454	Apr. 15	1562	419	51	322
Parker, Charles O., Natick, Mass., assignor to Wire Grip Fastening Company, Chicago, Ill. Jack for slugging-machines	429,862	June 10	1144	283	51	1702
Parker Company, Charles. (See Griswold, Lewis F., assignor.)						
Parker Company, Charles. (See Griswold, Lewis F., assignor.) (Reissue.)						
Parker Company, Charles. See Parker, Dexter W., assignor.)						
Parker, David F., Red Cloud, Nebr. Compen account-book	443,973	Dec. 30	3807	971	53	2035
Parker, De Witt C., Milford, N. H. Mirror support or holder	419,549	Jan. 14	1339	358	50	281
Parker, Dexter W., assignor to C. Parker Company, Meriden, Conn. Cigar-box	426,309	Apr. 22	2849	751	51	582
Parker, Edwin W., Waltham, assignor of one-half to Nonantum Worsted Company, Newton, Mass. Vaporizer	426,512	Apr. 29	3166	832	51	653
Parker, Edwin W., Waltham, assignor of one-half to Nonantum Worsted Company, Newton, Mass. Vaporizer	428,054	May 13	1561	395	51	1126
Parker, Emer H., Evanston, Ill. Electric temperature-controller	425,625	Apr. 15	1822	428	51	372
Parker, Erastus N., Springfield, Mass. Tool for jewelers' use	431,946	Aug. 26	2356	623	52	1242
Parker, Ezra, Fort Robinson, Nebr. Windmill	435,652	Sept. 2	429	114	52	1456
Parker, Frank F., Gardner, Mass. Machine for weaving cane-work	435,947	Sept. 9	883	{ 231 232 }	52	1551
Parker, Frank P. (See Magers and Parker.)						
Parker, George S., Janesville, Wis. Fountain-pen	423,804	Mar. 18	2169	573	50	1563
Parker, George W., San Francisco, Cal. Street-pavement	433,540	Aug. 5	137	39	52	784
Parker, Gilbert L. (See Back, Frank, assignor.)						
Parker, Henry A., Shiloh, Tenn. Composition for razor or other strops	426,310	Apr. 22	2851	.....	51	582
Parker, Howard, assignor of one-half to H. Fairbanks, St. Johnsbury, Vt. Machine for making hollow articles from paper-pulp	442,389	Dec. 9	1178	{ 306 307 }	53	1498
Parker, James N., Elkhart, Ind. Tire-tightener	434,947	Aug. 26	2357	624	52	1242
Parker, John, Clinton, Conn. Ship's rigging	423,619	Mar. 4	386	96	50	1210
Parker, John, Clinton, Conn. Gaff-jaw	429,474	June 3	567	139	51	1581
Parker, John, assignor to M. E. Beasley, Philadelphia, Pa. Barrel-setting-up machine	426,850	Apr. 29	3682	{ 959 960 }	51	752
Parker, John A., Bellefontaine, Ohio. Bread preserver and protector	443,637	Dec. 30	3383	846	53	1934
Parker, John H., Baltimore, Md. Adjustable tool-holder for lathes	426,311	Apr. 22	2852	751	51	582
Parker, John P., Ripley, Ohio. Soil-pulverizer	442,538	Dec. 9	1416	362	53	1545
Parker, John W., Cincinnati, and D. R. McCay, Centreburg, Ohio. Fan and canopy attachment for thrashing-machines	419,129	Jan. 7	714	188	50	150
Parker, Jonas, assignor of three-fourths to J. Kunkel, I. C. Smith, and W. J. Stewart, Williamsport, Pa. Buckle	426,678	Apr. 29	3415	896	51	700
Parker, Joseph N., Vineland, N. J. Horse-hoe and cultivator	422,620	Mar. 4	387	96	50	1210
Parker, Joseph N., Vineland, N. J. Cultivator	442,909	Dec. 16	2065	530	53	1681
Parker, La Fayette, Davenport, Iowa. Cable-railway apparatus	423,440	Mar. 18	1632	429	50	1462
Parker, Lewis C., Kansas City, Mo. Carburetor	435,856	Sept. 2	733	196	52	1516
Parker, Orrin W., Oakland, Cal. Windmill	432,146	July 15	1750	449	52	356
Parker, Perce F. (See Baker, George W., assignor.)						
Parker, Robert H., Carson City, Nev. Axle-lubricator	421,886	Feb. 18	2130	558	50	984
Parker-Russell Mining and Manufacturing Company. (See Hazeltine, Charles W., assignor.)						
Parker, Russell, Brooklyn, N. Y. Paper-weight	429,863	June 10	1146	283	51	1702
Parker, Thomas, Menomonee, Wis. Sluiceway and flood-gate	418,876	Jan. 7	347	84	50	72
Parker, Thomas, Menomonee, Wis. Adjustable sluiceway gate or dam	426,953	Apr. 29	3812	996	51	778
Parker, William E., and H. E. Temple, assignors of one-half to H. H. Humphrey, Buffalo, N. Y. Electric switch	422,147	Feb. 25	2505	661	50	1063
Parkhurst, Albert J., Kent City, Mich. Whiffletree	428,730	May 27	2593	657	51	1352

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Parkhurst, Alious N., Logansport, Ind. Pump	440,497	Nov. 11	1372	354	53	882
Parkhurst, Edward B., Woburn, Mass., assignor to Florence Motor Company, of Maine.	422,148	Feb. 25	2506	662	50	1063
Dynamo electric machine or electric motor				663		
Parkhurst, Edward B., Woburn, Mass., assignor to Florence Motor Company, of Maine.	422,149	Feb. 25	2509	663	50	1064
Electric motor				663		
Parkhurst, Edward B., Woburn, Mass., assignor to National Cash Register Company, Dayton, Ohio. Cash indicator and register	422,823	Mar. 4	665	170	50	1264
				171		
Parkhurst, Emily R. (See Tindell and Dickerson, assignors.)						
Parkhurst, Emmons M., Philadelphia, Pa. Shoe-burnishing machine	443,330	Dec. 23	2794	718	53	1832
				719		
Parkhurst, John H., Washington, D. C. Envelope	440,650	Nov. 18	1617	416	53	938
Parkhurst, John H., Washington, D. C. Machine for mixing mortar	440,651	Nov. 18	1619	417	53	938
Parkhurst, Melville C. (See Kelley and Parkhurst.)						
Parkin, John, assignor of one-half to H. P. Frear, San Francisco, Cal. Valve-gear for fluid rams and pistons	419,874	Jan. 21	1847	486	50	387
Parkinson, George M. (See Parkinson, Tom and G. M.)						
Parkinson, James D., assignor of one-half to H. D. Winn, Richmond, Va. Shears	437,660	Sept. 30	3638	950	52	2102
Parkinson, Joseph H. (See Irvine, William, assignor.)						
Parkinson, Tom and G. M., Doncaster, England. Sieve	437,718	Oct. 7	61	19, 20	53	15
Parkinson, William R., Racoon, Ill. Car-coupling	432,893	July 22	2885	739	52	582
Parkinson, William R., Racoon, Ill. Car-coupling	434,025	Aug. 12	859	926	52	932
Parks, A. M. (See Parks, Harvey E., assignor.)						
Parks, Albert F., Troy, assignor to C. E. Lee, Rochester, N. Y. Electrical annunciator	421,508	Feb. 18	1591	411	50	881
Parks, Alexander, Jr., Martinsburg, W. Va. Liquid-separator	418,984	Jan. 7	514	128	50	108
Parks, Alexander, Martinsburg, W. Va. Apparatus for separating the solid from the liquid portions of the waste of distilleries	442,539	Dec. 9	1417	362	53	1546
Parks, Charles E., Watertown, Wis. Barrel	441,694	Dec. 2	98	26	53	1281
Parks, Charles E., and L. Mollart, Watertown, Wis.; said Mollart assignor to said Parks.	433,024	Jan. 29	3116	799	52	631
Loom for weaving slat-and-wire fabric				800		
Parks, Charley D. (See Parks, Clarence W. and C. D.)						
Parks, Clarence W., Mecosta, and C. D. Parks, Saranac, Mich. Sprinkler	425,626	Apr. 15	1825	488	51	372
Parks, Edward H., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Grinding-machine	429,700	June 10	903	220	51	1656
				221		
Parks, Harvey E., Cuyahoga Falls, Ohio, assignor to A. M. Parks, Cook County, Ill. Splasher-holder	433,907	Aug. 5	690	179	52	891
Parks, Robert D., Mecosta, Mich. Creaming-can	424,996	Apr. 8	875	231	51	178
Parks, William T., La Grange, Ind. Shock compressor and binder	428,178	May 20	1737	440	51	1169
Parlow, James M., and C. W. Tobey, New Bedford, Mass. Railway-switch	419,061	Jan. 7	623	161	50	131
				162		
Parmalee, William L., assignor to A. C. Rex, Philadelphia, Pa. Skate	419,550	Jan. 14	1340	358	50	282
Parmelee, Arthur W., Worcester, Mass. Coat and hat hook	433,182	July 29	3359	868	52	678
Parmelee, Dubois D., assignor to Okonite Company, New York, N. Y. Apparatus for covering wire with plastic material	429,581	June 3	725	175	51	1611
Parmelee, E. M. (See Allen, Edward R., assignor.)						
Parmelee, Frank M., Grand Rapids, Mich. Guard-rail	419,022	Jan. 7	567	142	50	120
Parmelee, John H., Bridgeport, Conn. Hame-fastener	442,824	Dec. 16	1914	491	53	1653
				492		
Parmelee, John H., assignor of one-half to A. W. Wallace, Bridgeport, Conn. Hame-fastener	423,529	Mar. 18	1766	464	50	1487
Parmelee, John W., Wilkes-Barré, Pa. Furnace for heating metal	430,538	June 17	2221	545	51	1919
Parmelee, Wolcott J., Wilkes-Barré, Pa. Die for upsetting-machines	429,701	June 10	907	221	51	1657
Parmelee, Wolcott J., Wilkes-Barré, Pa. Die for forging axle-boxes	430,539	June 17	2222	545	51	1920
Parmelee, Wolcott J., Wilkes-Barré, Pa. Device for trimming die-forged axle-boxes	430,540	June 17	2224	546	51	1920
Parmelee, Wolcott J., Wilkes-Barré, Pa. Apparatus for forging axles	430,541	June 17	2225	546	51	1920
Parmelee, Wolcott J., Wilkes-Barré, Pa. Clutch-operating mechanism	432,069	July 15	1619	415	52	331
Parmelee, Wolcott J., Wilkes-Barré, Pa. Apparatus for trimming the fins from die-forged axles	434,068	Aug. 12	927	244	52	947
				546		
Parmelee, James C., Sedalia, Mo. Engraving-machine	430,542	June 17	2227	547	51	1921
Parnly, Samuel P., Chicago, Ill. Electric-arc lamp	433,908	Aug. 5	691	179	52	892
Parnall, Alfred N., assignor of one-half to J. W. Jackson, Denver, Colo. Rotary engine	419,062	Jan. 7	626	163	50	132
Parnell, John C. (See Denison and Parnell.)						
Paronto, John. (See Bradley, Richard, assignor.)						
Parr, Joseph, deceased; R. A. Parr administrator and assignor to H. McCollum, New York, N. Y. Cracker-machine	431,149	July 1	170	43, 44	52	36
Parr, Robert A., administrator. (See Parr, Joseph.)						
Parramore, Reddin W., Monmouth County, N. J. Corset	425,520	Apr. 15	1662	443	51	341
Parramore, Reddin W., Asbury Park, N. J. Corset clasp and brace	439,891	Nov. 4	398	103	53	684
Parrish Electric Track Signal Company. (See Parrish, Homer A., assignor.)						
Parrish, Homer A., Jackson, assignor to Parrish Electric Track Signal Company, Detroit, Mich. Electric railway-signal	429,582	June 3	726	176	51	1611
Parrish, Myron W., assignor to Graphite Electric Company, Detroit, and J. Hutchinson, Jackson, Mich. Separating metallic impurities from graphite	429,386	June 3	437	103	51	1554
Parrish, Myron W., assignor to J. A. Bowden, Graphite Electric Company, Detroit, and J. Hutchinson, Jackson, Mich. Electric battery	431,073	July 1	69	16	52	15
Parrish, Thomas J., Nevada, Mo. Rheostat	432,894	July 22	2887	739	52	582
Parry, David M., Indianapolis, Ind. Short-turning vehicle	432,554	July 22	2359	609	52	480
Parry, David M. and T. H., Indianapolis, Ind. Securing tires to the rims of wheels	429,221	June 3	174	42	51	1504
Parry, David M. and T. H., Indianapolis, Ind. Road-cart	435,515	Sept. 2	201	55	52	1414
Parry, David M., and D. S. Reel, assignors to Parry Manufacturing Company, Indianapolis, Ind. Vehicle	435,366	Aug. 26	2991	793	52	1361
Parry, Edward G., assignor to Parry Fire Arms Company, Ithaca, N. Y. Breech-loading breakdown gun	442,453	Dec. 9	1278	330	53	1519
				331		
Parry Fire Arms Company. (See Parry, Edward G., assignor.)						
Parry Manufacturing Company. (See Parry and Reel, assignors.)						
Parry, Thomas H. (See Parry, David M. and T. H.)						
Parry, William H., assignor to J. H. Havens, New York, N. Y. Saw filing and setting machine	427,898	May 13	1333	336	51	1081
Parsil, Edwin R. (See Trowbridge, John H., assignor.)						
Parsley, Walter L., Wilmington, N. C. Subway for electric cables	431,780	July 8	1177	293	52	238
				294		
Parsons, Charles C. (See Reed, Devolson, assignor.)						
Parsons, Charles C., Hempstead, N. Y. Insecticide	431,528	July 1	765		52	152
Parsons, Edward. (See Nutting, Parsons, and Bower.)						
Parsons, Francis W., Philadelphia, Pa. Steam-generator	429,771	June 10	1001	246	51	1676

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Parsons, Francis W., Wianno, Mass. Car-coupling	433,695	Aug. 5	376	96	52	829
Parsons, Harry T. (See Russell and Parsons.)						
Parsons, Henry G., and W. A. Brown, New Britain, Conn. Belt-fastener	428,130	May 20	1679	425	51	1158
Parsons, Horace W., Wamego, Kans. Churn	439,549	Oct. 28	2916	775	53	573
Parsons, James, Acton Vale, and G. Lowe, Montreal, Quebec, Canada. Safeguard for railway fog-signals	423,570	Mar. 18	1817	479	50	1497
Parsons, John H. (See Gay and Parsons.)						
Parsons, John H., Susquehanna Depot, Pa. Train-signal	426,679	Apr. 29	3417	897	51	701
Parsons, John J., Brooklyn, N. Y. Cuspidor	424,815	Apr. 1	592	156	51	114
Parsons, John J., New York, N. Y. Cuspidor	424,816	Apr. 1	594	{ 156 157 }	51	115
Parsons, John R., and D. A. Willcox, Earlville, N. Y. Vehicle	435,154	Aug. 26	2655	702	52	1299
Parsons, Joseph A., Rocky River, Ohio. Spraying apparatus	426,954	Apr. 29	3814	997	51	778
Partridge, Andrew, assignor of one-half to B. F. Peet, Springfield, Mass. Loom-shuttle	430,037	June 10	1420	352	51	1756
Partridge, William O., Milton, Mass. Duplex desk	428,407	May 20	2109	{ 529 530 }	51	1243
Paschal, Adam A. (See Dunn and Paschal.)						
Passino, George G., Clear Lake, S. D. Railway-switch	421,428	Feb. 18	1470	{ 380 381 382 }	50	859
Pastorfield, Jeremiah, Newport, Va. Thill-coupling	438,559	Oct. 14	1339	363	53	264
Patch, Frank, <i>et al.</i> (See Robinson, Clark, assignor.)						
Patch, Harrison O., <i>et al.</i> (See Pullman, Harry B., assignor.)						
Patchel, George G. and T. T. Darby, Pa. Pump	418,745	Jan. 7	126	31	50	28
Patchel, Thomas T. (See Patchel, George G. and T. T.)						
Pate, John C., Boonville, Ind. Grading-machine	435,767	Sept. 2	598	159	52	1490
Pate, Robert O. (See Burrows, Joseph M., assignor.)						
Patent Button Company. (See Jackson and Platt, assignors.)						
Patent Button Company. (See Platt, Clark M., assignor.)						
Patent Elastic Fabric Company. (See Funnell, James O., assignor.)						
Paterson, James, Stockton, and W. Paterson, Benicia, Cal. Steam-boiler	441,852	Dec. 2	354	93, 94	53	1333
Paterson, James B. (See Carl and Paterson.)						
Paterson, Robert. (See Alexander and Paterson.)						
Paterson, Walter, Glasgow, county of Lanark, Scotland, and W. B. Cumming, Bootle, county of Lancaster, England, assignors of one-half to L. Katzenstein, New York, N. Y. Water-tight bulk-head door	432,070	July 15	1621	{ 415 416 }	52	331
Paterson, William. (See Paterson, James and W.)						
Patiz, Albert, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Hanging lamp	420,211	Jan. 28	2374	630	50	497
Patnoe, George W. (See Marchant and Patnoe.)						
Patrick, Adolphe, Maskinongé, Canada. Water-wheel	436,291	Sept. 9	1408	367	52	1651
Patridge, James O., assignor of one-half to H. Barnhill, Wellston, Ohio. Swing	428,515	May 20	2250	570	51	1368
Pattberg, Henry, Jersey City, N. J. Door-mat	428,627	May 27	2421	616	51	1321
Pattree, Herbert H., Washington, D. C. Umbrella-supporter	435,446	Sept. 2	101	28, 29	52	1394
Pattree, Joseph O., St. Paul, Minn. Spark-catcher	439,492	Nov. 4	398	104	53	685
Patten, Benjamin R., Yarmouth, Nova Scotia, Canada. Steam-actuated valve	424,686	Apr. 1	383	101	51	75
Patten, Francis J., New York, N. Y. Electro-magnet	427,606	May 13	875	226	51	994
Patten, Francis J., New York, N. Y., assignor to J. M. Seymour, Brick Church, N. J. Syn-chronous multiplex telegraphy	428,221	May 20	1803	{ 452 453 }	51	1182
Patten, Francis J., New York, N. Y., assignor to J. M. Seymour, Brick Church, N. J. Multi-plex telegraph	428,222	May 20	1812	{ 453 454 }	51	1184
Patten, Francis J., New York, N. Y., assignor to J. M. Seymour, Brick Church, N. J. Multi-plex telegraph	428,223	May 20	1815	{ 454 455 }	51	1185
Patten, Francis J., New York, N. Y., assignor to J. M. Seymour, Brick Church, N. J. Syn-chronous multiplex telegraphy	428,224	May 20	1817	455	51	1185
Patten, Francis J., New York, N. Y., assignor to J. M. Seymour, Brick Church, N. J. Syn-chronous multiplex telegraphy	428,225	May 20	1818	455	51	1186
Patten, Francis J., New York, N. Y., assignor to J. M. Seymour, Brick Church, N. J. Syn-chronous multiplex telegraphy	428,226	May 20	1819	456	51	1186
Patten, Francis J., New York, N. Y., assignor to J. M. Seymour, Brick Church, N. J. Multi-plex telegraph	429,735	June 10	949	233	51	1665
Patten, James S., assignor to himself and E. Higgins, Baltimore, Md. Self-oiling axle-bearing	422,150	Feb. 25	2511	663	50	1064
Patten, James S., assignor to himself and E. Higgins, Baltimore, Md. Self-oiling axle-bearing	443,974	Dec. 30	3808	971	53	2035
Patten, John, assignor to J. Patten Manufacturing Company, New York, N. Y. Apparatus for producing and maintaining high vacua	427,792	May 13	1166	{ 292 293 }	51	1050
Patten, John, assignor to J. Patten Manufacturing Company, New York, N. Y. Vacuum-chamber	440,747	Nov. 18	1779	459	53	968
Patten Manufacturing Company, John. (See Patten, John, assignor.)						
Patten, Thomas. (See Van Ryzin, Dodge, and Patten.)						
Patten, William H., <i>et al.</i> (See Justin, Joel G., assignor.)						
Patten, Zeboim C., Chattanooga, Tenn. Almanac or calendar	431,281	July 1	378	95	52	77
Patterson, Albert M. (See Morris, Henry B., assignor.)						
Patterson, Alexander, Syracuse, N. Y. Work-table	428,939	May 27	2896	741	51	1413
Patterson, C. Godfrey, <i>et al.</i> (See Barron, Walter J., assignor.)						
Patterson, Charles S., New York, N. Y. Coin-controlled lock for opera-glass boxes	423,947	Mar. 25	2395	636	50	1614
Patterson, Charles S., New York, N. Y. Coin-locked box	442,686	Dec. 16	1650	424	53	1602
Patterson, Cbarley G., Youngstown, Ohio. Washing-machine	425,693	Apr. 15	1929	513	51	392
Patterson, Elisha G., Titusville, Pa. Railway-rail	423,078	Mar. 11	1095	285	50	1351
Patterson, Elisha G., Titusville, Pa. Rail-joint fastener	436,995	Sept. 23	2938	678	52	1891
Patterson, Frank J., assignor to National Cash Register Company, Dayton, Ohio. Key-arrester for cash-indicators	437,236	Sept. 30	2980	779	52	1972
Patterson, Hugh, J. MacCormack, and H. L. Van Zile, Albany, N. Y.; said MacCormack and Van Zile assignors of part to said Patterson. Steam-boiler	421,509	Feb. 18	1593	411	50	882
Patterson, James, Sans Bois, Indian Ter. Mechanical movement	442,998	Dec. 16	2201	566	53	1710
Patterson, James H., Shrewsbury, N. J. Composition of matter for making billiard-balls, combs, &c	426,513	Apr. 29	3167	.....	51	653
Patterson, James W., New York, N. Y. Cash-register for coin-actuated locks	423,948	Mar. 25	2397	337	50	1615
Patterson, James W., New York, N. Y. Coin-actuated box	438,174	Oct. 14	772	{ 210 211 }	53	155
Patterson, John, Philadelphia, Pa. Fertilizer	438,859	Oct. 21	1844	.....	53	363
Patterson, John H., assignor to National Cash Register Company, Dayton, Ohio. Combined account book and holder	425,455	Apr. 15	1564	419	51	322

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Patterson, John W., Madisonville, Ky. Running-gear for vehicles	440,960	Nov. 18	2138	554	53	1035
Patterson, Peter, assignor to National Tube Works Company, McKeesport, Pa. Tube-welding apparatus	442,454	Dec. 9	1279	331	53	1519
Patterson, Ralph J., Doctor Town, Ga. Fruit-packing case	430,878	June 24	2792	684	51	2038
Patterson, Ralph J., Doctor Town, Ga. Crate-head frame	430,879	June 24	2794	684	51	2038
Patterson, Ralph J., Doctor Town, Ga. Fruit-packing case	430,880	June 24	2795	685	51	2038
Patterson, Ralph J., Doctor Town, Ga. Crate-head	441,326	Nov. 25	2761	714	53	1161
Patterson, Robert F., assignor to Bigelow Carpet Company, Clinton, Mass. Moquette carpet	432,763	July 22	2704	691	52	546
Patterson, Thomas, Boston, Mass. Fuse-block	426,057	Apr. 22	2481	656	51	506
Patterson, William H., Cleveland, Ohio, assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Manufacturing paper bags	426,851	Apr. 29	3685	960	51	752
Patterson, William H., Cleveland, Ohio, assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machine	426,852	Apr. 29	3686	961	51	752
Patterson, William R., Chicago, Ill. Manufacture of telegraph-cables	428,055	May 13	1563	395	51	1127
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Thermal door-closer	427,899	May 13	1335	337	51	1082
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Underground electric cable	430,297	June 17	1861	457	51	1850
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Conduit for telegraph-cables	433,025	July 29	3119	800	52	631
Patterson, William S., Allegheny, Pa. Brush-holder for electric motors or dynamos	441,695	Dec. 2	99	26	53	1282
Patton, John J., et al. (See Rock, Frank, assignor.)						
Patton, Archie and J., and G. A. Billen, Hamburg, Mich. Side-track derailing-switch	426,058	Apr. 22	2482	656	51	506
Patton, James N., Loveland, Ohio, assignor of one-half to A. J. Eyerly, Hagerstown, Md. Oil-cup	441,376	Nov. 25	2836	732	53	1174
Patton, John. (See Patton and Billen.)						
Patton, John A., San Diego, Cal. Retaining device for overshoes	426,312	Apr. 22	2853	751	51	582
Patton, John J., et al. (See Blackburn, Charles W., assignor.)						
Patton Motor Company. (See Patton, William H., assignor.)						
Patton, W. T., et al. (See House, John, assignor.)						
Patton, William H., Chicago, Ill. Boat	424,817	Apr. 1	596	157	51	115
Patton, William H., Chicago, Ill., assignor to Patton Motor Company, Pueblo, Colo. Motor for street-cars	434,993	Aug. 26	2418	639	52	1254
Paul, Abner C. (See Coy and Paul.)						
Paul, Albert, assignor of one-half to A. Von der Heyden, Berlin, Germany. Brake for vehicles	428,940	May 27	2897	741	51	1414
Paul, Amasa C., assignor of one-half to H. A. Turner, Minneapolis, Minn. Stock-car	421,607	Feb. 18	1742	456	50	911
Paul, Charles E. (See Paul and Kleinstuber, assignors.)						
Paul, George D., assignor to E. Alsford and J. Holmes, Newark, N. J. Button-fastener	435,379	Aug. 26	3018	798	52	1366
Paul, William C., and O. D. Kleinstuber, assignors, by mesne assignments, of one-third to C. E. Paul, Milwaukee, Wis. Signal	419,970	Jan. 21	1980	520	50	414
Pauli, Augustus, Brooklyn, N. Y. Book-rack	433,959	Aug. 12	775	203	52	917
Paulitschky, Carl and W., Vienna, Austria-Hungary. Machine for removing snow from railways and tramways	443,866	Dec. 30	3632	935	53	2003
Paulitschky, Wilhelm. (See Paulitschky, Carl and W.)						
Pauli, Archibald W., Wheeling, W. Va. Wick-raiser	441,442	Nov. 25	2945	758	53	1196
Pauli, Archibald W., Wheeling, W. Va. Lantern	420,093	Jan. 28	2176	573	50	460
Pauli, Archibald W., Wheeling, W. Va., assignor to Nail City Lantern Company, of West Virginia, and Bellaire Stamping Company, of Ohio. Lantern	433,364	July 29	3610	931	52	729
Pauli, Archibald W., assignor to Nail City Lantern Company, Wheeling, W. Va., and Bellaire Stamping Company, Bellaire, Ohio. Lantern	433,362	July 29	3608	930	52	729
Pauls, August, Brooklyn, N. Y. Combined scissors and tracing-wheel	433,363	July 29	3609	931	52	729
Paulsell, A. C., et al. (See Ludwig, John C., assignor.)						
Paulsen, Reinhold F. (See Schmitz and Paulsen.)						
Paulus, Aaron R., Villisca, Iowa. Railway-track drill	438,017	Oct. 7	530	149	53	101
Pauly, Peter J., Jr., St. Louis, Mo. Paper-file	428,516	May 20	2251	571	51	1269
Pauly, Peter J., Sr., St. Louis, Mo. Cabinet for paper-files	428,517	May 20	2253	571	51	1269
Paunthier, Casimir, assignor to Société L'Incandescence Électrique, Paris, France. Re-pairing incandescent electric lamps	428,941	May 27	2900	742	51	1414
Pawlowski, Jacob, Cincinnati, Ohio. Holder for electric-arc lamps	439,178	Oct. 28	2325	623	53	461
Pawtucket Manufacturing Company. (See Meader, Benjamin S., assignor.)						
Paxson, Aaron N., Tipton, Iowa. Clothes-drier	425,942	May 27	2901	743	51	1414
Paxson, Charles H. (See Coffield, Peter T., assignor.)						
Paxson, Charles H., Springfield, assignor to Superior Machine Company, New Carlisle, Ohio. Lawn-mower	426,313	Apr. 22	2854	752	51	582
Pay, Charles, Providence, R. I. Hoisting-bucket	425,954	Apr. 15	2324	616	51	467
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing porous crystallized metal plates	424,571	Apr. 1	208	57	51	43
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing crystallized metallic lead plates	440,267	Nov. 11	979	249	53	811
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing crystallized lead plates	440,268	Nov. 11	980	250	53	811
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing crystallized metal plates	440,269	Nov. 11	984	251	53	811
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing crystallized metal plates	440,270	Nov. 11	987	252	53	812
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Porous crystallized metal plate	440,271	Nov. 11	989	253	53	812
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Making porous crystallized metal plates	440,272	Nov. 11	992	254	53	812
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Making porous crystallized metal plates	440,273	Nov. 11	994	255	53	812
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing porous crystallized metal plates	440,274	Nov. 11	996	256	53	812
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing porous crystallized metal plates	440,275	Nov. 11	998	257	53	812
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing porous crystallized metal plates	440,276	Nov. 11	1000	258	53	813
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing crystallized metallic lead plates	440,277	Nov. 11	1002	259	53	813
Payen, Clément, Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Producing crystallized metal plates	440,575	Nov. 11	1490	385	53	904
Payette, Peter, Penetanguishene, Ontario, Canada. Saw-mill dog	424,347	Mar. 25	2990	795	50	1728

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Payette, Peter, Penetanguishene, Ontario, Canada. Saw-mill dog.....	428,518	May 20	2254	{ 571 572 }	{ 51	1269
Paylor, Robert L., Olive Hill, N. C. Tobacco-stick	426,467	Apr. 29	3101	813	51	640
Payne, Alexander O., Elmira, N. Y. Check-hook	423,178	Mar. 11	1247	325	50	1381
Payne, Edward F., Central Valley, assignor to T. B. Mills, New York, N. Y. Fishing-reel	423,764	July 22	2705	692	52	546
Payne, John, Connerville, Ind. Portable voting-booth.....	423,571	Mar. 18	1818	479	50	1497
Payne, John J. E. H., Lipscomb, Tex. Rotary reversible steam-engine	420,094	Jan. 28	2178	{ 573 574 }	{ 50	461
Payne, John J. E. H., Lipscomb, Tex. Gas-cylinder for elevating heavy ordnance	437,237	Sept. 30	2981	779	52	1973
Payne, Samuel R., Rome, Tenn. Attachment for drilling-machines	423,269	Mar. 11	1344	361	50	1406
Payne, William, and W. H. Thamesford, Ontario, Canada. Truss	430,676	June 24	2463	601	51	1972
Payne, William H. (See Payne, William and W. H.)						
Payntar, William W., Columbus, Ohio. Sample-case	440,278	Nov. 11	1004	258	53	813
Payson, Aurin M., assignor of one-half to A. Cook, Malden, Mass. Ash-sifter.....	423,270	Mar. 11	1385	361	50	1406
Payson, Joseph R., Jr., Chicago, Ill. Sliding-door support	426,314	Apr. 22	2855	752	51	583
Payson, Joseph R., Jr., Chicago, Ill. Door-hanger	442,273	Dec. 9	1001	264	53	1465
Payton & Kelley. (See Kelley, Samuel E., assignor.)						
Peabody, B. F., et al. (See Bryant, Zimmerman, and Becker, assignors.)						
Peabody, David G. (See Pennock, William D., assignor.)						
Peabody, Henry A., Ukiah, Cal. Fence-post	436,634	Sept. 16	1960	514	52	1762
Peach, William, Allegheny, Pa. Safety device for inclines, &c.	432,213	July 15	1845	474	52	373
Peacock, Benjamin, Big Bend, Wis. Seat-standard for wagons	434,158	Aug. 12	1085	279	52	978
Peacock, Edward F., and H. C. Reagan, Jr., Philadelphia, Pa. Feed-water purifier	428,131	May 20	1679	426	51	1159
Peacock, Edward M., Brooklyn, N. Y. Can-cover	428,760	May 27	2636	667	51	1361
Peacock, Edward M., Brooklyn, N. Y. Sheet-metal vessel	439,693	Nov. 4	309	104	53	685
Peacock, Jacob S., Lancaster, Pa. Padlock	421,966	Feb. 25	2240	589	50	1014
Peacock, Thomas B., Topeka, Kans. Mail-indicator and advertising-board	440,961	Nov. 18	2139	554	53	1035
Peadi, Walter, Druban, Natal, South Africa, assignor to S. and T. M. Ford, Bristol, England. Animal-trap	443,975	Dec. 30	3809	971	53	2036
Peak, Morris. (See Casaday and Peak.)						
Peak, Morris, and J. B. Casaday, Colorado Springs, Colo. Gate-hanger.....	427,439	May 6	631	158	51	936
Peake, Albert F. (See Ludwick, Jay J., assignor.)						
Pearce, Atkins & Co. (See Mullen, Robert H., assignor.)						
Pearce, Frederick, New York, N. Y., assignor to Gamewell Fire Alarm Telegraph Company, of New York. Municipal signaling-box	424,431	Mar. 25	3139	833	50	1758
Pearce, John C., Elk Garden, W. Va. Self-acting pin-pusher for mining cars	435,653	Sept. 2	430	115	52	1456
Pearce, Richard, Denver, Colo. Extracting silver from copper ores, mattes, and other copper products	421,031	Feb. 11	910	.....	50	745
Pearce, Thomas A. (See Fefel, Henry H., assignor.)						
Pearce, Thomas A., et al. (See Egly, John C., assignor.)						
Pearce, William J., Terre Haute, Ind. Steam drilling-machine	434,883	Aug. 19	2230	585	52	1211
Peard, John, Brooklyn, N. Y. Folding settee or seat	431,389	July 1	550	137	52	111
Peare, George R., Lynn, assignor to E. L. Sprague, Boston, Mass. Vehicle-wheel	421,013	Feb. 11	885	228	50	740
Pearsall, Richard S., Sea Cliff, N. Y. Shears	430,677	June 24	2465	601	51	1974
Pearsall, Richard S., Sea Cliff, N. Y. Shears	440,436	Nov. 11	1272	329	53	862
Pearse, Henry, Lymington, county of Southampton, England. Fountain pen-holder	423,339	Mar. 11	1483	389	50	1426
Pearse, T. Henry, et al. (See Boris, Pierre J., assignor.)						
Pearson, Fred, assignor of one-half to J. C. Graham & Co., Philadelphia, Pa. Loom for weaving double pile fabrics	440,113	Nov. 4	726	193	53	751
Pearson, George P., and J. A. Foster, Attica, Ind. Barrel-stand	438,486	Oct. 14	1230	334	53	243
Pearson, George S. (See Welton, Frank R., assignor.)						
Pearson, Henry, Baltimore, Md. Refrigerating-tank for transporting milk and other dairy products	425,578	Apr. 15	1739	467	51	355
Pearson, John J., New York, assignor to himself, and J. Kunze, Yonkers, N. Y. Operating gas-engines	426,736	Apr. 29	3514	918	51	719
Pearson, John J., New York, and J. Kunze, Yonkers, N. Y. Ignitor for gas-engines	428,858	May 27	2780	707	51	1390
Pearson, Lewis L., assignor of one-half to A. Stewart, Aurora, Ill. Hammock-chair	427,900	May 13	1336	337	51	1082
Pearson, Nels K., San Francisco, Cal. Brake-shoe	424,348	Mar. 25	2991	796	50	1728
Pearson, O. E., et al. (See Jorgensen, Axel, assignor.)						
Pearson, Peter, New York, N. Y. Portable electric signaling device	434,835	Aug. 19	2136	{ 559 560 }	{ 52	1193
Pearson, Thomas J., Newark, N. J. Machine for forming and pressing hats	427,186	May 6	246	64	51	860
Pearsons, Fillmore A., assignor to Howe Scale Company of 1886, Rutland, Vt. Balance-ball for scales	440,363	Nov. 11	1128	290	53	835
Pease, Edward L., Darlington, county of Durham, England. Gas-holder	432,434	July 15	2159	{ 556 557 }	{ 52	433
Pease, Edward L., Darlington, county of Durham, England. Means for regulating the movement of gas holders	435,186	Aug. 26	2706	715	52	1308
Pease, Edward L., Darlington, county of Durham, England. Means for regulating the movement of gas-holders	435,187	Aug. 26	2707	{ 715 716 }	{ 52	1308
Pease Furnace Company, J. F. (See Pease, John F., assignor.)						
Pease, Jacob, Brooklyn, assignor to W. Brookfield, New York, N. Y. Screw-press for insulators	419,875	Jan. 21	1848	486	50	387
Pease, John F., assignor to J. F. Pease Furnace Company, Syracuse, N. Y. Furnace	435,002	Sept. 2	818	217	52	1533
Pease, Lovenia E., East Saginaw, Mich. Pillow-sham holder	434,801	Aug. 19	2091	547	52	1184
Pease, Robert R., assignor to H. Roberts, Hartford, Conn. Car-seat	442,637	Dec. 16	1574	407	53	1587
Pech, Gustavus, Storm Lake, Iowa. Well-drilling machine	440,924	Nov. 18	2081	537	53	1024
Pech Manufacturing Company. (See Siebens, George, assignor.)						
Peck, Albert S., assignor of one-half to S. E. Peck, Geneva, Ill. Windlass	440,979	Nov. 11	1006	258	53	813
Peck, Benjamin S., New York, N. Y. Blacking-brush	440,884	Nov. 18	2009	516	53	1011
Peck, Cassius C., New York, N. Y. Purifying brine	423,949	Mar. 25	2401	638	50	1615
Peck, Cassius C., New York, N. Y. Apparatus for distilling and concentrating liquids	426,139	Apr. 22	2610	686	51	532
Peck, Cassius C., New York, N. Y. Evaporating apparatus	426,140	Apr. 22	2614	{ 686 687 }	{ 51	533
Peck, Cassius C., New York, N. Y. Manufacturing salt	426,141	Apr. 22	2616	687	51	533
Peck, Cassius C., Warsaw, N. Y. Manufacturing salt	426,142	Apr. 22	2618	687	51	533
Peck, Cassius C., Warsaw, N. Y. Evaporating apparatus	435,384	Oct. 14	1084	296	53	213
Peck, Cassius C., Warsaw, N. Y. Evaporating liquids	438,385	Oct. 14	1086	296	53	214
Peck, Charles E., Kent, Ohio. Permutation-padlock	430,145	June 17	1595	397	51	1799
Peck, Charles F. (See Tesla, Nikola, assignor.)						
Peck, Charles H., Providence, assignor to S. K. Merrill & Co., Pawtucket, R. I. Button	422,890	Mar. 4	792	203	50	1287
Peck, Charles P. B., New York, N. Y. Box with two compartments	437,042	Sept. 23	2660	696	52	1906
Peck, Duncan W. (See Trump and Peck.)						
Peck, Edmund B., Brooklyn, N. Y. Barber's chair	441,806	Dec. 2	275	74	53	1318
Peck, Edward A., Chicago, Ill. Cooking-vessel	436,903	Sept. 23	2468	643	52	1867

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Peck, Elisha, assignor of one-half to W. A. Stewart, Wawaka, Ind. Windmill	432,435	July 15	2163	{ 557 558 }	52	433
Peck, Frank E., East Wareham, Mass. Velocipede	437,820	Oct. 7	230	{ 70, 71 72 }	53	45
Peck, Franklin D., Grand Rapids, Mich. Carving-machine	430,678	June 24	2465	{ 601 602 }	51	1975
Peck, Frederic M. (See Birkery and Casé, assignors.)						
Peck, Frederick A., Providence, R. I. Machine for reducing wire	428,572	May 20	2330	591	51	1284
Peck, Frederick A., Providence, R. I., assignor to Daggett & Clapp, Attleborough, Mass. Machine for reducing wire	428,519	May 20	2255	572	51	1270
Peck, George C., Pawtucket, R. I. Counter-guard	437,130	Sept. 23	2797	729	52	1932
Peck, Henry E., New Haven, and P. Doepfensmith, Hamden, Conn. Die for making saddle and carriage clips	434,197	Aug. 12	1135	295	52	988
Peck, Henry S., assignor to R. J. Moorhead, North East, Pa. Suspended adjustable chair	425,248	Apr. 8	1251	333	51	253
Peck, Henry S., assignor to R. J. Moorhead, North East, Pa. Rope-clamp	436,315	Sept. 9	1443	376	52	1658
Peck, Hiram D. (See Peck, John W., assignor.)						
Peck, Horace B. (See Campney, Milton E., assignor.)						
Peck, Ira F., Providence, R. I. Hollow rivet	422,824	Mar. 4	668	171	50	1265
Peck, Ira F., Providence, R. I. Spindle-holder for dyeing yarn in cops	434,136	Aug. 12	1047	{ 270 271 }	52	970
Peck, Ira F., Providence, R. I. Machine for dyeing yarn in cops	436,433	Sept. 16	1646	433	52	1703
Peck, Ira F., Providence, R. I. Lacing-stand	438,113	Oct. 7	680	185	53	131
Peck, John W., assignor to H. D. Peck, Cincinnati, Ohio. Fruit-gatherer	424,934	Apr. 1	770	205	51	150
Peck, Melinda. (See Peck, Orrin B., assignor.)						
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for decomposing metallic salts	433,135	July 29	3291	847	52	664
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Handling and delivering slag	433,136	July 29	3292	847	52	664
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal plant for treating slag	433,137	July 29	3293	848	52	665
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for treating slag	433,138	July 29	3294	848	52	665
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for centrifugally treating molten material	433,139	July 29	3295	849	52	665
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for centrifugally treating molten material	433,140	July 29	3296	{ 849 850 }	52	666
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Machine for centrifugally treating molten material	433,141	July 29	3298	{ 850 851 }	52	666
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for centrifugally treating molten material	433,142	July 29	3300	851	52	666
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. End-thrust bearing	433,143	July 29	3301	852	52	667
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for centrifugally treating molten material	433,144	July 29	3302	853	52	667
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for centrifugally treating molten material	433,145	July 29	3304	{ 853 854 }	52	667
Peck, Seth E. (See Peck, Albert S., assignor.)						
Peck, Stow & Wilcox Company. (See Brooks, John S., assignor.)						
Peck, Stow & Wilcox Company. (See Upson, Waldo L., assignor.)						
Peck, Walter A. (See Bright, Richard A., assignor.)						
Peck, Wells M., Syracuse, N. Y. Spring-clip	427,357	May 6	497	128	51	909
Peck, William H. (See Monfort and Peck.)						
Peckham, Edgar, New York, N. Y. Car-truck	419,876	Jan. 21	1850	{ 486 487 }	50	388
Peckham, Edgar, New York, N. Y. Car-truck	419,877	Jan. 21	1852	487	50	388
Peckham, Edgar, New York, N. Y. Car-truck	419,878	Jan. 21	1854	{ 487 488 }	50	389
Peckham, Edgar, New York, N. Y. Electric street-car gear	420,543	Feb. 4	163	40	50	595
Peckham, Edgar, New York, N. Y. Electric-car gear	420,544	Feb. 4	164	41	50	595
Peckham, Edgar, New York, N. Y. Electric-car axle	420,545	Feb. 4	165	41	50	596
Peckham, Edgar, New York, N. Y. Car-truck	424,722	Apr. 1	437	116	51	86
Peckham, Edgar, New York, N. Y. Car-truck	424,723	Apr. 1	438	{ 116 117 }	51	87
Peckham, Edgar, New York, N. Y. Electric car-motor	425,627	Apr. 15	1828	{ 488 489 }	51	373
Peckham, Edgar, New York, N. Y. Electric-motor truck and gear	440,189	Nov. 11	854	{ 219 220 }	53	786
Peckham, William C., Troy, Ohio. Shelving	438,638	Oct. 21	1464	395	53	294
Peckham, William H., Brooklyn, N. Y. Forming finger-rings	433,578	Aug. 5	203	54	52	796
Peckwell, Frank H. (See Smith and Peckwell.)						
Pecquet, Richard C. A., et al. (See Lemmon, William W., assignor.)						
Pedder, Joshua. (See Cole and Pedder.)						
Peden, Joseph S., New York, N. Y. Bracket-head and bracket	440,899	Nov. 18	2035	524	53	1016
Pedersen, Johannes T., New York, N. Y. Device for transmitting motion	443,259	Dec. 23	2675	686	53	1809
Pederson, Haakon, Minneapolis, Minn. Boot or shoe polishing machine	439,179	Oct. 28	2326	624	53	462
Pederson, Ole, Chicago, Ill. Target	434,522	Aug. 19	1649	432	52	1098
Pederson, Ole, Chicago, Ill. Spring-gun	440,190	Nov. 11	856	220	53	786
Pederson, Ole, assignor to Sleight Manufacturing Company, Moline, Ill. Furniture-caster	438,276	Oct. 14	933	252	53	183
Pederson, Ole, assignor to Sleight Manufacturing Company, Moline, Ill. Furniture-caster	438,422	Oct. 14	1145	300	53	225
Pederson, Ole, assignor to Sleight Manufacturing Company, Moline, Ill. Barrel-hanger	443,147	Dec. 23	2476	632	53	1763
Pederson, Ole, Moline, assignor of one-half to J. D. Williams, Chicago, Ill. Brush	440,114	Nov. 4	728	193	53	751
Pedigo, Madison T., et al. (See Bow, Lafayette T., assignor.)						
Peel, William S. (See Swindells, Peel, and Freeman.)						
Peel, William T., assignor of one-half to J. R. Steiner, St. Paul, Minn. Regulator for dynamos and motors	426,570	Apr. 29	3251	853	51	669
Peeler, John W., Calvert, Tex. Corn or cotton-seed planter	421,755	Feb. 18	1938	509	50	949
Peepers, William, Hicksville, Ohio. Tension device for fence-machines	431,673	July 8	1007	250	52	206
Peer, John A., Brooklyn, N. Y. Motor	441,696	Dec. 2	100	27	53	1282
Peer, John A., Brooklyn, assignor to A. G., C. C., and F. Ely, New York, N. Y. Mowing-machine	428,018	May 13	1507	383	51	1116
Peerless Cloth Cutting Machine Company. (See Kohn, Morris, assignor.)						
Peerless Lead Glass Works. (See McMurtry, Joseph, assignor.)						
Peerless Reaper Company. (See Slentz, Alburice O., assignor.)						
Peet, Benjamin F. (See Partridge, Andrew, assignor.)						
Peffley, William H., Colburn, Ind. Whip-socket and rein-holder	443,242	Dec. 23	2651	680	53	1804
Pegg, Abijah H., Dowagiac, Mich. Base-burning stove	436,801	Sept. 23	2258	595	52	1828
Peggs, Jack. (See Field, Peggs, and Bassinger.)						
Peggs, Jack, Milford, Tex. Motor for operating churns	423,805	Mar. 18	2170	574	50	1564

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Pegram, George H., New York, N. Y. Continuous-girder bridge	424,349	Mar. 25	2992	796	50	1728
Pehrson, John, Rockford, Ill. Plow	441,891	Dec. 2	405	107	53	1344
Pehrson, Nils. (See Linden, John A., assignor.)						
Peirce, Charles F. (See Otis and Peirce.)						
Peirce, Edwin J., Jr., Woonsocket, R. I., assignor to Wardwell Sewing Machine Company, New York, N. Y. Wax-thread sewing-machine	431,192	July 1	235	59, 60	52	49
Peirce, George, Newport, assignor to American Ship Windlass Company, Providence, R. I. Apparatus for hoisting and lowering ships' boats	425,955	Apr. 15	2327	617	51	468
Peirce, George H., Wakefield, Mass. Dental tool	443,705	Dec. 30	3392	871	53	1955
Peirce, James A., and J. E. Gibbs, Jonesborough, Tenn. Fruit-drier	420,562	Feb. 4	190	49	50	602
Peirce, James S., Portsmouth, N. H. Tile for pavements and vault-lights	437,347	Sept. 30	3154	826	52	2005
Peirson, John D. (See Dobson and Peirson.)						
Peiter, Herman, Norwalk, Conn. Combined shirt and suspenders	443,376	Dec. 23	2866	737	53	1846
Peklinger, Carl, <i>et al.</i> (See Iwanowitsch, Richard, assignor.)						
Pell, Adelle M. (See Pell, Henry W., assignor.)						
Pell, Henry W., assignor to A. M. Pell, Rome, N. Y. Fifth-wheel for vehicles	435,707	Sept. 2	513	{ 135 136 }	{ 52	1474
Pell, John E., Benjamin, N. C. Fertilizer attachment for plows	434,293	Aug. 12	1290	335	52	1018
Pell, Lyman F., assignor to G. A. Simonds & Co., Woburn, Mass. Heel-stiffener machine	423,271	Mar. 11	1386	362	50	1406
Pell-tt, William B., Flint, Mich. Table or other logged article	434,456	Aug. 19	1550	404	52	1078
Pellinger, George, <i>et al.</i> (See Gruter, Ferdinand, assignor.)						
Pellow, James E., Sierra City, Cal. Leaf-turner	439,550	Oct. 28	2917	776	53	573
Pelouquin, Nazairice, Southbridge, Mass. Polishing apparatus	422,246	Feb. 25	2667	704	50	1093
Peloubet, Jarvis, Bloomfield, N. J. Reed-organ	457,131	Sept. 23	2798	729	52	1932
Pelton, Charles H. (See Christ, Gustave A., assignor.)						
Pelton, George W., Muscatine, Iowa. Propeller-wheel	436,802	Sept. 23	2259	{ 595 596 }	{ 52	1828
Pelton, Josiah J., assignor of one-half to F. Spaulding, Miles Grove, Pa. Truss	439,252	Oct. 28	2458	659	53	486
Pemberton, Samuel, assignor of one-half to A. C. Frost, Alpena, Mich. Life-preserver	426,543	Apr. 29	3213	842	51	661
Pendergast, John B., Louisville, Ky. Necktie-fastener	434,836	Aug. 19	2138	560	52	1194
Pendleton, Gordon, Jr., Boston, Mass. Bobbin or spool	426,644	Apr. 29	3366	882	51	691
Pendleton, John H. (See Bryson and Pendleton.)						
Pendleton, John H. (See Bryson, Pendleton, and Moss.)						
Pendleton, John H., Brooklyn, assignor to Rapid Transit Cable Company, New York, N. Y. Cable railway	436,102	Sept. 9	1117	{ 290 291 292 }	{ 52	1595
Pendleton, John H., Brooklyn, assignor to Rapid Transit Cable Company, New York, N. Y. Grip mechanism for cable railways	436,103	Sept. 9	1122	{ 292 293 }	{ 52	1596
Pendleton, John H., Brooklyn, assignor to Rapid Transit Cable Company, New York, N. Y. Cable railway	436,104	Sept. 9	1128	294	52	1597
Pendleton, John H., Brooklyn, assignor to Rapid Transit Cable Company, New York, N. Y. Grip mechanism for cable railways	436,105	Sept. 9	1130	295	52	1597
Pendleton, John H., Brooklyn, A. Bryson, Jr., and C. Tiers, assignors to Rapid Transit Cable Company, New York, N. Y. Cable-railway signal	418,850	Jan. 7	299	73	50	63
Pendleton, John H., Brooklyn, A. Bryson, Jr., and L. Moss, assignors to Rapid Transit Cable Company, New York, N. Y. Brake-operating mechanism for railway-cables	431,478	July 1	685	{ 171 172 }	{ 52	138
Pendleton, John H., Brooklyn, C. Tiers, and A. Bryson, Jr., assignors to Rapid Transit Cable Company, New York, N. Y. Cable railway	436,106	Sept. 9	1135	{ 296 297 }	{ 52	1598
Penfield, Edgar J., <i>et al.</i> (See Bridges, William C., assignor.)						
Penfield, James W. and R. C., Willoughby, Ohio. Brick-machine	426,315	Apr. 22	2857	{ 752 753 }	{ 51	583
Penfield, Raymond C. (See Penfield, James W. and R. C.)						
Peninsular Car Company. (See Stevenson, John S., assignor.)						
Peninsular Novelty Company. (See Brosnan, Cornelius J., assignor.)						
Penkert, Max, Troy, N. Y. Shirt	422,409	May 20	2112	530	51	1243
Penman, John. (See Schofield, Richard, assignor.)						
Penn, Alfred E. (See Penn, Thomas and A. E.)						
Penn Lamp and Lighting Company. (See Penn, Thomas and A. E., assignors.)						
Penn, Thomas and A. E., Wandsworth Road, county of Surrey, assignors to Penn Lamp Lighting Company, (limited), London, England. Oil-lamp	431,616	July 8	895	{ 223 224 }	{ 52	186
Penner, Peter, McCook, Nebr. Hame-tug	430,146	June 17	1597	397	51	1800
Penney, Herbert E., assignor of one-half to Z. T. Morrison, Minneapolis, Minn. Device for shielding and protecting wires	425,107	Apr. 8	1031	275	51	208
Penney, Joseph, Grand Rapids, Mich. Device for ejecting water or other liquids from containing-tanks to basins	428,943	May 27	2902	743	51	1415
Penney, Loren W., assignor to Lowell Machine Shop, Lowell, Mass. Yarn-measuring device	430,679	June 24	2467	602	51	1975
Pennie, John C. (See Rosen, Gus A., assignor.)						
Penniman, George D., <i>et al.</i> (See Silkman, Edward J., assignor.)						
Pennington, Edward J., Edinburg, Ind. Pulley	419,791	Jan. 21	1705	452	50	358
Pennington, Edward J., Mount Carmel, Ill. Pulley	419,792	Jan. 21	1705	452	50	358
Pennington, Edward J., Mount Carmel, Ill. Split pulley	428,520	May 20	2256	572	51	1270
Pennington, Isaac, Tiffin, Ohio. Snap-hook	440,056	Nov. 4	652	174	53	735
Pennoek, Andrew J., Longmont, Colo. Bee-hive	442,687	Dec. 16	1652	425	53	1603
Pennoek, Frederick M., Kennett Square, Pa. Road scraping and ditching machine	422,621	Mar. 4	339	97	50	1211
Pennoek, George B., Brooklyn, N. Y. Automatic switch for regulating the power of electric batteries	422,438	Mar. 4	107	29	50	1157
Pennoek, John D., and J. A. Bradburn, Syracuse, N. Y. Making bleaching-powder and caustic soda	428,408	May 20	2111	.....	51	1243
Pennoek, Lee J., assignor of one-half to W. G. Anderson, Brooklyn, N. Y. Exercising-machine	433,960	Aug. 12	777	203	52	917
Pennoek, Willard, Minerva, Ohio. Car-axle-box lid	428,944	May 27	2903	743	51	1415
Pennoek, Willard, Minerva, Ohio. Die for making car-axle-box lids	436,187	Sept. 9	1255	327	52	1619
Pennoek, William D., assignor of one-half to D. G. Peabody, Denver, Colo. Bee-hive	425,047	Apr. 8	950	254	51	192
Pennycook, John T., New York, N. Y., assignor to Alpha Glass and Metal Company, of New Jersey. Pneumatic signaling apparatus	421,429	Feb. 18	1473	382	50	859
Pennycook, John T., New York, N. Y., assignor to Alpha Glass and Metal Company, of New Jersey. Metallic glazing-bar	431,193	July 1	239	61	52	50
Pennycook, John T., New York, N. Y., assignor to Alpha Glass and Metal Company, of New Jersey. Pneumatic signaling apparatus	436,434	Sept. 16	1649	{ 433 434 }	{ 52	1704
Pennycook, John T., Newark, N. J., assignor to E. M. McCook, Riverside, Conn. Manufacture of plate-glass	434,400	Aug. 12	1453	{ 378 379 }	{ 52	1052
Penrose, Charles I., Chatham, N. Y. Bolt-locking device	442,455	Dec. 9	1282	331	53	1519
Penrose, William H., United States Army. Saw-filing machine	424,724	Apr. 1	440	117	51	87

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Pentz, Albert D., Elizabeth, N. J. Flexible coupling	433,304	July 29	3532	911	52	714
Pentz, James A., <i>et al.</i> (See Reckenzaun, Anthony, assignor.)						
Pepper & Co., W. H. (See Pepper, William H., assignor.)						
Pepper, David, Jr., Philadelphia, Pa. Electrode for batteries and making the same	434,457	Aug. 19	1551	404	52	1078
Pepper, David, Jr., Philadelphia, Pa. Making secondary-battery plates	434,458	Aug. 19	1552	.....	52	1078
Pepper, David, Jr., assignor to himself and H. G. Clay, Jr., Philadelphia, Pa. Motor-regulator	441,807	Dec. 2	276	75	53	1318
Pepper, William H., assignor to W. H. Pepper & Co., Lake Village, N. H. Circular-knitting machine	424,497	Apr. 1	89	25, 26	51	20
Pepper, William H., and A. T. L. Davis, Lake Village, assignors to Pitman Manufacturing Company, Laconia, N. H. Splicing-thread feed mechanism for knitting-machines	440,606	Nov. 11	1547	{ 398 399 }	53	914
Pepper, William H., and A. T. L. Davis, Lake Village, assignors to Pitman Manufacturing Company, Laconia, N. H. Splicing-thread gripper and slackener for knitting-machines	443,462	Dec. 23	2996	770	53	1871
Pepple, George W., Auburn, Ind. Seat	438,941	Oct. 21	1958	522	53	385
Peralta, Cándido G. de, Havana, Cuba. Galvanic battery	441,967	Dec. 2	522	140	53	1366
Percy, James, Chicago, Ill. Vehicle-spring	428,688	May 27	2422	616	51	1321
Peregrine, Seymour W., Grand Rapids, Mich. Painting-machine	425,547	Apr. 15	1696	453	51	348
Peregrine, Seymour W., Grand Rapids, Mich. Opera-chair	430,433	June 17	2063	509	51	1890
Peregrine, Seymour W., Grand Rapids, Mich. Drying-kiln	435,258	Aug. 26	2804	743	52	1327
Peregrine, Seymour W., Grand Rapids, Mich. School seat and desk	436,258	Sept. 9	1361	{ 354 355 }	52	1641
Peregrine, Seymour W., Grand Rapids, Mich. Fastening for slatted furniture	436,259	Sept. 9	1361	355	52	1641
Peregrine, Seymour W., Grand Rapids, Mich. Fastening for slatted furniture	438,175	Oct. 14	774	211	53	155
Peregrine, Seymour W., Grand Rapids, Mich. Drying-kiln	438,423	Oct. 14	1146	309	53	225
Perfect Check Protector Company. (See Coggeshall, Carol H., assignor.)						
Perfect Liquid Measure Manufacturing Company. (See Lewis and Irish, assignors.)						
Perfection Heat and Light Company. (See McClary, Thomas D., assignor.)						
Perham, Haven C., assignor to Kitson Machine Company, Lowell, Mass. Dust-trunk for cotton-openers	427,008	Apr. 29	3896	1017	51	793
Perine, Aaron E., Topeka, Kans. Listing-plow	421,510	Feb. 18	1594	411	50	882
Perkins, Albion F. (See Hutton and Perkins.)						
Perkins, Benjamin F., Holyoke, Mass. Rotary fan	420,310	Jan. 28	2524	670	50	525
Perkins, Charles G. (See Gibbs and Perkins.)						
Perkins, Charles G., Hartford, Conn. Cut-out for electrical translating devices	436,087	Sept. 9	1098	285	52	1591
Perkins, Charles G., Hartford, Conn. Electric switch	436,107	Sept. 9	1137	297	52	1598
Perkins, Charles W., trustee. (See Lawson, John H., assignor.)						
Perkins, Edward A. (See Walker, Willis F., assignor.)						
Perkins, Eliab and F. E., St. Joseph, Mo. Windlass	425,185	Apr. 8	1166	307	51	236
Perkins, Elisha H., <i>et al.</i> (See Ramsay, Henry A., assignor.)						
Perkins, Floyd N., Cleveland, assignor to Kenton Lock Manufacturing Company, Kenton, Ohio. Latch	433,146	July 29	3305	854	52	668
Perkins, Francis B., Boston, Mass. Electric elevator	439,180	Oct. 28	2327	624	53	462
Perkins, Francis B., Boston, Mass. Elevator	442,199	Dec. 9	897	239	53	1445
Perkins, Frank H. (See Miller, Louis L., assignor.)						
Perkins, Frederick E. (See Perkins, Eliab and F. E.)						
Perkins, George G., Wimpenny, and J. H. Evans, Manchester, county of Lancaster, England. Ring-spinning machine	421,359	Feb. 11	1375	356	50	832
Perkins, Hazen H., Kewanee, Ill. Husking-pin	429,475	June 3	568	139	51	1581
Perkins, Hazen H., Kewanee, Ill. Husking pin or peg	436,378	Sept. 16	1564	411	52	1690
Perkins, Henry S., deceased, Dunham, Ala.; M. W. Perkins, administratrix. Gang rotary saw	435,380	Aug. 26	3019	799	52	1366
Perkins, James P., Yonkers, N. Y. Combined red pigment and paint base	429,054	May 27	3080	.....	51	1448
Perkins, James P., Yonkers, N. Y. Treating slag for the production of red pigments	429,055	May 27	3081	.....	51	1448
Perkins, James P., Yonkers, N. Y. Treating slag for the production of red pigments	429,056	May 27	3083	.....	51	1448
Perkins, Jesse I., Grove, Tex. Machine for pulling stumps	442,329	Dec. 9	1093	286	53	1482
Perkins Lock Manufacturing Company. (See Forkel and Hunn, assignors.)						
Perkins, Loftus, London, England. Refrigerating and freezing apparatus	439,181	Oct. 28	2328	{ 624 625 626 }	53	462
Perkins, Luther M., St. Louis, Mo. Electric conductor for street-railways	435,447	Sept. 2	103	29	52	1395
Perkins, Mattie W., administratrix. (See Perkins, Henry S.)						
Perkins, Morgan W. (See Seat and Perkins.)						
Perkins, N. S. (See White, Albert M., assignor.)						
Perkins, Otis L., Peabody, Mass. Potato-chip holder	422,247	Feb. 25	2668	704	50	1093
Perkins, William C., assignor to New Haven Wire Goods Company, New Haven, Conn. Gridiron. (Reissue)	11,080	May 27	3161	814	51	1464
Perkins, William C., assignor to New Haven Wire Goods Company, New Haven, Conn. Broiler	430,401	June 17	2022	498	51	1883
Perkins, William C., assignor to New Haven Wire Goods Company, New Haven, Conn. Gas-stove	430,402	June 17	2024	499	51	1883
Perkins, William H. (See Palsen, Magnus J., assignor.)						
Perks, Albert J. (See Casto, Frank, assignor.)						
Perlinsky, Max A. (See Neuburger, Perlinsky, and Gaylord.)						
Perls, Hermann, Rosback, Germany, assignor of one-half to S. Bernhardt, New York, N. Y. Letter-box	438,942	Oct. 21	1959	523	53	385
Perls, Martin. (See Perls, Theodor, assignor.)						
Perls, Theodor, Würzburg, Germany, assignor of one-half to M. Perls, London, England. Electric signaling apparatus for preventing collisions between railway-trains	435,516	Sept. 2	202	55, 56	52	1414
Pernot, Emile F. (See Pipes and Pernot.)						
Perrand, John B., and W. Bechtold, New York, N. Y. Nail-head, &c	440,364	Nov. 11	1130	290	53	836
Perret, Frank A., Brooklyn, N. Y. Dynamo-electric machine	432,169	July 15	1781	457	52	362
Perret, Frank A., Brooklyn, N. Y., assignor to Elektron Manufacturing Company, of New York. Electric-railway motor	424,818	Apr. 1	597	157 { 359 360 361 362 }	51	115
Perret, Henri, A. Gres, and H. Million, Lyons, France. Machine for applying chenille to tulle	434,355	Aug. 12	1376	.....	52	1036
Perret, Paul, Chaux-de-Fonds, Switzerland. Stem-winding watch	432,709	July 22	2608	667	52	528
Perret, Paul, Chaux-de-Fonds, Switzerland. Manufacture of balance-wheels for watches	433,255	July 29	3462	894	52	700
Perrett, Frank J. (See Stokes and Perrett.)						
Perrin, Oliver U., Stone Bluffs, Ind. Mower	439,253	Oct. 28	2459	659	53	486
Perrine, Alfred T., assignor to M. Siersdorfer and I. Kinsey, Cincinnati, Ohio. Padlock	443,537	Dec. 30	3118	802	53	1903
Perrine, John V. (See Cofield, Peter T., assignor.)						
Perrine, Robert M., Cleveland, Ohio. Purifying and deodorizing crude petroleum	419,347	Jan. 14	1061	50	224

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Perna, Gregorie, Slanic, Roumania. Breech-loading gun	437,365	Sept. 30	3199	834	52	2013
Perry, Charles E., Forsyth, Mont. Separable button	434,802	Aug. 19	2092	547	52	1184
Perry, Charles H., Oneida, assignor of one-half to T. R. Proctor, Utica, N. Y. Type-writing machine	435,654	Sept. 2	431	{ 115 116 }	{ 52 52 }	1456
Perry, David P. (See Pfänder, Charles A., assignor.)						
Perry, Enoch W., Jr. (See Kipper and Perry.)						
Perry, Enoch W., Jr., New York, N. Y. Shutter for photographic cameras	439,037	Oct. 21	2102	563	53	413
Perry, Enoch W., Jr., New York, N. Y., assignor of one-half to E. Kipper, Zylonite, Mass. Photographic dipper	420,355	Jan. 28	2586	687	50	536
Perry, Enoch W., Jr., New York, N. Y., assignor of one-half to E. Kipper, Zylonite, Mass. Shutter for photographic cameras	422,825	Mar. 4	669	171	50	1265
Perry, Enoch W., Jr., New York, N. Y., assignor of one-half to E. Kipper, Adams, Mass. Shutter for photographic apparatus	438,943	Oct. 21	1961	523	53	385
Perry, Enoch W., Jr., New York, N. Y., assignor of one-half to E. Kipper, Adams, Mass. Photographic camera	438,944	Oct. 21	1963	524	53	385
Perry, Francis L., Brooklyn, N. Y. Vehicle-spring	433,026	July 29	3119	800	52	631
Perry, Francis L., Brooklyn, N. Y. Two-wheeled vehicle	439,681	Nov. 4	85	23	53	624
Perry, Franklin W., Philadelphia, Pa. Capsule-press	442,910	Dec. 16	2067	{ 530 531 }	{ 53 53 }	1682
Perry, Fred H., <i>et al.</i> (See Laird, Wesley E., assignor.)						
Perry, Frederick J., Nottingham, England. Embroidering-machine	433,815	Aug. 5	567	{ 147 148 }	{ 52 52 }	867
Perry, John, <i>et al.</i> (See Merrifield, Preston V., assignor.)						
Perry, John E., Wakefield, R. I. Lantern or lamp	430,680	June 24	2471	603	51	1975
Perry, Leziam L., Peabody, Mass. Manufacturing transparent fabrics	420,696	Feb. 4	375	50	50	638
Perry, Peter, Vandalia, Ill. Horseshoe's nippers and hoof-trimmer	441,968	Dec. 2	522	140	53	1366
Perry, Stephen C. (See Mitchell, John B., assignor.)						
Perry, Thomas O., Chicago, Ill. Grinding-mill	420,464	Feb. 4	64	14	50	576
Perry, Thomas O., Tecumseh, Mich. Windmill	431,851	July 8	1295	325	52	262
Perry, Thomas O., assignor to L. W. Noyes, Chicago, Ill. Windmill-derrick	431,991	July 8	1493	377	52	301
Perry, William A. (See Hathaway, George H., assignor.)						
Perry, William D., <i>et al.</i> (See Easton, James W., assignor.)						
Perry, William H. B., Troy, N. Y. Mechanism for polishing stone	425,628	Apr. 15	1830	{ 489 490 }	{ 51 51 }	373
Persanowsky, Julius, Brooklyn, N. Y. Washing-machine	431,821	July 8	1247	312	52	252
Pern Mower Company. (See Spratt, Henry W., assignor.)						
Perreil, Leighton M., Manheim, Pa. Match-safe	437,792	Oct. 7	188	59	53	38
Pessenger, John S., Brooklyn, N. Y., assignor of one-half to F. C. Tomlinson, Closter, N. J. Machine for making spikes, &c.	422,151	Feb. 25	2513	664	50	1064
Peter, Joseph, Bucyrus, Ohio. Beer-cooling apparatus	436,635	Sept. 16	1960	{ 514 515 }	{ 52 52 }	1762
Peterkin, Anceal A. (See Peterkin, James A. and A. A.)						
Peterkin, Anceal A., Fort Motte, S. C., assignor of one-half to N. K. Earle, Washington, D. C. Pipe-wrench	441,020	Nov. 18	2219	573	53	1051
Peterkin, James A. and A. A., Fort Mott, S. C. Mower	436,878	Sept. 23	2427	{ 632 633 }	{ 52 52 }	1859
Peterman, Joseph S., Jr., Flomtown, Pa. Cutter for fodder, straw, &c.	420,734	Feb. 4	426	113	50	648
Peters, Charles C., assignor of two-thirds to J. V. B. Hoyle and C. W. Wadsworth, Springfield, Ohio. Apparatus for recutting files	434,884	Aug. 19	2232	585	52	1211
Peters, Charles S., Sioux City, Iowa. Hotel-indicator	431,725	July 8	1098	273	52	224
Peters Dash Company. (See Peters and Walton, assignors.)						
Peters, Fred. (See Traub and Peters.)						
Peters, Frederick R., <i>et al.</i> (See Paridy and Brown, assignors.)						
Peters, George M., and L. B. Walton, assignors to Peters Dash Company, Columbus, Ohio. Dash for vehicles	422,970	Mar. 11	934	245	50	1322
Peters, George T., Butte City, Mont. Horseshoe-hammer	443,377	Dec. 23	2867	737	53	1247
Peters, Gershom M., Cincinnati, Ohio. Blasting-cartridge	422,439	Mar. 4	108	29	50	1157
Peters, Gershom M., Cincinnati, Ohio. Blasting-cartridge	422,440	Mar. 4	109	30	50	1158
Peters, Gershom M., Cincinnati, Ohio. Blasting-cartridge	422,441	Mar. 4	110	30	50	1158
Peters, Gershom M., Cincinnati, Ohio. Cartridge	422,442	Mar. 4	111	30	50	1158
Peters, Gordon D., London, England. Spring-roller for window-shades	422,314	Feb. 25	2772	730	50	1113
Peters, Henry. (See Joy, William, assignor.)						
Peters, Käthe, Kiel, Germany. Opening and closing device for beer-glasses	431,390	July 1	551	{ 137 138 }	{ 52 52 }	112
Peters, Mahlon, Oaklandon, assignor of one-half to J. D. Lowden, Lawrence, Ind. Post-hole auger	427,009	Apr. 29	3898	1017	51	794
Peters, Richard G., Manistee, Mich. Evaporating apparatus	420,426	Jan. 28	2684	{ 711 712 }	{ 50 50 }	554
Peters, Samuel S., Middletown, Pa. Game apparatus	434,721	Aug. 19	1981	515	52	1162
Petersen, Anton, Chicago, Ill. Pigeon-hole box	438,713	Oct. 21	1588	426	53	315
Petersen, Edward A. C., Chicago, Ill. Baker's oven	428,521	May 20	2257	573	51	1270
Petersen, Frank, Chicago, Ill. Pen-holder	431,391	July 1	552	138	52	112
Petersen, Paul S. N., Utica, N. Y. Car-coupling	426,626	Apr. 29	3340	875	51	687
Petersen, Peter, and H. A. Closser, Fairchild, Wis. Railway-spike	433,816	Aug. 5	569	148	52	867
Peterson, Albert H., assignor of one-third to G. P. A. Gunther, Philadelphia, Pa. Pipe-hanger	429,057	May 27	3085	796	51	1448
Peterson, Albert H., Jersey City, N. J., assignor to J. Mehl & Co., New York, N. Y. Satchel-frame	437,366	Sept. 30	3202	834	52	2013
Peterson, Alexander E., New York, N. Y. Belt-stretching machine	431,074	July 1	69	17	52	16
Peterson, Alexander E., New York, N. Y. Belt-stretching machine	442,135	Dec. 9	800	{ 215 216 }	{ 53 53 }	1426
Peterson, Anthony, and O. O. Raaen, Placerville, Idaho. Cultivator or harrow	437,450	Sept. 30	3340	{ 873 874 }	{ 52 52 }	2042
Peterson, Carson A., assignor to J. Peterson, Lebanon, Kans. Fence-post	437,165	Sept. 23	2871	746	52	1944
Peterson, Charles M., Seneca, Mo. Sheaf-carrier	436,188	Sept. 9	1257	{ 327 328 }	{ 52 52 }	1619
Peterson, E., <i>et al.</i> (See Samuelson, Andrew G., assignor.)						
Peterson, Eric M., Worcester, Mass. Shutter-worker	438,240	Oct. 14	873	236	53	173
Peterson, Erick H., Philadelphia, Pa. Combined purse and hat-brush	440,191	Nov. 11	856	220	53	787
Peterson, Hans, Round Rock, Tex. Plow	442,200	Dec. 9	899	239	53	1445
Peterson, Jane G., <i>et al.</i> (See Peterson, Knute F., assignor.)						
Peterson, Jennie. (See Peterson, Carson A., assignor.)						
Peterson, John W., Chicago, Ill. Stone lifting and carrying machine	422,826	Mar. 4	670	{ 171 172 }	{ 50 50 }	1266

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Peterson, Jonathan E., near West Mansfield, Ohio. Corn-cutting implement	443,055	Dec. 16	2284	586	53	1726
Peterson, Knute F., Lake View, Ill., assignor to himself and C. W. Caldwell, Waterloo, Iowa. Automatic liquid-releaser	427,607	May 13	876	{ 220 221 }	51	994
Peterson, Knute F., Chicago, Ill., assignor to himself and C. W. Caldwell, Waterloo, Iowa. Automatic liquid-releaser	427,608	May 13	878	221	51	994
Peterson, Knuto F., Ravenswood, assignor to J. G. Peterson and C. B. Billings, Chicago, Ill. Ticket-punch	439,038	Oct. 21	2104	564	53	414
Peterson, Ludvig, Arlington, S. D. Harvester-reel attachment	422,152	Feb. 25	2516	665	50	1065
Peterson, Mats P., Oshkosh, Wis. Vehicle-brake	434,459	Aug. 19	1553	405	52	1078
Peterson, Niels P., Colby, Wis. Sleigh-knee	431,194	July 1	240	61	52	50
Peterson, Per A., New York, N. Y. Sewing-tool	419,216	Jan. 14	857	225	50	184
Peterson, Rafor W., and S. B. Clark, Santa Rosa, Cal. Hop-picker	426,603	Apr. 29	3300	866	51	679
Petford, William H. (See Nodder and Petford.)						
Petherick, W. W., et al. (See Kinney, Jesse, assignor.)						
Petit, Armand, Fourmies, France. Air-wetting apparatus	418,746	Jan. 7	127	31	50	28
Petzaens, Carl V., Joplin, Mo. Treating sublimed lead	439,733	Nov. 4	156	.....	53	638
Petree, Wesley A., Mizpah, N. C. Tobacco-hanger	425,548	Apr. 15	1698	453	51	348
Petree, William H., Bethania, N. C. Tobacco hanger or stick	428,522	May 20	2258	573	51	1271
Petrie, Nelson C., Cherry Valley, Ohio. Bee-warmer	437,451	Sept. 30	3342	874	52	2042
Perry, Nicholas, Rockport, Mo. Invalid-chair	438,945	Oct. 21	1969	525	53	387
Petsche, Gustav B., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Valve-gear	442,136	Dec. 9	801	216	53	1426
Pett, Frank S., Dover, assignor to T. F. Walker, Birmingham, England. Ship's log	442,257	Dec. 9	978	{ 257 258 }	53	1461
Pettee Machine Works. (See Francis, George T., assignor.)						
Pettigrew, Adolph, Brooklyn, N. Y. Reversible feed mechanism for sewing-machines ..	426,737	Apr. 29	3516	919	51	720
Potter, George, Jr., Paducah, Ky. Drum	440,192	Nov. 11	857	221	53	787
Petersen, Carl A., Lake Crystal, Minn. Attachment for stoves	426,316	Apr. 22	2859	753	51	584
Pettersson, Gustaf F., assignor to O. A. T. Kindstrom, Stockholm, Sweden. Protector for pocket-books	426,680	Apr. 29	3419	897	51	701
Pettigrew, Charles. (See Smith, Pettigrew, and Garrett.)						
Pettigrew, Charles, assignor to Joli t Steel Company, Joliet, Ill. Shears for metal	420,095	Jan. 28	2180	574	50	461
Pettigrew, Richard F., et al. (See Sprague, Henry W., assignor.)						
Pettijohn, William R., Hoyt, Kans. Lister-cultivator	440,498	Nov. 11	1372	354	53	882
Pettingell, Andrews Company. (See Herrick, Charles H., assignor.)						
Pettingell, Benjamin C., assignor of one-half to E. Clute, Vancouver, Canada. Hatchet for shingling	440,962	Nov. 18	2140	554	53	1035
Pettit, Albert, and J. Powers, Perrinton, Mich. Wash-board holder	437,617	Sept. 30	3577	935	52	2090
Pettit, Allan H., et al. (See Hickey, John, assignor.)						
Pettit, Elihu R., Philadelphia, Pa. Comb-cleaner	437,238	Sept. 30	2984	779	52	1973
Pettit, George, Jr. (See Bowers and Pettit.)						
Pettit, Israel J., Americus, Kans. Pie-lifter	420,546	Feb. 4	166	41	50	596
Petzold, Charles G., assignor of one-half to Arlington Mills, Lawrence, Mass. Pattern-chain for looms	427,010	Apr. 29	3898	1017	51	794
Pew, Joseph N., Pittsburg, Pa. Incandescent gas-lamp	422,536	Mar. 4	246	64	50	1183
Peyton, Thomas, Hartford, Conn. Oil-cup	433,089	July 29	3220	829	52	650
Pfahler, William H., assignor to A. Cox Stove Company, Philadelphia, Pa. Flue structure of cooking ranges or stoves	430,085	June 10	1503	373	51	1772
Pfannkuche, Gustav, Cleveland, Ohio. Regulator for electric-current generators	428,317	May 20	1961	492	51	1213
Pfannkuche, Gustav, Cleveland, Ohio. Electrical converter	429,583	June 3	728	176	51	1612
Pfannkuche, Gustav, assignor to Brush Electric Company, New York, N. Y. Ammeter and voltmeter	434,032	Aug. 12	868	229	52	935
Pfatischer, Mathias, Philadelphia, Pa., assignor to Electrical Accumulator Company, of New York. Dynamo-electric machine	421,967	Feb. 25	2242	589	50	1014
Pfeffer, John F., Cincinnati, Ohio. Cash indicator and register	422,827	Mar. 4	671	172	50	1266
Pfeffer, John F., Cincinnati, Ohio. Cash indicator and register	422,828	Mar. 4	673	{ 172 173 174 }	50	1266
Pfeffer, John F., Cincinnati, Ohio. Printing-recorder	423,273	Mar. 11	1395	363	50	1408
Pfeffer, John F., Cincinnati, and E. Spencer, Dayton, Ohio; said Spencer assignor to said Pfeffer. Registering apparatus for key-operated machines	423,272	Mar. 11	1389	{ 362 363 }	50	1407
Pfingst, Louis, Boston, Mass. Coupling for electric cars	426,317	Apr. 22	2861	753	51	584
Pfingst, Louis, Boston, Mass. Electric car	430,147	June 17	1597	398	51	1800
Pfingst, Louis, Boston, Mass. Trolley-wheel for electrically-propelled vehicles	438,359	Oct. 14	1055	287	53	208
Pfingst, Louis, Boston, Mass. Trolley-pole	439,182	Oct. 28	2331	627	53	462
Pfingst, Louis, Boston, and S. A. Bemis, Springfield, Mass. Car-brake	431,075	July 1	70	17	52	16
Pfingst, Louis, Boston, and S. A. Bemis, Springfield, Mass. Truck for railway-cars	440,365	Nov. 11	1131	{ 290 291 }	53	836
Pfingsten, Carl G., New York, N. Y. Pocket-book clasp	429,246	June 3	207	52	51	1512
Pfintzinger, William, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Substantive yellow dye	428,629	May 27	2423	.....	51	1321
Plueger, Ernest F., Akron, Ohio. Trolling-spoon	432,436	July 15	2164	558	52	433
Plünger, Charles A., assignor to D. P. Perry, Chicago, Ill. Lightning-arrester	420,096	Jan. 28	2182	575	50	462
Plünger, Charles A., assignor to D. P. Perry, Chicago, Ill. Electric switch	440,720	Nov. 18	1734	445	53	960
Pfortner, Ignatz, New York, N. Y. Smoking-pipe	419,348	Jan. 14	1062	280	50	225
Pforzheimer, Isaac. (See Zallud, Charles, assignor.)						
Pforzheimer, Isaac. (See Zallud and Pforzheimer.)						
Pfotenbauer, Hugo, deceased, East Orange, N. J.; L. Pfotenbauer administratrix. Sink-strainer	442,999	Dec. 16	2202	566	53	1710
Pfotenbauer, Lena, administratrix. (See Pfotenbauer, Hugo.)						
Pfouts, George L. (See Hannis, Henry F., assignor.)						
Pfouts, Leroy S., Canton, Ohio. Combined friction-clutch and shaft cut-off	441,254	Nov. 25	2642	686	53	1138
Pfangle, Charles J., Aurora, Ill. Removable letter	433,211	July 29	3398	878	52	686
Pfund, Richard, Brooklyn, N. Y. Dynamo-electric machine	429,736	June 10	950	234	51	1665
Pheatt, Gideon K., Toledo, Ohio. Gun-charge indicator	439,551	Oct. 28	2920	776	53	574
Pheister, Samuel E., Tippecanoe, Ind. Car-coupling	430,192	June 17	1653	412	51	1811
Phelan, John, Pittsburg, Pa. Galley-lock	442,540	Dec. 9	1419	362	53	1546
Phelps, Albert, Ansonia, Conn. Motion-clock	431,282	July 1	379	95	52	77
Phelps, Benjamin F., Kansas City, Kans. Machine for mixing liquids	420,356	Jan. 28	2588	687	50	536
Phelps, Casper F., and R. A. Lucas, Kohala, Hawaii. Car-coupling	441,580	Nov. 25	3157	812	53	1236
Phelps, Charles V., Rochester, Ohio. Tower	422,036	Feb. 25	2333	{ 616 617 }	50	1032
Phelps, Don A., Cincinnati, Ohio. Parcel-carrier	423,696	Mar. 18	2023	534	50	1535
Phelps, Don A., Cincinnati, Ohio. Combined ironing-board and bosom-stretcher	425,048	Apr. 8	952	254	51	192

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Phelps, George H., <i>et al.</i> (See Smith, Edward S., assignor.)						
Phelps, George H., Newton, Mass. Garment-supporter.	420,166	Jan. 28	2296	607	50	483
Phelps, George H., Newton, Mass. Making garment or fabric holding catches	427,242	May 6	339	87	51	877
Phelps, Harvey J., Havana, Ill. Grain-drill	433,027	July 29	3121	801	52	632
Phelps, Harvey J., assignor to Havana Press Drill Company, Havana, Ill. Metallic flask	420,664	Feb. 4	335	87	50	629
Phelps, Harvey J., assignor to J. W. Rhodes, Havana, Ill. Wheel for seeding-machines	425,956	Apr. 15	2329	617	51	468
Phelps, Harvey J., assignor to J. W. Rhodes, Havana, Ill. Making metallic wheels	433,183	July 29	3359	869	52	678
Phelps, Henry L. (See Beiersmith, Peter J., assignor.)						
Phelps, Henry W., <i>et al.</i> (See Ranney, Darwin D., assignor.)						
Phelps, James R., Sacramento, Cal. Harness	438,360	Oct. 14	1055	287	53	208
Phelps, Joseph, Newton, Mass. Car-coupling	423,340	Mar. 11	1483	389	50	1426
Phelps, Lucius B., Eagleville, Ohio. Harrow and seed-planter	434,644	Aug. 19	1860	487	52	1140
Phelps, Lucius J., Passaic, N. J., assignor to D. D. MacMullen, Brooklyn, N. Y. Lubricator	424,350	Mar. 25	2994	796	50	1729
Phelps, Mac, Red Oak, Iowa. Combined platform-scale and calculator	438,753	Oct. 21	1664	446	53	329
Phelps, Richard N. R., assignor to C. R. Cheever, New York, N. Y. Supplying furnaces with carbonaceous fuel	436,613	Sept. 16	1922	505	52	1754
Phelps, Walter J., Salem, Ohio. Soldering-machine	439,762	Nov. 4	199	51, 52	53	647
Phelps, William C., assignor to S. M. Bixby & Co., New York, N. Y. Mucilage-brush scraper	433,090	July 29	3221	829	52	650
Phenix, William, Chicago, Ill. Grip for traction-cables	441,377	Nov. 25	2837	732	53	1174
Phifer, Washington I., California, Mo. Rotary engine	422,829	Mar. 4	681	{ 174 175 }	{ 50	1267
Philadelphia Exhaust Ventilator Company. (See Poulson, Joseph, assignor.)						
Philadelphia Novelty Company. (See Heysinger, Isaac W., assignor.)						
Philadelphia Textile Machinery Company. (See Proctor and Knowles, assignors.)						
Philbrick, Josiah J., Chattanooga, Tenn. Producing barrel-staves	432,640	July 22	2483	639	52	504
Philon, George, Mishawaka, Ind. Wood-rim pulley	429,637	June 10	806	196	51	1637
Philon, George, assignor to Dodge Manufacturing Company, Mishawaka, Ind. Pulley	438,822	Oct. 21	1777	476	53	351
Philip, Hedwig, assignor to M. E. M. Philip, Hamburg, Germany. Corset	432,895	July 22	2888	{ 739 740 }	{ 52	582
Philip, Mendel E. M. (See Philip, Hedwig, assignor.)						
Philippart, Gustave, Paris, France. Secondary battery	425,902	Apr. 15	2225	591	51	449
Philippart, Gustave, Paris, France. Secondary battery	425,957	Apr. 15	2329	618	51	468
Philips, Ferdinand, Philadelphia, Pa. Wire-nail machine	433,961	Aug. 12	778	204	52	918
Philips, William J. (See Pierce, Francis, assignor.)						
Phille, Jeremiah, Norwich, N. Y. Milk-pail	419,551	Jan. 14	1341	{ 358 359 }	{ 50	282
Phillips, Ambrose A., Toledo, Ohio, assignor of one-half to R. A. Wallace, Chicago, Ill. Mixer for natural gas	434,948	Aug. 26	2358	624	52	1242
Phillips, Arthur J. (See Bouvier and Phillips.)						
Phillips, Byron C., Flandreau, S. D. Washing-machine	419,063	Jan. 7	627	163	50	132
Phillips, Charles H., Boston, Mass. Grain-weighing machine	440,794	Nov. 18	1862	{ 479 480 }	{ 53	982
Phillips, Charles T., Toronto, Ontario, Canada. Machine for oiling the axles of vehicles	428,945	May 27	2905	744	51	1415
Phillips, Columbus, assignor of part to W. B. Alexander and I. Y. Sage, Birmingham, Ala. Reversing-lever for steam-engines	427,268	May 6	376	98	51	884
Phillips, Columbus, assignor of one-half to W. B. Alexander and I. Y. Sage, Birmingham, Ala. Attachment for feed-water injectors	433,028	July 29	3122	802	52	632
Phillips, Darius T., assignor of one-half to D. W. Mitchell, Chicago, Ill. Corn-harvester	421,756	Feb. 18	1940	{ 510 511 }	{ 50	949
Phillips, Edward D., assignor of one-half to C. Goetz, Mineral Point, Wis. Feed-grinder	443,000	Dec. 16	2203	566	53	1711
Phillips, Edward R., Cambridge, Mass. Mailing-case for bottles	428,410	May 20	2113	530	51	1243
Phillips, Edwin G., assignor of two-thirds to S. Weiskoff and T. P. Livingston, Charleston, S. C. Hinge	424,900	Apr. 1	722	193	51	139
Phillips, Elwood C., Chicago, Ill. Machine for perforating characters	441,581	Nov. 25	3159	{ 812 813 }	{ 53	1287
Phillips, Elwood C., Chicago, Ill. Coin-and-slot machine for tool-sharpening	443,001	Dec. 16	2204	567	53	1711
Phillips, Erbine C., Appleton, Wis. Coin-controlled indicating striking-machine	427,011	Apr. 29	3599	1018	51	794
Phillips, Eugene F., Providence, R. I. Electric conductor	421,968	Feb. 25	2243	590	50	1015
Phillips, Franklin, Newark, N. J., assignor to Hewes & Phillips Iron Works, of New Jersey. Escape-valve for dash-pots	420,887	Feb. 4	689	177	50	693
Phillips, George, Corsicana, Tex. Fuse for shells	426,210	Apr. 22	2717	711	51	552
Phillips, Henry L., London, England. Tool for forming bottle-necks	442,358	Dec. 9	980	258	53	1461
Phillips, Jacob, Westfield, Pa. Mowing-machine	421,430	Feb. 18	1474	383	50	859
Phillips, James N., <i>et al.</i> (See Siedentopf, Frederick, assignor.)						
Phillips, John C., Rochester, assignor of one-half to W. H. Bonslong, Winamac, Ind. Bridge	440,437	Nov. 11	1273	329	53	862
Phillips, John E., Fort Madison, Iowa. Locomotive	428,179	May 20	1739	440	51	1170
Phillips, John K., South Orange, N. J. Foot-rest for use in shoe-stores	442,781	Dec. 16	1832	474	53	1638
Phillips, John O. (See Booker and Phillips.)						
Phillips, John O., New York, N. Y. Electric-lamp socket	439,304	Oct. 28	2556	683	53	505
Phillips, Lewis B., Diana, assignor to himself and C. V. Graves, Wilna, N. Y. Steam-engine	422,622	Mar. 4	392	98	50	1211
Phillips, Lewis B., assignor to C. V. Graves, Natural Bridge, N. Y. Valve for steam-engines	440,057	Nov. 4	652	174	53	735
Phillips, Mary. (See Carpenter and Phillips.)						
Phillips, Orson D. (See Littlewood and Phillips.)						
Phillips, Russell, Boston, assignor of four-fifths to B. P. Ryder, East Braintree, and F. Keith, East Bridgewater, Mass. Steam-engine	430,681	June 24	2471	{ 603 604 }	{ 51	1976
Phillips, Theodore F., Wabash, Ind. Car-coupling	433,487	Aug. 5	72	21	52	771
Phillips, Thomas J., Cleveland, Iowa. Means for sinking shafts in soft earth	424,819	Apr. 1	598	157	51	116
Phillips, Thomas J., Cleveland, Iowa. Sinking shafts in soft earth	424,820	Apr. 1	601	158	51	116
Phillips, William A. (See Entz and Phillips.)						
Phillips, William A., assignor to Edison Machine Works, Schenectady, N. Y. Electric conductor	434,885	Aug. 19	2233	586	52	1211
Phillips, William P., Boston, Mass. Safety water-gage	421,139	Feb. 11	1063	273	50	775
Phillips, Zaidee A. (See Haven, John V. D., assignor.)						
Philo, Lewis M., Alton, N. Y. Horse-boot	424,573	Apr. 1	210	58	51	43
Philp, John W., Humboldt, Tenn. Machine for cutting gores in barrel-blanks	424,821	Apr. 1	603	{ 158 159 }	{ 51	116
Philpott, Charles H. (See Holler, Georg, assignor.)						
Philpott, Charles H., Raton, N. Mex. Ter. Burglar-alarm	420,097	Jan. 28	2183	575	50	462
Phippen, George D., and J. H. Browne, Salem, Mass. Coupon-cutter	423,950	Mar. 25	2403	638	50	1615
Phipps, Alfred P., <i>et al.</i> (See Lefeber, Henry, assignor.)						
Phipps, Edward L., Milford, Mich. Car-door	433,212	July 29	3399	878	52	686

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Phipps, Edward L., Milford, Mich. Car-door	433,256	July 29	3463	894	52	700
Phipps, Edward L., assignor of one-half to S. H. Wilhelm and A. D. Webb, Milford, Mich. Car-door	420,465	Feb. 4	66	14	50	576
Phipps, J., <i>et al.</i> (See Hutton, Milton C., assignor.)						
Phoenix Actien-Gesellschaft für Bergbau und Huttenbetrieb. (See Spannagel and Springorum, assignors.)						
Phonophore Syndicate. (See Langdon-Davies, Charles, assignor.)						
Physician's Supply Manufacturing Company. (See Campbell, Howard, assignor.)						
Piaget, Henry V., <i>et al.</i> (See McCann, Adam A., assignor.)						
Piaget, William E., <i>et al.</i> (See McCann, Adam A., assignor.)						
Pianko, Mendel, Brooklyn, N. Y. Window-stand	424,351	Mar. 25	2995	796	50	1729
Piatt, Harry B., St. Louis, Mo. Harness-pad	426,318	Apr. 22	2862	754	51	584
Picard, Charles T., assignor to himself and L. J. Demers, Chicago, Ill. Bridge-gate	440,366	Nov. 11	1134	292	53	837
Picard, Lorenzo F. (See Angell and Picard.)						
Pick Sisters. (See Elias, Jacob J., assignor.)						
Pickard, William P., Summertown, Tenn. Automatic car-brake	435,633	Sept. 2	400	108	52	1450
Pickering, Fred. (See Wiatt and Pickering.)						
Pickering, James. (See Looney, William, assignor.)						
Pickering, Joseph M., Philadelphia, Pa. Machine for removing down from feathers	426,955	Apr. 29	3815	997	51	778
Pickett, Chancy J., <i>et al.</i> (See Watrous, Henry N., assignor.)						
Pickett, Byron M., New York, N. Y., assignor to New Process Steel Hardening Company, Portland, Me. Hardening steel	437,793	Oct. 7	189		53	38
Pickett, Byron M., New York, N. Y., assignor to New Process Steel Hardening Company, Portland, Me. Process of and composition for tempering	437,794	Oct. 7	190		53	38
Pickett, Byron M., New York, N. Y., assignor to New Process Steel Hardening Company, Portland, Me. Composition of fluids for tempering steel	437,795	Oct. 7	191		53	38
Pickett, David M., Dearborn, Mich. Tucking-guide for sewing-machines	435,517	Sept. 2	205	56	52	1414
Pickett, Hamilton F. (See McIlvain, Gose, and Pickett.)						
Pickett, Squire A., Crowley, La. Rice-machine	426,738	Apr. 29	3518	919	51	720
Pickett, William H. (See Campbell and Pickett.)						
Pickett, William H., Warren, Pa. Carpet-sweeper	419,349	Jan. 14	1063	{ 280 281 }	50	225
Pickhardt, Gustav. (See Heinz, Adolph, assignor.)						
Pickles, Charles K., St. Louis, Mo. Mechanical movement	433,184	July 29	3360	869	52	678
Pickles, Charles K., assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper cutter	423,806	Mar. 18	2171	574	50	1564
Pickles, Charles K., assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	428,523	May 20	2260	573	51	1271
Piedra, Manuel A., Schriever, La. Apparatus for washing gases	419,350	Jan. 14	1064	281	50	225
Pielert, John H., Triumph, Md. Snow-plow	436,636	Sept. 16	1962	515	52	1762
Pielsticker, Carl M., London, England. Producing sheets direct from molten metal	437,509	Sept. 30	3424	{ 896 897 }	52	2060
Pieper, Henri, Fils, Liege, Belgium. Arc lamp	423,807	Mar. 18	2172	{ 574 575 }	50	1564
Pier, Colwert K., <i>et al.</i> (See Farmer, Julius M., assignor.)						
Pierce, Calvin S. (See Stump, Ira E., assignor.)						
Pierce, Charles H., Rossville, Ill. Car-coupling	436,260	Sept. 9	1362	355	52	1642
Pierce, Francis, assignor of one-half to W. J. Philips, Philadelphia, Pa. Electrical burglar-alarm	440,115	Nov. 4	729	{ 193 194 }	53	751
Pierce, Francis M., assignor of one-third to P. Pierce, Omaha, Nebr. Clevis for whiffletrees	433,091	July 29	3222	829	52	651
Pierce, George W., <i>et al.</i> (See Farnham, Isaiah H., assignor.)						
Pierce, Harry L. (See Pierce, Homer I., assignor.)						
Pierce, Homer I., Lynn, assignor of one-half to H. L. Pierce, Leominster, Mass. Device for suspending electric conductors	429,058	May 27	3086	796	51	1448
Pierce, Jesse W., Belton, Tex. Type-writing machine	419,217	Jan. 14	858	{ 225 226 }	50	184
Pierce, Mark H., Wilmington, Del. Mop-holder	420,466	Feb. 4	67	14	50	577
Pierce, Mark H., Wilmington, Del. Railway-chair	422,830	Mar. 4	685	175	50	1268
Pierce, Paul. (See Pierce, Francis M., assignor.)						
Pierce, Philip, Wexford, Ireland. Mowing and reaping machine	438,424	Oct. 14	1147	310	53	225
Pierce Steam Heating Company. (See Bryant, Orrin, assignor.)						
Pierce, Stiles H., Van Orin, Ill. Car-coupling	431,852	July 8	1209	325	52	263
Pierce, William A., Napa, Cal. Gate	422,831	Mar. 4	687	175	50	1269
Pierce, William H. (See Gunder and Pierce.)						
Piero, William J. (See Morgan, Lewis C., assignor.)						
Pierson, James S. (See Johnson, John A., assignor.)						
Pierson, Lucinda M., Goleta, Cal. Remedy for diphtheria	429,152	June 3	66		51	1485
Pierson, Oliver, Roann, Ind. Saw-sharpening machine	435,121	Aug. 26	2610	691	52	1290
Pierson, Pike, Grand Rapids, Mich., assignor to G. Challoner's Sons, Oshkosh, Wis. Feeding mechanism for shingle-saving machines	432,071	July 15	1624	416	52	332
Pierson, Whitfield H., Duncan, Ill. Barrel-elevator	431,006	June 24	2924	733	51	2074
Piette, Ludwig, Pilsen, Bohemia, Austria-Hungary. Machine for sorting disintegrated wood, &c.	425,341	Apr. 8	1384	369	51	278
Piffard, Bernard, Hemel Hempstead, England. Manufacture of varnish	441,853	Dec. 2	355		53	1333
Piggott, Henry E., assignor of one-half to G. R. Bispham, St. Louis, Mo. Wire-nail machine	429,550	June 10	1268	314	51	1726
Pike, James W., Little Falls, N. Y. Take-up mechanism for circular-knitting machines	423,079	Mar. 11	1096	{ 285 286 287 }	50	1351
Pike, James W., Little Falls, N. Y. Circular-knitting machine	423,080	Mar. 11	1098	{ 286 287 }	50	1351
Pilcher, John V. (See Cash, Arthur W., assignor.)						
Pilcher, William H., Chandlerville, Ill. Ticket-case	422,037	Feb. 25	2334	617	50	1032
Piles, Isaac, Yankton, S. D. Rubber	421,757	Feb. 18	1943	511	50	949
Pilkington, Franklin, Anniston, Ala. Steam-engine valve	437,618	Sept. 30	3577	{ 935 936 }	52	2090
Pilkington, George B., assignor to Traut & Hine Company, New Britain, Conn. Suspender-buckle	431,992	July 8	1495	378	52	301
Pilkington, Joseph W., Bridgeport, Conn. Hat-fastener	421,758	Feb. 18	1943	511	50	950
Pillard, Oliver E., Cambridge, Mass. Automatic bolt-work	420,563	Feb. 4	191	49, 50	50	602
Pilley, Charles A. (See Miller and Shultz, assignors.)						
Pilliod, Charles J., assignor to L. N. Pilliod and H. S. Bassett, Swanton, Ohio. Feed-regulator	422,623	Mar. 4	394	98	50	1212
Pilliod, Lewis N., <i>et al.</i> (See Pilliod, Charles J., assignor.)						
Pillsbury, Charles H. L., Denver, Colo. Cash recording and indicating machine	423,628	Mar. 18	1917	505	50	1516

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Pillsbury, Charles J. (See Foote, Theodore M., assignor.)						
Pilson, George, Yonkers, N. Y. Window-cleaning implement	418,959	Jan. 7	483	120	50	102
Pimienta, Octavio, Cardenas, Cuba. Sugar-packing machine	427,107	May 6	134	35	51	838
Pimienta, Octavio, Cardenas, Cuba. Sugar-packing machine	427,108	May 6	136	35	51	838
Pinagel Leo, Aix-la-Chapelle, Germany. Apparatus for extracting grease from wool	440,963	Nov. 18	2141	554	53	1035
Pinard, Zatique, Portland, Oreg. Sash-fastener	436,841	Sept. 23	2328	612 613	52	1841
Pinckney, John M., Westbury, N. Y. Stove-truck	431,953	July 8	1434	364	52	289
Pinckney, John T., Galion, Ohio. Combined order-indicator and throttle-lock	435,634	Sept. 2	403	109	52	1451
Pine, James, Troy, N. Y. Mowing-machine	420,098	Jan. 28	2183	575 576 577	50	462
Pine, James K. P. (See Hills, George E., assignor.)						
Pine, James K. P., Lansingburg, N. Y. Spring-board wagon	441,191	Nov. 25	2514	649	53	1117
Ping, Robert G., Audubon, Iowa. Motor	420,888	Feb. 4	691	177	50	693
Ping, Robert G., and H. Mendenhall, Audubon, Iowa. Door-lock	431,674	July 8	1009	250	52	207
Pinkham, Edwin, assignor of one-half to G. L. and H. Rogers, Baltimore, Md. Cringle-clew for sails	439,422	Oct. 28	2731	728	53	537
Pinolet, Louis M., New York, N. Y. Bell	423,697	Mar. 18	2024	534	50	1535
Piper, Edward S., Toronto, Ontario, Canada. Signal-lock	425,549	Apr. 15	1699	453 454	51	348
Piper, Edward S., Toronto, Ontario, Canada. Signal-lantern	428,946	May 27	2905	744	51	1415
Piper, Luther, Berlin, Conn. Punch	425,456	Apr. 15	1565	419	51	322
Piper, Milton J., Saltsburg, Pa. Mortising-machine	429,059	May 27	3087	796	51	1449
Piper, Myron S., Emporia, Kans. Tilting gate	438,560	Oct. 14	1340	363	53	265
Piper, Orin, Manchester, N. H. Loom-temple	422,248	Feb. 25	2669	704 705	50	1094
Piper, Orin, assignor of one-half to A. P. Horne, Manchester, N. H. Oil-can	429,951	June 10	1270	314	51	1726
Piper, William M., Allegheny, Pa. Milk-pail	440,193	Nov. 11	858	221	53	787
Pipes, Martin L., and E. F. Pernot, Corvallis, Oreg. Copy-holder for type-writing machines	434,356	Aug. 12	1379	362	52	1037
Pirkie, William J., Cumming, Ga. Plow	438,487	Oct. 14	1232	334	53	243
Pirnie, George, New York, N. Y. Whip	419,130	Jan. 7	715	188	50	150
Pirrung, Frank E. (See Pirrung, Hubert A. and F. E.)						
Pirrung, Hubert A. and F. E., St. Paul, Minn. Feathering paddle-wheel	437,619	Sept. 30	3580	936	52	2090
Pitcairn, Robert B., New York, N. Y. Fountain-pen	427,358	May 6	499	128	51	910
Pitcher, Henry A., Neillsville, Wis. Magazine-gun	433,420	July 29	3684	951 952	52	746
Pitkin, Julian H., Ravenswood, and J. S. Lane, Oak Park, Ill. Compound locomotive or other compound engine	430,969	June 24	2926	718	51	2062
Pitman, Fred L., Wilmington, N. C. Railway-rail	438,444	Oct. 14	1173	317	53	230
Pitman Manufacturing Company. (See Pepper and Davis, assignors.)						
Pitman, Nathaniel E., Lynn, Mass. Walking-stilt	433,365	July 29	3612	931	52	729
Pitney, Albert L., Washington, D. C. Combined cord-fastener case and label-holder	421,032	Feb. 11	910	235	50	745
Pitney, Albert L., Pittsburg, Pa. Fire-extinguisher	441,969	Dec. 2	523	140	53	1366
Pittman, Reinhard W., assignor to Plimpton Manufacturing Company, Hartford, Conn. Envelope and card counting device	424,127	Mar. 25	2660	708 709	50	1664
Pitts Agricultural Works. (See Butler, Wesley, assignor.)						
Pittsburgh Brass Company. (See Hipwell, Thomas, assignor.)						
Pittsburgh Brass Company. (See Hoerle, William M., assignor.)						
Pittsburgh Glass Novelty Company. (See Maxwell, William H., assignor.)						
Pittsburgh Metallurgy Company. (See Smith, Martin V., assignor.)						
Pittsburgh Tubular Steel Whiffletree Company. (See Jackson, William, assignor.)						
Place, Everett G. (See Taylor, William O., assignor.)						
Place, James F., Montclair, N. J., assignor to Holmes, Booth & Haydens, New York, N. Y. Lamp	422,537	Mar. 4	247	64	50	1183
Plaine, Harry E., Broken Bow, Nebr. Tinner's mandrel	439,183	Oct. 28	2332	627	53	463
Planchamp, John D., Chicago, Ill. Jeweler's stock-plate	426,059	Apr. 22	2483	656	51	506
Plank, Levi R., Ashland, Ohio. Door-check	430,682	June 24	2475	604	51	1977
Plankinton, William. (See Johnson, Warren S., assignor.)						
Plano Manufacturing Company. (See Breuscher, Christoph, assignor.)						
Plano Manufacturing Company. (See Gray and Estep, assignors.)						
Plano Manufacturing Company. (See Hunt, George G., assignor.)						
Platen, Hugo B., and W. W. Bennett, Savannah, Ga. Box-lifter	432,765	July 22	2706	692	52	546
Platnauer, Louis, Birmingham, England. Watch-bow fastener	419,552	Jan. 14	1342	359	50	282
Platt, Albert L., Clinton, Ill. Ice-cream freezer	427,901	May 13	1337	337	51	1082
Platt, Albert L., assignor of three-fourths to V. Warner and H. A. Magill, Clinton, Ill. Power-press	432,836	July 22	2803	717 718	52	565
Platt, Clark M., assignor to Patent Button Company, Waterbury, Conn. Button	429,624	Mar. 4	395	98	50	1212
Platt, Corwin H., Cleveland, Ohio. Copy-holder	422,538	Mar. 4	250	64	50	1183
Platt, Irving G., Waterbury, Conn. Rivet	420,828	Feb. 4	584	150	50	675
Platt, Irving G., Waterbury, Conn. Rivet	420,829	Feb. 4	584	150	50	675
Platt, John F. (See Shobe and Platt.)						
Platt, Lewis A. (See Jackson and Platt.)						
Platt, Oron S., Bridgeport, Conn. Electric switch	427,522	May 6	746	185	51	959
Platt, Oron S., Bridgeport, Conn. Electric switch	427,523	May 6	747	186	51	960
Platt, Oron S., and J. M. Orford, Bridgeport, Conn.; said Orford assignor to said Platt. Electric switch	427,521	May 6	744	185	51	959
Plattner, Andrew, Hastings, Nebr. Band-cutting fork	438,765	Oct. 21	1682	451	53	333
Platts, A. A., et al. (See Ricker, Elbridge G. S., assignor.)	441,774	Dec. 2	230	59	53	1308
Paul, Oscar, assignor to Huger & Hoffmann, Dresden, Germany. Photographic camera	434,090	Aug. 12	964	253	52	955
Player, John. (See Rogers and Player.)						
Player, John, Dunkirk, N. Y. Locomotive-frame pedestal	442,541	Dec. 9	1420	363	53	1546
Pleas, Wilson F., Eau Claire, Wis. Snow-road machine	419,351	Jan. 14	1065	281	50	225
Plechawski, Emil, Vienna, Austria-Hungary. Geographical time-indicator	434,137	Aug. 12	1048	271	52	970
Plecker, David A., Mount Crawford, Va. Iron for wagon-beds	422,249	Feb. 25	2670	705	50	1094
Pless, William B., San Francisco, assignor of one-half to R. C. Sargent, San Joaquin, Cal. Dredging-machine	426,681	Apr. 29	3421	897	51	701
Plew, James E., Chicago, Ill. Check for horses	435,948	Sept. 9	886	232 233	52	1551
Plimpton, Manufacturing Company. (See Pittman, Reinhard, assignor.)						
Plimsoll, Henry D., New York, N. Y. Window-chair	423,698	Mar. 18	2025	534	50	1536
Plohr, Henry, Chicago, Ill. Sofa and bed combined	439,184	Oct. 28	2333	627 628	53	463

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Plotts, Isaac N., Philadelphia, Pa. Spoon.....	431,914	July 8	1377	349	52	277
Plough, Henry W., and E. N. Giles, Indianapolis, Ind. Portable hot-air radiator.....	420,390	Jan. 28	2640	700	59	546
Plowman, David W., Blue Springs, Nebr. Listed-corn cultivator.....	443,148	Dec. 23	2477	632	53	1768
Plowman, John J., Albion, N. Y. Carpet-stretcher.....	436,088	Sept. 9	1099	285	52	1592
Plowright, William, Blandinsville, Ill. Band-cutter and feeder.....	423,629	Mar. 18	1919	505	50	1516
Plum, Jacob B. (See Goodyear and Plum.).....						
Plumb, Charles, Buffalo, N. Y. Police-patrol signal-box.....	438,361	Oct. 14	1056	288	53	208
Plumb, William H., Ansonia, Conn. Garment-supporter.....	437,043	Sept. 23	2661	696	52	1906
Plumbly, Frederick K., assignor of one-half to T. Gingras, Buffalo, N. Y. Ash and garbage receptacle.....	419,472	Jan. 14	1241	329	50	261
Plume & Atwood Manufacturing Company. (See Atwood, Lewis J., assignor.).....						
Plume & Atwood Manufacturing Company. (See Atwood and Tobey, assignors.).....						
Plume & Atwood Manufacturing Company. (See Tobey, Frederick W., assignor.).....						
Plume & Atwood Manufacturing Company. (See Wilder, Elihu, assignor.).....						
Plume, David N., Waterbury, Conn. Curtain-ring.....	426,682	Apr. 29	3422	897	51	702
Plumer, Eugene C., Columbia, S. C. Package-tie.....	419,879	Jan. 21	1855	488	50	389
Plummer, John W. (See Fuller and Plummer.).....						
Plummer, John W., Somerville, assignor to I. P. T. Edmands, trustee, Boston, Mass. Rand-trimmer.....	419,352	Jan. 14	1067	282	50	226
Plummer, John W., Somerville, assignor to I. P. T. Edmands, trustee, Boston, Mass. Heel-trimming machine.....	419,880	Jan. 21	1856	488	50	389
Plumtree, Charles E., and L. A. A. Tonnet, Spokane Falls, Wash. Double cutter-bar for headers.....	442,002	Dec. 16	2205	567	53	1711
Pneumatic Dynamite Gun Company. (See Bartlett, Wallace A., assignor.).....						
Pneumatic Dynamite Gun Company. (See Osborne, John W., assignor.).....						
Pneumatic Dynamite Gun Company. (See Reynolds, George H., assignor.).....						
Pneumatic Dynamite Gun Company. (See Zalinski, Edmund L., assignor.).....						
Poff, Henderson J., Hubbell, Nebr. Combined ironing-table and clothes-rack.....	422,093	Feb. 25	2423	640	50	1047
Poggenburg, George, New York, N. Y. Game.....	425,249	Apr. 8	1252	333	51	253
Pohl, Johann C. (See Gabriel and Pohl.).....						
Pohlig, J. (See Bahlson, Carl, assignor.).....						
Pohlman, John T., New Haven, Conn. Metal tug for harness.....	439,682	Nov. 4	87	23	53	624
Poindexter, Martin J., Reading, Pa. Tool-shank.....	432,951	Mar. 25	2404	638	50	1616
Poindexter, Robert E. (See Kiler, Charles M., assignor.).....						
Poindexter, Robert E., Indianapolis, Ind. Corn-splitting machine.....	429,794	June 10	1034	254	51	1681
Poindexter, Robert E., Indianapolis, Ind. Saw-jointer.....	442,638	Dec. 16	1654	425	53	1603
Poirrier, Alcide F., Paris, France. Nitroso dye.....	420,311	Jan. 28	2525	.....	50	525
Poirrier, Alcide F., Paris, France. Green dye.....	423,341	Mar. 11	1484	.....	50	1426
Pokorny, John J., New York, N. Y. Air-ship.....	424,822	Apr. 1	607	159	51	117
Poland, Charles H. (See Stafford and Poland.).....						
Poland, Lawrence N. P., Cincinnati, Ohio. Filament for incandescent electric lights.....	432,710	July 22	2609	667	52	528
Polk, Caleb C., assignor of one-half to C. B. Thornburg, Richmond, Ind. Piano attachment.....	443,538	Dec. 30	3119	803	53	1903
Polk, William R., Jr., Atlanta, Ga. Automatic fan.....	421,014	Feb. 11	886	229	50	740
Polka, Ferdinand A., Oakes, N. D. Milk-pail strainer.....	439,185	Oct. 28	2335	628	53	463
Pollak, Charles F., Paris, France. Apparatus for preparing electric accumulator-plates.....	431,617	July 8	898	225	52	187
Pollard, Charles R., Somerville, Conn. Mechanical movement.....	421,608	Feb. 18	1744	457	50	911
Pollard, Charles R., Somerville, Conn. Tension-regulator for spindle-driving bands for spinning-machines.....	428,630	May 27	2424	616	51	1321
Pollard, Grant U., Sedgwick, Kans. Rotating grain-meter.....	422,832	Mar. 4	638	175 176	50	1269
Pollitt, Flor S., Harrodsburg, Ky. Shaft-detacher.....	421,140	Feb. 11	1064	273	50	775
Pollmann, August. (See Morgenenthaler, George A., assignor.).....						
Pollock, Amariah, Hallsville, Ill. Belt-tightener.....	439,790	Nov. 4	240	61	53	655
Pollock, James A., et al. (See Paridy and Brown, assignors.).....						
Pollock, John, Belfast, Ireland. Apparatus for preventing incrustation in boilers.....	435,518	Sept. 2	205	57	52	1414
Pollok, Frank J. (See Sanders, Harry G., assignor.).....						
Polson, Gustavus A., assignor of one-half to S. Carey, New York, N. Y. Regulator for dynamo-electric machines.....	431,618	July 8	899	225	52	187
Pomeroy, George M. D., Lebanon, Ind. Potato-digger.....	428,288	May 20	1916	482	51	1204
Pomeroy, Julius T., Edgerton, Wis. Pneumatic milker.....	439,552	Oct. 28	2921	777	53	574
Pomeroy, Ledru R. (See Markham and Pomeroy.).....						
Pomeroy, Payson M. (See Turley, Chamberlin, and Pomeroy.).....						
Pond, George F. (See Leaird, Meggs, Pond, and Separk.).....						
Pond, Goldsberry H., Rutland, Vt. Buoyant propeller.....	424,076	Mar. 25	2587	690	50	1651
Pond, Goldsberry H., Glens Falls, N. Y. Buoyant propeller.....	424,077	Mar. 25	2589	691	50	1651
Pond, Goldsberry H., Glens Falls, N. Y. Buoyant propeller.....	424,078	Mar. 25	2590	691	50	1651
Pond, Goldsberry H., Glens Falls, N. Y. Traction-engine.....	433,488	Aug. 5	73	22	52	741
Pond, Goldsberry H., Glens Falls, N. Y. Buoyant propeller.....	434,523	Aug. 19	1650	432	52	1098
Pond, Goldsberry H., Glens Falls, N. Y. Water-locomotive.....	441,327	Nov. 25	2762	714	53	1161
Pond, Orlando M., Independence, Iowa. Hook.....	419,353	Jan. 14	1069	282	50	226
Pond, Samuel N., New Haven, Conn., assignor to J. H. Blackwood, Washington, D. C. Adjustable crank.....	421,969	Feb. 25	2245	590	50	1015
Pönniger, Franz. (See Koller, Gustav, assignor.).....						
Ponsar, Theodore, Talmage, Nebr. Middlings-separator.....	420,957	Feb. 11	801	208	50	724
Pontious, Marshall E., assignor of one-half to F. L. Cody, Cleveland, Ohio. Lawn rake and sweeper.....	425,695	Apr. 15	1933	514	51	393
Ponto, William J., Hillsborough, N. D. Car-coupling.....	440,058	Nov. 4	654	174	53	736
Pool, Francis W., St. Paul, Minn. Propeller-shaft and mechanism for driving the same.....	434,803	Aug. 19	2093	547	52	1184
Pool, Francis W., Norwich, Conn. Submarine vessel.....	435,857	Sept. 2	734	196 197	52	1517
Pool, Francis W., assignor to himself and T. N. Young, St. Paul, Minn. Running-board for cars.....	422,153	Feb. 25	2517	665	50	1065
Poole, Edward, Fordyce, Ark. Cultivator.....	423,342	Mar. 11	1486	389	50	1426
Poole, Edwin W., Cleveland, Ohio. Automatic ash-sifter for coal-stoves.....	438,176	Oct. 14	775	211	53	156
Poole, Emanuel, and J. A. Welty, Arcadia, Ohio. Refrigerator.....	432,711	July 22	2609	667 668	52	528
Poole, Henry, Battle Hill, assignor of one-third to J. H. Prescott, Salina, Kans. Broom-corn-seed stripper.....	434,069	Aug. 12	928	244	52	948
Poole, Henry, Battle Hill, assignor of one-third to J. H. Prescott, Salina, Kans. Broom-corn harvester.....	434,070	Aug. 12	931	245	52	948
Poole, Samuel, assignor to himself and F. J. Finley, Brooklyn, N. Y. Yard-protector.....	435,708	Sept. 2	516	136	52	1475
Pooley & Son, Henry. (See O'Brien, Eugene, assignor.).....						
Poorbaugh, James H., Burrton, Kans. Mortar-mixer.....	436,020	Sept. 9	986	259	52	1571

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Poore, Graydon, and W. C. Storey, London, county of Middlesex, England. Steam-generator for submarine vessels.	432,555	July 22	2360	609	52	480
Poore, Henry F., Indianapolis, Ind. Saw.	428,411	May 20	2114	530	51	1243
Pope, Charles A., assignor to Aurora Vapor Stove Company, Cleveland, Ohio. Vapor-burner cone.	421,759	Feb. 18	1944	511	50	950
Pope, Charles H. (See Stewart, John A., assignor.)						
Pope, Everett M. (See Bray and Pope.)						
Pope, Everett M. (See Bray, Pope, and Taber.)						
Pope Manufacturing Company. (See Towle, George C., assignor.)						
Pope Manufacturing Company. (See Veeder, Curtis H., assignor.)						
Pope, Samuel, Philadelphia, Pa. Heel-trimming machine.	433,213	July 29	3400	879	52	687
Pope, William. (See Lippitt and Pope.)						
Pope, William H., Fernandina, Fla. Construction of railways.	435,768	Sept. 2	599	159	52	1490
Popenhagen, Joseph B., Chicago, Ill. Reversible seat for chairs.	427,359	May 6	500	128	51	910
Popp Compressed Air and Electric Power Company. (See Popp, Victor, assignor.)						
Popp, I. M. (See Kaylor, Edward, assignor.)						
Popp, Victor, Paris, France, assignor to Popp Compressed Air and Electric Power Company, (limited.) Electric meter.	425,579	Apr. 15	1741	467	51	356
Popp, Victor, Paris, France, assignor to Popp Compressed Air and Electric Power Company, (limited.) Automatic oiling device.	426,468	Apr. 29	3102	813 814	51	640
Popp, Victor, Paris, France, assignor to Popp Compressed Air and Electric Power Company, Limited. Fluid-meter.	438,766	Oct. 21	1683	452	53	333
Popp, Victor, Paris, France, assignor to Popp Compressed Air and Electric Power Company, Limited. Electro-pneumatic clock.	438,767	Oct. 21	1684	452	53	333
Popper, Josef, Vienna, Austria-Hungary. Air-condenser and cooling apparatus.	430,881	June 24	2796	685	51	2039
Poppert, George, Milwaukee, Wis. Sliding window-blind.	430,403	June 17	2025	499	51	1883
Poppert, George, Milwaukee, Wis. Sliding window-blind.	432,329	July 15	2020	519	52	404
Poppert, George, Milwaukee, Wis. Attachment for molding-machines.	439,894	Nov. 4	400	104	53	685
Porr, Albert P. (See Corl and Porr.)						
Porritt, Albert. (See Porritt and Fenton.)						
Porritt, Josiah, Bradford, A. Porritt, Leeds, M. Porritt, Bradford, and W. H. Fenton, Batley, county of York, England. Spinning-frame.	436,326	Sept. 9	1467	382	52	1663
Porritt, Marshall. (See Porritt and Fenton.)						
Portable Fan Company. (See Curtice, William H., assignor.)						
Porteous, James, Fresno, Cal. Raisin-grader.	421,881	Feb. 18	2123	557	50	982
Porteous, William, Cincinnati, Ohio. Lathe-tool.	427,902	May 13	1339	338	51	1082
Porteous, William, Cincinnati, Ohio. Automatic screw-cutting die.	427,903	May 13	1340	338	51	1083
Porteous, William, Cincinnati, Ohio. Grinding-machine.	427,904	May 13	1341	338 339	51	1083
Porteous, William, Elmwood Place, Ohio. Straight-way valve. (Reissue.)	11,115	Oct. 7	704	191	53	136
Porter, Arthur, Galena, Ill. Lawn-mower.	441,970	Dec. 2	525	140 141	53	1366
Porter, Charles L., Chicago, Ill. Recovering glycerine from spent soap-lyes.	420,830	Feb. 4	585	151	50	675
Porter, Charles S., Ivanhoe Furnace, Va. Drill-hole magnet.	432,896	July 22	2889	740	52	583
Porter, Daniel R., assignor to W. F. Goldthwaite, Chelsea, C. F. Brown, and A. W. Crossley, Boston, Mass. Wrench.	426,956	Apr. 29	3818	997	51	779
Porter, Edward E., Cincinnati, Ohio. Wrapper-pasting device.	440,607	Nov. 11	1552	399	53	915
Porter, Edward E., Cincinnati, Ohio, assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Press for bundling.	440,194	Nov. 11	859	221	53	787
Porter, Edward E., Cincinnati, Ohio, assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Press for bundle-wrapping.	440,195	Nov. 11	860	221	53	787
Porter, Edwards W. (See Hargreaves, Porter, and Scranton.)						
Porter, Edwin E., Canal Fulton, Ohio. Apparatus for the transmission of power.	429,153	June 3	66	17	51	1485
Porter Electric Messenger Company. (See Porter, Major D., assignor.)						
Porter, Frederick E., Baltimore, Md. Paper bag.	421,191	Feb. 11	1143	292	50	789
Porter, John, Eldora, Iowa. Railway-tie.	426,319	Apr. 22	2863	754	51	584
Porter, John A., St. Louis, Mo. Permutation-padlock.	419,553	Jan. 14	1343	359 360	50	282
Porter, Joseph E., Ottawa, Ill. Hay-elevator track.	423,274	Mar. 11	1397	364	50	1408
Porter, Lansing, Auburn, N. Y. Lock-hinge.	421,511	Feb. 18	1595	411	50	882
Porter, Lansing, Auburn, N. Y. Blind-hinge.	442,689	Dec. 16	1655	425	53	1603
Porter, Louis H. (See Henderson and Porter.)						
Porter, Major D., Newton, Mass., assignor to Porter Electric Messenger Company, of New York. Electric indicator.	424,725	Apr. 1	442	117 118	51	87
Porter, Major D., Brooklyn, N. Y., assignor to Porter Electric Messenger Company, of New York. Electric indicator.	424,726	Apr. 1	445	118 119	51	88
Porter Manufacturing Company. (See Limoge, Damos, assignor.)						
Porter, Nelson E., Ticonderoga, N. Y. Toe-weight.	427,905	May 13	1344	339	51	1084
Porter, Wallace, and H. George, Wilkes-Barré, Pa. Trolley.	425,694	Apr. 15	1931	513	51	393
Porter, William D., assignor of one-half to J. G. W. Wood, Mount Pleasant, Tex. Cotton chopper and cultivator.	423,179	Mar. 11	1248	325	50	1381
Porter, William H., Lima, Ohio. File or binder.	440,499	Nov. 11	1373	355	53	882
Porter, William H., assignor of two-thirds to C. W. Schneider and C. Baker, Washington, D. C. Appliance for preventing incrustation.	425,903	Apr. 15	2227	591	51	449
Portlock, Warren, assignor of part to L. Mendelson and G. Fuller, San Diego, Cal. Car-coupling.	433,305	July 29	3533	912	52	714
Poschinger, Mathias, and H. Vogt, Louisville, Ky. Stand-pipe for ammonia-gas generators.	436,994	Sept. 23	2592	678	52	1891
Possons, Nathan S., Cleveland, Ohio. Gearing for electrically-propelled vehicles.	434,949	Aug. 26	3360	625	52	1243
Possons, Nathan S., Cleveland, Ohio. Fuse-block.	435,102	Aug. 26	2579	681	52	1284
Possons, Nathan S., assignor to Brush Electric Company, Cleveland, Ohio. Fuse-box.	429,584	June 3	729	176	51	1612
Possons, William J., assignor to Brush Electric Company, Cleveland, Ohio. Apparatus for electroplating.	441,892	Dec. 2	407	107 108	53	1344
Possons, William J., assignor to Brush Electric Company, Cleveland, Ohio. Apparatus for electroplating.	441,893	Dec. 2	409	108 109	53	1345
Possons, William J., assignor to Brush Electric Company, Cleveland, Ohio. Apparatus for electroplating carbons and other articles.	441,894	Dec. 2	412	109 110 111	53	1345
Post, Alexander, Eilpe, near Hagen, Prussia, Germany. Belt-coupling.	424,023	Mar. 25	2515	669	50	1636
Post, Charles B. (See Arnold and Post.)						
Post, Charles B., New London, Ohio. Metal wheel.	442,456	Dec. 9	1283	332	53	1519
Post, Charles C., Douglasville, Ga. Kitchen-cabinet.	422,833	Mar. 4	690	176	50	1269
Post, Charles W., Springfield, Ill. Hay-stacker.	424,128	Mar. 25	2661	709	50	1665
Post & Co. (See Briggs, Arthur E., assignor.)						
Post, Ezra L., New York, N. Y. Journal-box.	418,960	Jan. 7	485	120	50	102

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Post, Paul W. (See Smith and Post.)						
Post, Peter K., Jr., New York, N. Y. Detergent	432,437	July 15	2165		52	434
Post, Shelby L., <i>et al.</i> (See Surratt, George, assignor.)						
Postal, Frank S., assignor to Champion Tool and Handle Works, Ewart, Mich. Cant-hook crate	433,817	Aug. 5	570	148	52	868
Postal, Frank S., assignor to Champion Tool and Handle Works, Ewart, Mich. Cant-hook	439,553	Oct. 28	2922	777	53	574
Poston, Quincy A., assignor of one-third to S. M. Poston, New Salem, Ind. Straw-stacker	432,953	July 22	2989	768	52	600
Poston, Sanford M. (See Poston, Quincy A., assignor.)						
Pottdorf, Seymour, Emlenton, Pa. Sucker-rod elevator	432,193	July 15	1814	467	52	368
Pott, Charles H., <i>et al.</i> (See Swisher, Frank B., assignor.)						
Potter, Albert H., Geneva, Switzerland, assignor to Trenton Watch Company, Trenton, N. J. Stem-winding watch	425,342	Apr. 8	1386	{ 369 370 }	51	278
Potter, Arthur W., Wilkes-Barré, Pa. Kindergarten-table	421,512	Feb. 18	1596	412	50	882
Potter, Charles, Plainfield, N. J. Frisket-placing apparatus for printing-machines	433,214	July 29	3402	879	52	687
Potter, Edward T., Newport, R. I. Portable or sectional building	425,250	Apr. 8	1252	334	51	254
Potter, Frank N., Elkhart, Ind. Folding bedstead	439,554	Oct. 28	2923	777	53	574
Potter, Frank R., New York, assignor of one-half to A. E. Maynard, Brooklyn, N. Y. Work-holding table for carving-machines	428,351	May 20	2013	506	51	1224
Potter, Henry K. (See Potter, John L. and H. K.)						
Potter, Isaac J., assignor of one-half to J. G. Stanton, Camden, N. J. Cultivator	443,056	Dec. 16	2286	586	53	1726
Potter, James C., Pawtucket, R. I. Evening mechanism for cotton-openers	420,735	Feb. 4	427	113	50	648
Potter, James R., Providence, R. I. Switch for street-cars	426,211	Apr. 22	2718	712	51	552
Potter, John A., Munhall, Pa. Combined crane and weighing apparatus	432,072	July 15	1625	416	52	332
Potter, John A., Homestead, Pa. Shaping cast-steel	434,294	Aug. 12	1291	335	52	1019
Potter, John L., and H. K., Somerville, Mass. Nozzle for street-sprinkling carts	423,390	Mar. 11	1553	408	50	1438
Potter, John S. (See Cartwright and Potter.)						
Potter, John S., Newton, and D. J. Cartwright, Boston, Mass.; said Cartwright assignor to said Potter. Circuit breaker and closer	443,404	Dec. 23	2904	747	53	1853
Potter, John S., Newton, D. J. Cartwright, Boston, and B. B. Keyes, Chelsea, Mass.; said Cartwright and Keyes assignors to said Potter. Electric incandescent lamp	436,316	Sept. 9	1444	376	52	1658
Potter, Joseph H., Jr., Fall River, Mass., assignor of one-half to E. Dixon, Bristol, R. I. Spinning-machine	436,317	Sept. 9	1445	376	52	1658
Potter, Lizzie T., Hartford, Conn. Belt-fastener	435,949	Sept. 9	888	233	52	1552
Potter, Stephen M., and H. E. Morgan, Philadelphia, Pa. Electric motor or dynamo-electric machine	428,782	May 27	2669	677	51	1367
Potter, Thomas, Swansea, Mass. Apparatus for handling hay	439,326	Oct. 28	2586	690	53	510
Potter, William G., Marblehead, Mass. Pulley	425,827	Apr. 15	2120	566	51	429
Potterif, Albert A., Centreville, Mo. Fruit-gatherer	441,971	Dec. 2	526	141	53	1366
Potticary, Charles, St. Thomas, Ontario, Canada. Spark-arrester	430,298	June 17	1862	458	51	1851
Potts, Harlan L., Pottstown, Pa. Fastener for shoe-strings, bags, &c	423,808	Mar. 18	2174	575	50	1564
Potts, Isaac B., Columbus, Ohio. Detachable pipe-coupling	424,129	Mar. 25	2663	709	50	1665
Potts, Isaac B., Columbus, Ohio. Detachable pipe-coupling	424,130	Mar. 25	2664	710	50	1665
Potts, Isaac B., Columbus, Ohio. Combined union and elbow for pipes	433,489	Aug. 5	74	22	52	771
Potts, John B., Brooklyn, N. Y. Umbrella or cane holder	439,423	Oct. 28	2733	729	53	538
Potts, Robert. (See Bronner, Potts, and Pungs.)						
Pottstown Iron Company. (See Bertrand, Ernst, assignor.)						
Poulin, Lucien, Gundersen, Mont. Grinding-mill	443,295	Dec. 23	2736	703	53	1820
Poulson, Britton, Fort Wayne, Ind. Cabinet folding bedstead	432,073	July 15	1626	417	52	332
Poulson, Joseph, Philadelphia, Pa., assignor to Philadelphia Exhaust Ventilator Company, of Pennsylvania. Air-valve for steam-radiators	442,911	Dec. 16	2068	531	53	1682
Poulson, Joseph, Philadelphia, Pa., assignor to Philadelphia Exhaust Ventilator Company, of Pennsylvania. Air-valve for steam-radiators	442,912	Dec. 16	2070	531	53	1682
Poulter, John H., assignor of one-half to J. P. Barrieklow, Arcola, Ill. Grain-weigher	439,024	Oct. 21	2085	558	53	410
Pounder, George H., Port Atkinson, Wis. Butter-worker	442,201	Dec. 9	900	240	53	1445
Poussot, Marie J. N., Pierre, near Toul, France. Musical instrument	442,913	Dec. 16	2072	532	53	1683
Povall, Alfred, and F. P. Howe, Danville, Pa. Machine for removing fins from metal beams	442,914	Dec. 16	2073	{ 532 533 }	53	1683
Powell & Brother. (See Bennor, Joseph, assignor.)						
Powell, Charles F., Minneapolis, Minn. Anti-interfering device	438,086	Oct. 7	641	175	53	123
Powell, Charles W., assignor of one-fourth to W. H. Powell, Green Island, N. Y. Car-brake	427,706	May 13	1027	258	51	1024
Powell, Charles W., assignor of one-third to W. H. Powell, Green Island, N. Y. Rail-brake for street-cars	442,542	Dec. 9	1421	363	53	1547
Powell, Francis M., assignor to himself and G. McConnell, Frederick, S. D. Pulley	424,687	Apr. 1	385	{ 101 102 }	51	75
Powell, Frank A., Hebron, Nebr. Book-rest	422,443	Mar. 4	111	30	50	1158
Powell, George W., Sunny South, Ala. Car-coupling	429,096	May 27	3142	810	51	1461
Powell, George W., Lockport, N. Y. Dash-board for vehicles	434,198	Aug. 12	1137	295	52	989
Powell, James C., Macon, Ga. Paper box	421,302	Feb. 11	1287	332	50	816
Powell, James C., Macon, Ga. Rotating steel file	426,320	Apr. 22	2864	754	51	585
Powell, James F., Chestnut, Va. Car-coupling	439,424	Oct. 28	2734	729	53	538
Powell, Louie W., Marion, La. Corn-planter	433,092	July 29	3223	{ 829 830 }	52	651
Powell, Louis K. (See Conway, William O., assignor.)						
Powell, Madison, Hebron, Nebr. Oven and heater	429,772	June 10	1002	246	51	1676
Powell, Madison, Hebron, Nebr. Wagon-tongue support	434,566	Aug. 19	1716	449	52	1112
Powell, Moses W., Chicago, Ill. Roofing composition	423,699	Mar. 18	2026		50	1536
Powell, Moses W., Chicago, Ill. Roof	438,324	Oct. 14	1002	272	53	198
Powell, Noah M., Reger, Mo. Burglar-alarm	420,697	Feb. 4	376	100	50	638
Powell, Samuel L., Lewistown, assignor of one-half to F. D. Morrison, Baltimore, Md. Apparatus for operating signals	437,348	Sept. 30	3156	826	52	2006
Powell, Samuel L., Lewistown, assignor of one-half to F. D. Morrison, Baltimore, Md. Railway-switch-operating system	443,149	Dec. 23	2478	{ 633 634 }	53	1769
Powell, Samuel L., Lewistown, assignor of one-half to F. D. Morrison, Baltimore, Md. Electrically-operated railway-switch	445,167	Dec. 23	2509	642	53	1775
Powell, Thomas, Guthrie, Ky. Saw-filing machine	434,071	Aug. 12	936	246	52	949
Powell, Thomas, Fort Scott, Kans. Button-hole attachment for sewing-machines	442,695	Dec. 16	1664	{ 427 428 }	53	1605
Powell, William, Cleveland, Ohio. Hydrocarbon-burner	431,479	July 1	686	172	52	138
Powell, William E., Brooklyn, N. Y. Drinking-cup attachment for bottles	423,275	Mar. 11	1398	364	50	1408
Powell, William H. (See Powell, Charles W., assignor.)						
Power, Henry A. (See Power, William H. and H. A.)						
Power, Joseph, Philadelphia, Pa. Thread-guide for knitting-machines	436,996	Sept. 23	2594	678	52	1891
Power, Joseph H., Hackleman, Ind. Fence	419,706	Jan. 21	1580	422	50	334

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Power, William H. and H. A., Ringgold, Va. Tobacco-curing house	425,696	Apr. 15	1935	514	51	394
Powers, Charles D., Jr., Milwaukee, Wis. Attachment for lawn-mowers	433,029	July 29	3123	802	52	632
Powers, Charles M., assignor of one-half to M. I. McCreight, Dubois, Pa. Combined canceling-stamp and file	443,485	Dec. 23	2966	747	53	1853
Powers, Daniel. (See Dow and Powers.)						
Powers, Daniel H. (See Currier, Alfred, assignor.)						
Powers, David J., Chicago, Ill. Folding bed	439,683	Nov. 4	88	23	53	625
Powers, Elah J., Wilmington, N. C. Mixing-machine	443,654	Dec. 30	3306	852	53	1949
Powers, Frank, assignor of one-half to L. Lamb, Clinton, Iowa. Life-preserver	436,318	Sept. 9	1447	376	52	1658
Powers, Henderson M., Lancaster, Pa. Thill-coupling	438,018	Oct. 7	530	149	53	101
Powers, J. K. (See Hartsaugh, D. Maurice, assignor.)						
Powers, James J., New York, N. Y. Automatic plug-feeder or plug-cock	424,688	Apr. 1	387	102	51	76
Powers, James J., and R. Van Buren, Brooklyn, N. Y. Machine for making clay conduits	419,793	Jan. 21	1706	453	50	359
Powers, Jay W., Winnetka, assignor to Hydro-Pneumatic Manufacturing Company, Chicago, Ill. Force-pump	425,349	Apr. 8	1460	391	51	292
Powers, John. (See Pettit and Powers.)						
Powers, Levi R., Brocton, Ill. Gate-hinge	430,543	June 17	2230	547	51	1921
Powers, Michael L., Unionville, Conn. Polishing-machine	435,709	Sept. 2	517	136	52	1475
Powers, William H., et al. (See Curtiss, Willard, assignor.)						
Powers, William P., La Crosse, Wis. Thermostat	424,617	Apr. 1	279	72	51	56
Powers, William T., et al. (See Curtiss, Willard, assignor.)						
Powles, John L., Goodland, Ind. Draft-equalizer	422,154	Feb. 25	2518	665	50	1065
Prager, Samuel, New York, N. Y. Cigarette-machine	433,818	Aug. 5	571	149	52	868
Prahar, Louis B., Brooklyn, N. Y. Catch for chatelaine or similar bags	423,630	Mar. 18	1920	505	50	1516
Prahar, Louis B., Brooklyn, N. Y. Tablet attachment for the frames of purses	430,351	June 17	1949	478	51	1868
Prahn, Adolph F., Indianapolis, Ind. Culinary utensil	435,448	Sept. 2	104	29	52	1395
Prall Tramway Motor Company. (See Prall, William E., Jr., assignor.)						
Prall, William E., Jr., Washington, D. C. Motor for street-cars	426,660	Apr. 22	2484	656	51	506
Prall, William E., Jr., Washington, D. C. Motor for street-cars	426,662	Apr. 22	2490	658	51	507
Prall, William E., Jr., Washington, D. C., assignor to Prall Tramway Motor Company. Street-car motor	426,061	Apr. 22	2486	657	51	506
Pranke, August, Detroit, Mich. Combined shutter-fastener and slat-operator	438,425	Oct. 14	1148	310	53	226
Pranke, August, Detroit, Mich. Shutter-worker	438,426	Oct. 14	1149	310	53	226
Pratel, Alfred, New York, N. Y. Means for exhibiting goods	443,664	Dec. 30	3322	856	53	1942
Prater, Leander C. (See Crumbaugh and Prater.)						
Prather, Herman, Jonesville, Ind. Corn-planter	418,747	Jan. 7	128	31, 32	50	28
Prather, Herman, Jonesville, Ind. Corn-planter	431,619	July 8	961	225, 226	52	187
Pratt, Benjamin O. (See Brower, Hiram B., assignor.)						
Pratt, Charles M. (See Leland, Edwin A., assignor.)						
Pratt, Charles T., Pawtucket, R. I. Closet	429,952	June 10	1271	314	51	1727
Pratt, Charles T., New Hartford, N. Y. Drill-chuck	434,460	Aug. 19	1554	465	52	1078
Pratt, Edwin H., Warsaw, Va. Apparatus for operating oyster-tongs	441,192	Nov. 25	2515	650	53	1118
Pratt, George A., Brownsville, Cal. Book index and casing	423,971	Mar. 11	938	246	50	1322
Pratt, Harden D., Jr., Elmira, N. Y. Hitching-strap attachment	420,958	Feb. 11	802	208	50	725
Pratt, Harry G., et al. (See Strang, Lew K., assignor.)						
Pratt, Henry C., Canandaigua, N. Y. Fence	424,498	Apr. 1	92	26	51	21
Pratt, Henry L., Brooklyn, N. Y., assignor to Miller's Falls Company, Miller's Falls, Mass. Anger-handle	438,860	Oct. 21	1845	496	53	363
Pratt, John L., David City, Nebr. Electric belt	443,226	Dec. 23	2627	675	53	1860
Pratt, Lemuel C., Kalamazoo, Mich. Two-wheeled vehicle	435,710	Sept. 2	518	137	52	1475
Pratt & Letchworth. (See Crosby, George S., assignor.)						
Pratt & Letchworth. (See Samson, Adolph, assignor.)						
Pratt, Mason D., Johnstown, Pa., assignor to Johnson Company, of Kentucky. Cable-railway crossing	423,081	Mar. 11	1106	287	50	1352
Pratt, Nat. W., Brooklyn, N. Y. Steam-generator	428,631	May 27	2425	616, 617	51	1322
Pratt, Nat. W., Brooklyn, N. Y. Steam-generator	428,632	May 27	2426	617	51	1322
Pratt, Nat. W., Brooklyn, N. Y. Pneumatic gun	430,087	June 10	1506	374	51	1772
Pratt, Nat. W., Brooklyn, N. Y. Section 1 steam-boiler	431,480	July 1	688	172	52	138
Pratt, Nat. W., Brooklyn, N. Y. Firing-valve for pneumatic ordnance	435,367	Aug. 26	2993	793	52	1361
Pratt, Nat. W., Brooklyn, N. Y. Sectional steam-boiler	439,684	Nov. 4	89	24	53	625
Pratt, Nat. W., Brooklyn, N. Y. Fuel crushing and feeding device for furnaces	443,109	Dec. 23	2405	614	53	1757
Pratt, Nat. W., Brooklyn, N. Y. Automatic stoker	443,110	Dec. 23	2466	614, 615	53	1757
Pratt, Nat. W., Brooklyn, and M. W. Sewall, New York, N. Y. Firing-valve-controlling mechanism for pneumatic guns	430,086	June 10	1564	373, 374	51	1772
Pratt, Philip W., Abingdon, Mass. Glazed target	429,953	June 10	1272	315	51	1727
Pratt, Prescott H., East Bridgewater, Mass., assignor to Wire Grip Fastening Company, Chicago, Ill. Jack for nailing-machines	432,074	July 15	1628	417	52	333
Pratt, Robert J. (See Robison, Joseph, assignor.)						
Pratt, Robert J., Greenbush, N. Y. System of temperature-regulation	433,147	July 29	3306	854, 855, 856	52	668
Pratt, Samuel H., Brownsville, Cal. Shifter for gang-edgers	421,609	Feb. 18	1746	457, 458	50	911
Pratt, Samuel H., Strawberry Valley, Cal. Lung-testing toy	426,683	Apr. 29	3422	698	51	702
Pratt, Sedgwick, United States Army. Range-finder	434,950	Aug. 26	2361	625	52	1243
Pratt, Walter J., Lowville, N. Y. Fire-escape	432,556	July 22	2362	609	52	481
Pratt & Whitney Company. (See Cooley, Charles H., assignor.)						
Pratt & Whitney Company. (See Cooley and Richards, assignors.)						
Pratt & Whitney Company. (See Richards, Francis H., assignor.)						
Pratt & Whitney Company. (See Smith, Thomas L., assignor.)						
Pray, Hamilton, Clove, N. Y. Ice-plow	419,354	Jan. 14	1069	282	50	226
Pray, John M., assignor of one-half to H. H. Leithhead, Los Angeles, Cal. Pipe-tongs	438,177	Oct. 14	776	211	53	156
Preble, Amariah M., et al. (See Gilman, Charles A., assignor.)						
Preble, Josiah H., et al. (See Gilman, Charles A., assignor.)						
Preble, William H., et al. (See Verrill, Sullivan W., assignor.)						
Prebster, Anderson and E., Brownburg, Ind. Check-wire for hand-planting	437,239	Sept. 30	2985	780	52	1973
Prebster, Everson. (See Prebster, Anderson and E.)						
Preiss, Carl, assignor of one-half to S. Eisenstein, Währing, near Vienna, Austria-Hungary. Calk for horseshoes	426,853	Apr. 29	3688	961	51	753

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Prenter, William, <i>et al.</i> (See Best, Edward, assignor.)						
Prentice, Albert F., <i>et al.</i> (See Luther, Benjamin G., assignor.)						
Prentice, Chalmers M. C., Norwalk, Ohio. Apparatus for heating and ventilating railway-cars	440,500	Nov. 11	1374	355	53	882
Prentice, Charles F., New York, N. Y. Eyeglass-case	432,214	July 15	1846	474	52	374
Prentice, George G. (See Lockwood, David D., assignor.)						
Prentice, George G., Bridgeport, Conn., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine	427,609	May 13	880	221	51	994
Prentice, Vernon F., <i>et al.</i> (See Luther, Benjamin G., assignor.)						
Prentiss, Henry S., New York, N. Y. Calendar	428,318	May 20	1963	493	51	1213
Prentiss, Henry S., New York, N. Y. Multiple cam	428,319	May 20	1967	494	51	1214
Prentiss, Henry S., Elizabeth, N. J. Calendar	441,443	Nov. 25	2946	759	53	1197
Prentiss, William. (See Gillam, George E., assignor.)						
Prenveille, Eugene, and P. Stein, Paris, France. Piston-rod	434,524	Aug. 19	1651	432	52	1099
Presbrey, Eugene W., New York, N. Y. Compound-blow-pipe regulator	438,488	Oct. 14	1233	334	53	243
Presbrey, Walter A., Providence, R. I. Game apparatus	439,425	Oct. 28	2735	729	53	538
Prescott, Anna M., <i>et al.</i> (See Prescott, George P., assignor.)						
Prescott, De Witt C., Marinette, Wis. Saw-mill dog	424,727	Apr. 1	450	120	51	89
Prescott, De Witt C., Marinette, Wis. Saw-guide for band-saw mills	426,684	Apr. 29	3423	898	51	702
Prescott, George B., Jr., Newark, N. J., assignor to Electrical Accumulator Company, New York, N. Y. Distribution of electricity by secondary batteries	418,748	Jan. 7	130	32	50	29
Prescott, George B., Jr., Newark, N. J., assignor to Accumulator Company, of New Jersey. Automatic regulation of electric circuits	435,545	Sept. 2	252	70	52	1424
Prescott, George P., assignor to A. M. Prescott, West Troy, A. W. Ham, A. M. Wight, and J. P. Lyon, Troy, N. Y. Type-setting machine	433,030	July 29	3124	{ 802 803 804 }	52	633
Prescott, John H. (See Poole, Henry, assignor.)						
Prescott, William, Fort Madison, Iowa. Railway-ditcher	442,457	Dec. 9	1284	332	53	1520
Prescott, William P. (See Bissell and Prescott.)						
Presley, Frank E. (See Brown, Joseph N., assignor.)						
Press, Whiting G. (See Cadwell, Jason R., assignor.)						
Pressard, Théophile, Paris, France. Steam-generator	432,075	July 15	1631	418	52	333
Presser, William, <i>et al.</i> (See Admire, Joshua, assignor.)						
Pressley, Leonidas C., Brooklyn, N. Y., and W. Lumbard, Wheatland, Cal. Check-cutter	418,961	Jan. 7	486	121	50	102
Pressly, Thompson, Sweet Home, Tex. Poison-distributor	434,357	Aug. 12	1381	363	52	1037
Pressnall, Melvin. (See Milton and Pressnall.)						
Pressnell, Thomas H., <i>et al.</i> (See Brenizer, Orson W., assignor.)						
Prest, John E., Northbridge, Mass. Electric stop-motion for warping-machines	424,997	Apr. 8	878	231	51	178
Prest, John E., Whitinsville, Mass. Loom-temple	428,132	May 20	1682	426	51	1159
Prest, John E., Whitinsville, Mass. Loom-temple	428,133	May 20	1682	426	51	1159
Prest, John E., Whitinsville, Mass. Yarn-separator for spinning-machines	435,122	Aug. 26	2612	691	52	1290
Pretholdt, Robert L., Cerro Gordo, Minn. Draft-equalizer	433,579	Aug. 5	205	54	52	796
Preston, Charles, Syracuse, N. Y. Knob attachment	433,260	Dec. 23	2677	686	53	1809
Preston, Charles A., Cambridgeport, assignor of one-half to G. Frost & Co., Boston, Mass. Combined button-loop and safety-pin	419,554	Jan. 14	1344	360	50	283
Preston, Edwin J., London, E. W. De Russett, Croydon, near London, England, W. Mullin, Belfast, Ireland, and J. McKirdy, assignors to J. Stone & Co., London, England. Side scuttle for ships	428,227	May 20	1820	{ 456 457 }	51	1186
Preston, Ellen M., assignor of one-half to H. I. Gould, Providence, R. I. Napkin-belt	423,572	Mar. 18	1819	479	50	1497
Preston, Hiram P., Haverhill, assignor of one-half to A. C. Tebbetts, Everett, Mass. Staying boot or shoe seams	430,544	June 17	2230	547	51	1921
Preston, Robert, <i>et al.</i> (See Trump, John G., assignor.)						
Preston, Robert, Philadelphia, Pa. Making cores	435,858	Sept. 2	736	197	52	1517
Preston, William M., Rondout, N. Y. Device to facilitate the drilling of holes centrally in shafts for watches, &c	437,796	Oct. 7	192	59	53	38
Pretzel, Henry C., Leicester, England. Boot or shoe welt machine	427,610	May 13	881	222	51	994
Pretzel & Co., Franz. (See Nesler, Heinrich T., assignor.)						
Preussner, Ludwig, Berlin, Germany. Producing marble-like or enamel-like objects	424,352	Mar. 25	2996		50	1729
Preussner, Ludwig, Philadelphia, Pa. Producing artificial stone	424,353	Mar. 25	2998		50	1729
Prevear, Charles M. (See Clennan, Milton A., assignor.)						
Price, Benjamin F., Bloomington, Ill. Furnace	437,452	Sept. 30	3343	874	52	2042
Price, Benjamin I., Denver, Colo. Joint for spectacle-frames	426,422	Apr. 22	3043	796	51	620
Price, Charles R., Cherokee, Iowa. Fence	441,072	Nov. 13	2316	599	53	1070
Price, Charles R., and E. M. Gallup, Cherokee, Iowa. Fence-post	423,809	Mar. 18	2175	575	50	1564
Price, Edwin W. (See Walter, Edward, assignor.)						
Price, George W., Little Orleans, Md. Corn-planter	424,131	Mar. 25	2665	710	50	1665
Price, George W., Little Orleans, Md. Corn-planter	439,685	Nov. 4	91	24	53	626
Price, Henry S. (See Kent and Price.)						
Price, Jacob, San Leandro, Cal. Traction-engine	419,284	Jan. 14	955	{ 251 252 }	50	202
Price, James M., Philadelphia, Pa. Street railway or tramway	427,109	May 6	139	36	51	839
Price, James M., Philadelphia, Pa. Support for railway-rails	430,590	June 17	2301	{ 565 566 }	51	1935
Price, James M., Philadelphia, Pa. Railway support and cross-tie	431,172	July 1	209	52	52	43
Price, James S., Houston, Tex. Machine for forming cotton-seed meal into cakes	425,251	Apr. 8	1254	{ 334 335 }	51	254
Price, James S., Houston, Tex. Cotton-seed-meal heater	428,134	May 20	1683	{ 426 427 }	51	1159
Price, James S., Houston, Tex. Machine for forming cotton-seed meal into cakes	429,544	June 3	620	{ 163 164 }	51	1600
Price, John A., Scranton, Pa. Cooking-stove oven	418,817	Jan. 7	235	57	50	51
Price, John A., Scranton, Pa. Cooking-stove	418,851	Jan. 7	303	73	50	63
Price, John A., Scranton, Pa. Cooking-stove	433,093	July 29	3224	830	52	551
Price, Joseph C. (See Chable, August F., assignor.)						
Price, Joseph M. (See Fronefield and Price.)						
Price, Maurice, New York, N. Y. Machine for turning and pressing the edges of shirt-bosoms	422,625	Mar. 4	396	99	50	1212
Price, Robert B., St. John, New Brunswick, Canada. Oil-feeder	428,135	May 20	1684	427	51	1160
Price, Thomas J., Danville, Pa. Feed-table for rolling-mills	441,895	Dec. 2	416	111	53	1346
Price, William C., Toronto, Canada, assignor to H. Beisheim, Rochester, N. Y. Mat	443,331	Dec. 23	2796	719	53	1833
Price, William G. (See Kingman, Daniel C., assignor.)						
Price, William H., Columbus, Ohio. Mail-pouch	428,228	May 20	1823	457	51	1187
Price, William H., Jr., assignor to Chandler & Price, Cleveland, Ohio. Printing-press	420,017	Jan. 21	2053	541	50	427

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Price, William H., assignor to J. F. Shea, Washington, D. C. Hasp-lock.....	438,823	Oct. 21	1778	476	53	351
Price, William H., assignor to J. F. Shea, Washington, D. C. Padlock.....	438,824	Oct. 21	1780	476	53	352
Prichard, John H., Bode, Iowa. Trip-hook.....	441,255	Nov. 25	2644	687	53	1139
Pride, William H., Springfield, Ill. Building-tile.....	430,810	June 24	2695	660	51	2019
Pridham, Rodney W. (See Murtha, Harry T., assignor.)						
Pridmore, Edward, assignor to Johnston Harvester Company, Batavia, N. Y. Disk har- row.....	433,654	Aug. 5	318	82	52	817
Pridmore, Henry E. (See Baker and Pridmore.)						
Pridmore, Henry E., Chicago, Ill., assignor to McCormick Harvesting Machine Company. Grain-binder.....	422,444	Mar. 4	113	31, 32	50	1158
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Platform-flag for harvesters.....	431,283	July 1	379	95	52	77
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Platform-flag for harvesters.....	432,766	July 22	2708	692	52	546
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Relief-rake for grain-binders.....	435,519	Sept. 2	206	57	52	1414
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Machine for making sand molds for casting.....	435,520	Sept. 2	208	57, 58	52	1415
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Harvester-truck.....	435,521	Sept. 2	209	58	52	1415
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-adjuster for self-binding harvesters.....	435,522	Sept. 2	210	58	52	1415
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Cord-holder for grain-binders.....	436,909	Sept. 23	2474	{ 645 646 }	{ 52 52 }	1868
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder.....	437,719	Oct. 7	63	20, 21	53	15
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Harvester.....	438,277	Oct. 14	934	252	53	183
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Mower.....	441,896	Dec. 2	417	{ 111 112 }	{ 53 53 }	1346
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder.....	442,544	Dec. 9	1427	365	53	1548
Pridmore, Henry E., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Grain-binder.....	442,545	Dec. 9	1429	{ 366 367 }	{ 53 53 }	1549
Pridmore, Henry E., and W. R. Baker, assignors to McCormick Harvesting Machine Com- pany, Chicago, Ill. Harvester.....	442,543	Dec. 9	1423	364	53	1547
Pries, Ernest, New York, N. Y. Reed-plate for accordions.....	437,906	Oct. 7	351	102	53	68
Pries, Frederick, Florence, Neb. Game apparatus.....	436,637	Sept. 16	1964	516	52	1762
Priesmeyer, Henry F. (See Meyer, Louis E., assignor.)						
Priest, Edward D., Lynn, Mass. Supporting-frame for electric-railway motors.....	422,445	Mar. 4	119	32, 33	50	1160
Priest, Joseph K., Nashua, N. H. Hair-clipper sweat-guard.....	432,076	July 15	1633	419	52	334
Priest, William. (See Lloyd and Priest.)						
Priestley, Forrest M., Denver, Colo. Blotter-bath.....	434,567	Aug. 19	1717	449	52	1112
Priestman, Howard, Bradford, county of York, England. Machine for spinning, &c., yarns.....	422,155	Feb. 25	2519	665	50	1066
Priestman, Samuel. (See Priestman, William D. and S.)						
Priestman, William D. and S., Hull, county of York, England. Means for facilitating the starting and regulating the working of hydrocarbon-engines.....	430,038	June 10	1421	353	51	1756
Prietz, Emil, Christianstadt, Prussia, Germany. Lathe attachment.....	431,392	July 1	552	138	52	112
Prillwitz, Ludwig, New York, N. Y. Boring-tool holder.....	430,148	June 17	1599	398	51	1800
Primrose, George L., Syracuse, N. Y. Folding screen.....	430,683	June 24	2475	604	51	1977
Prince, Jerome, Milford, Mass., assignor to Glass Transmitter Telephone Company, of Maine. Transmitter for mechanical telephones.....	427,269	May 6	377	98	51	884
Prince, Samuel, New London, Conn. Lemon-juice extractor.....	428,947	May 27	2906	745	51	1416
Prindle, Edward T., Aurora, Ill. Door-hanger.....	423,952	Mar. 25	2405	638	50	1616
Pringle, Eugene, Gloversville, N. Y. Breech-loading gun.....	439,895	Nov. 4	401	105	53	685
Pringle, Eugene, Gloversville, N. Y., assignor to M. D. Shipman and C. E. Bradt, De Kalb, Ill. Glove-fastening.....	429,177	June 3	106	25	51	1492
Pringle, Eugene, Gloversville, N. Y., assignor to M. D. Shipman and C. E. Bradt, De Kalb, Ill. Glove-fastening.....	443,792	Dec. 30	3527	905	53	1982
Pringle, John N., Belleville, Ontario, Canada. Axle-lubricator.....	434,358	Aug. 12	1383	363	52	1037
Pringle, John N., Belleville, Canada. Musical skipping-rope handle.....	438,489	Oct. 14	1234	335	53	243
Printing Telegraph Company of Illinois. (See Odell, John B., assignor.)						
Prisk, William H., Monticello, Wis. Plow.....	429,060	May 27	3088	796	51	1449
Pritchard, Frederick, Meriden, Conn. Reed-organ.....	427,360	May 6	501	128	51	910
Pritchard, Henry. (See Milar and Pritchard.)						
Pritschau, Arthur F., assignor of part to L. Manger, H. S. McDowell, and W. J. Rothwell, Denver, Colo. Nut-lock.....	430,404	June 17	2026	499	51	1883
Pritzius, Ludwig, Ludwigshafen-on-the-Rhine, Germany. Apparatus for molding caout- chouc palate-plates for artificial teeth.....	443,378	Dec. 23	2868	{ 737 738 }	{ 53 53 }	1847
Prizgint, Joseph F., Los Angeles, Cal. Shirt-measuring appliance.....	438,178	Oct. 14	777	212	53	156
Probert, Hubert F., assignor of one-half to Sheffield Velocipede Car Company, Three Riv- ers, Mich. Stand-pipe for supplying water to railway-engines.....	420,889	Feb. 4	692	178	50	694
Probert, William, Duncansville, Pa. Machine for making tubing.....	433,580	Aug. 5	206	55	52	796
Procter, Edwin R., Washington Court-House, Ohio. Corn-planter.....	426,212	Apr. 22	2719	{ 712 713 }	{ 51 51 }	553
Procter, Edwin R., Washington Court-House, Ohio. Nut-lock.....	427,611	May 13	883	222	51	995
Proctor, David R., Chicago, Ill., assignor to National Wire Mat Company, of Illinois. Sash- fastener.....	419,881	Jan. 21	1857	488	50	390
Proctor, H. P., et al. (See Brown, Theodore H., assignor.)						
Proctor, Josiah K., and J. H. Knowles, assignors to Philadelphia Textile Machinery Com- pany, Philadelphia, Pa. Drying-machine.....	426,321	Apr. 22	2865	{ 754 755 }	{ 51 51 }	585
Proctor, Josiah K., and J. H. Knowles, assignors to Philadelphia Textile Machinery Com- pany, Philadelphia, Pa. Drying-machine.....	432,282	July 15	1950	499	52	393
Proctor, Josiah K., and J. H. Knowles, assignors to Philadelphia Textile Machinery Com- pany, Philadelphia, Pa. Drying apparatus.....	433,094	July 29	3228	{ 830 831 }	{ 52 52 }	652
Proctor, Thomas R. (See Perry, Charles H., assignor.)						
Procinier, Frank G., assignor to himself and E. Hamilton, Chicago, Ill. Steam-trap for radiators.....	438,825	Oct. 21	1781	477	53	352
Promis, Eugene, Philadelphia, Pa. Cigar-holder.....	437,837	Oct. 7	252	77	53	50
Promis, Eugene, Philadelphia, Pa. Cigar-holder.....	440,367	Nov. 11	1135	292	53	837
Prophet, John M. (See Winters and Prophet.)						
Propst, Nicholas, Decatur, Ill. Clothes-powder.....	429,476	June 3	570	130	51	1582
Prosinger, Martin, Canon City, Colo. Envelope-opener.....	436,189	Sept. 9	1262	329	52	1620

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Proskauer, Samuel, <i>et al.</i> (See Mayfield, Elmer J., assignor.)						
Prospective Mining and Machinery Company. (See Tremain, Charles W., assignor.)						
Prosser, Berry. (See Heymann and Prosser.)						
Prosser, George E. (See Bigelow and Prosser.)						
Protzman, Ferdinand, Sr., <i>et al.</i> (See Adams, Charles, assignor.)						
Proust, Olivier, Paris, France. Petroleum-stove	432,438	July 15	2166	558	52	434
Prouty, Chester, Instanter, Pa. Detachable handle for crosscut-saws	437,620	Sept. 30	3581	936	52	2090
Prouty, Chester, Instanter, Pa. Crosscut-saw	440,253	Nov. 11	955	245	53	806
Prouty, Enoch, assignor of one-half to O. S. Prouty, Chicago, Ill. Power-transmitting device	443,608	Dec. 30	3233	831	53	1926
Prouty, Jonas R. (See Avery, William, assignor.)						
Prouty, Olive S. (See Prouty, Enoch, assignor.)						
Provost, Benjamin A., St. Paul, Minn. Fishing-hook	440,721	Nov. 18	1735	445	53	960
Provost, Gustave. (See Ranlett and Provost.)						
Provost, Peter, Minneapolis, Minn. Grain-scourer	439,555	Oct. 28	2924	{ 777 778	{ 53	574
Pruden, Daniel R., assignor to D. W. Wormwood, Chelsea, Mass. Optometer	430,591	June 17	2303	566	51	1936
Pruden, Silas, Los Angeles, Cal. Nailless horseshoe	434,401	Aug. 12	1455	379	52	1052
Prud'homme, Hector, Tomahawk, Wis. Scrubbing-machine	438,561	Oct. 14	1341	364	53	265
Pruett, Isaac. (See Mathews and Pruett.)						
Pruitt, John H., Markton, Ala. Burglar-alarm	432,077	July 15	1634	419	52	334
Pruntz, John E., assignor to Greene & Pruntz, Baltimore, Md. Fire-extinguishing apparatus	441,697	Dec. 2	103	27	53	1282
Prunye, Wallace E., assignor of one-half to F. F. Hall, Norwich, N. Y. Halter	422,626	Mar. 4	398	99	50	1212
Pryor, Daniel R., McKeesport, Pa. Pipe-coupling	435,711	Sept. 2	520	137	52	1475
Przewdzink, Emanuel, Beuthen, Germany. Embroidery-stand	437,240	Sept. 30	2935	780	52	1974
Psilander, Charles A. (See Angerer and Psilander.)						
Pudan, Herbert W. (See Pudan, Thomas A. and H. W.)						
Pudan, Thomas A. and H. W., Sacramento, Cal. Dish-washing machine	426,739	Apr. 29	3519	919	51	721
Puech, Cécile, (née Laure), Mazamet, Tarn, France. Separating fur, &c., from the skin	422,627	Mar. 4	399	.....	50	1212
Puffer, Alvin D., Medford, Mass. Soda-water-draft apparatus	422,834	Mar. 4	691	176	50	1369
Puffer, Alvin D., Medford, Mass. Soda-water-draft apparatus	435,188	Aug. 26	2710	716	52	1309
Puffer, C. C. (See Metzler, August J., assignor.)						
Pugh, John, Philadelphia, Pa. Mandrel for dental disks	428,019	May 13	1508	383	51	1116
Pugh, Robert H., Chicago, Ill. Railway-rail	428,948	May 27	2907	745	51	1416
Pugh, William J., <i>et al.</i> (See Anderson, Charles A., assignor.)						
Pugsley, Abraham, Jamestown, R. I. Blind-stop	433,306	July 29	3534	912	52	714
Pugsley, Abraham, Jamestown, R. I. Shutter-worker	433,819	Aug. 5	572	149	52	868
Pugsley, Henry S., Oakland, Cal. Journal-box protector	421,610	Feb. 18	1747	458	50	912
Pugsley, William E., Parker, S. D. Scraper	435,712	Sept. 2	521	{ 137 138	{ 52	1476
Pullen, Edwin J., Holton, Kans. Cutting apparatus	441,698	Dec. 2	105	28	53	1283
Pullen, William E., Indianapolis, Ind. Shirt-waist	432,557	July 22	2363	609	52	481
Pullen, William E., Indianapolis, Ind. Garment-supporter	432,558	July 22	2364	610	52	481
Pullin, Alfred R., Sydney, New South Wales. Nut-lock	422,250	Feb. 25	2671	705	50	1094
Pullman, Albert B., Chicago, Ill. Railway-car	419,355	Jan. 14	1071	282	50	236
Pullman, Albert B., Chicago, Ill. Railway-car	419,356	Jan. 14	1072	283	50	227
Pullman, Albert B., Chicago, Ill. Car-door hanger	420,831	Feb. 4	587	151	50	675
Pullman, Albert B., Chicago, Ill. Sliding door for railway-cars	421,084	Feb. 11	984	{ 252 253	{ 50	759
Pullman, Albert B., Chicago, Ill. Hanger for sliding doors	438,325	Oct. 14	1003	272	53	198
Pullman, Harry B., Cambridge, Ohio, assignor of three-fourths to C. D. Robbins and H. O. Patch, Washington, Pa. Electric motor	440,776	Nov. 18	1836	473	53	978
Pullman Sash Balance Company. (See McArthur, James, assignor.)						
Pullman's Palace Car Company. (See Bauer, Alexander H., assignor.)						
Pullman's Palace Car Company. (See Sessions, Henry H., assignor.)						
Pullon, Joseph T. (See Baldry and Pullon.)						
Pullon, Joseph T. (See Jefferson and Pullon.)						
Pulster, Henry, assignor to Klander & Bro., Philadelphia, Pa. Knit fabric	426,322	Apr. 22	2867	755	51	585
Pulver, Wandle. (See Monroe, Hartley L., assignor.)						
Pumpelly, James K., Chicago, Ill. Secondary battery	442,390	Dec. 9	1181	307	53	1499
Pumpelly, James K., Chicago, Ill. Secondary battery	442,391	Dec. 9	1182	307	53	1499
Pumpelly, James K., assignor to D. S. Covert, Chicago, Ill. Connector for secondary batteries	434,199	Aug. 12	1138	295	52	989
Pumphrey, George H., Minneapolis, Minn. Ink-well for school-desks	418,749	Jan. 7	132	32	50	29
Punches, Oscar J., Plymouth, Mich. Cash-carrier	420,832	Feb. 4	589	151	50	675
Pungs, William A. (See Bronner, Potts, and Pungs.)						
Pungs, William A., assignor to Metallic Grain Door Company, Detroit, Mich. Grain-car door	435,523	Sept. 2	211	59	52	1415
Pupke, Eberhard L., <i>et al.</i> (See Benwell, Thomas B., assignor.)						
Purcell, Eppa H. (See Lovett and Purcell.)						
Purdy, Andrew J., Washington, D. C. Ship	441,193	Nov. 25	2516	650	53	1118
Purdy, Arthur F., Lawrence, Cal. Telegraph-key	437,510	Sept. 30	3427	897	52	2060
Purdy, B. B. (See Harris, William E., assignor.)						
Purdy, Charles G., Brooklyn, N. Y. Filter	427,906	May 13	1344	340	51	1084
Purdy, Charles H., assignor of one-half to H. W. Johnson, Michigan City, Ind. Rotary chair	426,323	Apr. 22	2869	755	51	585
Purdy, Hannah H. (See Purdy, Ira L. and H. H.)						
Purdy, Horace M., Lawrence, Nebr. End-gate for wagons	432,897	July 22	2889	740	52	583
Purdy, Ira L., assignor to H. H. Purdy, Macedon, N. Y. Scale-beam and weight therefor	429,477	June 3	571	140	51	1582
Purdy, James H., assignor of one-half to C. S. Van Wyck, Earl, N. Y. Grain-drill	435,769	Sept. 2	599	{ 159 160	{ 52	1490
Purdy, Ormond E., Amsterdam, N. Y., assignor to A. Carmichael and N. H. Townsend, (executrix of S. D. Townsend, deceased), Westerly, R. I. Check or other like book	443,296	Dec. 23	2738	703	53	1820
Purdy, Stillman H., Minneapolis, Minn. Grain-seeder	429,954	June 10	1273	315	51	1727
Purdy, Zachariah V., Vienna, Va., assignor to Eureka Horse and Mule Shoe Company, Washington, D. C., and E. F. Buckley, <i>et al.</i> Horseshoe-machine	434,837	Aug. 19	2139	{ 560 561	{ 52	1194
Purdy, Zachariah V., Vienna, Va., assignor to Eureka Horse and Mule Shoe Company, Washington, D. C., and E. F. Buckley, <i>et al.</i> Roll for preparing horseshoe-blanks	434,838	Aug. 19	2142	561	52	1194
Purefoy, Addison F., Meriden, Conn. Spring bed-bottom	440,324	Nov. 11	1073	276	53	825
Purnell, James O., assignor to Patent Elastic Fabric Company, Pittsfield, Mass. Cutting-machine	430,882	June 24	2797	685	51	2039
Pursel, Frank P. (See Pursel, William W. and F. P.)						
Pursel, William W., Berwick, Pa. Lock	431,620	July 8	902	226	52	187

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Pursel, William W. and F. P., Berwick, Pa. Lock	440,280	Nov. 11	1008	259	53	814
Pursell, Harry D., Washington Court-House, Ohio. Grate-front	419,064	Jan. 7	623	163	50	132
Pursell, Harry D., Washington Court-House, Ohio. Advertising and distributing apparatus	424,354	Mar. 25	2939	797	50	1729
Pursell, Harry D., Washington Court-House, Ohio. Vending-machine	432,493	July 15	2167	553	52	434
Pursell, Peter M., Indianapolis, Ind. Grate-setting for fire-places	440,196	Nov. 11	861	222	53	733
Purves, James, Homestead, Pa. Apparatus for tapping furnaces	436,461	Sept. 16	1691	445	52	1713
Purves, Thomas, <i>et al.</i> (See Bronson, Benjamin, assignor.)						
Purvis, John B., assignor of one-third to S. O. Brooks, Detroit, Mich. Steering apparatus	439,763	Nov. 4	201	52	53	648
Purvis, William B., Philadelphia, Pa. Fountain-pen	419,065	Jan. 7	629	163	50	132
Purvis, William B., Philadelphia, Pa. Paper-bag machine	420,099	Jan. 28	2188	578	50	463
Purvis, William B., Philadelphia, Pa. Paper-bag machine	430,684	June 24	2476	{ 604 605 }	{ 51 51 }	{ 1977 1977 }
Purvis, William B., Philadelphia, Pa. Paper-bag machine	434,461	Aug. 19	1557	405	52	1079
Purvis, William B., Philadelphia, Pa. Paper-bag machine	435,524	Sept. 2	212	59	52	1416
Pusey, Joshua, Lima, Pa. Lock	429,795	June 10	1036	254	51	1681
Putman, John, assignor to M. A. Putman, Beardstown, and J. F. Black, Virginia, Ill. Nut-lock	423,441	Mar. 18	1633	429	50	1463
Putman, Martha A., <i>et al.</i> (See Putman, John, assignor.)						
Putnam, Anna M., <i>et al.</i> (See Moore, Charles E., assignor.)						
Putnam, Arthur L., Manchester, N. H. Sand-hand	425,252	Apr. 8	1258	336	51	254
Putnam, E. P. (See Candee, William N., assignor.)						
Putnam, Fred E., Clinton, Me. Wrench	441,854	Dec. 2	355	94	53	1333
Putnam, George H., Hopkinton, Mass. Gilding-machine for boots	442,915	Dec. 16	2075	533	53	1684
Putnam, Henry W. (See Miles, Purches, assignor.)						
Putnam, John P., Boston, Mass. Wash-basin	434,402	Aug. 12	1456	379	52	1052
Putnam, John P., Boston, Mass. Water-closet and supply-tank therefor	440,197	Nov. 11	863	222	53	738
Putnam, Silas S., Jr., assignor of one-half to W. W. Whitmarsh, Boston, Mass. Self-adjusting fender or guard for railway-cars	431,393	July 1	553	{ 138 139 }	{ 52 52 }	{ 112 112 }
Putnam, Silas S., Jr., and W. W. Whitmarsh, Boston, Mass. Self-adjusting fender or guard for railway-cars	442,546	Dec. 9	1434	367	53	1549
Putrow, John B., Westborough, assignor to W. B. Johns, Antigo, Wis. Shingle-sawing machine	423,953	Mar. 25	2406	{ 639 640 }	{ 50 50 }	{ 1616 1616 }
Pyatt, Daniel A., <i>et al.</i> (See Mitchell, George P., assignor.)						
Pyle, George C., assignor to National Electric Head Light Company, Indianapolis, Ind. Arc lamp	422,446	Mar. 4	122	33	50	1160
Pymm, John, St. George, Utah Ter. Screw shank and ferrule	430,685	June 24	2478	605	51	1977
Pynchon, Edwin, Chicago, Ill. Adjustable chair	443,197	Dec. 23	2581	{ 663 664 }	{ 53 53 }	{ 1792 1792 }
Pyott, Louis T., Lower Merion, Pa. Driving-gear for wood-working machines	421,303	Feb. 11	1288	332	50	816
Pyper, John S., An Sable Chasm, N. Y. Grinding attachment for sewing-machines	432,898	July 22	2891	741	52	583
Pyrophoto Company. (See Mandel, Philip H., assignor.)						
Quack, Edward, Cologne, assignor to C. W. Hasenclever Söhne, Dusseldorf, Germany. Gas-engine	441,582	Nov. 25	3161	{ 813 814 815 }	{ 53 53 53 }	{ 1237 1237 1237 }
Quackenbush, Henry M., Herkimer, N. Y. Target	426,063	Apr. 22	2492	658	51	508
Quackenbush, Henry M., Herkimer, N. Y. Skeleton gunstock	436,997	Sept. 23	2593	679	52	1891
Quade, August C., Jr., Mayfield, Wis. Animal-watering device	432,078	July 15	1636	420	52	334
Quaglio, Julius. (See Westphal, Christian, assignor.)						
Quaife, Charles E. (See Harkness and Quaife.)						
Quain, Alexander H. and A., and G. P. Warner, Albany, Oreg. High-grade-water-power utilizer	437,511	Sept. 30	3428	897	52	2061
Quain, Allie. (See Quain and Warner.)						
Quaker City Dye Works Company. (See Fearon, James J., assignor.)						
Quaker City Dye Works Company. (See Macfarlane, William W., assignor.)						
Quanchi, Louis, Yonkers, assignor to L. Lawrence, New York, N. Y. Making matrices for stereotyping purposes	436,379	Sept. 16	1565	411	52	1690
Quarrie, George, New York, assignor of one-third to T. R. Sully, Buffalo, N. Y. Advertising device	438,179	Oct. 14	778	212	53	156
Quasebarth, Adolph, White Castle, La. Sugar-cane car	435,319	Aug. 26	2911	{ 772 773 }	{ 52 52 }	{ 1345 1345 }
Quayle, Daniel F. W., Castletown, Isle of Man, England. Sponge-holder	430,434	June 17	2064	509	51	1800
Quayle, William, Denver, Colo. Bevel	442,592	Dec. 9	1505	387	53	1565
Queen Anne Screen Company. (See Baldwin, Judson A., assignor.)						
Quentell, William P., Kansas City, Mo. Type-writing machine	433,820	Aug. 5	572	{ 149 150 }	{ 52 52 }	{ 868 868 }
Quevedo, Narciso T., Worcester, Mass. Velocipede	427,110	May 6	140	36, 37	51	839
Quevedo, Narciso T., Worcester, Mass. Car-coupling	432,559	July 22	2365	610	52	481
Quevedo, Narciso T., assignor of one-half to I. Brown, Worcester, Mass. Ripping attachment for sewing-machines	421,054	Feb. 11	947	243	50	752
Quigg, Lewis, assignor to C. C. Davis and J. H. Richard, Spring City, Pa. Last	434,678	Aug. 19	1916	499	52	1149
Quigg, William A., New York, N. Y. Brush	426,213	Apr. 22	2724	713	51	553
Quiggin, Daniel A., Blundell Sands, near Liverpool, assignor of one-half to J. Newton, London, England. Manufacture of helical coils of metallic tubing	431,804	Aug. 19	2094	{ 548 549 }	{ 52 52 }	{ 1185 1185 }
Quigley, Andrew P., Jamestown, N. Y. Pipe-wrench	440,501	Nov. 11	1375	355	53	882
Quigley, Daniel J., New York, N. Y. Garbage-receptacle and ash-receiver	436,543	Sept. 16	1829	481	52	1737
Quigley Furniture Company. (See Bancroft, Melvin, assignor.)						
Quigley, John A., New Utrecht, N. Y. Sanitary and automatic drinking-basin for animals	434,072	Aug. 12	937	246	52	949
Quigley, Walter C., Lake Geneva, Wis., assignor of one-half to R. W. Munzer, Cook County, Ill. Lace or embroidery holder	436,638	Sept. 16	1966	516	52	1763
Quigley, William C., Richmond, Ohio. Scoop	440,059	Nov. 4	655	175	53	736
Quimby, Charles S., and R. S. Macnamee, Pickering, Pa. Water-heater for stoves	436,671	Sept. 16	2030	530	52	1775
Quimby, Frederick B., Quincy, Mass. Focusing attachment for photographic instruments	439,556	Oct. 28	2926	778	53	575
Quinan, William R., Pimole, Cal. Mixer for explosives	427,707	May 13	1029	258	51	1024
Quincy, Charles F. (See Churchward, James, assignor.)						
Quincy, Charles F. (See Merrill, Rufus S., assignor.)						
Quincy, George G., <i>et al.</i> (See Jenkins, Samuel B., assignor.)						
Quindry, John, Fort Branch, Ind. Folding carriage-top	430,435	June 17	2066	509	51	1891
Quinlan, Ed. F., and J. G. Knebel, Pueblo, Colo. Steam-whistle	431,007	June 24	2985	737	51	2074
Quinlan, Patrick H., New Orleans, La. Pipe-wrench	437,079	July 15	1637	420	52	335
Quinlean, Daniel J. (See Matthews and Quinlean.)						
Quinn, George F., Brooklyn, N. Y. Lifting-jack	422,539	Mar. 4	251	64	50	1184
Quinn, James. (See Merrill, Thomas B., assignor.)						
Quinn, James, Jr. and V. Angerer, assignors to W. Wharton, Jr., and Company, Incorporated, Philadelphia, Pa. Street-railway crossing	439,426	Oct. 28	2737	{ 729 730 }	{ 53 53 }	{ 538 538 }

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Quinn, James E., Boston, Mass. Dental vulcanizer.	433,185	July 29	3362	869	52	679
Quinn, James T., <i>et al.</i> (See Cairns, Samuel D., assignor.)						
Quinn, James W., assignor of two-thirds to C. C. Copeland, North Madison, and W. M. Copeland, Madison, Ind. Motor-vehicle.	431,993	July 8	1496	378	52	301
Quinn, Timothy C., <i>et al.</i> (See Reason, Walter M., assignor.)						
Quinn, Walter M. (See Guilford and Quinn.)						
Quinn, William J., assignor to Nail City Lantern Company, Wheeling, W. Va. Lantern.	427,440	May 6	631	158	51	937
Quirin, Emil J. F., Tioga Centre, N. Y. Tabular calculator.	424,574	Apr. 1	212	58	51	44
Quisenberry, Madison, Raymore, Mo. Automatic flood-gate.	433,366	July 29	3613	932	52	730
Quist, Olaf, Colton, Cal. Life-preserver.	419,066	Jan. 7	630	164	50	133
Quitman, Frederick W., South Norwalk, Conn. Soldering or brazing torch.	433,631	Aug. 5	278	74	52	810
Quitman, Frederick W., South Norwalk, Conn. Self-locking pulley.	438,291	Oct. 14	954	259	53	188
Quivey, Joseph M. (See Shaw, James F., assignor.)						
Raabe, Julius A., St. Louis, Mo. Toy.	425,343	Apr. 8	1387	370	51	279
Raaben, Ole O. (See Peterson and Raaben.)						
Rabb, Philipp J., Frankfort Station, Ill. Potato-planter.	433,031	July 29	3130	804	52	633
Rabenstein, Carl, and J. Reineking, Neillsville, Wis. Lantern.	430,193	June 17	1654	412	51	1811
Raber, Emanuel, Canton, Ohio. Ladder.	434,462	Aug. 19	1559	405	52	1079
Rabich, William, assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter.	423,810	Mar. 18	2176	575	50	1564
Rabinowicz, Israel, assignor of two-thirds to C. Strattmann and J. T. Schoolcraft, Schenectady, N. Y. Insulating compound.	433,215	July 29	3403		52	687
Raborg, William A., <i>et al.</i> (See Carl, Frederick, assignor.)						
Racine Malleable and Wrought Iron Company. (See Tecktonins, Emil C., assignor.)						
Rack, Adolf, Vienna, Austria-Hungary. Malt-kiln.	441,699	Dec. 2	107	23, 29	53	1283
Rackleff, James L. (See Mitchell, John B., assignor.)						
Radam, William, Austin, Tex. Composition for preserving food.	425,904	Apr. 15	2228		51	449
Radant, August F., assignor of one-half to A. Braatz, Wausau, Wis. Steam-engine valve.	441,897	Dec. 2	420	112	53	1347
Radcliffe, John J., Long Hill, Conn. Folding closet or wardrobe.	426,957	Apr. 29	3819	998	51	779
Radcliffe, Robert D., assignor of one-half to H. S. Beattie, New York, N. Y. Constructing underground conduits.	440,576	Nov. 11	1492	385	53	904
Radcliffe, Robert D., assignor of one-half to H. S. Beattie, New York, N. Y. Combined tunnel and cable railway.	440,577	Nov. 11	1494	385	53	904
Radde, Carl O., Hamburg, Germany. Apparatus for displaying advertisements.	442,274	Dec. 9	1004	265	53	1466
Rademacher, Frank, assignor of one-half to H. H. Leithead, Los Angeles, Cal. Steam-condenser and water-heater.	434,463	Aug. 19	1560	406	52	1079
Radermacher, John (See Scholl, Peter, assignor.)						
Raders, Joseph L. F. (See Föge, Griesse, and Raders.)						
Radlauer, Siegmund, Berlin, Germany. Preparing a hypnotic.	422,251	Feb. 25	2673		50	1094
Radler, Karl, Hildesheim, Germany. Hinge.	442,547	Dec. 9	1435	368	53	1549
Radley, John P., Albany, N. Y. Barley-fork.	432,573	Mar. 18	1820	479	50	1497
Rady, William, Sellersburg, Ind. Separating apparatus.	419,067	Jan. 7	631	164	50	133
Rae, Frank B., Chicago, Ill. Printing-teletype.	443,111	Dec. 23	2409	615	53	1758
Rae, Frank B., Detroit, Mich. Safety cut-out.	423,354	Feb. 25	2841	749	50	1125
Rae, Frank B., Detroit, Mich. Trolley for overhead electric railways.	423,391	Mar. 11	1554	408	50	1439
Rae, Frank B., Detroit, Mich. Car-gong.	423,392	Mar. 11	1555	408	50	1439
Rae, Frank B., Detroit, Mich. Insulating-hanger for overhead supply-conductors.	426,064	Apr. 22	2494	658	51	508
Rae, Frank B., Detroit, Mich. Current-indicator.	426,065	Apr. 22	2496	659	51	509
Rae, Frank B., Detroit, Mich. Trolley-support.	426,066	Apr. 22	2497	659	51	509
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Trolley for electric railways.	421,304	Feb. 11	1289	{ 332 333 }	{ 50 50 }	817
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Overhead trolley for electric railways.	421,305	Feb. 11	1290	333	50	817
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Trolley-arm support for electric railways.	423,136	May 20	1635	427	51	1160
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Switch for electric locomotives.	430,686	June 24	2479	605	51	1977
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Gearing.	431,124	July 1	135	35	52	29
Rae, Frank B., assignor to Detroit Electrical Works, Chicago, Ill. System of electrical distribution.	437,512	Sept. 30	3430	898	52	2061
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Electrical switch.	437,513	Sept. 30	3432	898	52	2061
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Motor-truck for electrically-propelled vehicles.	437,661	Sept. 30	3638	950	52	2102
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Automatic switch for stationary motors.	437,662	Sept. 30	3639	951	52	2102
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Armature for dynamo-electric machines and motors.	437,663	Sept. 30	3642	951	52	2103
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Yoke and brush-holder.	440,817	Nov. 18	1904	489	53	990
Raechle, William, Boston, Mass. Button-hole-cutting mechanism for sewing-machines.	440,760	Nov. 18	1803	466	53	972
Raff, Edward S., Canton, Ohio. Check-punch.	429,814	June 10	1069	263	51	1687
Raff, Edward S., Canton, Ohio. Inkstand.	430,194	June 17	1655	412	51	1811
Raff, Edward S., Canton, Ohio. Check rating and punching machine.	433,541	Aug. 5	138	40	52	784
Raffensberger, Jacob D., Mechanicsburg, Pa. Folding thill or pole for vehicles.	438,946	Oct. 21	1969	525	53	387
Rafferty, John H., Worcester, Mass. Head-check loop.	420,244	Jan. 28	2440	644	50	507
Rafferty, John H., Worcester, Mass. Bridle.	431,396	July 1	556	139	52	113
Rafferty, Patrick, assignor of two-thirds to P. Finnegan and J. Cranney, Ovid, N. Y. Railway-tie.	430,039	June 10	1423	353	51	1756
Raggio, Charles A., Chicago, Ill. Bung.	435,713	Sept. 2	522	138	52	1476
Rahn, Henry. (See Barney and Rahn.)						
Rähse, Ferdinand, Löbau, Germany. Mechanism for playing key-board instruments.	443,003	Dec. 16	2206	{ 567 568 }	{ 53 53 }	1711
Rahter, Adolphus C., <i>et al.</i> (See Brown, Levi S., assignor.)						
Raidt, Daniel W., New Madrid, Mo. Vehicle-tongue.	439,557	Oct. 28	2927	778	53	575
Railsback, Lafayette D. (See Bradford, Chester, assignor.)						
Railsback, Lafayette D., Indianapolis, Ind. Machine for making ice, ice-cream, &c.	443,984	Dec. 30	3830	976	53	2039
Railway Appliance Company. (See Wayland and Baldwin, assignors.)						
Railway Device Manufacturing Company. (See Gifford, Ezra N., assignor.)						
Railway Speed Recorder Company. (See Wilkins, Alexander G., assignor.)						
Railway Station Indicator Company. (See Jordan, George C., assignor.)						
Raines, Burress W., Fulbright, Tex. Quilting-frame.	423,972	Mar. 11	938	246	50	1322
Raleigh, John A., assignor of one-half to J. S. Stringer, Columbia, Ala. Oil-can.	442,638	Dec. 16	1575	407	53	1587
Ralph, Ephraim, Duluth, Minn. Oil vaporizer and burner.	421,760	Feb. 18	1945	512	50	950
Ralph, Samuel W., Mecca, Ohio. Route time-table.	425,084	Apr. 8	1002	268	51	202

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Ralston, J. Huns. (See Holmes and Ralston.)						
Ralston, Robert R. (See Marks, Lauer, and Ralston.)						
Ralston, Samuel H., Norristown, and J. R. Jones, Philadelphia, Pa. Method of and apparatus for manufacturing metallic car-wheels	430,750	June 24	2596	635	51	2000
Ralya, William S., assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw-tool	438,180	Oct. 14	779	212	53	156
Ralya, William S., assignor to E. C. Atkins & Company, Indianapolis, Ind. Device for jointing and dressing saws	438,181	Oct. 14	780	212	53	157
Ramapo Iron Works. (See Davidson, Robert J., assignor.)						
Rambo, Elmer J., Findlay, Ohio. Tool for crimping glassware	438,019	Oct. 7	531	149	53	101
Rambousek, Rudolph, St. Louis, Mo. Tonic beverage	438,020	Oct. 7	532		53	101
Ramer, Albert. (See Ramer, John H., Jr., and A.)						
Ramer, John H., Jr., and A., Santa Fé, Ind. Base for fence-posts	435,978	Sept. 9	929	244	52	1560
Ramey, Alfred H., and F. D. Rollins, Aurora, Ill. Inhaler	429,321	June 3	335	79	51	1535
Ramsay, Henry A., Baltimore, Md. Hydro-pneumatic mechanism to check recoil of guns in heavy ordnance	437,797	Oct. 7	192	59	53	38
Ramsay, Henry A., Baltimore, Md., assignor to W. Dugdale, E. H. Perkins, R. S. Albert, and C. M. Benninghaus. Dummy locomotive	441,583	Nov. 25	3163	815	53	1237
Ramsdell, George, New York, N. Y. Apparatus for the manufacture of wood and oil gas	442,493	Dec. 9	1345	346	53	1533
Ramsdell, George D., Rochester, N. Y. Carriage-seat	421,970	Feb. 25	2247	590	50	1015
Ramsel, Leopold, Baltimore, Md. Producing caramel-malt	421,431	Feb. 18	1475		50	860
Ramsey, Charles, Leeds, county of York, England. Manufacturing and bleaching pulp	429,097	May 27	3143	810	51	1461
Ramsey, James, Moon, Pa. Gate-latch	421,015	Feb. 11	887	229	50	741
Ramsey, Jonathan. (See Tufts and Ramsey.)						
Ramsey, Joseph, Jr., assignor of one-half to F. C. Weir, Cincinnati, Ohio. Power-transmitter for railway-signals	427,361	May 6	503	129	51	910
Ramsey, Joseph, Jr., and F. C. Weir, Cincinnati, Ohio. Interlocking electric-railway system	429,478	June 3	572	140 141	51	1582
Ramsey, Joseph, Jr., and F. C. Weir, Cincinnati, Ohio. Electric-railway switch and signal mechanism	440,502	Nov. 11	1376	355 356	53	883
Ramsey, Joseph, Jr., and F. C. Weir, Cincinnati, Ohio. Electric switch and signal mechanism	440,503	Nov. 11	1378	356 357	53	883
Ramsey, Lorenzo D. (See Huhn, Ramsey, and Huhn.)						
Ramsey, Rudolph, Chicago, Ill. Pen-holder for cripples	426,324	Apr. 22	2870	755	51	586
Ramsey, Silas M. (See Barkeley, Julius A., assignor.)						
Ramsey, William M., Allegheny, Pa. Trolley-line switch	443,004	Dec. 16	2208	568	53	1712
Ramsey, William M., Allegheny, Pa. Trolley-line insulator	443,005	Dec. 16	2208	568	53	1712
Ramseyer, William H. (See Burbank, Bill, and Ramseyer.)						
Ramsperger, Hermann G., New York, N. Y. Photographic or laboratory lamp	427,187	May 6	248	64	51	860
Ramus, Charles E., assignor of one-half to H. R. Reinhart and M. C. Russell, Chicago, Ill. Cutting-die	419,357	Jan. 14	1074	283	50	227
Ramus, Charles E., assignor of one-half to H. R. Reinhart and M. C. Russell, Chicago, Ill. Leather-thong cutter	432,641	July 22	2484	639	52	504
Rand, Addison C., assignor to Rand Drill Company, New York, N. Y. Chuck for rock-drills	421,612	Feb. 18	1752	459	50	912
Rand, Addison C., assignor to Rand Drill Company, New York, N. Y. Rock-drill	421,613	Feb. 18	1754	460	50	912
Rand, Addison C., New York, and F. A. Halsey, North Tarrytown, assignors to Rand Drill Company, New York, N. Y. Air-compressor	421,611	Feb. 18	1748	458 459	50	912
Rand, Allen S., Fort Madison, Iowa, assignor to O. I. Searles, G. F. Jackson, and F. M. Gustin. Stop-action for organs	441,328	Nov. 25	2763	714	53	1161
Rand Drill Company. (See Ambrose, Robert L., assignor.)						
Rand Drill Company. (See Githens, Joseph C., assignor.)						
Rand Drill Company. (See Rand, Addison C., assignor.)						
Rand Drill Company. (See Rand and Halsey, assignors.)						
Rand, Fred K. (See Hakewessell and Rand.)						
Rand, Joseph A., assignor to I. Besse and H. T. Moody, Newburyport, Mass. Game apparatus	420,959	Feb. 11	803	208	50	725
Rand, Julian R., Brattleborough, Vt. Centering-tool	430,299	June 17	1863	458	51	1851
Rand, McNally & Company. (See Theis, Theodore, assignor.)						
Rand, William H., Garner, N. C. Cultivator	429,955	June 10	1274	315	51	1727
Randall, Aaron F. (See Stockbridge and Randall.)						
Randall Car Heater Company. (See Randall, William H., assignor.)						
Randall, Charles A. (See Smart, James S., assignor.)						
Randall, Charles A., London, England. Electric time alarm and indicator	420,890	Feb. 4	694	178	50	694
Randall, Charles A., London, England, assignor to Electric Date and Time Stamp Company, East St. Louis, Ill. Electro-mechanical time-stamp	419,068	Jan. 7	632	164 165	50	133
Randall, Charles H., Newark Valley, N. Y. Vehicle-pole tip	426,544	Apr. 29	3215	843	51	662
Randall, Daniel B. and H. W., Fly Creek, N. Y. Fruit-gatherer	442,639	Dec. 16	1576	407	53	1587
Randall, Elizabeth. (See Randall, William P., assignor.)						
Randall, George H., Medford, Mass. Manifold blank-book	424,499	Apr. 1	93	26	51	21
Randall, Henry W. (See Randall, Daniel B. and H. W.)						
Randall, James D. (See Randall, Silas H., assignor.)						
Randall, James E., Dallas, Tex. Saw-jointer	420,547	Feb. 4	166	41	50	596
Randall, John, Chippewa Falls, Wis. Hydrostatic vehicle-spring	443,112	Dec. 23	2411	615 616	53	1758
Randall, Milo G. (See Herrick, Randall, and Meech.)						
Randall, Robert, assignor to himself, J. P. Ballou, and E. Van Peirson, Newark, N. Y. Fruit-press	442,494	Dec. 9	1347	346	53	1533
Randall, Silas H., assignor of one-half to J. D. Randall, Wyoming, Ohio. Vise	438,826	Oct. 21	1784	477	53	352
Randall, Silas H., assignor of one-half to J. D. Randall, Wyoming, Ohio. Leather-punching machine	439,603	Oct. 28	3004	797	53	591
Randall, Silas H., assignor of one-half to J. D. Randall, Wyoming, Ohio. Crupper-former	440,722	Nov. 18	1736	445	53	960
Randall, Timothy P., Greenville, assignor to D. McWolfe, Adrian, Mich. Whiffletree-book	422,628	Mar. 4	400	99	50	1213
Randall, William H., assignor to Randall Car Heater Company, Chicago, Ill. Heater	428,137	May 20	1686	427 428	51	1160
Randall, William P., Le Roy, N. Y. Stove-truck	442,825	Dec. 16	1915	492	53	1653
Randall, William P., assignor, by mesne assignments, to E. Randall, Le Roy, N. Y. Broiler	419,159	Jan. 7	765	203	50	159
Randel, Charles D. (See Randall, William and C. D.)						
Randel, William and C. D., assignors to Troy Button Hole Company, Troy, N. Y. Button-hole sewing-machine	424,432	Mar. 25	3145	833 834	50	1759
Randel, William, Elizabeth, N. J., and C. A. French, Boston, Mass. Sash-cord fastener	428,180	May 20	1741	440	51	1170
Randel, William, Elizabeth, N. J., and C. A. French, Boston, Mass. Window-bead fastener	428,181	May 20	1742	441	51	1170
Randle, William H., Glasco, Kans. Windmill	431,076	July 1	72	17, 18	52	16

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Randolph, Alfred. (See Babbitt and Randolph.)						
Randolph & Clowes. (See Richard, Fred J., assignor.)						
Randolph & Clowes. (See White, Lyman, assignor.)						
Randolph, Edgar F., <i>et al.</i> (See Wirsching, Aloys, assignor.)						
Randolph, Isham, Englewood, Ill. Semaphore.....	421,085	Feb. 11	986	253	50	760
Randolph, Isham, Chicago, Ill. Railway-switch and signal-operating appliance.....	431,726	July 8	1099	274	52	224
Randolph, Isham, Chicago, Ill. Combined railway-switch and signal-operating mechanism.....	441,378	Nov. 25	2838	732 } 733 }	53	1175
Randolph, Isham, Chicago, Ill. Detector appliance for railway-switches.....	441,379	Nov. 25	2841	733	53	1175
Randolph, James F., <i>et al.</i> (See Wirsching, Aloys, assignor.)						
Randolph, Lucy F., <i>et al.</i> (See Wirsching, Aloys, assignor.)						
Randolph, Richard F. (See Watson and Randolph.)						
Randolph, Thaddeus F., <i>et al.</i> (See Collins, Timothy J., assignor.)						
Randolph, Thomas M. F., <i>et al.</i> (See Wirsching, Aloys, assignor.)						
Rank, Erdman, St. Paul, Minn. Fire-escape.....	430,592	June 17	2304	566	51	1936
Rankin, Andrew N., Jamaica, N. Y. Apparatus for constructing cold-packed pipe-joints.....	419,995	Jan. 21	2024	534	50	422
Rankin, Edmund S., <i>et al.</i> (See Ward, Frank F., assignor.)						
Rankin, J. H. (See Dodge, William B., assignor.)						
Rankin, James H. B., Boston, Mass. Tidal motor.....	421,761	Feb. 18	1946	512	50	950
Rankin, John R. (See Lombard and Rankin.)						
Rankin, Ransom F., <i>et al.</i> (See Groswith, Henry, assignor.)						
Rankin, Robert M., assignor to A. Gast Bank Note and Lithographing Company, St. Louis, Mo. Register and file for office use.....	431,621	July 8	903	226	52	188
Rankin, Thomas I. (See Mott and Rankin.)						
Rankin, Thomas I., assignor to A. Cox Stove Company, Philadelphia, Pa. Flue-damper.....	421,141	Feb. 11	1065	273 } 274 }	50	775
Rankin, William A. (See Armstrong and Rankin.)						
Rankin, William G., assignor of one-half to B. T. Bruce, Providence, R. I. Toe-clip for bicycle-pedals.....	425,697	Apr. 15	1936	514	51	394
Rankin, William H., Lawrence, Mass. Card-grinding apparatus.....	426,545	Apr. 29	3216	843	51	662
Ranlett, Horace D., and G. Provost, San Francisco, Cal. Device for operating shutters for elevator-shafts.....	439,883	Nov. 4	286	73	53	664
Ranney, Darwin D., assignor to H. W. Phelps and S. J. Ranney, Lewistown, Ill. Can-soldering apparatus.....	430,751	June 24	2598	635 } 636 }	51	2000
Ranney, Darwin D., assignor to H. W. Phelps and S. J. Ranney, Lewistown, Ill. Can-soldering machine.....	437,453	Sept. 30	3343	874 } 875 }	52	2043
Ranney, Darwin D., assignor to H. W. Phelps and S. J. Ranney, Lewistown, Ill. Carburetor.....	437,454	Sept. 30	3345	875	52	2043
Ranney, Maurice M., Comstock, Mich. Machine for hilling celery.....	428,352	May 20	2015	507	51	1224
Ranney, Sarah J., <i>et al.</i> (See Ranney, Darwin D., assignor.)						
Ransom, A. F. (See Kent, George R., assignor.)						
Ransom, Albert. (See Ridge, Joseph, assignor.)						
Ransom, Ezra. (See Hinkle and Ransom.)						
Ransom, George F., assignor of one-half to G. L. Hilt, Minneapolis, Minn. Electric guest-call.....	437,798	Oct. 7	195	60	53	39
Ransom, John R. B., <i>et al.</i> (See Collins, Timothy J., assignor.)						
Ransome, Ernest L., San Francisco, Cal. Mold for molding concrete continuously.....	424,656	Apr. 1	338	88	51	66
Ransome, James E., Ipswich, county of Suffolk, England. Plowshare.....	421,971	Feb. 25	2248	591	50	1015
Rauson, Thomas W., Hornellsville, N. Y. Locomotive-tank.....	431,397	July 1	559	140	52	113
Rape, William M., Notasulga, Ala. Combined cotton-planter and fertilizer-distributor.....	423,811	Mar. 18	2177	576	50	1565
Rapelye, Mary L., Summit, N. J. Bed-clothes holder.....	438,639	Oct. 21	1465	395	53	294
Rapid Safety Filter Company. (See Knight, Edward M., assignor.)						
Rapid Transit Cable Company. (See Bryson and Pendleton, assignors.)						
Rapid Transit Cable Company. (See Bryson, Pendleton, and Moss, assignors.)						
Rapid Transit Cable Company. (See Pendleton, John H., assignor.)						
Rapid Transit Cable Company. (See Pendleton, Bryson, and Moss, assignors.)						
Rapid Transit Cable Company. (See Pendleton, Bryson, and Tiers, assignors.)						
Rapid Transit Cable Company. (See Pendleton, Tiers, and Bryson, assignors.)						
Rapieff, John, New York, N. Y. Electrical indicating apparatus for linear measure.....	441,972	Dec. 2	527	141 } 142 } 143 }	53	1367
Rapieff, John, New York, N. Y. Electrical location and range finding instrument.....	441,973	Dec. 2	534	142 } 143 }	53	1367
Rapieff, John, New York, N. Y. Finding the range of distant objects.....	441,974	Dec. 2	535	143	53	1367
Rapieff, John, New York, N. Y. Indicator for range-finders.....	441,975	Dec. 2	537	143 } 144 }	53	1368
Rapp, Barnett R., West Chester, Pa. Machine for washing milk-cans.....	434,679	Aug. 19	1916	500	52	1150
Rapp, George F., St. Louis, Mo. Shoe.....	436,544	Sept. 16	1829	482	52	1737
Rapp, John W., New York, N. Y. Fire-proof door.....	427,362	May 6	504	129	51	911
Rapplee, Frank A. (See Hunt and Rapplee.)						
Rapplee, Frank A., Farmer Village, N. Y. Crate.....	425,253	Apr. 8	1259	336	51	255
Rapplee, Hannibal W., Philadelphia, Pa. Drying apparatus.....	443,150	Dec. 23	2484	634	53	1769
Raquet, Leonard, Newark, N. J. Picture-frame support.....	438,257	Oct. 14	893	242	53	177
Raschen, Luder. (See Schroeder, John, assignor.)						
Rasines, Antonio, <i>et al.</i> (See Gray, William S., assignor.)						
Raskazoff, Leonid. (See Anderson, William, assignor.)						
Rasmussen, Anton. (See Swett and Rasmussen.)						
Rasmussen, Julius A. N., Copenhagen, Denmark. Machine for punching horseshoe-bars.....	428,949	May 27	2907	745	51	1416
Rasmussen, Halvor. (See Zeller, William, assignor.)						
Ratchford, Nicholas, and L. D. Evans, Plain City, Ohio. Railway-frog.....	434,525	Aug. 19	1652	432 } 433 }	52	1099
Ratchford, Nicholas, and C. Harper; said Harper assignor to said Ratchford and E. M. Fiebiger, Plain City, Ohio. Steam-engine.....	432,677	July 22	2555	655	52	518
Ratchford, Nicholas, and L. D. Evans, assignors of one-half to C. N. Boyd, Plain City, Ohio. Railway-frog.....	433,148	July 29	3310	855	52	669
Ratcliff, Charles A., Gilman, Iowa. Car-coupling.....	419,555	Jan. 14	1345	360	50	283
Rath, Charles, Mobeetie, Tex. Scraper.....	420,960	Feb. 11	804	209	50	725
Rath, Georg, Elberfeld, Prussia, Germany. Woven plush fabric.....	422,447	Mar. 4	125	34	50	1161
Rathbun, Frank A., Kentwood, La., assignor to Rathbun Manufacturing Company, Milwaukee, Wis. Wheeled scraper.....	429,387	June 3	437	103	51	1554
Rathbun Manufacturing Company. (See Rathbun, Frank A., assignor.)						
Rathburn, Sereno H., Stanberry, Mo. Car-coupling.....	439,558	Oct. 28	2929	778	53	575
Rathsack, William. (See Wagner, Ernst, Jr., assignor.)						
Rathsam, George W., Indianapolis, Ind. Flower-pot machine.....	434,200	Aug. 12	1138	296	52	980

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Ratto, Gasper R., Chicago, Ill. Cable railway	424,500	Apr. 1	95	27	51	21
Ratto, Gasper R., Chicago, Ill. Gate for swing-bridges	440,368	Nov. 11	1137	{ 292 203 }	53	837
Ratz, John, assignor to himself and H. Lichtenberger, Hazleton, Pa. Miner's lamp	438,490	Oct. 14	1235	335	53	244
Rau, Benedict, Red Bud, Ill. Chain-pump	431,264	July 1	380	95	52	77
Rau, Edward, Albany, N. Y. Shoe	425,254	Apr. 8	1260	336	51	255
Rau, Emanuel, Brooklyn, assignor to E. Rau Manufacturing Company, New York, N. Y. Gumming device for envelope-machines	425,629	Apr. 15	1831	490	51	374
Rau, Emanuel, Brooklyn, assignor to E. Rau Manufacturing Company, New York, N. Y. Machine for gumming envelope-blanks	439,039	Oct. 21	2105	{ 564 565 }	53	414
Rau, John, assignor to Rau Novelty Company, Chicago, Ill. Oil-can	423,812	Mar. 18	2178	576	50	1565
Rau Manufacturing Company, Emanuel. (See Balch, Samuel W., assignor.)						
Rau Manufacturing Company, Emanuel. (See Rau, Emanuel, assignor.)						
Rau Novelty Company. (See Rau, John, assignor.)						
Raub, James W., assignor to National Switch and Signal Company, South Easton, Pa. Apparatus for operating railway-signals	431,481	July 1	639	{ 172 173 }	52	139
Raudnitz, Elias, Prague, Bohemia, Austria-Hungary. Glove-fastener	433,696	Aug. 5	377	96	52	829
Raughtigan, Michael, assignor of one-half to F. C. Turner, Norwich, Conn. Dash-pot	434,951	Aug. 26	2362	625	52	1243
Rauhe, Carl, Düsseldorf, Germany. Machine for boring cartridge-shells	438,241	Oct. 14	874	237	53	173
Rauhut, Johan F., assignor of one-half to W. Hinze, St. Louis, Mo. Velocipede	433,962	Aug. 12	779	204	52	918
Rausch, Charles, New York, N. Y. Billiard-cue tip	432,330	July 15	2021	520	52	405
Rauschenbach, Johann, assignor to International Watch Company, of J. Rauschenbach, Schaffhausen, Switzerland. Stem-winding watch	420,919	Feb. 4	739	189	50	703
Rave, Charles, Malines, Belgium. Utilizing acid-tar residuums	425,905	Apr. 15	2229	.....	51	449
Ravenstein, Anton H., Guelph, N. D., assignor of one-half to M. Classen, Kalamazoo, Nebr. Harvester-dropper	435,320	Aug. 26	2913	773	52	1346
Rawdon, Lucien, Windsor, Ohio. Barrel-truck	423,442	Mar. 18	1634	420	50	1463
Rawles, John, Seville, Ill. Car-coupling	443,867	Dec. 30	3634	936	53	2003
Rawlings, Emma J., St. Louis, Mo. Splasher-holder	433,032	July 29	3131	804	52	633
Rawlings, John J. (See Rawlings, William K. and J. J.)						
Rawlings, William J., Ottawa, Ohio. Vehicle-gearing	431,755	July 8	1140	284	52	232
Rawlings, William J., Ottawa, Ohio. Vehicle-spring	434,994	Aug. 26	2420	640	52	1254
Rawlings, William R. and J. J., South Kensington, county of Middlesex, England. Blow-pipe	424,024	Mar. 25	2515	669	50	1636
Rawls, Joseph G., Wilson, N. C. Watch-maker's etaking-tool and lathe	428,020	May 13	1509	383	51	1116
Rawson, Albert E., Chicago, Ill. Ellipsograph	422,252	Feb. 25	2763	706	50	1094
Rawson, Frederick L., assignor to Company Woodhouse & Rawson United, Limited, London, England. Impregnating parts of electrical apparatus	437,044	Sept. 23	2662	.....	52	1906
Rawson, George W., Cambridge, Mass. Hoisting apparatus	436,190	Sept. 9	1262	329	52	1620
Ray, Ethel A., Florence, S. C. Animal-trap	442,737	Dec. 16	1770	458	53	1624
Ray, Frank A. (See Webb, Scott A., assignor.)						
Ray, Frank H. (See Butts, Daniel G., assignor.)						
Ray, Harvey, Mobile, Ala., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Inking-ribbon spool for type-writing machines. (Reissue)	11,097	July 22	3012	774	52	604
Ray, Richard, Griffin, Ga. Cotton-picker's stool	432,560	July 22	2366	610	52	482
Ray, Richard, Griffin, Ga. Folding headshade or hat	441,380	Nov. 25	2843	{ 733 734 }	53	1176
Ray, Richard, Griffin, Ga. Spring body-brace	443,113	Dec. 23	2413	616	53	1758
Raymond, Charles W., et al. (See Campbell, Joseph, assignor.)						
Raymond, Charles W., Dayton, Ohio. Dumping-car	421,432	Feb. 18	1476	383	50	860
Raymond, Charles W., Dayton, Ohio. Brick-machine	430,752	June 24	2599	636	51	2001
Raymond, Frank. (See Raymond, Matthew and F.)						
Raymond, George E., Chicago, Ill. Spouted measure	424,901	Apr. 1	723	193	51	140
Raymond, George E., Chicago, Ill. Wire egg-case	433,925	Aug. 5	714	185	52	896
Raymond, George E., Grand Rapids, Mich. Vehicle-spring	433,367	July 29	3614	932	52	730
Raymond, Henry, Kellogg, Iowa. Tool for pulling fence-staples	426,854	Apr. 29	3688	962	51	753
Raymond, Jean M., Paris, France. Disinfectant	423,530	Mar. 18	1767	.....	50	1488
Raymond, John H., Syracuse, N. Y. Sawing-machine	437,138	Sept. 23	2808	731	52	1934
Raymond, Joseph F., et al. (See Campbell, Joseph, assignor.)						
Raymond, Matthew and F., London, England. Car-coupling	419,358	Jan. 14	1075	{ 283 284 }	50	227
Raymond, Silas H., assignor to A. O. Crozier and G. A. Cutler, Grand Rapids, Mich. Vehicle-spring	436,504	Sept. 16	1753	463	52	1724
Raymond, Silas H., assignor of three-fourths to W. B. Remington, E. J. Horton, and F. C. Remington, Grand Rapids, Mich. Carpet-sweeper	438,114	Oct. 7	681	185	53	131
Raynald, John, Philadelphia, Pa. Fountain-pen	438,895	Oct. 21	1895	504	53	372
Rayner, William, Newark, N. J. Nut-lock	425,457	Apr. 15	1566	420	51	322
Rayney, John, Brooklyn, N. Y. Revolving-reel bake-oven	422,629	Mar. 4	401	{ 99 100 }	50	1213
Raynor & Co., Samuel. (See Bouvier, Louis P., assignor.)						
Razall, Henry G., Milwaukee, Wis. Moist-pan for copying-cloths	439,896	Nov. 4	407	106	53	687
Razall, Henry G., Milwaukee, Wis. Book-binding	443,332	Dec. 23	2797	719	53	1833
Rea, Henry, Jr., and J. L. Clark, Pittsburg, Pa. Freezing-box for ice-machines	439,559	Oct. 28	2930	779	53	576
Reaben, Harris W., Summit, Miss. Vehicle-wheel	431,398	July 1	560	140	52	114
Reach, Robert, Philadelphia, Pa. Exercising apparatus	420,415	Jan. 23	2669	708	50	552
Reach, Robert, assignor to American Patents Company, Philadelphia, Pa. Spring-board	436,462	Sept. 16	1692	446	52	1713
Reach, Robert, assignor to American Patents Company, Philadelphia, Pa. Tie-plate	437,821	Oct. 7	231	71	53	46
Reach, Robert, assignor to American Patents Company, Philadelphia, Pa. Tug-of-war belt	437,822	Oct. 7	231	71	53	46
Reach, Robert, assignor to American Patents Company, Philadelphia, Pa. Vaulting-horse	438,640	Oct. 21	1466	395	53	294
Read, Charles C., Mandarin, Fla. Watering-pot	443,717	Dec. 30	3408	{ 875 876 }	53	1957
Read, Charles H., Pittsburg, Pa. Glass-press	442,390	Dec. 9	1094	287	53	1482
Read, Daniel M., New York, N. Y. Snap-catch for bags	442,331	Dec. 9	1096	287	53	1482
Read, Daniel M., New York, N. Y. Finger-lock for chatelaine-bags	442,392	Dec. 9	1183	307	53	1499
Read, Horatio, Jersey City, N. J. Syringe	427,111	May 6	141	37	51	839
Read & Lincoln. (See Whitney, Edwin, assignor.)						
Read, William, Jr., assignor to P. H. Goss, Boston, Mass. Device for holding sensitized paper in contact with negatives	425,958	Apr. 15	2330	618	51	469
Reade, Charles A., Chicago, Ill. Bridle-bit	435,189	Aug. 26	2711	716	52	1309
Reading Stove Works, Orr, Painter & Co. (See Orr, Jesse, assignor.)						
Read, Arthur J. E., Pawtucket, assignor of one-half to J. A. Miller, Jr., Providence, R. I. Velocipede	420,416	Jan. 28	2670	708	50	552
Reagan, Daniel E., Terre Haute, Ind. Nut-lock	436,380	Sept. 16	1566	411	52	1690
Reagan, Dominick A., Altoona, Pa. Sand-pipe for locomotives	431,150	July 1	172	44	52	37

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Reagan, Harry C., Jr. (See Peacock and Reagan.)						
Reagan, John P. (See Cross and Reagan.)						
Ream, Theodore J., Columbiana, Ohio, assignor of one-half to G. C. Hogaboom, Topeka, Kans. Fountain attachment for blacking-brushes	423,443	Mar. 18	1635	430	50	1463
Ream, Theodore J., Columbiana, Ohio, assignor of one-half to G. C. Hogaboom, Topeka, Kans. Fountain blacking-dauber	423,444	Mar. 18	1636	430	50	1463
Reamer, James S., Portville, N. Y. Car-coupling	440,652	Nov. 18	1621	418	53	938
Reams, William, Pittsburg, Pa. Combined table, easel, and writing-desk	439,186	Oct. 23	2336	629	53	464
Reason, Walter M., assignor to L. H. Corcoran, T. C. Quinn, and A. T. Slaght, Caro, Mich. Type-writing machine	439,847	Nov. 4	326	84	53	671
Reast, Frederick, assignor to W. Hubbard, Hastings, England. Shoulder-brace corset	433,095	July 29	3229	831	52	652
Reaves, Henry D., Montecito, Cal. Fruit-gatherer	427,112	May 6	142	37	51	840
Reber, Daniel L., assignor of one-half to W. Borchers, Amanda, Ohio. Sash-cord fastener	425,906	Apr. 15	2231	591	51	449
Rebok, John H., T. T. Maguire, and P. K. Rebok, Toledo, Iowa. Churn	427,188	May 6	249	65	51	860
Rebok, Philip K. (See Rebok, Maguire, and Rebok.)						
Reckenzaun, Anthony, London, England, assignor to Electric Car Company of America, Philadelphia, Pa. Brush-reverser for electric motors	432,561	July 22	2367	610	52	482
Reckenzaun, Anthony, Clapham, England, assignor of part to A. J. De Camp, C. D. Norton, C. M. Blanchard, S. M. Buckman, J. A. Pentz, C. Schaffer, L. Godfrey, G. W. Hewitt, E. Agnew, and L. W. Fox. Electric meter	437,763	Oct. 7	140	44	53	29
Reckord, John H., Belair, Md. Bag-holder and truck	434,805	Aug. 19	2097	549	52	1185
Rech, Jacob, Jr., Brooklyn, assignor of two-thirds to C. Emig and C. Grub, Syracuse, N. Y. Puzzle	423,276	Mar. 11	1399	364	50	1408
Record, George J., Conneaut, Ohio. Can-top	419,794	Jan. 21	1707	453	50	359
Record, George J., Conneaut, Ohio. Can-faucet	442,016	Dec. 16	2076	533	53	1684
Rector, Henry C., Lincoln, Nebr. Awning slide or runner	441,021	Nov. 18	2221	574	53	1051
Rector, Edward, Cincinnati, Ohio. Cash indicator and register	420,018	Jan. 21	2054	542	50	428
Rector, Edward, Cincinnati, Ohio. Cash register and indicator	434,201	Aug. 12	1139	297	52	989
Redding, Benjamin S., Greensborough, Ala. Car-coupling	437,514	Sept. 30	3433	898	52	2062
Redding, Harvey, Everett, Mass. Apparatus for detecting short circuits	432,215	July 15	1846	474	52	374
Redding Ink and Duplicator Company. (See Fuerth, William G., assignor.)						
Reddout, William N., Rushville, N. Y., assignor to A. B. Burtis, Cleveland, Ohio, and F. Hammond, Phelps, N. Y. Core for casting	418,750	Jan. 7	132	.....	50	29
Reddout, William N., Rushville, N. Y., assignor to A. B. Burtis, Cleveland, Ohio, and F. Hammond, Phelps, N. Y. Mold for forming cores	436,998	Sept. 23	2596	679	52	1892
Redfield, Casper L., Minneapolis, Minn., assignor, by mesne assignments, to Chicago Matrix Machine Company. Impression device for matrix-making machines	421,972	Feb. 25	2249	591	50	1016
Redfield, Casper L., Minneapolis, Minn., assignor, by mesne assignments, to Chicago Matrix Machine Company. Type-die holder for matrix-making machines	428,138	May 20	1688	428	51	1160
Redfield, Casper L., Minneapolis, Minn., assignor, by mesne assignments, to Chicago Matrix Machine Company. Impression device for matrix-making machines	429,737	June 10	951	234	51	1666
Redfield, Casper L., Minneapolis, Minn., assignor, by mesne assignments, to Chicago Matrix Machine Company. Impression device for matrix-making machines	429,738	June 10	953	234	51	1666
Redfield, Casper L., Minneapolis, Minn., assignor to Chicago Matrix Machine Company. Impression device for matrix-making machines	429,739	June 10	954	234	51	1666
Redfield, Casper L., Minneapolis, Minn., assignor to Chicago Matrix Machine Company. Matrix-making machine	429,740	June 10	955	235 236	51	1667
Redfield, Casper L., Minneapolis, Minn., assignor to Chicago Matrix Machine Company. Justifying-index for matrix-machines	429,741	June 10	959	236	51	1667
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Impression device for matrix-making machines	429,742	June 10	960	236	51	1668
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Forming matrices	429,864	June 10	1147	283	51	1702
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Type-die for matrix-machines	429,865	June 10	1148	284	51	1703
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Type-die for matrix-making	429,866	June 10	1149	284	51	1703
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Forming matrices	429,867	June 10	1151	284	51	1703
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Matrix-making machine	441,118	Nov. 18	2389	619	53	1084
Redfield, Frank. (See Whitlock and Redfield.)						
Redfield, Jessie A., et al. (See Redfield, Lewis H., assignor.)						
Redfield, Lewis H., assignor to C. P. Noxon and J. A. Redfield, Syracuse, N. Y. Nut-lock	441,194	Nov. 25	2518	651	53	1119
Redgate, Herbert, Nottingham, England. Twist-lace machine	435,321	Aug. 26	2913	773	52	1346
Redlinger, Michael, assignor to Freeport Hardware Manufacturing Company, Freeport, Ill. Spring-hinge	438,641	Oct. 21	1467	396	53	294
Redlinger, Michael, assignor to C. Morgan, A. Baumgarten, and E. H. Morgan, Freeport, Ill. Spring-hinge	443,057	Dec. 16	2286	586	53	1727
Redlinger, Michael, assignor, by mesne assignments, to L. M. Devore and M. H. Wilcox, Freeport, Ill. Velocipede	431,529	July 1	765	191	52	153
Redman, John W., et al. (See Kline, John E., assignor.)						
Redman, William E., et al. (See Kline, John E., assignor.)						
Redmann, Adolf, Chicago, Ill. Corned-beef tray and meat-rack	426,958	Apr. 29	3820	998	51	779
Redmond, Francis, Ranelagh, Dublin, Ireland. Window-cleaner	427,363	May 6	505	129	51	911
Redpath, Homer H., et al. (See Roberts, John, assignor.)						
Redpath, Irvin, et al. (See Roberts, John, assignor.)						
Redway, George M., Ashbury Park, N. J. Bevel	443,539	Dec. 30	3122	803	53	1904
Redwood, Boverton. (See Dewar and Redwood.)						
Reece, John, Boston, Mass. Sewing-machine for barring button-holes	441,700	Dec. 2	110	29, 30	53	1284
Reed, Albert O. (See Reed, John U., assignor.)						
Reed, Anson A., Worcester, Mass. Tool for dressing emery-wheels	442,782	Dec. 16	1832	474	53	1638
Reed, Axel H. (See Wilkins and Reed.)						
Reed, Benjamin F. (See King and Reed.)						
Reed, Devolson, assignor of one-half to C. C. Parsons, Randolph, N. Y. Clothes-drier	430,970	June 24	2928	719	51	2063
Reed, Edwards A., Oliver Springs, Tenn. Table	438,947	Oct. 21	1972	526	53	387
Reed, Eli S. (See Lee and Reed.)						
Reed, Eli S., Chattanooga, Tenn. Board of trade	426,546	Apr. 29	3217	843	51	662
Reed, Eli S., Chattanooga, Tenn., assignor of three-fourths to Invisible Hitching Post Company. Hitching-post	427,012	Apr. 29	3903	1018	51	795
Reed, Ella J. (See Cornwall, John B., assignor.)						
Reed, Ernest M., Wichita, Kans. Conduit electric railway	437,720	Oct. 7	67	21, 22	53	16

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Reed, F. Fremont. (See Brice, Alfred L., assignor.)						
Reed, Francis O., assignor of one-half to D. P. Hollon, Paris, Tex. Feed-trough	434,806	Aug. 19	2098	{ 549 550 }	{ 52	1186
Reed, George H., Gardner, Kans. Window-jack	430,971	June 24	2929	719	51	2063
Reed, George P., Melrose, Mass. Clock-pendulum	436,941	Sept. 23	2524	661	52	1877
Reed, George T., assignor to J. B. H. Jefferson and V. H. Klinefelter, Baltimore, Md. Hand driving mechanism for sewing-machines	431,994	July 8	1497	378	52	301
Reed, George W. (See Rigby and Reed.)						
Reed, Herbert L., Wauvaca, Wis. Radiator-ventilator	440,964	Nov. 18	2143	555	53	1036
Reed, Hiram F., Abington, Mass. Jack for burnishing	439,752	Nov. 4	182	47, 48	53	644
Reed, J. Van D. (See Stowe, Benjamin L., assignor.)						
Reed, James H., Lynn, Mass. Knitting-machine	435,449	Sept. 2	105	30	52	1395
Reed, James W., assignor of one-half to W. J. Isett, Pittsburg, Pa. Clothes-drier	443,920	Dec. 30	3713	951	53	2018
Reed, Jay, Freeman, Mo. Buckle	439,254	Oct. 28	2460	659	53	487
Reed, John U., Hartford, assignor of one-half to A. O. Reed, Higganum, Conn. Lathe or planer tool	442,259	Dec. 9	981	258	53	1462
Reed, Lewis M., Patterson, Kans. Attachment for cultivators	422,973	Mar. 11	939	246	50	1322
Reed, Lewis M., Patterson, Kans. Cultivator	438,896	Oct. 21	1896	504	53	372
Reed, Lemon M., assignor to Cleveland Cooperage and Machine Company, Cleveland, Ohio. Heater for cooperage purposes	426,325	Apr. 22	2871	756	51	586
Reed & McGee, et al. (See Wilson, Peter M., assignor.)						
Reed, Reuben M., Newark, N. Y. Anti-rust pail	434,464	Aug. 19	1561	406	52	1080
Reed, Thomas, and J. Rowley, Toledo, Ohio. Rolling-mill	420,100	Jan. 28	2189	578	50	463
Reed, Thomas S., Jersey City, N. J. Electrical insulation	424,575	Apr. 1	215	58	51	44
Reed, Wesley G., Toronto, Ontario, Canada. Electric alarm for letter-boxes	424,219	Mar. 25	2783	742	50	1689
Reed, Willard S., Leipsic, Del. Bicycle	426,855	Apr. 29	3689	962	51	753
Reed, Willard V., Lowville, N. Y. Vehicle-pole tip	423,277	Mar. 11	1400	364	50	1409
Reed, William S., Leominster, Mass. Cash-carrier	439,686	Nov. 4	92	24	53	626
Reed, William S., assignor to Gould Rolling Machine Company, Leominster, Mass. Stock-feeding device for machines	431,173	July 1	211	53	52	44
Reeder, James A., assignor to himself and J. D. Ozier, Corinth, Miss. Baling-press	430,352	June 17	1950	478	51	1868
Reeder, William S., assignor to Kingsland & Douglas Manufacturing Company, St. Louis, Mo. Belt-tightener for cotton-gins	437,241	Sept. 30	2986	{ 780 781 }	{ 52	1974
Reeder, William S., assignor to Kingsland & Douglas Manufacturing Company, St. Louis, Mo. Baling-press	437,242	Sept. 30	2987	{ 781 782 }	{ 52	1974
Reehill, John S., Jersey City, N. J. Apparatus for issuing checks	443,333	Dec. 23	2798	{ 719 720 }	{ 53	1833
Reel, Daniel S. (See Parry and Reel.)						
Reeme, Theodore O., Decatur, Ill. Windmill	420,520	Feb. 4	131	32	50	589
Reens, Israel, Chicago, Ill. Cloth-cutting apparatus	435,610	Sept. 2	350	97	52	1442
Reens, Israel, assignor of one-half to A. L. Singer & Co., Chicago, Ill. Tailor's table	420,212	Jan. 28	2375	631	50	497
Reenstierna, Libert, Boston, Mass. Surgical splint	432,899	July 22	2893	741	52	583
Rees, Charles. (See De Zeng and Rees.)						
Rees & Co., William. (See Ford, John C., assignor.)						
Rees, Henry P., et al. (See Rees, Herrman, assignor.)						
Rees, Herrman, assignor to L. J. and H. P. Rees, New York, N. Y. Ear-ring	421,433	Feb. 18	1479	383	50	860
Rees, James H., et al. (See Marsh, Grant, assignor.)						
Rees, John G. (See Schenkel and Rees.)						
Rees, Louis J., et al. (See Rees, Herrman, assignor.)						
Rees, Thomas M., and C. L. Burgermeister, Pittsburg, Pa., assignors to said Rees. Balanced valve	435,546	Sept. 2	253	70, 71	52	1424
Rees, Walter, Philadelphia, Pa. Cartridge-filling machine	419,473	Jan. 14	1342	329	50	361
Reese, Arthur, Sharpsburg, Pa. Rolls for rerolling old rails	438,642	Oct. 21	1468	396	53	294
Reese, Henry D., and M. F. Game, Abbeville, S. C. Seed-planter	427,612	May 13	884	222	51	995
Reese, Henry M., Louisville, Ky. Burial-casket	426,469	Apr. 29	3104	814	51	641
Reesso, Jacob, Pittsburg, assignor to Bessemer Steel Company, (limited,) Philadelphia, Pa. Manufacturing iron and steel	429,638	June 10	807		51	1637
Reese, James. (See Jackson and Reese.)						
Reese, John M., Jr. (See Robertson and Reese.)						
Reese, Samuel W. (See Bussell, Edward, assignor.)						
Reese, Thomas, Jr., Newark, N. J. Dynamo-brush clamp	441,256	Nov. 25	2645	687	53	1139
Reese, Thomas B. (See Harris and Reese.)						
Reeser, John W., Florissant, Colo., assignor of three-fourths to T. Saunders, B. H. Bryant, and H. Collbran, of Colorado. Railway chair and brace	426,214	Apr. 22	2725	713	51	554
Reeve, John N. (See Reiff, William H., assignor.)						
Reeves, Charles H., et al. (See Anderson, Joseph R., assignor.)						
Reeves, Charles W., Boston, Mass. Instrument for drawing irregular curves, ellipses, &c.	434,465	Aug. 19	1562	406	52	1080
Reeves, Charles W., assignor to W. C. Montgomery, Boston, Mass. Square	427,113	May 6	143	37	51	840
Reeves, Cyrus D., Kansas City, Kans. Cash-carrier	438,714	Oct. 21	1583½	426	53	316
Reeves, Franklin B., et al. (See Anderson, Joseph R., assignor.)						
Reeves, James L., Collinsville, Ala. Egg-carrier	430,219	June 17	1706	424	51	1821
Reeves, Milton O., assignor to Reeves Pulley Company, Columbus, Ind. Means for securing pulleys to shafts	419,556	Jan. 14	1346	360	50	283
Reeves, Milton O., assignor to Reeves Pulley Company, Columbus, Ind. Split pulley	419,557	Jan. 14	1347	361	50	283
Reeves, Milton O., assignor to Reeves Pulley Company, Columbus, Ind. Making wooden split bushings	419,558	Jan. 14	1348	361	50	283
Reeves Pulley Company. (See Reeves, Milton O., assignor.)						
Reeves, William H., Maurice, Iowa. Draft-equalizer	430,753	June 24	2600	636	51	2001
Regan, Daniel S., assignor to Regan Vapor Engine Company, San Francisco, Cal. Gas-engine. (Reissue)	11,068	Apr. 1	785	209	51	153
Regan, Dennis J., Agawam, Mass. Harness-trimming	438,182	Oct. 14	782	213	53	157
Regan, John W., and C. A. Neuert, Boston, Mass. Trap for kitchen-sinks	434,680	Aug. 19	1918	500	52	1150
Regan Vapor Engine Company. (See Regan, Daniel S., assignor.) (Reissue.)						
Regar, George H., Philadelphia, Pa. Clothes-line holder	428,412	May 20	2115	531	51	1244
Regensteiner, Theodore, and L. Brannbach, Chicago, Ill. Game apparatus	424,132	Mar. 25	2668	710	50	1666
Register, Charles L., Tekamah, Neb. Neck-yoke fastener	428,562	Oct. 14	1343	364	53	265
Register, Robert F., assignor of one-third to S. W. Register, Baltimore, Md. Parcel and letter box	431,399	July 1	560	140	52	114
Register, Robert F., assignor of one-third to S. W. Register, Baltimore, Md. Letter-box	441,898	Dec. 2	422	113	53	1347
Register, Samuel W. (See Register, Robert F., assignor.)						
Register, John E., Dover, Del. Dental flask	428,139	May 20	1689	428	51	1161
Regnell, Bigney & Co. (See Regnell, Herman T., assignor.)						
Regnell, Herman T., assignor to Regnell, Bigney & Co., Attleborough, Mass. Jewelry	433,033	July 29	3132	804	52	634

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Reguin, Ernest L., Sacramento, and T. J. Kingston, San Francisco, Cal. Reversible window-sash.	425,146	Apr. 8	1101	293	51	221
Rehfuß, George. (See Chabot, Rehfuß, and Moore.)						
Rehfuß, George. (See Fitz and Rehfuß.)						
Rehfuß, George. (See Moore and Rehfuß.)						
Rehfuß, George, J. G., and M. O., Philadelphia, Pa. Machine for making and attaching loops to the edges of fabrics by means of a needle and looper	438,427	Oct. 14	1150	{ 310 311	{ 53	226
Rehfuß, John G. (See Fitz and Rehfuß.)						
Rehfuß, John G. (See Rehfuß, George, J. G., and M. O.)						
Rehfuß, Martin, Jr. (See Drysdale, Knowlton P., assignor.)						
Rehfuß, Martin O. (See Fitz and Rehfuß.)						
Rehfuß, Martin O. (See Rehfuß, George, J. G., and M. O.)						
Rehfuß, Martin O. (See Schuckers and Rehfuß.)						
Rehkopf, Fredrick, Memphis, Tenn. Harness-saddle	432,642	July 22	2485	639	52	504
Rehmenklau, Rudolph W. O., Minneapolis, Minn. Rotary separator, grader, or bolter.	422,974	Mar. 11	940	{ 246 247	{ 50	1322
Rehnström, Albert W., Malhammar, assignor to Aktiebolaget Lactoserin, Stockholm, Sweden. Food product	442,593	Dec. 9	1507		53	1565
Reibnitz, Diprand v., Berlin, Germany. Meat-scraper	421,995	Feb. 25	2275	599	50	1021
Reich, John, Philadelphia, Pa. Lounge or sofa	429,956	June 10	1275	315	51	1727
Reichard, J. G. Ernst, Borna, Saxony, Germany assignor of one-half to C. C. Treiber, Lone Elm, Mo. Spring-motor	424,220	Mar. 25	2784	{ 742 743	{ 50	1689
Reichardt, Ferdinand A., New York, N. Y. Clasp for surgical instruments	426,959	Apr. 29	3821	998	51	779
Reichardt, Ferdinand A., New York, N. Y. Pocket surgical case	439,187	Oct. 28	2937	629	53	464
Reichelt, Julius. (See Zein and Reichelt.)						
Reichelt, Julius, Fort Madison, Iowa. Pug-mill.	426,470	Apr. 29	3105	814	51	641
Reichenbach, Edward, Orrville, Ohio. Instrument for surveying and grading ditches	433,697	Aug. 5	378	96	52	829
Reichert, John. (See Johnson and Reichert.)						
Reichle, Martin, et al. (See Trump, John G., assignor.)						
Reichling, Oscar E. H. N., Marion, Ind. Farm-gate	424,576	Apr. 1	217	59	51	44
Reichmann, Anton, Breslau, Germany. Wick-trimmer	431,008	June 24	2986	733	51	2074
Reid, Adam, Buffalo, N. Y. Fountain-pen	421,614	Feb. 18	1755	460	50	912
Reid, Alban H., Philadelphia, Pa. Churn-closure	425,147	Apr. 8	1103	293	51	221
Roid, Charles E., Kansas City, Mo. Elevator for letters, &c.	426,418	Apr. 22	3035	{ 794 795	{ 51	618
Reid, Charles H., Danbury, Conn. Hat-ironing machine	420,961	Feb. 11	806	209	50	725
Reid, Charles H., Danbury, Conn. Hat-block chuck	421,513	Feb. 18	1597	412	50	883
Reid, Charles H., Danbury, Conn. Hat-finishing lathe	421,514	Feb. 18	1598	{ 412 413	{ 50	883
Reid, Charles H., Danbury, Conn. Machine for rounding and planing the curled edges of hats	427,793	May 13	1171	293	51	1051
Reid, David, Melbourne, Victoria. Key for securing stereotype-plates	418,985	Jan. 7	515	128	50	108
Reid, Edwin B., assignor of one-third to J. G. Scott, Barrie, Ontario, Canada. Car-coupling.	443,540	Dec. 30	3122	803	53	1904
Reid, Edwin S., New York, N. Y., assignor to Standard Underground Cable Company, Pittsburgh, Pa. Cable-grip	424,935	Apr. 1	771	205	51	150
Reid, Frederick A., et al. (See Tourangin, Ernest, assignor.)						
Reid, George, et al. (See Trump, John G., assignor.)						
Reid, Hugh, Guilford, Ill. Plow	430,149	June 17	1600	398	51	1200
Reid, James W., San Francisco, Cal. Discharge attachment for wash-basins, &c.	439,687	Nov. 4	93	25	53	626
Reid, John, Yonkers, assignor to J. L. Mott Iron Works, New York, N. Y. Combined plunger, needle-spray, and shower bath	430,253	June 17	1763	438	51	1831
Reid, Mary J. (See Wright, Eliza M., assignor.)						
Reid, Nicholas. (See Gardner and Reid.)						
Reid, Pettis A. (See Elliott, Collins, and Reid.)						
Reid, Robert H. (See Sharpe, John, assignor.)						
Reid, Robert N., Orange, N. J. Mangle	419,795	Jan. 21	1708	453	50	359
Reid, Samuel, Chicago, Ill. Curling-iron	427,907	May 13	1346	310	51	1084
Reid, Thomas J., Cincinnati, Ohio. Hub-band	429,479	June 3	577	141	51	1583
Reid, Thomas J., Cincinnati, Ohio. Machine for applying rings to hub-bands	434,568	Aug. 19	1718	449	52	1112
Reid, William, West Hebron, N. Y. Self-feeding machine for shaping irregular forms	431,954	July 8	1435	{ 364 365	{ 52	229
Reifert, John, Rome, N. Y. Railway-tie	440,653	Nov. 18	1622	418	53	939
Reiff, Gustavus N., Easton, Pa. Mechanism for operating railway-signals, &c	419,996	Jan. 21	2027	534	50	422
Reiff, William H., Philadelphia, Pa. Burglar-alarm	428,693	May 27	2534	644	51	1341
Reiff, William H., assignor of one-half to E. P. Starr, Philadelphia, Pa. Apparatus for games	429,585	June 3	731	177	51	1612
Reiff, William H., assignor of one-half to J. N. Reeve, Philadelphia, Pa. Apparatus for games	441,090	Nov. 18	2345	607	53	1076
Reifsnider, Le Baron, Altoona, Pa. Grain-car door	438,737	Oct. 21	1632	438	53	324
Reilly, James, assignor of one-half to C. Bergman, Buffalo, N. Y. Die for forging car-couplers	421,142	Feb. 11	1066	274	50	775
Reilly, Francis P., New York, N. Y., assignor to Johnson Company, of Kentucky. Chair for girder-rails	418,986	Jan. 7	516	129	50	109
Reilly, Frank W., assignor to Chicago Daily News Company, Chicago, Ill. Toy bank	436,672	Sept. 16	2032	530	52	1775
Reilly, James, Brooklyn, N. Y. Apparatus for heating water in baths	433,490	Aug. 5	75	22	52	771
Reilly, John, Baltimore, Md. Controller for elevators	432,767	July 22	2709	693	52	516
Reilly, John C., Brooklyn, N. Y. Cable-terminal	429,815	June 10	1071	{ 263 264	{ 51	1687
Reilly, Michael E., Montesano, Wash. Hammer-handle attachment	428,524	May 20	2260	574	51	1271
Reilly, Owen, New York, assignor to G. H. Clarke, Brooklyn, N. Y. Grate-bar	434,722	Aug. 19	1982	516	52	1162
Reilly, Philip J. (See Crippen, Edwin, assignor.)						
Reilly, Robert M., Baltimore, Md. Siphon-tank	427,364	May 6	506	129	51	911
Reilly, Sumner C., Terre Haute, Ind. Hydrocarbon-burner	432,080	July 15	1639	420	52	335
Reilly, Thomas F., et al. (See Anderson, Lee, assignor.)						
Reimers, Fredrick, Lincoln, Nebr. Removable and adjustable water-proof wash-bowl lining	430,195	June 17	1656	412	51	1811
Reimers, Gerhard, New York, N. Y. Fastener for clothes-lines	420,962	Feb. 11	808	210	50	726
Reimers, John N., Calumet, Iowa. Obstetrical forceps	424,689	Apr. 1	388	103	51	76
Rein, Bernard, Detroit, and A. W. Straight, Ypsilanti, Mich. Plumber's or jeweler's furnace	430,196	June 17	1657	413	51	1811
Rein, Gustavus, assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	423,813	Mar. 18	2180	576	50	1566
Rein, Gustavus, assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	428,525	May 20	2261	574	51	1271

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Rein, Gustavus, assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	441,381	Nov. 25	2844	734	53	1176
Rein, William. (See Montgomery, William E., assignor.)						
Reine, Paul R., New Orleans, La. Lamp-bracket	438,768	Oct. 21	1685	452	53	334
Reineking, John. (See Rabenstein and Reineking.)						
Reinhardt, Christoph, Newark, N. J. Candle-holder for Christmas-trees	420,607	Feb. 4	255	68	50	614
Reinhardt, James H., Brooklyn, N. Y., assignor to J. Wetter, Memphis, Tenn. Consecutive-numbering head	425,580	Apr. 15	1742	468	51	356
Reinhardt, James H., Brooklyn, N. Y., assignor to J. Wetter, Memphis, Tenn. Consecutive-numbering machine	425,581	Apr. 15	1744	468	51	356
Reinhart, Henry. (See O'Neill and Reinhart.)						
Reinhart, Henry R., et al. (See Ramus, Charles E., assignor.)						
Reinhold, August F., New York, N. Y. Burner	439,560	Oct. 28	2931	779	53	576
Reinhold, Frank J. (See Slayton and Reinhold.)						
Reinhold, Frank J., assignor to F. A. Hubel, Detroit, Mich. Capsule-stripping machine	429,957	June 10	1276	316	51	1728
Reinhold, Hermann A., Woolwich, England. Vehicle-wheel	430,687	June 24	2481	606	51	1978
Reininghaus, Gustav, Mentz, Hesse, Germany. Preparation of malt	419,707	Jan. 21	1582	422	50	334
Reinisch, Anton, Vienna, Austria-Hungary. Cartridge-case	436,150	Sept. 9	1199	313	52	1609
Reinisch, Charles, Newark, N. J. Ink well or stand	424,079	Mar. 25	2592	691	50	1631
Reinmann, Albert L., Allegheny, assignor to Westinghouse Electric Company, Pittsburg, Pa. Incandescent electric lamp	434,159	Aug. 12	1086	279	52	978
Reis, Ferdinand W. (See Graf, Robert R., assignor.)						
Reisner, Fred, et al. (See Bolton, George W., assignor.)						
Reiss, George, Milwaukee, Wis. Whiffletree	428,950	May 27	2909	745	51	1416
Reiss, George T., assignor to Niles Tool Works, Hamilton, Ohio. Lathe	430,088	June 10	1509	375	51	1773
Reissig, Theodor, Ludwigshafen-on-the-Rhine, Bavaria, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Blue dye	431,541	July 1	787		52	156
Reitler, Charles W., assignor of one-fourth to W. T. Jenison, Denver, Colo. Electric-pen holder. (Reissne)	11,053	Jan. 7	784	207	50	163
Reitz, Daniel G., Berlin, Pa. Middlings-purifier	433,034	July 29	3133	805	52	634
Reixach, José. (See Lister and Reixach.)						
Reixach, José, assignor to Lister & Co., Limited, Bradford, England. Woven pile fabric	442,749	Dec. 16	1784	462	53	1627
Reiz, Nikolaus, assignor to himself and T. Holman, Chicago, Ill. Game-board	429,639	June 10	809	197	51	1637
Reliance Corset Company. (See Smith, Emmet L., assignor.)						
Rembert, Henry, Willis, Tex. Compressing and baling cotton-batting	429,640	June 10	809	197	51	1638
Rembert, Henry, Willis, assignor to Rembert Roller Compress Company, Galveston, Tex. Baling cotton	441,022	Nov. 18	2221	574	53	1052
Rembert Roller Compress Company. (See Rembert, Henry, assignor.)						
Remington, Fred C., et al. (See Raymond, Silas H., assignor.)						
Remington, George H., Providence, R. I. Belt-shifter	421,515	Feb. 18	1599	413	50	883
Remington, George H., Providence, R. I. Key for stem-winding watches	434,050	Aug. 12	891	235	52	939
Remington, James E., Scott, Ind. Device for building wire-and-picket fences	431,915	July 8	1377	349	52	277
Remington Standard Type Writer Manufacturing Company. (See Adams, Charles H., assignor.)						
Remington Standard Type Writer Manufacturing Company. (See Jenne, William M., assignor.)						
Remington, William B., et al. (See Raymond, Silas H., assignor.)						
Remme, William R. (See Hickey and Remme.)						
Remmers, Bernhard, New Orleans, La., assignor to Niles Tool Works, Hamilton, Ohio. Filter-press	427,794	May 13	1173	294	51	1052
Remmert, Herman J., Fort Wayne, Ind. Gas-scrubber	426,326	Apr. 22	2873	756	51	586
Remmert, Herman J., Fort Wayne, Ind. Gas-washer	426,327	Apr. 22	2876	757	51	587
Rempen, August, Linden, near Hanover, assignor to F. Heuser & Co., Hanover, Germany. Rotating bottling apparatus	436,999	Sept. 23	2598	679	52	1892
Rempis, John H., Grand Rapids, Mich. Sleigh-knee	435,666	Sept. 2	454	120	52	1462
Remus, Carl T., assignor to J. Scherbel, Dresden, Germany. Machine for making metal-joint fastenings for boxes	431,995	July 8	1497	{ 378 379 }	{ 52 302 }	
Remus, Theodore, Dresden, Saxony, Germany, assignor, by mesne assignments, to Wolf Brothers, Philadelphia, Pa. Machine for ornamenting boxes	430,883	June 24	2798	686	51	2039
Remy, Emile, Mülhausen, Germany. Dye-vat	433,632	Aug. 5	279	74, 75	52	810
Renalds, William R., Baltimore, Md. Air-moistening apparatus	432,837	July 22	2805	718	52	566
Renard, Louis M. J. C. C., Mendon, near Paris, France. Galvanic battery	425,959	Apr. 15	2331	618	51	469
Renard, Rudolph W., Hogestown, Pa. Hay tedder, rake, and loader	440,504	Nov. 11	1381	{ 357 358 }	{ 53 883 }	
Renault, Bernard, and M. Desvernay, Paris, France. Electrolyte for secondary batteries	440,505	Nov. 11	1384	358	53	884
Renkert, Louis H., et al. (See McCray, John E., assignor.)						
Renkin, William W., Allegheny, Pa. Meat-chopper	420,583	Feb. 4	219	57	50	607
Renner, Joseph O., and N. Bowers, Greeneville, Tenn. Tobacco-stick	438,445	Oct. 14	1174	317	53	231
Rennerd, Benjamin F. (See McCollister and Rennerd.)						
Rennie, William, Sing Sing, N. Y. Brick-kiln	433,368	July 29	3615	{ 932 933 }	{ 52 730 }	
Rennison, John. (See Garland, George A., assignor.)						
Rennyson, William. (See Burgess, Hugh, assignor.)						
Rennyson, William, Norristown, Pa. Heating and lighting device	426,215	Apr. 22	2725	{ 713 714 }	{ 51 554 }	
Reno, Henry, Portland, Oreg. Oil-can holder	423,631	Mar. 18	1921	506	50	1517
Reno, Jesse W., Boston, Mass. Conduit for electric street-railways	420,101	Jan. 28	2192	579	50	463
Renshaw, Alfred H., and H. H. Burden, Troy, N. Y. Car-coupling	431,195	July 1	241	61	52	50
Renshaw, Joseph B., Hartford, Conn. Eliminating graphitic carbon from cast-iron	438,715	Oct. 21	1589		53	316
Renshaw, Morrison, St. Louis, Mo. Door-securer	423,343	Mar. 11	1487	389	50	1426
Renshaw, Morrison, assignor to Swift-Renshaw Manufacturing Company, St. Louis, Mo. Curtain fastening	433,821	Aug. 5	574	150	52	869
Renshaw, Morrison, assignor to Swift-Renshaw Manufacturing Company, St. Louis, Mo. Horse-cleaner	439,561	Oct. 28	2933	780	53	576
Renshaw, Morrison, assignor to Swift-Renshaw Manufacturing Company, St. Louis, Mo. Envelope-seal	443,406	Dec. 23	2907	748	53	1854
Renton, John. (See Barnes, Henry, assignor.)						
Renton, Paul A., Brooklyn, N. Y. Convertible fitting for sewer-gas traps and waste-piping	441,775	Dec. 2	231	60	53	1309
Renwick, Henry B., New York, N. Y., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	440,116	Nov. 4	732	194	53	752
Reuz, Robert L., assignor of one-half to H. Weidman, Poplar Creek Agency, Mont. Shearing-machine	437,515	Sept. 30	3434	898	52	2062
Renzenbrink, Charles L., Canton, Ohio. Clarinet-reed protector	425,521	Apr. 15	1663	443	51	341
Reppell, Louis H., Kansas City, Mo. Brick-kiln	442,548	Dec. 9	1436	368	53	1550

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Reppy, Albert W., assignor of one-half to T. C. Masteller, Oakland, Cal. Automatic electric train-signal.	433,216	July 29	3404	879	52	687
Requarth, Frederick A. and H. W., and H. W. Hueffelmann, Dayton, Ohio. Cutter-head.	433,035	July 29	3135	806	52	634
Requarth, Henry W. (See Requarth and Hueffelmann.)						
Resley, Horace, Cumberland, Md. Railway-car mounting	441,976	Dec. 2	538	144	53	1368
Resseguie, Ralph. (See Koster, Lewis, assignor.)						
Ressler, George S., Toledo, Ohio. Combined baking, roasting, and frying pan	422,156	Feb. 25	2520	666	50	1066
Retter, Arwed, Utica, N. Y. Dental drill	423,344	Mar. 11	1487	390	50	1426
Retter, Arwed, Utica, N. Y. Dental engine	426,328	Apr. 22	2878	757	51	587
Rettich, Frank D., Cincinnati, Ohio. Puzzle	427,613	May 13	886	223	51	995
Rettie, Charles, Liverpool, county of Lancaster, England. Latch	420,963	Feb. 11	810	210	50	726
Rettie, Charles, Liverpool, England. Latch	436,435	Sept. 16	1651	434	52	1704
Retzbach, Joseph, Offenburg, Baden, Germany. Fifth-wheel for vehicles	419,708	Jan. 21	1583	423	50	234
Reubel, Henry, and H. Taylor, New York, N. Y. Curtain-rod support	428,783	May 27	2671	677	51	1367
Reuleaux, Josef, assignor to A. Laughlin Company, Cleveland, Ohio. Vertical sand-damper.	421,516	Feb. 18	1602	413	50	883
Reuter, Charles, and J. L. Schruben, Lafayette, Ind. Bedclothes-fastener	443,006	Dec. 16	2209	568	53	1712
Reuter, Henry, <i>et al.</i> (See Martin, Washington A., assignor.)						
Revelle, Hardy N. (See Ford and Revelle.)						
Reversible Collar Company. (See Butterworth, Robert, assignor.)						
Revis, John H., Vernon, Ill. Adjustable drag for harrows	430,972	June 24	2930	719	51	2063
Revis, John H., Vernon, Ill. Wagon-bolster	438,278	Oct. 14	936	253	53	184
Revolving Purifier Company. (See Anderson, William, assignor.)						
Revolving Purifier Company. (See Devonshire, Easton, assignor.)						
Rewrick, Assaria, San Francisco, Cal. Traveling block	433,601	Aug. 5	240	62	52	803
Rex, Alfred C. (See Parmelee, William L., assignor.)						
Rexford, Mortimer S., Norman, N. D. Road-scraper	424,823	Apr. 1	608	159	51	117
Reynburn, James P., Normal, Ill. Tug	430,254	June 17	1764	438	51	1832
Reynhold, Charles, assignor of one-half to V. Gentner, Jr., Buffalo, N. Y. Building-brick.	429,061	May 27	3090	797	51	1449
Reynier, Emile N., Paris, France. Secondary battery	438,827	Oct. 21	1786	477	53	353
Reynolds, Andrew J., Chicago, Ill. assignor to Reynolds Telephone, Organ, and Piano Company. Organ.	440,060	Nov. 4	656	175	53	736
Reynolds, Benjamin S., and W. A. Orr, Scranton, Pa. Lubricator-cup	422,038	Feb. 25	2335	617	50	1032
Reynolds, Charles A., Norwalk, Conn. Door-hanger	432,247	July 15	1887	486	52	382
Reynolds, Charles D., Providence, R. I. Ornamental chain	442,917	Dec. 16	2077	534	53	1684
Reynolds, Charles J., Maidenhead, England. Wheel	438,188	Oct. 28	2337	629	53	464
Reynolds, Christopher C., H. Hooton, and M. M. Busby, Salt Lake City, Utah Ter. Brake.	438,491	Oct. 14	1236	335	53	214
Reynolds, Delbert J., Winnebago City, Minn. Steering-propeller	421,009	June 24	2987	733 734	51	2074
Reynolds, Edwin, Providence, R. I. Ink-pad	424,657	Apr. 1	339	88	51	66
Reynolds, Eli A. D., Appleton, Wis. Pulp-digester	423,531	Mar. 18	1768	464	50	1488
Reynolds, Elisha L., Marysville, Ohio. Petty-ledger	443,007	Dec. 16	2210	569	53	1712
Reynolds, George A. (See Reynolds, Samuel W., assignor.)						
Reynolds, George H., New York, N. Y. Pneumatic gun	421,306	Feb. 11	1292	333 334 335 336	50	817
Reynolds, George H., New York, N. Y. Pneumatic gun	421,307	Feb. 11	1302	336	50	818
Reynolds, George H., New York, N. Y. Pneumatic gun	421,308	Feb. 11	1303	336 337	50	819
Reynolds, George H., New York, N. Y. Dynamite-gun and appliance for operating the same	421,310	Feb. 11	1308	337	50	820
Reynolds, George H., New York, N. Y. Pneumatic cannon	421,311	Feb. 11	1311	338 339	50	820
Reynolds, George H., New York, N. Y. Pneumatic gun	421,312	Feb. 11	1314	339 340	50	821
Reynolds, George H., New York, N. Y. Projectile	421,313	Feb. 11	1316	340	50	821
Reynolds, George H., New York, N. Y. Barrel for pneumatic guns	421,314	Feb. 11	1317	341	50	821
Reynolds, George H., New York, N. Y. Book-finisher's lettering-machine	443,379	Dec. 23	2869	738	53	1847
Reynolds, George H., assignor to Pneumatic Dynamite Gun Company, New York, N. Y. Pneumatic cannon	429,641	June 10	810	197 198 199	51	1638
Reynolds, George H., New York, N. Y., assignor to H. B. Richardson and E. B. Marsh, Amherst, Mass. Radial-cylinder pump	436,567	Sept. 16	1858	489	52	1742
Reynolds, George H., New York, N. Y., assignor to H. B. Richardson and E. B. Marsh, Amherst, Mass. Radial-cylinder engine	436,568	Sept. 16	1859	489 490	52	1743
Reynolds, George H., and E. L. Zalinski, New York, N. Y. Projectile	421,309	Feb. 11	1305	337	50	819
Reynolds, George L., Newark, N. J. Window-screen	428,413	May 20	2115	531	51	1244
Reynolds, Henry S., Brooklyn, N. Y. Handle and cover for coffee-pots, &c.	440,061	Nov. 4	637	175	53	737
Reynolds, Humphrey H., assignor of one-half to J. H. Torney, Detroit, Mich. Safety-gate for bridges	437,937	Oct. 7	401	114	53	77
Reynolds, James. (See O'Connor, James, assignor.)						
Reynolds, James. (See O'Connor, Patrick, assignor.)						
Reynolds, James B., <i>et al.</i> (See Siedentopf, Frederick, assignor.)						
Reynolds, John, Chicago, Ill. Roll-paper cutter	434,466	Aug. 19	1563	406	52	1080
Reynolds, John E., Middletown, N. Y. Guide for straw-braid-sewing machines	432,283	July 15	1952	499	52	393
Reynolds, John H. (See Burns, John, assignor.)						
Reynolds, John H., New London, Conn. Window-glass	419,882	Jan. 21	1859	489	50	390
Reynolds, John R., and A. I. Jacobs, assignors to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine	435,611	Sept. 2	353	97	52	1442
Reynolds, John R., and A. I. Jacobs, assignors to Smyth Manufacturing Company, Hartford, Conn. Sewing books	435,612	Sept. 2	355	98	52	1443
Reynolds, John R., and A. I. Jacobs, assignors to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine	435,613	Sept. 2	357	98, 99	52	1443
Reynolds, Samuel F., Auburn, N. Y. Hose-reel	424,501	Apr. 1	96	27	51	22
Reynolds, Samuel W., Toledo, Ohio. Metallic fastener for tobacco	431,757	July 8	1143	285	52	232
Reynolds, Samuel W., assignor of one-half to G. A. Reynolds, Toledo, Ohio. Washing-machine	431,756	July 8	1141	285	52	232
Reynolds, Stephen H. (See Hood and Reynolds.)						
Reynolds Telephone, Organ, and Piano Company. (See Reynolds, Andrew J., assignor.)						
Reynolds, Thomas. (See Schnarrenberger, Jacob H., assignor.)						
Reynolds, William M., New York, N. Y. Window-cleaning chair	432,643	July 22	2486	639 640	52	504
Rhea-Doty Syndicate. (See Doty, Henry H., assignor.)						
Rheincker, Martin, and F. Ferkel, Cincinnati, Ohio. Hub-band	428,784	May 27	2672	677	51	1367

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Rheubottom, Frank C. (See Wilson and Rhenbottom.)						
Rhind, Frank, assignor to E. Miller & Company, Meriden, Conn. Lamp-extinguisher.	440,748	Nov. 18	1782	459	53	968
Rhind, Frank, assignor of one-half to E. Miller & Company, Meriden, Conn. Wick-adjusting device.	429,743	June 10	962	{ 236 237 }	51	1668
Rhind, Frank, assignor of one-half to E. Miller & Company, Meriden, Conn. Argand-lamp.	443,868	Dec. 30	3636	936	53	2004
Rhind, Frank, Meriden, Conn., assignor of one-half to C. S. Upton, New York, N. Y. Suspension device.	421,192	Feb. 11	1144	{ 292 293 }	50	790
Rhind, Frank, Meriden, Conn., assignor of three-fourths to C. S. Upton, New York, N. Y. Wick-raiser for central-draft lamps.	440,608	Nov. 11	1553	399	53	915
Rhines Ballot System Company. (See Rhines, John W., assignor.)						
Rhines, Foster P. (See Farwell and Rhines.)						
Rhines, John W., assignor to Rhines Ballot System Company, St. Paul, Minn. Vote-recording machine.	422,891	Mar. 4	793	203	50	1227
Rhoads, Frank B., Philadelphia, Pa., assignor, by mesne assignments, to E. L. Clark, Brooklyn, N. Y., and L. D. Howard, Philadelphia, Pa. Car for elevators.	425,828	Apr. 15	2120	566	51	430
Rhoads, John, Philadelphia, Pa. Brace for coal and freight cars.	442,238	Dec. 9	950	251	53	1456
Rhoads, John N., assignor of one-half to J. M. Keating, Philadelphia, Pa. Bottle-stopper.	425,550	Apr. 15	1700	454	51	348
Rhodes, Charles M. (See Halyburton, John L., assignor.)						
Rhodes, Charles M. (See Walsh, Phillip B., assignor.)						
Rhodes, Emma. (See Fenner, William W., assignor.)						
Rhodes, Frank B., and J. Campbell, assignors to O. C. Devereux, Providence, R. I. Separable button.	434,202	Aug. 12	1146	297	52	990
Rhodes, Franklin B., Providence, R. I. Calipers.	436,108	Sept. 9	1139	297	52	1598
Rhodes, George E., Kansas City, Mo. Cable-car fender.	429,545	June 3	953	254	51	1192
Rhodes, James B., Grand Rapids, Mich. Device for side-dressing saw-teeth.	441,701	Dec. 2	113	30	53	1284
Rhodes, Jay B., assignor to G. R. Shepardson, C. D. Hanscomb, and B. W. Shepardson, Kalamazoo, Mich. Workman's time-register.	432,562	July 22	2369	611	52	482
Rhodes, Jeremiah, et al. (See Ambler, William, assignor.)						
Rhodes, John W. (See Phelps, Harvey J., assignor.)						
Rhodes, John W., Havana, Ill. Grain-drill.	420,521	Feb. 4	132	33	50	589
Rhodes, John W., Havana, Ill. Grain-drill.	433,036	July 29	3136	{ 806 807 }	52	635
Rhodes, Joseph M., assignor to S. S. Rhodes, Covington, Ind. Photographic camera.	434,807	Aug. 19	2099	{ 550 551 }	52	1186
Rhodes, Samuel, et al. (See Ambler, William, assignor.)						
Rhodes, Susan S. (See Rhodes, Joseph M., assignor.)						
Rhodes, William S., St. Louis, Mo. Piston-rod packing.	419,069	Jan. 7	635	165	50	134
Rhomo, Mathew, and H. F. Herkner, New York, N. Y.; said Rhomo assignor to said Herkner. Circular-knitting machine.	430,300	June 17	1864	459	51	1851
Rhone, Samuel M., Montgomery Station, Pa. Harness.	429,545	June 3	672	164	51	1600
Rhyneason, George W., Cincinnati, Ohio. Shutter worker and fastener.	426,060	Apr. 29	3822	999	51	720
Rianhard, William L., Ansonia, Conn. Bib or cock.	433,999	Aug. 12	827	217	52	926
Ricard, Louis, assignor to I. L. Woodley and J. A. Dent, Rockland, Ontario, Canada. Ax or edge tool.	421,662	Feb. 18	2108	553	50	979
Rice, Charles A., Philadelphia, Pa. Gasoline-tank.	426,740	Apr. 29	3521	920	51	721
Rice, Charles B., assignor to Rice & Whitacre Manufacturing Company, Chicago, Ill. Water-heater.	420,019	Jan. 21	2056	542	50	428
Rice, Charles D., Bridgeport, Conn. Bicycle.	425,390	Apr. 8	1461	391	51	292
Rice, Charles E. (See Layman and Rice.)						
Rice, David H., Lowell, Mass., assignor to Currier Telephone Bell Company, of Massachusetts. Electric call.	425,630	Apr. 15	1833	{ 490 491 }	51	374
Rice, David H., Lowell, Mass., assignor to Currier Telephone Bell Company, of Massachusetts. Telephone bell and connection.	425,631	Apr. 15	1837	491	51	375
Rice, David H., Brookline, Mass., assignor to Eaton, Cole & Burnham Company, of Connecticut. Hose-nozzle.	426,514	Apr. 29	3168	832	51	653
Rice, Duane L., assignor to W. W. Kimball Company, Chicago, Ill. Music-rack.	427,614	May 13	886	223	51	995
Rice, Duane L., assignor to W. W. Kimball Company, Chicago, Ill. Music-desk for pianos.	433,655	Aug. 5	320	82	52	818
Rice, Edwin W., Jr. (See Alton and Rice.)						
Rice, Edwin W., Jr. (See Thomson and Rice.)						
Rice, Edwin W., Jr., Lynn, Mass. Gas-pipe-insulating device.	420,391	Jan. 28	2641	701	50	546
Rice, Edwin W., Jr., Lynn, Mass. Transmission of power by electricity.	421,193	Feb. 11	1146	293	50	790
Rice, Edwin W., Jr., Lynn, Mass. Coupling electric motors.	422,975	Mar. 11	942	247	50	1323
Rice, Edwin W., Jr., Lynn, Mass. Brush and holder for electrical machines.	426,471	Apr. 29	3106	815	51	641
Rice, Edwin W., Jr., Lynn, Mass. Measuring electric currents.	428,633	May 27	2427	618	51	1322
Rice, Edwin W., Jr., Lynn, Mass. Synchronizing alternate-current machines.	430,320	June 17	1900	466	51	1858
Rice, Edwin W., Jr., Lynn, Mass. Current and switch controlling mechanism.	432,644	July 22	2488	640	52	505
Rice, Edwin W., Jr., Lynn, Mass. Lightning-arrester.	440,654	Nov. 18	1623	418	53	939
Rice, Edwin W., Jr., Lynn, Mass. Regulation of electric motors.	442,668	Dec. 16	1619	417	53	1596
Rice, Elias. (See Williams, William, assignor.)						
Rice, Ezekiel C., Mandan, N. D. Apparatus for burning prairie-grass.	419,559	Jan. 14	1349	361	50	284
Rice, George L., assignor to W. Deering & Company, Chicago, Ill. Twine.	426,261	Sept. 9	1363	355	52	1642
Rice, George W., Des Moines, Iowa. Horseshoe.	426,803	Sept. 23	2261	596	52	1828
Rice, John S., Cambridge, and E. B. Whittier, Winthrop, Mass. Ash-barrel.	424,355	Mar. 25	3000	797	50	1729
Rice, Judson, San José, Cal. Heating apparatus for dissolving bituminous rock.	422,630	Mar. 4	404	100	50	1214
Rice, Lewis J., Indianapolis, Ind. Hose-coupling.	426,515	Apr. 29	3169	832	51	653
Rice, Mary E., West Gardner, Mass. Can-holder.	419,560	Jan. 14	1352	362	50	284
Rice, Viets L., New York, N. Y. Pulverizing-mill.	430,884	June 24	2800	686	51	2039
Rice & Whitacre Manufacturing Company. (See Rice, Charles B., assignor.)						
Rice, William F., Alpine, Mich. Horseshoe.	428,229	May 20	1825	458	51	1187
Rich, Albert E. (See Hunt and Rich.)						
Rich, Elisha B., Chicago, Ill. Device for brazing saws.	433,656	Aug. 5	320	82	52	818
Rich, Elisha B., Chicago, Ill. Saw-swaging machine.	438,861	Oct. 21	1848	{ 490 491 }	53	363
Rich, Frederick D., Salisbury, assignor of one-half to N. D. Dodge, Newburyport, Mass. Machine for slashing inner soles.	438,643	Oct. 21	1471	397	53	295
Rich, George, Philadelphia, Pa., assignor to C. J. Follmer, L. H. Clogg, T. Butts, and J. L. Brown. Machine for making springs for umbrellas or parasols.	422,835	Mar. 4	692	177	50	1270
Rich, Henry M. (See Taft, Edward L., assignor.)						
Rich, Jerome, Jackson, Mich. Brush.	428,140	May 20	1690	428	51	1161
Rich, John F., Summertown, assignor of two-thirds to L. L. Frierson, Mount Pleasant, Tenn. Barrel-hoop.	431,916	July 8	1378	349	52	278
Rich, John G., et al. (See Hinckley, Henry D., assignor.)						
Rich, W. W. (See Eaton, Elias S., assignor.)						
Rich, Watson W., Minneapolis, Minn. Discharge apparatus for coal or ore bins.	422,094	Feb. 25	2424	640	50	1047

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Rich, William L., Jonesborough, Ind. Brick-kiln	440,198	Nov. 11	866	223	53	789
Richard, Felix, assignor to Société Richard Frères, Paris, France. Telegraphic transmission of index movements	420,102	Jan. 28	2193	579 580 581	50	464
Richard, Fred J., assignor to Randolph & Clowes, Waterbury, Conn. Die for making spiral tubing	436,463	Sept. 16	1693	446	52	1713
Richard, J. Howard, <i>et al.</i> (See Quigg, Lewis, assignor.)						
Richard, William, assignor of two-thirds to L. Hossier and D. Hull, Bloomville, Ohio. Shears	437,621	Sept. 30	3582	936 937	52	2091
Richardi, Henry, Bellaire, Mich. Rolling-pin	434,295	Aug. 12	1293	335	52	1019
Richards, Arthur M., Bloomington, Ill. Car-seat	437,938	Oct. 7	402	114	53	77
Richards, Charles E., Brooklyn, N. Y. Coffin-fastener	424,618	Apr. 1	281	73	51	57
Richards, Charles H., Baltimore, Md. Hat rest and holder	436,021	Sept. 9	987	259	52	1571
Richards, Charles M., Fort Scott, Kans. Transposing key-board	420,359	Jan. 28	2593	689	50	537
Richards, Francis H. (See Cooley and Richards.)						
Richards, Francis H., Hartford, Conn. Magnetic separator for paper-pulp	438,897	Oct. 21	1897	504 505	53	373
Richards, Francis H., Hartford, assignor to American Button Fastener Company, New Britain, Conn. Button-setting instrument	439,604	Oct. 28	3007	797	53	591
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Drilling-machine	419,070	Jan. 7	636	165	50	134
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Drilling-machine	419,071	Jan. 7	638	165	50	134
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Milling-machine vise	419,072	Jan. 7	639	166	50	135
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Drill	419,883	Jan. 21	1859	489	50	390
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Milling-machine vise	419,884	Jan. 21	1860	489	50	390
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Milling-machine vise	419,885	Jan. 21	1861	489	50	390
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Drilling-machine	421,517	Feb. 18	1604	414	50	884
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Drilling-machine	422,540	Mar. 4	252	65	50	1184
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Drilling-machine	426,571	Apr. 29	3253	853 854	51	670
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Piston-valve	430,484	June 17	2138	526	51	1904
Richards, Francis H., Hartford, Conn., assignor to E. B. Cox, Drifton, Pa. Piston-valve	435,322	Aug. 26	2915	773	52	1346
Richards, Francis H., Springfield, Mass., assignor to E. B. Cox, Drifton, Pa. Work-holder	419,073	Jan. 7	641	166	50	135
Richards, Francis H., Springfield, Mass., assignor to E. B. Cox, Drifton, Pa. Work-holder	419,074	Jan. 7	642	166 167	50	135
Richards, Francis H., assignor to Hartford Heel Plate Company, Hartford, Conn. Heel-plate	427,524	May 6	749	186	51	960
Richards, Francis H., Hartford, assignor to Trant & Hine Company, New Britain, Conn. Suspender-buckle	432,740	July 22	2653	678	52	536
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	434,886	Aug. 19	2234	586	52	1212
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	435,450	Sept. 2	107	30	52	1395
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	435,451	Sept. 2	108	30	52	1396
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	435,452	Sept. 2	109	31	52	1396
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	435,453	Sept. 2	110	31	52	1396
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	435,454	Sept. 2	110	31	52	1396
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	435,455	Sept. 2	111	31	52	1396
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	435,456	Sept. 2	112	32	52	1397
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	436,262	Sept. 9	1364	356	52	1642
Richards, Francis H., Hartford, assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Making plates for suspender-buckles	436,263	Sept. 9	1365	356	52	1642
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Regulator for grain-weighers	434,723	Aug. 19	1983	516	52	1162
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Regulator for grain-scales	442,640	Dec. 16	1577	408	53	1588
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Regulator for grain-scales	442,711	Dec. 16	1700	436 437	53	1611
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	442,712	Dec. 16	1703	437 438 439	53	1612
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	442,713	Dec. 16	1708	439 440	53	1612
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	442,714	Dec. 16	1711	440 441	53	1613
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Regulator grain-weigher	442,715	Dec. 16	1713	441 442	53	1614
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Regulator grain-weigher	442,716	Dec. 16	1715	442 443	53	1615
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	442,717	Dec. 16	1721	443 444	53	1615
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-meter	442,718	Dec. 16	1723	444 445	53	1616
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	442,719	Dec. 16	1727	446 447	53	1616
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	442,720	Dec. 16	1731	448	53	1617
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	443,180	Dec. 23	2529	647	53	1779
Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	443,583	Dec. 30	3194	821 822	53	1918

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Richards, Francis H., assignor to Pratt & Whitney Company, Hartford, Conn. Grain-weigher	443,718	Dec. 30	3409	876	53	1958
Richards, George A., New London, Conn. Vehicle-spring	427,189	May 6	251	65	51	860
Richards, George A., New London, Conn. Vehicle-spring	432,563	July 22	2372	611	52	483
Richards, George C., assignor of one-half to W. T. Tuckwell, Sissons, Cal. Tire-tightener	438,362	Oct. 14	1058	288	53	208
Richards, George H., assignor of one-half to W. Nuneviller, Philadelphia, Pa. Flush-washer for photographic purposes	440,325	Nov. 11	1074	276	53	826
Richards, Henry B., La Grange, Tex. Poison-distributor	423,814	Mar. 18	2181	576	50	1566
Richards, Henry J., assignor of one-half to C. H. Gardner, Wilkes-Barré, Pa. Miner's lamp	427,013	Apr. 29	3905	1018	51	795
Richards, Hurlbert P. (See Elliott and Richards.)						
Richards, James E., Cedar Keys, Fla. Station-box for watchmen's electric time-detectors	432,645	July 22	2492	641	52	505
Richards, Lucius J., Philadelphia, Pa. Packing-case for coffee, &c	420,736	Feb. 4	429	113	50	648
Richards, Marcus C., Aurora, Ill. Door-hanger	438,587	Oct. 14	1377	373	53	272
Richards, Philip, assignor of one-half to G. W. Shonk, Plymouth, Pa. Coal-cutting machine	428,951	May 27	2910	746	51	1416
Richards, Philip, assignor of three-fourths to W. G. Jones, Jr., Plymouth, C. R. Eberle, Philadelphia, and W. M. Williams, Wilkes-Barré, Pa. Coal-cutting machine	438,446	Oct. 14	1175	{ 317 318 }	{ 53 53 }	{ 231 231 }
Richards, Ransom, et al. (See Wetherell, George F., assignor.)						
Richards, Richard S., London, England. Furnace-grate	433,491	Aug. 5	76	22	52	772
Richards, Robert H., Jr., Atlanta, Ga. Clamp-collar	428,058	May 13	1568	396	51	1138
Richards, Robert H., Boston, Mass. Machinery for separating ore	429,154	June 3	67	17	51	1485
Richards, Walter S., assignor of one-half to G. B. James, Boston, Mass. Commutator for induction-generators for telegraph-lines	430,688	June 24	2482	606	51	1978
Richards, Walter S., Natick, assignor of one-half to G. B. James, Boston, Mass. System of electrical distribution	440,326	Nov. 11	1075	{ 276 277 }	{ 53 53 }	{ 826 826 }
Richards, Walter W., Philadelphia, Pa. Sash-cord pulley	419,474	Jan. 14	1244	330	50	262
Richards, William, Rochester, N. Y. Clothes-pin	443,602	Dec. 30	3227	830	53	1925
Richards, William C., St. Louis, Mo. Gun-carrier	439,562	Oct. 28	2934	780	53	577
Richards, Wilton L., Malden, Mass. Telephone	438,828	Oct. 21	1790	478	53	353
Richardson, Albert B., Hamilton, Mass. Sash-fastener	423,082	Mar. 11	1101	288	50	1352
Richardson, Albert B., Hamilton, Mass. Sash-fastener	436,926	Sept. 23	2505	656	52	1874
Richardson, Albert H., San Francisco, Cal. Machine for sharpening cutting-tools	424,025	Mar. 25	2517	669	50	1636
Richardson, Brady S. (See Welsh, Richardson, and Welsh.)						
Richardson, Brady S., Scottsdale, Pa. Flux or solution for coating metals	434,296	Aug. 12	1293	.....	52	1019
Richardson, Briton H. (See Withers, Addison L., Jr., assignor.)						
Richardson, Charles A., Hannibal, Mo. Heating-stove	419,796	Jan. 21	1710	454	50	359
Richardson, Charles C., assignor to Louisville Lithographic Company, Louisville, Ky. Check-book	426,547	Apr. 29	3219	844	51	662
Richardson, Charles E., Minneapolis, Minn. Door	443,541	Dec. 30	3123	804	53	1904
Richardson, Charles N., Providence, R. I. Extension-ladder book	430,885	June 24	2802	686	51	2040
Richardson, Charles W., and C. F. Galloway, Columbus, Ohio. Ironing-board	436,436	Sept. 16	1652	434	52	1705
Richardson, David J., et al. (See Leher, Luther H., assignor.)						
Richardson, Edward M., assignor of one-half to A. S. Gordon, Laconia, N. H. Box-staying machine	428,952	May 27	2912	746	51	1417
Richardson, Everett P., Lawrence, Mass., assignor to Stanley Manufacturing Company, Portland, Me. Thread-waxing device for sewing-machines	440,327	Nov. 11	1076	277	53	826
Richardson, Ezra, U. S. Shearer, and J. L. Meils, Flanagan, Ill. Latch	424,902	Apr. 1	723	193	51	140
Richardson, Francisco S., Warren, Pa. Measuring-funnel	423,954	Mar. 25	2411	646	50	1617
Richardson, Frank M. and J. H. Claremont, Va. Thill-coupling	419,886	Jan. 21	1862	490	50	391
Richardson, George W., assignor of one-half to E. D. Gross, Philadelphia, Pa. Automatic cut-out	438,326	Oct. 14	1004	273	53	198
Richardson, Harvey J., New Weston, Ohio. Vehicle-gear	426,329	Apr. 22	2879	757	51	588
Richardson, Harvey J., North Star, Ohio. Brake-block	428,230	May 20	1825	458	51	1187
Richardson, Henry B., et al. (See Reynolds, George H., assignor.)						
Richardson, James, Tarrytown, N. Y. Metal railway sleeper and tie	430,197	June 17	1659	413	51	1812
Richardson, James, Bayard, Ohio. Railway-signal	436,191	Sept. 9	1264	329	52	1621
Richardson, James O., Boston, Mass. Steam-trap	425,108	Apr. 8	1032	275	51	208
Richardson, John, and B. R. Rowland, Lincoln, England. Valve-gear	435,323	Aug. 26	2916	774	52	1346
Richardson, John P., and G. F. Dyer, Cambridge, assignors to Mason & Hamlin Organ and Piano Company, Boston, Mass. Piano damper-action	427,525	May 6	749	186	51	960
Richardson, John S., Lowell, Mass. Yarn-guide for spinning-machines	433,037	July 29	3140	807	52	635
Richardson, Jos. N. (See Streeter, Nelson R., assignor.)						
Richardson, Joseph F., Birk's City, Ky. Churn	422,631	Mar. 4	405	100	50	1214
Richardson, Joseph H. (See Richardson, Frank M. and J. H.)						
Richardson, Julius C., Sharpsburg, Pa. Making nut-locks	432,081	July 15	1640	420	52	335
Richardson, Julius C., assignor to P. S. Hugus, Pittsburg, Pa. Molding-machine for hollow ware	425,255	Apr. 8	1261	336	51	255
Richardson, Leonard. (See Leland, Edwin A., assignor.)						
Richardson, Mark F., and C. A. Woodbury, Rutland, Vt. Breech-loading gun	440,328	Nov. 11	1077	277	53	826
Richardson, Reuben. (See Youngs and Richardson.)						
Richardson, Samuel S., Happy Camp, Cal. Damper	431,708	July 8	1074	268	52	219
Richardson, Samuel T., Gilmer, Tex. Car-coupling	434,000	Aug. 12	828	218	52	926
Richardson, Thomas D., et al. (See De Long, Frank E., assignor.)						
Richardson, Wilber E., Rumsey, Mont. Ore-conveyer	435,667	Sept. 2	435	120	52	1462
Richardson, William. (See Gilbert and Richardson.)						
Richardson, William H. (See Fries and Richardson.)						
Richardson, William H., et al. (See Lindsay, William E., assignor.)						
Richardson, William H., and W. Greaves, Oldham, county of Lancaster, England. Carding-engine	418,852	Jan. 7	305	73, 74	50	64
Richardson, William S., Boston, Mass. Fastening for overcoats, &c	443,634	Dec. 30	3277	845	53	1933
Richardson, Winfield S., Camden, N. J. Pump	430,436	June 17	2066	{ 509 510 }	{ 51 51 }	{ 1891 1891 }
Richey, Robert, and W. R. Frost, Belfast, Iowa. Automatic corn-planter	437,243	Sept. 30	2990	782	52	1974
Richmond, Cassius M., New York, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental-engine hand-piece	434,952	Aug. 26	2363	625	52	1243
Richmond, Cassius M., New York, N. Y., assignor to Wilmington Dental Manufacturing Company, Wilmington, Del. Dental-tool holder	439,427	Oct. 28	2739	730	53	539
Richmond, Henry. (See Sacks and Richmond.)						
Richmond, Robert N. (See Baumann, Hermann, assignor.)						
Richmond Street Motor Company. (See Simpkin, William, assignor.)						
Richmond, Wesley H., Cadillac, Mich. Rod-packing	434,808	Aug. 19	2102	551	52	1187
Richter, Arthur, and J. H. Lancaster, New York, N. Y. Fan for elevator-cars	432,768	July 22	2710	693	52	547
Richter, Charles, Camden, N. J. Electric-railway system	419,709	Jan. 21	1584	423	50	335
Richter, Charles, Camden, N. J., assignor to Electric Construction Company, of New Jersey. Electric railway	439,428	Oct. 28	2740	{ 730 731 }	{ 53 53 }	{ 539 539 }

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Richter, Gerhard, Melrose, Minn. Draft attachment for plows	427,481	May 6	683	171	51	947
Richter, Jacob, South Chicago, Ill. Automatic feed for blast-furnaces	418,927	Jan. 7	438	107	50	91
Richter, Jens, deceased; A. W. Matthaei, Berlin, Germany, administrator. Repeating-watch	430,739	June 24	2567	629 629	51	1995
Richter, Johann C. F., Rathenow, Prussia, Germany. Strip or ledge for beaters of thrashing-machines	426,856	Apr. 29	3690	962	51	753
Richter, Karl, assignor of two-thirds to Löwit & Co., Hernals, near Vienna, Austria-Hungary. Machine for making boxes	434,526	Aug. 19	1654	433	52	1099
Richter, Maurice, Williamstown, W. Va. Paddle-wheel	433,859	Sept. 2	737	198	52	1517
Richwine, William, Philadelphia, Pa. Tire for velocipedes	442,393	Dec. 9	1184	308	53	1499
Rickard, F. A., et al. (See Verrell, Charles F., assignor.)						
Ricker, Elbridge G. S., assignor to W. B. Wetherbee, Boston, Mass., and A. A. Platts, Reed's Ferry, N. H. Furnace for heating flat or sad irons	421,434	Feb. 18	1479	383 384	50	861
Ricker, Reuben H., assignor of one-half to C. F. Howe, Boston, Mass. Safe for milk-cans, &c	439,605	Oct. 28	3009	798	53	592
Rickerson, Sherman B., assignor to Excelsior Reducing Company, Toledo, Ohio. Reducing licorice-root, &c., to powder	437,244	Sept. 30	2992	782	52	1975
Rickett, William M., Laconia, N. H. Bed-lounge	442,394	Dec. 9	1185	308	53	1500
Ricketson, Frederick B., et al. (See Conley, Michael, assignor.)						
Ricketson, James C., et al. (See Conley, Michael, assignor.)						
Ricketts, James J., Pittsburg, Pa. Coupling for water-closets	434,116	Aug. 12	1016	264	52	965
Ricketts, James J., Pittsburg, Pa. Coupling for water-closets	434,117	Aug. 12	1017	264	52	965
Ricketts, John H., Pittston, Pa. Hat-tag	437,132	Sept. 23	2799	729	52	1932
Riddell, Horace B., Lockport, assignor to S. H. Baker, East Liberty, and W. H. Beckwith, Uniontown, Pa. Coke-oven front	428,953	May 27	2913	746	51	1417
Riddell, William H., Northfield, Minn. Heating-furnace	431,151	July 1	173	44, 45	52	37
Riddelle, Philip S. (See Wing, Charles S., assignor.)						
Riddiough, John, Bloomington, Wis. Take-up mechanism for looms	427,270	May 6	378	98, 99	51	885
Rideout, Morton H. (See Nealey and Rideout.)						
Rider, Charles M., Newark, Ohio. Cap-pistol	434,203	Aug. 12	1147	297	52	990
Rider, Edwin A., Racine, Wis. Hydrocarbon-burner	436,437	Sept. 16	1653	435	52	1705
Ridge, Isaac M. (See Snyder, Charles L., assignor.)						
Ridge, Joseph, assignor of one-half to A. Ransom, Chicago, Ill. Caster	418,928	Jan. 7	440	107	50	92
Ridge, Joseph, assignor of one-half to A. Ransom, Chicago, Ill. Vestibule-car	418,929	Jan. 7	440	108	50	92
Ridings, Joseph L., Enterprise, Mo. Washing-machine	432,082	July 15	1641	421	52	335
Ridley, George J., Auburn, N. Y. Grinding-machine	425,186	Apr. 8	1167	308	51	236
Ridlon, Gideon T., assignor of one-half to E. R. Chellis, Porter, Me. Fruit-pucker	431,709	July 8	1075	268	52	219
Rieckert, Herman A. J., New York, N. Y. Straw-twisting machine	425,187	Apr. 8	1168	308 309	51	236
Rieckert, Herman A. J., New York, N. Y. Self-binder	429,958	June 10	1279	317 318 318	51	1728
Rieckert, Herman A. J., New York, N. Y. Harvester	429,959	June 10	1285	319 320	51	1730
Rieckert, Herman A. J., New York, N. Y. Spring-hinge	443,380	Dec. 23	2871	738 739 321	53	1847
Riedell, John H., assignor to himself, C. A. and J. J. McCormick, Brooklyn, N. Y. Paper box	425,188	Apr. 8	1171	309 310	51	237
Riedell, John H., assignor to himself, C. A. and J. J. McCormick, Brooklyn, N. Y. Paper box	429,960	June 10	1299	321	51	1732
Rieder, Cyrus A., and D. Ford, Anthony, Kans. Two-wheeled vehicle	431,710	July 8	1077	269	52	219
Riedle, Frank. (See Schneider, John G., assignor.)						
Riedler, Alois, Berlin, Germany. Controlled valve	439,824	Nov. 4	928	73	53	664
Riedler, Alois, Berlin, Germany. Controlled valve	439,825	Nov. 4	290	73	53	665
Rieffel, John P., New York, N. Y. Ventilating-sash	429,796	June 10	1037	254 255	51	1621
Riefler, Sigismund, Munich, Bavaria, Germany. Balance-escapement	443,684	Dec. 30	3360	863 864	53	1949
Riegel, Ludwig D., Christiania, Norway. Pneumatic buffer	433,657	Aug. 5	321	83	52	818
Riegner, Reuben. (See Keiser, Florenz, assignor.)						
Rieker, Amos E. (See Wollin and Werline, assignors.)						
Rickie, John, Lahore, India. Compound engine	422,157	Feb. 25	2521	666	50	1066
Rieppel, John, Cowanesque, Pa. Pulley	423,180	Mar. 11	1250	325	50	1382
Ries, Charles J., Madisonville, Ky. Attachment for harness	419,075	Jan. 7	644	167	50	136
Ries, Elias E., assignor to Ries & Henderson, Baltimore, Md. System of distribution for electric railways	431,482	July 1	691	173	52	139
Ries, Frederick C., Macon, Ga. Dental plugger	425,344	Apr. 8	1388	370	51	279
Ries & Henderson. (See Ries, Elias E., assignor.)						
Riesberry, William C., Carberry, assignor to J. Lamh, Winnipeg, Manitoba, Canada. Twine-holder	426,645	Apr. 29	3367	882	51	691
Riesbeck, George, Allegheny, Pa. Safety device for mills	441,702	Dec. 2	114	31	53	1284
Riesinger, George, Buffalo, N. Y. Boat-propelling mechanism	424,026	Mar. 25	2518	670	50	1637
Rife, George W., Richmond, Ind. Gang-plow	440,900	Nov. 18	2036	524 525	53	1016
Rigby, Joseph, and G. W. Reed, Seattle, Wash. Car-coupling	427,908	May 13	1348	340	51	1084
Rigby, Robert M., Kansas City, Mo. Combined book and index	434,724	Aug. 19	1984	516	52	1162
Rigdon, Isaac, assignor to Metcalf & Mackey Company, Cincinnati, Ohio. Combined step, shaft-clip, and spring holder	437,367	Sept. 30	3203	835	52	2013
Rigg, James, London, and T. Meacock, Birmingham, England. Tap or valve	430,689	June 24	2483	606	51	1978
Riggin, Mary I., Newark, N. J. Railway-crossing gate	419,612	Jan. 14	1429	383	50	300
Riggs Electric Traveling Danger Signal Company. (See Riggs, Joseph W., assignor.)						
Riggs, John D. (See Boyer and Riggs.)						
Riggs, John D., Dayton, Ohio. Belt-dynamometer	431,077	July 1	74	18	52	17
Riggs, Joseph W., assignor to Riggs Electric Traveling Danger Signal Company, Minneapolis, Minn. Railway-signal	440,925	Nov. 18	2082	538	53	1024
Riggs, Joseph W., assignor to Riggs Electric Traveling Danger Signal Company, Minneapolis, Minn. Railway signaling device	440,926	Nov. 18	2084	538	53	1025
Riggs, Joseph W., assignor to Riggs Electric Traveling Danger Signal Company, Minneapolis, Minn. Railway signaling system	440,927	Nov. 18	2086	539	53	1025
Riggs, Joseph W., assignor to Riggs Electric Traveling Danger Signal Company, Minneapolis, Minn. Electric signaling system	441,703	Dec. 2	117	31, 32	53	1285
Riggs, L. C., et al. (See Guzman, William A., assignor.)						
Richter, John C. (See D'Arros and Richter.)						
Riglander, Jacob W., New York, N. Y. Device for mounting counter-shafts	441,977	Dec. 2	539	145	53	1368

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Riglander, Jacob W., New York, N. Y. Micrometer-gage	443,869	Dec. 30	3637	936	53	2004
Rick, Jacob. (See Dyer and Rick.)						
Riker, Andrew L., New York, N. Y. Mounting for electric motors	443,227	Dec. 23	2629	675	53	1800
Riker, William, Newark, N. J. Bracelet	421,615	Feb. 18	1756	460	50	913
Riley, John C., New Orleans, La. Force-feeder	421,824	Apr. 1	610	160	51	117
Riley, John M., Newark, N. J. Punching-machine	428,414	May 20	2117	531	51	1344
Riley, John M., Newark, N. J. Brush-holder	424,415	May 20	2118	532	51	1344
Riley, John M., Kearney, N. J. Shaping-machine	428,416	May 20	2119	532	51	1244
Riley, John M., Kearney, N. J. Tube-machine	435,078	Aug. 26	2547	671 672	52	1278
Riley, John T., West Union, Iowa. Device for determining the amount of butter in milk ..	437,133	Sept. 23	2800	730	52	1933
Riley, Lycurgus B., Grafton, Ill. Grain-measure	434,467	Aug. 19	1564	407	52	1080
Riley, Phillip, Marion, Iowa. Rail-joint support	424,221	Mar. 25	2786	743	50	1689
Riley, William G., Corydon, Iowa. Hame-lug	425,345	Apr. 8	1390	370	51	279
Rinderknecht, Charles J., assignor to Sinker-Davis Company, Indianapolis, Ind. Steam-engine governor	427,615	May 13	887	223	51	996
Rinehold, William, Danbury, Iowa. Stay-chain for whiffletrees	427,114	May 6	143	38	51	840
Ring, John, St. Louis, Mo., assignor of four-fifths to J. J. McLoughlin and B. W. Taylor, New Orleans, La. Passenger-fare collector	437,622	Sept. 30	3583	937	52	2091
Ring, John, St. Louis, Mo., assignor of four-fifths to B. W. Taylor and J. J. McLoughlin, New Orleans, La. Passenger-fare collector	437,623	Sept. 30	3585	937	52	2091
Ringer, Peter G., et al. (See Souders, Milton M., assignor.)						
Ringo, Alvin L., Chicago, Ill. Sample-book	442,395	Dec. 9	1187	308	53	1500
Rinman, Gustaf O. (See Alford, Rinman, and De Coppet.)						
Rinman, Gustave O., assignor to Cincinnati Ice Machine Company, Cincinnati, Ohio. Pipe-joint	432,248	July 15	1889	486	52	382
Rion, Henry W., assignor of one-half to C. H. Smith, Lansingburg, N. Y. Car-platform gate ..	426,646	Apr. 29	3368	883	51	691
Riordan, Dennis W., Chicago, Ill. Refrigerator-car	436,545	Sept. 16	1830	482	52	1737
Ripley, David A., Columbus, Ohio. Faucet	436,151	Sept. 9	1200	313	52	1609
Ripley, James R., Memphis, Tenn. Self-feeding rip-sawing machine	419,561	Jan. 14	1353	362	50	284
Rippey, James G. (See Merrill and Rippey.)						
Rippke, Hermann, Ober-Fäschkittel, near Olbendorf, Prussia, Germany. Field-mouse trap ..	426,857	Apr. 29	3691	962	51	754
Rippon, Amos. (See McMann and Rippon.)						
Ripson, John D., Thorold, Ontario, Canada. Burial-casket	443,209	Dec. 23	2601	669	53	1795
Ripson, John D., assignor of one-half to W. A. Frazer, Suspension Bridge, N. Y. Burial-casket	420,920	Feb. 4	740	190	50	704
Ripson, John D., assignor of one-half to W. A. Frazer, Suspension Bridge, N. Y. Burial-casket. (Reissue)	11,075	May 6	764	189	51	963
Ris, Christoph, assignor to J. R. Geigy & Co., Basle, Switzerland. Yellow dye	440,281	Nov. 11	1009		53	814
Risch, Vincent M., assignor of one-half to T. G. Mason, Toronto, Canada. Wrest-plank for pianos	439,688	Nov. 4	95	25	53	626
Rischmuller, George, San Francisco, Cal. Safeguard for cable and horse cars	440,749	Nov. 18	1783	460	53	969
Risbel, George P., Hornellsville, N. Y. Fencing	438,183	Oct. 14	783	213	53	157
Rishel, John K., Hughesville, Pa. Bureau	422,315	Feb. 25	2773	730	50	1113
Risser, Elias E. (See Thome and Risser.)						
Rist, Joseph, Kansas City, Mo. Sad-iron	420,564	Feb. 4	193	50	50	602
Ristedt, Albert H., Niles, Ohio. Chimney	441,506	Nov. 25	3041	783	53	1214
Ritch, Milton M., Laurinburg, N. C. Burglar-alarm	421,315	Feb. 11	1319	341	50	822
Ritchey, William J., Pittsburg, Pa. Preparation of gas for gas-engines	420,235	June 17	1731	430	51	1826
Ritchie, Andrew M., Brookline, Mass. Galvanometer	437,868	Oct. 7	298	89	53	58
Ritchie, David A., Cambridge, Mass. Machine for trimming elbow-blanks	432,564	July 22	2373	611	52	488
Ritchie, David A., Cambridge, Mass. Wire-cutting machine	432,565	July 22	2374	612	52	483
Ritchie, Leroy, Fair Haven, Minn. Flour-chest	442,202	Dec. 9	901	240	53	1446
Ritchie, Samuel, assignor to Gale Manufacturing Company, Albion, Mich. Disk harrow ..	443,793	Dec. 30	3529	905	53	1982
Ritchie, Samuel S. (See Silver, Hugh, assignor.)						
Ritchie, William E., assignor to himself and C. J. Ryder, Patchogue, N. Y. Air-heating flame-bed pipe for steam-boilers	443,334	Dec. 23	2801	720	53	1833
Ritters Metallic Picket Fence Company. (See Gleason, Michael, assignor.)						
Rittenhouse, Benjamin F., Norristown, Pa. Molding machinery	427,708	May 13	1031	258 259	51	1024
Rittenhouse, Frank, Norristown, Pa. Machine for punching and shearing curved plates ..	424,222	Mar. 25	2787	743	50	1690
Rittenhouse, Nicholas M. (See Dunnett, William W., assignor.)						
Ritter, Christian, and A. W. Stange, Philadelphia, Pa. Bottle-filling device	437,000	Sept. 23	2600	680	52	1893
Ritter, John L., assignor of one-half to J. P. Brown, Shenandoah, Va. Crate	433,369	July 29	3615	933	52	730
Ritter, John L., assignor of one-half to J. P. Brown, Shenandoah, Va. Freight-car door ..	436,505	Sept. 16	1754	463	52	1725
Ritter, John L., assignor of one-half to J. P. Brown, Shenandoah, Va. Egg-tester	437,245	Sept. 30	2994	783	52	1975
Ritter, Reuben, Philadelphia, Pa. Lubricator attachment	436,438	Sept. 16	1655	435	52	1705
Rittersbach, George W., assignor of two-thirds to R. B. Rittersbach, Philadelphia, Pa. Rail-way-chair	420,167	Jan. 28	2297	608	50	483
Rittersbach, George W., assignor of one-third to R. B. Rittersbach, Philadelphia, Pa. Rail-way-chair	441,109	Nov. 18	2375	616	53	1081
Rittersbach, Robert B. (See Rittersbach, George W., assignor.)						
Ritty, Sebastian, Dayton, Ohio. Harrow	423,815	Mar. 18	2182	577	50	1566
Ritty, Sebastian, Dayton, Ohio, assignor to A. W. Stevens & Son, Auburn, N. Y. Spring-tooth harrow	419,971	Jan. 21	1981	521	50	414
River, Amos J., assignor of one-half to J. G. Kinnard, Gosford, Pa. Railway-switch	421,518	Feb. 18	1607	414	50	884
Rivers, Clando M. (See Rivers, Thomas L., assignor.)						
Rivers, David H., Thomaston, Me. Step for ships' ladders or fire-escapes	441,585	Nov. 25	3165	816	53	1238
Rivers, Thomas L., assignor of one-fourth to C. M. Rivers, Newark, N. J. Car-coupling ..	421,616	Feb. 18	1757	460	50	913
Rives, Franklin, Seattle, Wash. Protecting and preserving piles	441,584	Nov. 25	3164	815	53	1238
Rivett, Edward, Boston, Mass. Watchmaker's staking and punching tool	425,522	Apr. 15	1664	444	51	341
Rix, Benjamin F., Kalamazoo, Mich. Vehicle-spring	419,475	Jan. 14	1245	330	50	262
Rix, George K., Chicago, Ill., assignor to Barbee Wire and Iron Works, Lafayette, Ind. Wire desk-basket	423,181	Mar. 11	1251	326	50	1382
Rixey, P. M. (See Hawley, Henry, assignor.)						
Roach, John M., et al. (See Dotson, John W., assignor.)						
Roach, Robert P., Atwood, Tenn. Brick-mold sander	441,978	Dec. 2	540	145	53	1368
Roake, John S., New York, N. Y. Water heater and purifier	428,694	May 27	2536	641	51	1342
Roake, John S., Brooklyn, N. Y. Feed-water purifier	428,695	May 27	2537	644	51	1342
Roach, John W., Mason City, assignor to H. W. McFadden, Havana, Ill. Ditching-wheel ..	435,770	Sept. 2	601	160	52	1490
Roath, George H., Marietta, Pa. Steam-radiator	422,541	Mar. 4	254	65	50	1184
Roath, Levi H., et al. (See Bond, George W., assignor.)						
Robb, Eliakim T., Chester, assignor of one-half to L. Miller, Philadelphia, Pa. Hydraulic apparatus	433,822	Aug. 5	575	150 151	52	869

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Robb, Frank, St. Johns, Mich. Cross-head	442,137	Dec. 9	804	217	53	1427
Robb, James T. (See Little and Robb.)						
Robb, James T., Mount Vernon, assignor to Edison General Electric Company, New York, N. Y. Extension-electroliter	435,368	Aug. 26	2995	794	52	1361
Robb, Lucian B. (See Stevens, William E., assignor.)						
Robb, Russell, Boston, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding	434,468	Aug. 19	1565	407	52	1080
Robbins, Albert F. (See Miller, Edward B., assignor.)						
Robbins, Alfred, Andoversford, county of Gloucester, England. Axle-box	420,357	Jan. 28	2589	688	50	536
Robbins, Alfred A., Brooklyn, N. Y. Carboy-holder	437,455	Sept. 30	3347	876	52	2044
Robbins & Appleton. (See Hofmann, Adolph W., assignor.)						
Robbins, Arthur C., Brooklyn, N. Y. Electric protective system	419,710	Jan. 21	1585	423	50	335
Robbins, Arthur C., Brooklyn, assignor to W. S. Andrews, New York, N. Y. Telegraphic circuit	433,421	July 29	3687	952	52	746
Robbins, Charles D., <i>et al.</i> (See Pullman, Harry B., assignor.)						
Robbins, Edward P., Cincinnati, Ohio. Movable vehicle-step	438,021	Oct. 7	533	{ 149 150 }	53	101
Robbins, Frederick A. (See Gibbs, George, assignor.)						
Robbins, Frederick A., San Francisco, Cal. Machine for crimping the heads of metal cans. Robbins, Horace, <i>et al.</i> (See Hatfield and Chubb, assignors.)	424,133	Mar. 25	2669	710	50	1666
Robbins, John A., Springfield, Mass. Wire-bending tool	429,961	June 10	1300	321	51	1732
Robbins, Michael C., Freeman, Mo. Windmill	437,897	Oct. 7	341	99	53	66
Robbins, Richard B., Adrian, Mich. Fence-post	433,038	July 29	3141	807	52	635
Robbins, William U., La Prairie, Ill. Flood-gate	431,917	July 8	1379	350	52	278
Robert, Toussaint, Eadonia, Wash. Saw-guide	425,085	Apr. 8	1003	268	51	202
Roberts, Alfred B., <i>et al.</i> (See Bullock, Henry P., assignor.)						
Roberts, Andrew, Fonda, Iowa. Check-row attachment	442,641	Dec. 16	1579	408	53	1588
Roberts, Andrew M., Mitchell, Oreg. Tool for trimming horses' hoofs	427,115	May 6	145	38	51	840
Roberts, Charles V., Philadelphia, Pa. Filter	419,023	Jan. 7	568	143	50	120
Roberts, Cyrus, Three Rivers, Mich. Hand-car	429,962	June 10	1301	322	51	1732
Roberts, Cyrus, Three Rivers, Mich. Car-wheel	429,963	June 10	1302	322	51	1732
Roberts, Cyrus, Three Rivers, Mich. Car-wheel	430,886	June 24	2802	687	51	2040
Roberts, Cyrus, Three Rivers, Mich. Car-wheel	430,887	June 24	2803	687	51	2040
Roberts, De Witt C., Chicago, Ill. Making engravings	436,047	Sept. 9	1038	.....	52	1581
Roberts, Edward. (See Michaels and Baeder, assignors.)						
Roberts, Edward F., Rochester, N. Y. Igniting apparatus for gas-engines	424,027	Mar. 25	2519	670	50	1637
Roberts, Edward F., Rochester, N. Y. Dust-proof joint	425,050	Apr. 8	953	255	51	192
Roberts, Edward F., Rochester, N. Y. Electrical tell-tale device	427,014	Apr. 29	3906	1019	51	795
Roberts, Edward F., Rochester, assignor of one-half to T. R. Sully, Buffalo, N. Y. System of ventilating and heating cars. (Reissue)	11,054	Jan. 7	784	{ 207 208 }	50	163
Roberts, Edward F., Rochester, N. Y., assignor to Roberts Manufacturing Company. Detachable metallic pipe-coupling	431,196	July 1	243	62	52	51
Roberts, Edward F., Rochester, N. Y., assignor to Roberts Manufacturing Company, of Ohio. Car-brake	433,039	July 29	3142	808	52	636
Roberts, Edward F., Rochester, N. Y., assignor to Roberts Manufacturing Company, of Ohio. Air-brake	433,040	July 29	3143	808	52	636
Roberts, Edward M., Marion, Kans. Self-heating sad-iron	422,448	Mar. 4	126	34, 35	50	1161
Roberts, Frank C., Philadelphia, Pa. Pottery-kiln	434,953	Aug. 26	2364	626	52	1244
Roberts, Frank C., Philadelphia, Pa. Pottery-kiln	434,954	Aug. 26	2366	{ 626 627 }	52	1244
Roberts, Frank W., Haverhill, Mass. Thread holder and cutter for button-hole sewing machines	434,118	Aug. 12	1019	265	52	965
Roberts, Franklin E., Flint, Mich. Combined try-square and protractor	425,698	Apr. 15	1937	515	51	394
Roberts, George, Tacoma, Wash. Railway-track-laying machine	425,829	Apr. 15	2121	{ 566 567 }	51	430
Roberts, George, Ellensburg, Wash. Railway-track-laying machine	425,907	Apr. 15	2232	{ 592 593 }	51	449
Roberts, George C., Chicago, Ill., assignor to Troy Laundry Machinery Company, Troy, N. Y. Reversal gear	425,458	Apr. 15	1568	420	51	322
Roberts, George C., Chicago, Ill., assignor to Troy Laundry Machinery Company, Troy, N. Y. Belt-shifter	425,459	Apr. 15	1572	421	51	323
Roberts, George C., Chicago, Ill., assignor to Troy Laundry Machinery Company, Troy, N. Y. Ironing-machine	433,658	Aug. 5	323	83	52	819
Roberts, George C., Chicago, Ill., assignor to Troy Laundry Machinery Company, Troy, N. Y. Ironing-machine	436,192	Sept. 9	1265	330	52	1621
Roberts, George C., Chicago, Ill., assignor to Troy Laundry Machinery Company, Troy, N. Y. Reversing-gear	436,193	Sept. 9	1268	{ 330 331 }	52	1621
Roberts, George C., Chicago, Ill., assignor to Troy Laundry Machinery Company, Limited, Troy, N. Y. Tape-feed for mangles	436,265	Sept. 9	1368	357	52	1643
Roberts, George S. (See Cram and Roberts.)						
Roberts, Henry. (See Pease, Robert R., assignor.)						
Roberts, Henry, Pittsburg, Pa. Apparatus for heating continuous lengths of rods, wire, wire rods, &c.	423,445	Mar. 18	1637	{ 430 431 }	50	1463
Roberts, Henry, Pittsburg, Pa. Apparatus for coiling metal rods	426,067	Apr. 22	2498	659	51	509
Roberts, Henry P., Rochester, N. Y. Reversing-trolley	422,976	Mar. 11	944	248	50	1323
Roberts, Henry P., Jamestown, N. Y. Vaporizer	435,903	Sept. 2	820	{ 217 218 }	52	1534
Roberts, Humphrey, Jr., Waterman, Ill. Grain loader and weigher	418,751	Jan. 7	134	32	50	29
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Separating-diaphragm for electrolytic cells	442,203	Dec. 9	902	240	53	1446
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Diaphragm for electrolytic cells	442,204	Dec. 9	904	241	53	1446
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Electrolytic apparatus	442,332	Dec. 9	1097	288	53	1482
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Apparatus for use in electrotypes	442,333	Dec. 9	1099	288	53	1482
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Electrolytic apparatus	442,334	Dec. 9	1100	288	53	1483
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Treating asbestos	442,335	Dec. 9	1102	.....	53	1483
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Carbon electrode and making the same	442,336	Dec. 9	1103	288	53	1483
Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Electrolytic apparatus	442,396	Dec. 9	1188	309	53	1500

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Roberts, Isaiah L., Brooklyn, assignor of one-half to T. H. McGraw, Poughkeepsie, N. Y. Electrolytic apparatus	442,594	Dec. 9	1508	387	53	1565
Roberts, James W., Chillicothe, Mo. Fence	429,773	June 10	1004	246	51	1676
Roberts, John, assignor of two-thirds to H. H. and I. Redpath, Pittsburg, Pa. Electric cigar-lighter	435,668	Sept. 2	456	120	52	1462
Roberts, John B. (See Hathaway, Martin, assignor.)						
Roberts, John W., assignor of one-half to Sherwin-Williams Company, Cleveland, Ohio. Can-testing apparatus	423,083	Mar. 11	1102	288	50	1352
Roberts, Joshua B., Hanover, Me. Cutting-off saw	420,103	Jan. 28	2198	582	50	465
Roberts, Lewis A., Carbondale, Pa. Wick-raiser for lanterns	442,205	Dec. 9	906	241	53	1446
Roberts, Lewis A., Carbondale, and T. H. Watts, Scranton, Pa. Lighting device for lamps	429,642	June 10	817	199	51	1639
Roberts Manufacturing Company. (See Roberts, Edward F., assignor.)						
Roberts, Milton J., New York, N. Y. Corset and making the same	423,490	Mar. 18	1703	449	50	1477
Roberts, Milton J., New York, N. Y. Electro-osteotome	436,804	Sept. 23	2261	596 597	52	1828
Roberts, Nate H., assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw jointer and gage	422,316	Feb. 25	2775	730	50	1113
Roberts, Nate H., assignor to E. C. Atkins & Company, Indianapolis, Ind. Saw jointer and gage	424,998	Apr. 8	879	232	51	178
Roberts, Nate H., assignor to E. C. Atkins & Company, Indianapolis, Ind. Bucksaw-frame	424,999	Apr. 8	881	232	51	179
Roberts, Nate H., assignor to E. C. Atkins & Company, Indianapolis, Ind. Device for jointing and dressing saws	438,184	Oct. 14	784	213	53	157
Roberts, Robert R., assignor to R. Goldschmid, trustee, Washington, D. C. Fibrating-machine	418,899	Jan. 7	393	96	50	82
Roberts, Thomas A., et al. (See Holman, William L., assignor.)						
Roberts, Thomas H., Owen Sound, Ontario, Canada. Bowling-crease	425,551	Apr. 15	1701	454	51	349
Robertson, Archibald J., assignor of one-half to J. H. Vogt, Chicago, Ill. Means for cooling journals and boxes	434,995	Aug. 26	2421	640	52	1254
Robertson, Archibald J., assignor of one-half to J. H. Vogt, Chicago, Ill. Device for controlling the air about running belts	438,644	Oct. 21	1472	397	53	295
Robertson Brothers. (See Stellmann, Louis H., assignor.)						
Robertson, Edward G., Newark, N. J. Harness-saddle	423,574	Mar. 18	1821	480	50	1497
Robertson, Edwin, and J. M. Reese, Jr., Fairmount, Ill. Fence-post	426,472	Apr. 29	3108	815	51	642
Robertson, George. (See Mayo, Warren S., assignor.)						
Robertson, George A. W., Charlottetown, Prince Edward Island, Canada. Vehicle-gear	436,264	Sept. 9	1366	356	52	1642
Robertson, Henry H. (See Anderson, Henry C., assignor.)						
Robertson, Hollis C., et al. (See Brandeis, Louis, assignor.)						
Robertson, James, Birmingham, county of Warwick, England. Apparatus for making tubes, &c.	420,098	May 27	3144	810 811 812	51	1461
Robertson, James C., assignor of one-half to R. and R. E. Kerr, Philipsburg, Pa. Sled	419,562	Jan. 14	1354	362 363	50	285
Robertson, James H., Brooklyn, assignor to Writing Telegraph Company, New York, N. Y. Autographic telegraph	420,833	Feb. 4	589	151	50	676
Robertson, James H., Rutherford, N. J., assignor to Writing Telegraph Company, New York, N. Y. Central-office system for autographic telegraphs	425,086	Apr. 8	1004	268 269	51	202
Robertson, James L., New York, N. Y. Steam-separator	428,954	May 27	2914	747	51	1417
Robertson, James U. (See Buchholz, Gustav A., assignor.)						
Robertson, John, Pottsville, Pa. Guard-bolt for car-platforms	436,292	Sept. 9	1409	367	52	1651
Robertson, John D., San Francisco, Cal. Attaching addresses or labels to wrappers, envelopes, or publications	430,787	June 24	2647	649	51	2011
Robertson, John H., New York, N. Y. Means for releasing grips on cable cars	424,619	Apr. 1	282	73	51	57
Robertson, Soren, assignor of one-half to A. Everett, Cleveland, Ohio. Car-coupling	443,921	Dec. 30	3714	951	53	2018
Robertson, Thomas W. (See Ongley, Charles E., assignor.)						
Robertson, William C., New York, N. Y. Surface-printing	420,698	Feb. 4	378	.....	50	639
Robertson, William H., Allegheny, Pa. Type-writing machine	439,689	Nov. 4	96	25	53	627
Robey, James G., Greenville, Tex. Steam-engine	431,996	July 8	1500	379 380 381	52	302
Robichau, Mathurin C., San Francisco, Cal. Street-sweeping machine	427,795	May 13	1174	294 295	51	1052
Robie, Frederic H. (See Dean and Robie.)						
Robin, Thimotha. (See Crooks and Robin.)						
Robinson, Albert S. (See Stafford and Robinson.)						
Robinson, Andrew J. (See Shaw, Charles H., assignor.)						
Robinson, Andrew J., Boston, Mass. Detachable cover for umbrellas or parasols	422,632	Mar. 4	405	100	50	1214
Robinson, Andrew J., Boston, Mass. Grommet	422,633	Mar. 4	407	101	50	1214
Robinson, Andrew J., Boston, Mass. Assignor to F. P. Robinson Company, Portland, Me. Fastening for umbrella-tips and the like	435,979	Sept. 9	930	244	52	1560
Robinson, Arthur H., Minneapolis, Minn. Sporting calendar	432,838	July 22	2807	718 719	52	566
Robinson, Arthur W., Bucyrus, Ohio. Dredging-machine	428,141	May 20	1691	429	51	1161
Robinson, Arthur W., Bucyrus, Ohio. Excavating-machine	435,547	Sept. 2	255	71	52	1424
Robinson, Arthur W., Bucyrus, Ohio. Dredge-bucket chain	436,008	Sept. 9	968	253	52	1567
Robinson, Charles D., Manchester, N. H., assignor to G. Draper & Sons, Hopedale, Mass. Support for spinning spindles	420,565	Feb. 4	194	50	50	602
Robinson, Charles W., Roslindale, Mass. Railway-switch	423,084	Mar. 11	1104	288	50	1352
Robinson, Charles W., London, England. Stylographic pen	443,542	Dec. 30	3124	804	53	1904
Robinson, Clark, Hartley, Iowa, assignor to W. J. Abernethy, Minneapolis, Minn. Inside blind	435,669	Sept. 2	456	121	52	1462
Robinson, Clark, assignor of two-thirds to W. S. Fuller, J. M. Yeoman, J. W. Cravens, and F. Patch, Hartley, Iowa. Measuring-vessel	429,201	June 3	145	35	51	1499
Robinson Company, F. P. (See Robinson, Andrew J., assignor.)						
Robinson, Cyrus E., East Concord, N. H. Fire-hose support	425,256	Apr. 8	1262	337	51	255
Robinson, Darius S., Cleveland, Ohio, assignor of one-half to H. E. Gilmore, Minneapolis, Minn. Composition for paint	421,360	Feb. 11	1376	.....	50	831
Robinson, David, Reynolds, Ill. Railing for freight-cars	437,799	Oct. 7	196	60	53	39
Robinson, Deighton A. (See Simpson, John, assignor.)						
Robinson, Edgar, Cincinnati, Ohio. Collar	427,909	May 13	1318	340	51	1084
Robinson, Edward, St. Johns, Newfoundland. Apparatus for drying fish and other articles	432,900	July 22	2894	741 742	52	583
Robinson, Edward P., Somerville, Mass. Pop safety-valve	426,516	Apr. 29	3170	833	51	654

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Robinson, Edward W., Deering, Me., assignor of one-half to E. B. Welch, Cambridge, Mass. Barb for wire fences.....	421,055	Feb. 11	948	244	50	752
Robinson, Eugene, Detroit, Mich. Railway-track rail.....	429,868	June 10	1152	284	51	1703
Robinson, Everett S., Patchogue, N. Y. Tool-handle.....	420,699	Feb. 4	379	101	50	639
Robinson, Frank, Bangor, Me. Piston-throw indicator for air-brakes.....	437,800	Oct. 7	197	60	53	39
Robinson, Frank H., North East, Pa. Boring and turning machine.....	420,665	Feb. 4	335	87, 88	50	629
Robinson, Frank L., Caribou, Me. Plume.....	419,887	Jan. 21	1863	490	50	391
Robinson, Frederick R., and W. J. Morgan, Rochester, N. Y. Insole.....	429,480	June 3	578	141	51	1583
Robinson, George H., <i>et al.</i> , executors. (See Ericsson, John.).....						
Robinson, Henry A., Foxcroft, Me. Show-box.....	435,022	Aug. 26	2465	{ 652 653 }	52	1262
Robinson, Henry A., Foxcroft, Me. Show-box.....	435,023	Aug. 26	2465	653	52	1262
Robinson, Henry D., Chester, Ind. Twisting-wheel for fence-machines.....	422,977	Mar. 11	946	248	50	1324
Robinson, John, Sharptown, Md. Box-fastener.....	421,762	Feb. 18	1947	512	50	950
Robinson, John, Brooklyn, N. Y. Stencil.....	422,060	Feb. 25	2373	627	50	1039
Robinson, John, Detroit, Mich. Dope-cup.....	433,149	July 29	3311	855	52	669
Robinson, John M., Bayou La Chute, La. Insect-powder duster.....	439,563	Oct. 28	2935	786	53	577
Robinson, John R., <i>et al.</i> (See Wynn, Arthur E., assignor.).....						
Robinson, John R., New York, N. Y. Dumping-car.....	420,392	Jan. 28	2642	701	50	547
Robinson, Joseph, Maryport, county of Cumberland, England. Time-striking watch.....	425,582	Apr. 15	1749	468	51	357
Robinson, Lyman C., assignor of one-half to G. E. W. Marsden, Janesville, Wis. Let-off motion for looms.....	436,724	Sept. 16	2101	553	52	1790
Robinson, Major J., Marshfield, Wis. Buckle.....	432,147	July 15	1751	449	52	356
Robinson, Nelson, New York, N. Y. Ash-cart.....	433,823	Aug. 5	578	151	52	869
Robinson Radial Car Truck Company. (See Robinson, William, assignor.).....						
Robinson-Rea Manufacturing Company. (See Babbitt and Randolph, assignors.).....						
Robinson, Reuben N., Sidney, Ohio. Grain weighing and registering apparatus.....	422,542	Mar. 4	254	65	50	1135
Robinson, Robert J., and C. F. Collins, Linneus, Mo. Sickle-adjuster.....	430,754	June 24	2601	636	51	2001
Robinson, Robert J., and C. F. Collins, Linneus, Mo. Cutter-bar guide.....	434,469	Aug. 19	1567	407	52	1081
Robinson, Stillman W. (See Clarke and Robinson.).....						
Robinson, Stillman W., Columbus, Ohio, assignor to Wire Grip Fastening Company, Chicago, Ill. Peg.....	440,723	Nov. 18	1737	446	53	961
Robinson, Theodore D. (See Dusenbury, Richard H., assignor.).....						
Robinson, Thomas, Minneapolis, Minn. Window-screen.....	442,783	Dec. 16	1834	474	53	1638
Robinson, Thomas C., Boston, assignor of one-half to E. B. Welch, Cambridge, Mass. Feeding mechanism for sewing-machines.....	423,816	Mar. 18	2184	577	50	1567
Robinson, Thomas C., Boston, assignor of one-half to E. B. Welch, Cambridge, Mass. Sewing-machine.....	423,817	Mar. 18	2185	577	50	1567
Robinson, Walter, Onondaga, assignor of one-half to S. W. Terry, Syracuse, N. Y. Plastering composition.....	434,569	Aug. 19	1719	.....	52	1113
Robinson, Walter H., Hickson, assignor of one-half to M. P. Davies, Fargo, N. D. Combined sack-filler and scoop.....	438,948	Oct. 21	1973	526	53	327
Robinson, William, Boston, Mass. Electric railway.....	430,690	June 24	2485	607	51	1979
Robinson, William, Boston, Mass. Electric-motor car.....	436,440	Sept. 16	1660	{ 436 437 }	52	1706
Robinson, William, Boston, Mass., assignor to Robinson Radial Car Truck Company, Portland, Me. Street-car.....	435,123	Aug. 26	2614	692	52	1290
Robinson, William, Boston, Mass., assignor to Robinson Radial Car Truck Company, Portland, Me. Electric-motor car.....	436,439	Sept. 16	1656	{ 435 436 }	52	1705
Robinson, William, Boston, Mass., assignor to Robinson Radial Car Truck Company, Portland, Me. Electric-motor car.....	436,742	Sept. 16	2138	{ 562 563 }	52	1797
Robinson, William, Boston, Mass., assignor to Robinson Radial Car Truck Company, Portland, Me. Electric-motor car.....	436,743	Sept. 16	2141	{ 563 564 }	52	1797
Robinson, William H., Rochester, N. Y. Electric vote indicator and recorder for legislative bodies.....	420,964	Feb. 11	810	{ 210 211 }	50	726
Robinson, William J., Philadelphia, Pa. Bath-tub with folding wash-basin.....	431,285	July 1	381	96	52	78
Robinson, William N., Marion, Ohio. Oil-burner.....	438,645	Oct. 21	1473	398	53	296
Robinson, William W., Ripon, and W. S. Brockway, Milwaukee, Wis. Gage for gas-cocks.....	422,449	Mar. 4	128	35	50	1161
Robinson, Willis E., Faribault, Minn. Telephone-call register.....	433,307	July 29	3535	{ 912 913 }	52	715
Robinson, Zachariah. (See Hull, John, assignor.).....						
Robischung, Henry, Chicago, Ill., assignor, by mesne assignments, to Campbell Printing Press and Manufacturing Company, New York, N. Y. Means for holding printing-plates on cylindrical or flat surfaces.....	427,365	May 6	507	130	51	911
Robischung, Henry, Chicago, Ill., assignor, by mesne assignments, to Campbell Printing Press and Manufacturing Company, New York, N. Y. Means for holding printing-plates on cylindrical or flat surfaces.....	427,366	May 6	508	130	51	911
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Clamp for brake-beams.....	430,755	June 24	2602	637	51	2002
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Trussed brake-beam.....	430,756	June 24	2604	637	51	2002
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Strut for brake-beams.....	440,117	Nov. 4	734	194	53	752
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Trussed brake-beam.....	440,438	Nov. 11	1275	329	53	862
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Brake-beam.....	440,761	Nov. 18	1804	466	53	973
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Device for securing brake-heads to brake-beams.....	441,195	Nov. 25	2520	651	53	1119
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Device for securing brake-heads to brake-beams.....	442,138	Dec. 9	805	217	53	1427
Robison, Charles W. (See Bevington, James H., assignor.).....						
Robison, Edward J., <i>et al.</i> (See Hood and Jacob, assignors.).....						
Robison, Edward J., <i>et al.</i> (See Mats, John F., assignor.).....						
Robison, James T., Willoughby, Ohio. Basket-cover fastener.....	431,400	July 1	562	141	52	114
Robison, Joseph, Greenbush, assignor to R. J. Pratt, Greenbush Heights, N. Y. Machine for sawing metal.....	423,278	Mar. 11	1401	365	50	1409
Robison, Robert F., Kansas City, Kans. Brick-machine.....	419,972	Jan. 21	1982	521	50	415
Robitaille, Frank A., Rimini, Mont. Hoist.....	425,699	Apr. 15	1938	515	51	394
Roblee, Edwin H. (See Burrell and Roblee.).....						
Roby, William C., Holy Cross, Colo. Nut-lock.....	442,642	Dec. 16	1580	409	53	1588
Roche, David, Cleveland, Ohio. Car-coupling.....	443,794	Dec. 30	3530	905	53	1982
Roche, Edward, Providence, R. I. Composition for shoe-maker's wax.....	440,762	Nov. 18	1805	53	973

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Roche, W. W., <i>et al.</i> (See McDougald, Alexander, assignor.)						
Roche, William J., <i>et al.</i> (See Cairns, Samuel D., assignor.)						
Rocheleau, Jacques. (See Eberts, Herman F., assignor.)						
Rocheleau, Jacques, Windsor, Ontario, Canada. Door-bell.	425,908	Apr. 15	2238	593	51	451
Rocheleau, Jacques, Windsor, Ontario, Canada. Door-bell.	429,643	June 10	818	199	51	1640
Rochester Lasting Machine Company. (See Collyer, Charles W., assignor.)						
Rochester Machine Tool Works. (See Buckley, John, assignor.)						
Roehow, Ferdinand, assignor to R. Senftner, Brooklyn, N. Y. Station-indicator.	437,001	Sept. 23	2601	{ 680 681 }	52	1893
Rock, Frank, assignor of two-thirds to H. E. Barnard and W. L. Pattison, Plattsburg, N. Y. Ironing-table.	431,530	July 1	768	191	52	153
Rock, Frederick W., Detroit, Mich. Car-brake.	427,910	May 13	1349	341	51	1084
Rockafellow, Lewis H., Philadelphia, Pa. Key-turner for gas and electric lights.	443,543	Dec. 30	3125	804	53	1905
Rocker Spring Company. (See Bunker, William L., assignor.)						
Rocker Spring Company. (See Stevens, Asher B., assignor.)						
Rockett, Francis, assignor of one-third to O. M. Gregory, Bridgeport, Conn. Machine for covering dress-stays.	428,142	May 20	1693	429	51	1161
Rockett, Thomas T., Philadelphia, Pa. Furnace-grate.	436,194	Sept. 9	1273	{ 331 332 333 }	52	1622
Rockett, Thomas T., Philadelphia, Pa. Furnace-grate.	441,023	Nov. 18	2225	{ 574 575 }	53	1052
Rockford Bolt Works. (See Mutimer, Frederick, assignor.)						
Rockingham Machine Company. (See Fowler, Warren, and Evans, assignors.)						
Rockwell, Albert F., assignor to New Departure Bell Company, Bristol, Conn. Call-bell.	426,330	Apr. 22	2880	758	51	588
Rockwell, Albert F., assignor to New Departure Bell Company, Bristol, Conn. Door-bell mechanism.	430,040	June 10	1424	{ 353 354 }	51	1756
Rockwell, Albert F., Bristol, Conn., assignor to New Departure Bell Company. Door-bell mechanism.	431,918	July 8	1380	350	52	278
Rockwell, Albert F., assignor of one-half to L. R. Tuttle, Jacksonville, Fla. Life-saving apparatus.	434,725	Aug. 19	1985	517	52	1162
Rockwell, Arthur E. (See Rockwell, Oscar B. and A. E.)						
Rockwell, Edward D., Bristol, Conn. Clip or paper-holder.	426,216	Apr. 22	2727	714	51	554
Rockwell, Edward D., Bristol, Conn. Clip or paper-holder.	443,210	Dec. 23	2603	670	53	1796
Rockwell, Frederick C. (See Furlong, Lawrence, assignor.)						
Rockwell, Frederick C., Hartford, Conn. Incandescent-lamp socket.	422,634	Mar. 4	407	101	50	1214
Rockwell, Frederick C., Hartford, Conn. Incandescent lamp.	430,437	June 17	2067	510	51	1891
Rockwell, Frederick C., Hartford, Conn. Incandescent lamp.	430,485	June 17	2139	526	51	1905
Rockwell, Frederick C., Hartford, Conn. Incandescent-lamp socket.	435,024	Aug. 26	2466	653	52	1263
Rockwell, Oscar B. and A. E., San Pierre, Ind. Land-marker.	429,481	June 3	579	141	51	1583
Rockwell, Warren C., Mount Carmel, Pa. Miner's-lamp holder.	430,691	June 24	2487	607	51	1979
Rockwood, George G., New York, N. Y., and H. B. Shallenberger, Rochester, Pa. Panoramic camera.	441,704	Dec. 2	119	32	53	1285
Roddey, William L. (See Neely, Samuel M., assignor.)						
Rodecap, Conrad S. (See Rodecap, George W., assignor.)						
Rodecap, George W., assignor of one-half to C. S. Rodecap, Middletown, Ind. Folding bedstead.	434,887	Aug. 19	2235	586	52	1212
Rodenhausen, Leonhard, Philadelphia, Pa. Dumping-wagon.	421,143	Feb. 11	1068	{ 274 275 }	50	776
Roderick, Joseph. (See Taylor and Roderick.)						
Rodey, Bernard S., <i>et al.</i> (See Bibikov, Nicholas A., assignor.)						
Rodey, Bernard S., <i>et al.</i> (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Rodgers, Alexander, Muskegon, Mich. Band-saw mill.	428,785	May 27	2673	678	51	1368
Rodgers, John N., <i>et al.</i> (See Rodgers, William N., assignor.)						
Rodgers, William N., assignor of two-thirds to J. N. Rodgers and H. A. Davis, Waverly, Kans. Buckle.	438,242	Oct. 14	875	237	53	173
Rodiger, William, Chicago, Ill. Inkstand or bottle.	438,898	Oct. 21	1900	505	53	373
Rodman, James A., Hickman Mills, Mo. Spring for vehicles.	437,405	Sept. 30	3255	848	52	2024
Rodman, Walter C., administrator. (See Garrett, Gilbert H.)						
Rodwell, George J. B., assignor of one-half to Bertram & Co., Toronto, Ontario, Canada. Machine for preparing the surface of steel for etching.	429,644	June 10	819	200	51	1640
Roe, Alpheus E., assignor to Vulcan Iron Works, San Francisco, Cal. Gang-edger.	431,483	July 1	694	{ 173 174 }	52	139
Roe, John P., Upper Tooting, England. Apparatus for transporting loads by means of traveling ropes or cables.	438,949	Oct. 21	1974	{ 526 527 }	53	387
Roe, John P., Oshkosh, Wis. Weeder.	442,918	Dec. 16	2079	534	53	1685
Roe, Justus, Patchogue, N. Y. Protractor.	431,484	July 1	696	{ 174 175 }	52	140
Roe, William J., Florida, N. Y. Checkrein-hook.	421,435	Feb. 18	1481	384	50	861
Roe, William J., Bostwick, Nebr. Cultivator.	438,447	Oct. 14	1177	319	53	231
Roebuck, Thomas G., Jersey City, N. J., assignor to Insulite Manufacturing Company, New York, N. Y. Incandescent-lamp socket.	433,698	Aug. 5	379	97	52	830
Roedell, Frederick H., Minneapolis, Minn. Caster.	428,143	May 20	1694	430	51	1161
Roehl, Carl, Chicago, Ill. Flour, meal, or bran packer.	429,645	June 10	820	200	51	1640
Röell, Cornelis F. A., London, England. Automatic candle-extinguisher.	434,297	Aug. 12	1294	336	52	1019
Röell, Cornelis F. A., London, England. Automatic candle-extinguisher and shado-holder.	434,298	Aug. 12	1296	337	52	1019
Roemer, Adolph, and F. W. Roll, Milwaukee, Wis. Stopper for bottles.	436,569	Sept. 16	1861	490	52	1743
Roemer, Hermann. (See de Kinder and Roemer.)						
Roemer, Thomas R., assignor, by mesne assignments, to J. H. Brookmire, St. Louis, Mo. Seal-lock.	426,961	Apr. 29	3822	999	51	780
Roemer, William, Newark, N. J. Satchel and frame therefor.	427,796	May 13	1177	295	51	1052
Roemmele, Julius, Freiburg, Baden, Germany. Key for shafting.	423,701	Mar. 18	2027	535	50	1536
Roepke, Carl A., Manchester, England. Musical box.	443,114	Dec. 23	2414	{ 616 617 }	53	1758
Roeppe, Charles W., Alliance, Ohio. Brake-shoe.	423,818	Mar. 18	2186	578	50	1567
Roeppe, Charles W., Alliance, Ohio. Brake-shoe.	423,819	Mar. 18	2187	578	50	1567
Roeppe, Charles W., Alliance, Ohio. Brake-shoe.	423,820	Mar. 18	2188	578	50	1567
Roeppe, Charles W., Alliance, Ohio. Brake-shoe.	426,068	Apr. 22	2499	660	51	509
Roeske, Henry, Philadelphia, Pa. Hydraulic motor.	424,223	Mar. 25	2789	744	50	1690
Roeske, Henry, Philadelphia, Pa. Filter.	442,397	Dec. 9	1190	309	53	1500
Rogers, Andrew W., assignor to S. W. Winslow, trustee, Beverly, Mass. Buffer.	421,763	Feb. 18	1948	512	50	950
Rogers, Andrew W., assignor to S. W. Winslow, trustee, Beverly, Mass. Buffer.	421,764	Feb. 18	1950	513	50	950
Rogers, Andrew W., assignor to S. W. Winslow, trustee, Beverly, Mass. Buffer.	425,632	Apr. 15	1838	491	51	375
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Dividing rods of metal and at the same time pointing and threading the adjacent ends thereof.	429,388	June 3	441	104	51	1555

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Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Rolled wood-screw	430,236	June 17	1732	430	51	1826
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Die for rolling screw-threads	430,237	June 17	1734	431	51	1826
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Wood-screw	434,809	Aug. 19	2103	551	52	1187
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Rolled wood-screw	438,754	Oct. 21	1666	447	53	330
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Die for rolling wood-screws	440,329	Nov. 11	1079	278	53	827
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Die for making rolled wood-screws	440,330	Nov. 11	1081	278	53	827
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Die for making screw-bolts	440,331	Nov. 11	1083	278	53	827
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Die for making rolled wood-screws	440,332	Nov. 11	1084	278	53	827
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Die for making rolled wood-screws	440,333	Nov. 11	1085	279	53	827
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Rolled wood-screw	440,334	Nov. 11	1087	279	53	828
Rogers, Charles S., Fort Reno, Ind. Ter. Flour-safe	423,955	Mar. 25	2412	640	50	1617
Rogers, Charles S., assignor of one-third to W. Freeman, Kansas City, Mo. Adjustable head-rest	426,069	Apr. 22	2500	660	51	509
Rogers & Co., C. B. (See Tompkins, Daniel D., assignor.)						
Rogers, David D., Daytona, Fla. Grading and leveling instrument	419,711	Jan. 21	1587	424	50	335
Rogers, Ebenezer H., Jr., Brooklyn, N. Y. Hand or other stamping mechanism	424,502	Apr. 1	97	28	51	22
Rogers, Ethan, Ballston, N. Y. Apparatus for burning hydrocarbon oils	428,353	May 20	2017	507	51	1225
Rogers, Ethan, Ballston Spa, N. Y. Hydrocarbon-burner	434,810	Aug. 19	2104	551	52	1187
Rogers, Grafton L., et al. (See Pinkham, Edwin, assignor.)						
Rogers, Hannah E., Portland, Me. Abdominal supporter	433,370	July 29	3617	933	52	731
Rogers, Harry, et al. (See Pinkham, Edwin, assignor.)						
Rogers, Henry G. (See Coyle, Andrew M., assignor.)						
Rogers Iron Manufacturing Company. (See Mee, Gilbert, assignor.)						
Rogers, James H., Bladensburg, Md., assignor to Visual Synchronism Company, of West Virginia. Printing instrument or apparatus for telegraphic or other uses	420,358	Jan. 28	2590	688 689 350 351	50	537
Rogers, James W., Kingsmill, Ontario, Canada. Combined drill, seeder, and cultivator	431,919	Feb. 8	1331	351	52	278
Rogers, John A., and A. A. Oden, Hartsell's, Ala. Railway-signal	422,158	Feb. 25	2523	667	50	1066
Rogers, John D., Hope, Ark. Churn	419,888	Jan. 21	1864	470	50	391
Rogers, John F., Belfast, Me. Vamp-marking machine	429,389	June 3	443	104	51	1555
Rogers, John G. (See More and Rogers.)						
Rogers, John M., Powellville, S. C. Spring-propelled vehicle	424,903	Apr. 1	724	193 194 731 732 733 734	51	140
Rogers, John R., Cleveland, Ohio, assignor to Rogers Typograph Company, Jersey City, N. J. Typograph	437,139	Sept. 23	2811	732 733 734	52	1935
Rogers, Joseph C., et al. (See Lawton, Charles H., assignor.)						
Rogers, Lebbeus H., New York, N. Y. Multiple slip	419,359	Jan. 14	1076	284	50	227
Rogers, Lebbeus H., New York, N. Y. Carbolized sheets for manifolding	427,015	Apr. 29	3907	1019	51	795
Rogers, Lebbeus H., assignor to Rogers Manifold and Carbon Paper Company, New York, N. Y. Inking-ribbon for type-writers	420,312	Jan. 28	2526	670	50	525
Rogers, Lewis B., Mount Vernon, N. Y. Wabble-saw	425,700	Apr. 15	1940	515	51	395
Rogers Liquid Meter Company. (See Rogers, Richard J., assignor.)						
Rogers, Louis P., and J. Hofman, Rochester, N. Y. Transporting-receptacle	440,885	Nov. 18	2009	517	53	1011
Rogers Manifold and Carbon Paper Company. (See Rogers, Lebbeus H., assignor.)						
Rogers, Marcus A., Canton, Ill. Feed-trough	420,168	Jan. 28	2298	608	50	483
Rogers, Nathan F., Dennis, Mass. Portable dock	431,675	July 8	1009	251	52	207
Rogers, Newton, and J. A. Wharry, Terre Haute, Ind. Hydrocarbon-furnace	427,367	May 6	509	130	51	912
Rogers, Oscar W., West Union, Iowa. Genealogical chart	432,148	July 15	1752	450	52	356
Rogers, Philip, Swansea, and J. Player, Clydach, county of Glamorgan, England. Automatic machine for coating metal sheets with tin, &c.	426,962	Apr. 29	3824	999 1000 226	51	780
Rogers, Richard J., Chelsea, Mass., assignor to Rogers Liquid Meter Company, Portland, Me. Oscillating water-meter	431,622	July 8	904	227	52	188
Rogers, Samuel T. (See Bliss, Francis D., assignor.)						
Rogers, Seth, Ballston Springs, N. Y. Hatchet	420,104	Jan. 28	2199	582	50	466
Rogers, Thomas, Bournemouth, county of Hants, England. Cooking-range	429,546	June 3	673	164 165	51	1601
Rogers, Thomas J., Searcy, Ark. Subsoiler and bush-puller	425,460	Apr. 15	1574	421	51	323
Rogers, Thompson T., Perry, Mo. Sleigh-runner for wheeled vehicles	432,083	July 15	1642	421	52	335
Rogers, Timothy, assignor of one-half to H. Voll, Springfield, Ohio. Wind-engine	427,911	May 13	1351	341	51	1085
Rogers Typograph Company. (See Bright, Fred E., assignor.)						
Rogers Typograph Company. (See Rogers, John R., assignor.)						
Rogers, William, Pittsburg, Pa. Device for sealing the joints of gas-pipes	418,752	Jan. 7	135	33	50	30
Rogers, William, Hartford, Conn. Making spoons and forks	424,503	Apr. 1	98	28	51	22
Rogers, William A., Amoret, Mo. Hand-truck	432,566	July 22	2375	612	52	483
Rogers, William H., Whitmore, Ohio. Fence-post	429,547	June 3	676	165	51	1602
Rogers, William H., Kingston, Ontario, Canada. Axle for vehicles	430,438	June 17	2068	511	51	1891
Rogers, William S., assignor to himself and J. Copp, Los Angeles, Cal. Printer's galley	421,617	Feb. 18	1758	460	50	913
Rogier, Charles G. (See Roxer, Gustav, assignor.)						
Rohm, Jacob M., Gapsville, Pa. Kettle-supporter	425,701	Apr. 15	1941	516	51	395
Rohme, James H., Newburg, N. Y. Belt-shifting and brake mechanism for sewing-machines	428,859	May 27	2781	707	51	1390
Rohrbach, Gabriel, Del Rio, Tex. Gate-latch	433,492	Aug. 5	77	23	52	772
Rohrbach, Gabriel, and J. Shaughnessy, Del Rio, Tex. Track-walker's tool	441,979	Dec. 2	542	145	53	1369
Rohrer, Albert L. (See Thomson and Rohrer.)						
Rohrer, Henry, Lancaster, Pa. Umbrella drip-cup	425,109	Apr. 8	1033	276	51	208
Rohrman, Theodore A., Philadelphia, Pa. Hammock-supporting structure	443,544	Dec. 30	3126	804 805	53	1905
Rohrmoser, Hans T., Hoboken, N. J. Apparatus for cutting ludes into strips	435,381	Aug. 26	3021	799	52	1366
Rojo, Frank C., New Orleans, La. Axle-box	435,124	Aug. 26	2615	692	52	1291
Rolfe, Abial W. (See Rolfe, Arthur F., J. H., A. W., and C. M.)						
Rolfe, Arthur F., J. H., A. W., and C. M., Peacock, N. H. Coin-envelope	426,331	Apr. 22	2881	758	51	588
Rolfe, Charles M. (See Rolfe, Arthur F., J. H., A. W., and C. M.)						
Rolfe, Frank S., Claremont, N. H. Sand-band	419,829	Jan. 21	1865	490	50	391

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Rolfe, Joseph H. (See Rolfe, Arthur F., J. H., A. W., and C. M.)						
Roll Fred W. (See Roemer and Roll.)						
Roller Bearing Axle Company. (See Barney, Henry, assignor.)						
Roller-Bearing Axle Company. (See Barney and Rahn, assignors.)						
Roller-Bearing Axle Company. (See Hardy Lewis W., assignor.)						
Roller, William. (See Myrick and Roller.)						
Rollert, Anton J. (See Fischer and Rollert.)						
Rollert, Anton J., assignor to T. A. Kochs, Chicago, Ill. Barber's chair.	437,456	Sept. 30	3348	876	52	2044
Rollings, Eliphalet J., assignor of two-thirds to L. C. Rollings and J. M. Cloud, Mobile, Ala. Printer's chase.	435,771	Sept. 2	602	160	52	1490
Rollings, Lewis C., <i>et al.</i> (See Rollings, Eliphalet J., assignor.)						
Rollins, Frank D. (See Ramey and Rollins.)						
Rollins, Franklin J. (See Mitchell, John B., assignor.)						
Rollins, John B., Carrollton, Ky. Sawing-machine.	442,398	Dec. 9	1191	309	53	1501
Rolls, Caroline C. (See Rolls, Edwin C., assignor.)						
Rolls, Edwin C., Chatham, Ontario, Canada. Mop and wringer.	432,806	July 22	2769	709	52	558
Rolls, Edwin C., assignor to C. C. Rolls, Chatham, Ontario, Canada. Combined mop and wringer.	428,696	May 27	2539	645	51	1342
Romaine, Worthington D., Cincinnati, Ohio. Perpetual calendar.	424,356	Mar. 25	3001	797	50	1730
Romans, Squire P. (See Kidd, Edward Z., assignor.)						
Romer, Jesse F., assignor of one-half to M. F. Warren, Buffalo, N. Y. Curtain-fixture.	439,848	Nov. 4	328	84	53	672
Romme, William S., Brooklyn, N. Y., assignor to A. H. Woodall, Eekington, D. C. Attachment for type-writers.	441,705	Dec. 2	121	33	53	1286
Rommenhöller, Carl G., <i>et al.</i> (See Schmitt, Johann, assignor.)						
Romshe, John, Lima, Ohio. Attachment for churns.	431,234	July 1	310	76	52	62
Ronayne, Thomas H., <i>et al.</i> (See Goss, Charles E., assignor.)						
Rondinella, Lino F., Philadelphia, Pa. Plotter.	434,073	Aug. 12	939	246	52	950
Roney John H., <i>et al.</i> (See Dain, Albert E., assignor.)						
Roney, William R., Chicago, Ill., assignor to Westinghouse, Church, Kerr & Company. New York, N. Y. Furnace-grate.	429,797	June 10	1038	255	51	1681
Ronk, Joel, Bucyrus, Ohio. Car-coupling.	438,258	Oct. 14	894	243	53	177
Rood, Ashel G. (See Moyer, Henry L., assignor.)						
Rooney, Gasper S., assignor of one-half to J. B. Condron, Hollidaysburg, Pa. Carpet-sweeper.	437,349	Sept. 30	3158	827	52	2006
Rooney John, <i>et al.</i> (See Booth, Walter W., assignor.)						
Rooney, Legora, Janesville, Wis. Check-book.	428,320	May 20	1968	494	51	1214
Rooney, Michael. (See Huntley, Hosea H., assignor.)						
Roop, Jacob W. (See Boggs, Joseph O., assignor.)						
Rorbach, William L., and G. W. Tucker, Philadelphia, Pa. Bottle-stopper.	429,482	June 3	581	142	51	1583
Roos, Mathias, Chicago, Ill. Ironing-table.	419,797	Jan. 21	1712	454	50	360
Roos, William A., New York, N. Y. Desk and its supports.	432,901	July 22	2895	742	52	584
Root, Charles A., Brooklyn, assignor to W. P. Ward, New York, N. Y. Door-closer.	441,899	Dec. 2	424	113	53	1348
Root, Esther A., administratrix. (See Root, Franklin.)						
Root, Frank H. (See Bell and Root.)						
Root, Franklin, deceased; E. A. Root, Hartford, Conn., administratrix. Curtain-fixture.	424,224	Mar. 25	2789	744	50	1690
Root, Howard C., Brooklyn, N. Y. Automatic toll system for telephone pay-stations.	440,118	Nov. 4	734	194 195	53	752
Root, Watson R., Canton, assignor to Upson Nut Company, Farmington, Conn. Machine for lining rules.	423,446	Mar. 18	1639	431 432	50	1464
Root, Watson R., Canton, assignor to Upson Nut Company, Farmington, Conn. Sandpapering-machine.	443,795	Dec. 30	3531	905 906	53	1982
Roots, Francis T. (See Heinemann, Theodore P., assignor.)						
Roots, James, Westbourne Park, county of Middlesex, England. Petroleum-engine.	425,909	Apr. 15	2239	593 594	51	451
Roovers, Alexander H. (See Roovers, Alfred W. and A. H.)						
Roovers, Alfred W. and A. H., Brooklyn, N. Y. Coin-operated power or strength-testing machine.	423,702	Mar. 18	2028	535	50	1536
Roovers, Alfred W. and A. H., Brooklyn, N. Y. Coin-controlled strength-testing machine.	434,608	Aug. 19	1783	465	52	1125
Roovers, Alfred W. and A. H., Brooklyn, N. Y. Coin-controlled microscope.	439,189	Oct. 28	2338	629 630	53	464
Roovers, Alfred W. and A. H., Brooklyn, N. Y. Coin-controlled microscope.	439,100	Oct. 23	2740	630	53	465
Roovers, Louis, Brussels, Germany. Valve.	419,076	Jan. 7	645	167	50	136
Roper, James W., <i>et al.</i> (See Lee and Reed, assignors.)						
Roper, Sylvester H., Boston, Mass. Fire-escape.	439,191	Oct. 23	2343	630	53	465
Roraback, Edwin C., Saginaw, Mich. Grater.	438,588	Oct. 14	1378	374	53	272
Rorke, Edward A., Brooklyn, N. Y. Buffer for store-service apparatus.	426,548	Apr. 29	3920	844	51	663
Rorke, Edward A., Brooklyn, N. Y. Switch for store-service railways.	429,646	June 10	823	201	51	1640
Rorke, Edward A., Brooklyn, N. Y. Elevator for store-service apparatus.	431,723	July 8	1181	296	52	239
Rosa, Albert, assignor to J. A. Zinns, Milwaukee, Wis. Sad-iron.	429,202	June 3	146	35	51	1499
Rosback, Fredrick P., Chicago, Ill. Perforator.	421,765	Feb. 18	1950	513 514	50	931
Rosback, Fredrick P., Chicago, Ill. Book-stapling machine.	435,614	Sept. 2	365	99 100	52	1444
Rosborough, Joseph W., Normandy, Tenn. Water elevator and carrier.	437,246	Sept. 30	2996	783 784	52	1976
Rösch, Andrew J. (See Rösch, J. Edward and A. J.)						
Rösch, J. Edward and A. J., St. Louis, Mo. Combined matting-machine, easel, and table.	421,973	Feb. 25	2250	591 592	50	1016
Rose, Charles P., Mnskegon, Mich. Gang-saw book and stirrup.	432,567	July 22	2376	612	52	484
Rose, Edward P. (See Bryant, Emory A., assignor.)						
Rose, George, Glasgow, county of Lanark, Scotland, assignor of one-half to J. Sinclair, London, England. Lamp.	427,912	May 13	1352	341	51	1085
Rose, George L. (See Rose, Henry M. and G. L.)						
Rose, George M., assignor to M. B. Rose, Fargo, N. D. Disintegrating fibrous substances.	429,647	June 10	824	51	1641	
Rose, Henry C., Leadville, Colo. Fire-escape.	432,159	Feb. 25	2524	667	50	1067
Rose, Henry J. F., High Bluff, Manitoba, Canada. Wash-boiler.	430,486	June 17	2140	526	51	1905
Rose, Henry M. and G. L., Waterman, Ill. Disk cultivator.	435,655	Sept. 2	437	117	52	1458
Rose, Horatio, Glen Cove, Tex. Washing-machine.	422,160	Feb. 25	2526	668	50	1067
Rose, Howard A., Syracuse, Nebr. Hog-trough.	413,228	Dec. 23	2630	675	53	1800
Rose, James, <i>et al.</i> (See Shubert, Harold C., assignor.)						
Rose, James M., Allegheny, Pa. Apparatus for the manufacture of gas.	428,955	May 27	2915	747	51	1417
Rose, James M., Allegheny, Pa. Apparatus for the manufacture of gas.	428,956	May 27	2918	748	51	1418
Rose, John, Philadelphia, Pa. Umbrella-runner retainer.	427,368	May 6	510	130	51	912

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Rose, John H., Lima, Ohio. Fare-register.....	436,805	Sept. 23	2365	{ 597 598 }	52	1829
Rose, Joseph, Memphis, Tenn. Spring bed-bottom.....	419,218	Jan. 14	862	226	50	184
Rose, Joseph W., and C. C. Balston, Brooklyn, N. Y. Nursing-bottle.....	420,965	Feb. 11	813	211	50	727
Rose, Joshua, Twickenham, England. Steam-engine valve.....	440,965	Nov. 18	2143	{ 555 556 }	53	1036
Rose, Lucious G., and D. S. Mooers, Fort Ripley, Minn. Rut-cutter for logging-roads.....	438,829	Oct. 21	1792	478	53	353
Rose, Myra B. (See Rose, George M., assignor.)						
Rose, Preston B., Ann Arbor, Mich. Manufacture of fertilizers.....	438,646	Oct. 21	1474	.....	53	296
Rose, Tom K. (See Dennes and Rose.)						
Rose, Walter A., et al. (See Haines and Curry, assignors.)						
Rose, William, Lerado, Kans. Device for leveling railways.....	420,245	Jan. 28	2431	647	50	507
Rose, William P. Ayr, N. D. Screening and loading attachment for thrashing machines..	420,966	Feb. 11	814	211	50	727
Rose, William P., assignor to R. A. Miller, R. H. McCann, G. A. Chilton, and W. H. Neil, Dublin, Tex. Tobacco substitute.....	440,506	Nov. 11	1386	.....	53	884
Rosebrugh, Abner M., Toronto, Canada. Induced-current telegraph.....	440,199	Nov. 11	867	{ 223 224 }	53	789
Rosebrugh, Abner M., Toronto, Canada, assignor to American Bell Telephone Company, Boston, Mass. Multiple telegraph or telephone.....	442,139	Dec. 9	806	217	53	1427
Rosekrans, Thomas, Esopus, N. Y. Harness.....	424,225	Mar. 25	2790	744	50	1690
Rosen, Gus A., Louisville, Ky., assignor to J. C. Pennie, Washington, D. C. Druggist's bottle-case.....	425,523	Apr. 15	1665	444	51	341
Rosenbaum, William A. (See Collins, William F., assignor.)						
Rosenburg, Albert, Baltimore, Md. Mechanical call-bell and annunciator.....	423,345	Mar. 11	1489	390	50	1427
Rosenfeld, Jesse. (See Rosenfeld, Leo, assignor.)						
Rosenfeld, Leo, Baltimore, Md. Fastener for hats or bonnets.....	437,046	Sept. 23	2664	696	52	1906
Rosenfeld, Leo, assignor to J. Rosenfeld, Baltimore, Md. Fastener for hats or bonnets.....	437,045	Sept. 23	2663	696	52	1906
Rosenfeld, Abraham. (See Cook, Gustave, assignor.)						
Rosenfeld, Anthony. (See Rosenfeld, William W., assignor.)						
Rosenfeld, William W. (See Kennedy, Diss, and Rosenfeld.)						
Rosenfeld, William W., New York, N. Y., assignor, by mesne assignments, to Sanitary Supply Company of New York. Plumber's trap.....	419,219	Jan. 14	864	227	50	185
Rosenfeld, William W., Brooklyn, assignor to A. Rosenfeld, New York, N. Y. Apparatus for detecting leaks in pipes.....	429,286	June 3	265	64, 65	51	1522
Rosenstock, Moritz, New York, N. Y. Suspenders.....	421,519	Feb. 18	1608	415	50	825
Rosenstock, Moritz, New York, N. Y. Shirt.....	421,520	Feb. 18	1610	415	50	825
Rosenthal, Adolph, Augusta, Ga. Baby-walker.....	427,116	May 6	146	38	51	840
Rosenthal, August, Milwaukee, Wis. Combined feed-cutter and corn-husker.....	440,818	Nov. 18	1905	489	53	990
Rosenthal, Philipp. (See Wegener, Carl, assignor.)						
Rosewater, Andrew, Omaha, Nebr. Flushing-tank.....	428,254	May 20	1859	{ 466 467 }	51	1193
Rosewater, Andrew, Omaha, Nebr. Flushing-tank.....	428,957	May 27	2922	{ 748 749 }	51	1418
Rosewater, Frank, Cleveland, Ohio. Pen-rack or easel.....	438,185	Oct. 14	785	214	53	157
Rösing, Bernhard, Friedrichshütte, near Tarnowitz, Prussia, Germany. Flue-dust collector.....	432,440	July 15	2168	559	52	434
Roskilly, Jonas. (See Le Roy, Charles J., assignor.)						
Roskoph, Moses. (See Koehler and Roskoph.)						
Ross, Alfred, Wichita, Kans. Apparatus for checking horses.....	425,633	Apr. 15	1839	492	51	375
Ross, Archibald A., Harrison Valley, Pa., and E. S. Chatfield, Addison, N. Y. Wagoubrake.....	429,062	May 27	3090	797	51	1449
Ross, Augustus, assignor to M. B. Wallace, St. Louis, Mo. Adjustable binder for books, pamphlets, &c.....	442,206	Dec. 9	906	241	53	1446
Ross, Charles F. (See Blandon, Ross, and Lummi.)						
Ross, Charles H., Boston, Mass. Boiler.....	421,194	Feb. 11	1148	293	50	790
Ross, Charles J., Springfield, Ill. Scissors-holder.....	438,987	Oct. 7	642	175	53	124
Ross, D. C. H. (See Carmody, John T., assignor.)						
Ross, Duane A., Ilion, N. Y. Crate.....	426,858	Apr. 29	3692	963	51	754
Ross, Eliza J., administratrix. (See Ross, Robert.)						
Ross, Elmore W., Springfield, Ohio. Feed-cutter.....	439,429	Oct. 28	2741	{ 731 732 }	53	539
Ross, Friedrich, and A. Frauen, Vienna, Austria-Hungary. Motor for electric regulating apparatus.....	421,195	Feb. 11	1150	294	50	791
Ross, George, South Butte, Mont. Dumping-car.....	420,105	Jan. 28	2200	582	50	466
Ross, George B., Buffalo, N. Y. Hypodermic syringe.....	422,450	Mar. 4	128	35	50	1161
Ross, George W. (See White, Maurice W., assignor.)						
Ross, James P. (See Stevens, Charles W., assignor.)						
Ross, John, assignor of one-half to G. King, Blythe, Canada. Reaper and mower knife sharpener.....	440,119	Nov. 4	737	195	53	753
Ross, John H., and E. E. Atkins, Birmingham, county of Warwick, England. Overhead oil-lamp.....	422,836	Mar. 4	695	{ 177 178 }	50	1270
Ross, John H., and E. E. Atkins, Birmingham, county of Warwick, England. Overhead oil-lamp.....	422,837	Mar. 4	697	178	50	1271
Ross, John K., Newark, N. J. Button-hole strip.....	437,457	Sept. 30	3349	876	52	2044
Ross, John K., Newark, N. J. Corset.....	439,690	Nov. 4	96	25	53	627
Ross, Josiah, Buffalo, N. Y. Drilling-machine.....	441,900	Dec. 2	425	113	53	1348
Ross-Moyer Manufacturing Company. (See Ross, Simon, Jr., assignor.)						
Ross, Noble G., Centre, assignor to Cyclone Manufacturing Company, New London, Mo. Apparatus for moving straw, &c.....	424,433	Mar. 25	3148	{ 834 835 }	50	1760
Ross, Noble G., Centre, assignor to Cyclone Manufacturing Company, New London, Mo. Grain-scale.....	433,422	July 29	3689	{ 952 953 }	52	746
Ross, Percy W., Los Angeles, Cal. Metal railway-tie.....	423,447	Mar. 18	1640	432	50	1464
Ross, Percy W., Los Angeles, Cal. Car-coupling.....	439,897	Nov. 4	408	106	53	687
Ross, Robert, deceased, (E. J. Ross administratrix,) Vergennes, Vt., assignor of five-eighths to J. I. Gilbert, Malone, N. Y. Electric forging-machine.....	423,956	Mar. 25	2414	{ 640 641 }	50	1617
Ross, Robert N., St. Louis, Mo. Disintegrator.....	443,838	Dec. 30	3602	926	53	1997
Ross, Robert W., et al. (See Smith, Frederick F., assignor.)						
Ross Sash Lock Company. (See Ross, Thomas B., assignor.)						
Ross, Simon, Jr., Cincinnati, Ohio. Sand-paper machine for boots or shoes.....	426,860	Apr. 29	3694	963	51	754
Ross, Simon, Jr., Cincinnati, Ohio. Burnishing-tool holder.....	426,861	Apr. 29	3695	964	51	755
Ross, Simon, Jr., Cincinnati, Ohio. Sand-paper roll.....	426,862	Apr. 29	3696	964	51	755
Ross, Simon, Jr., assignor to Ross-Moyer Manufacturing Company, Cincinnati, Ohio. Sand-paper roll.....	426,859	Apr. 29	3693	963	51	754

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Ross, Simon, Jr., assignor to Ross-Moyer Manufacturing Company, Cincinnati, Ohio. Sand-paper roll	431,997	July 8	1502	380	52	302
Ross, Simon, Jr., assignor to Ross-Moyer Manufacturing Company, Cincinnati, Ohio. Shoe-stamping machine	437,664	Sept. 30	3643	951	52	2103
Ross, Simon, Jr., assignor to Ross-Moyer Manufacturing Company, Cincinnati, Ohio. Heel-breasting machine	437,665	Sept. 30	3643	951	52	2103
Ross, Simon, Jr., assignor to Ross-Moyer Manufacturing Company, Cincinnati, Ohio. Embossing-machine	441,980	Dec. 2	543	146	53	1369
Ross, Simon, Jr., Cincinnati, Ohio, assignor to F. A. Watson, Chicago, Ill. Shoe-upper turning and beading machine	432,902	July 22	2897	742	52	584
Ross, Thomas, Sydney, New South Wales. Portable fire-escape	434,588	Aug. 19	2237	587	52	1212
Ross, Thomas B., assignor to Ross Sash Lock Company, Evansville, Ind. Sash-balance	426,070	Apr. 22	2501	660	51	510
Ross Valve Company. (See Ross, William, assignor.)						
Ross, Walter T., Quebec, Canada. Candle attachment	432,678	July 22	2557	655	52	518
Ross, William, assignor to Ross Valve Company, Troy, N. Y. Slide-gate valve	442,458	Dec. 9	1286	332 333 467	53	1520
Ross, William, and J. Bilbie, London, county of Middlesex, England. Nailing-machine	428,255	May 20	1862	468	51	1194
Ross, William E., Rochester, N. Y. Rein-holder for preventing runaways	427,616	May 13	889	224	51	996
Ross, William E., Rochester, N. Y. Rein-holder	427,617	May 13	891	224	51	996
Ross, William H., Camden, N. J. Mouth-piece for speaking tubes	440,886	Nov. 18	2011	517	53	1011
Rossman, Jonas A., New York, N. Y. Plug for soil or other pipes	424,690	Apr. 1	389	103	51	76
Rossney, William C., Hyde Park, assignor of one-half to W. G. Cutter, Cambridge, Mass. Gas regulator and equalizer for gas-engines	420,169	Jan. 28	2299	608	50	484
Rost, Franz J., Milwaukee, Wis. Mangle	421,144	Feb. 11	1069	275	50	776
Rost, Franz J., Milwaukee, Wis. Baker	427,797	May 13	1178	296	51	1052
Röstel, Carl, assignor to Grusonwerk, Magdeburg, Prussia, Germany. Breech-loading gun	422,538	Mar. 4	698	179	50	1271
Röstel, Carl, assignor to Grusonwerk, Magdeburg, Prussia, Germany. Breech-loading fire-arm	430,973	June 24	2931	719 720	51	2063
Roszell, Stephen S. (See Goss, Charles F., assignor.)						
Rotary Magnetic Ore Separator Company. (See Finney, George S., assignor.)						
Roth Brothers. (See Kint, Daniel, assignor.)						
Roth, Edwin A. (See Hartmann and Meedom, assignors.)						
Roth, Elias D., Fort Collins, Colo. Ore-crusher	427,441	May 6	632	159	51	937
Roth, Elias D., Fort Collins, Colo. Amalgamator	427,442	May 6	634	159	51	937
Roth, John L. (See Nordmann, Friedrich G., assignor.)						
Roth, William, New York, N. Y. Hoisting-machine	438,187	Oct. 14	786	214	53	158
Rothband, Henry L. (See Mandleberg, Rothband, and Mandleberg.)						
Rothenberg, William F., assignor of one-half to J. Turre, Denver, Colo. Electric-wire supporter	423,632	Mar. 18	1922	506	50	1517
Rotherbücher, Max, Hamburg, Germany. Making collars for water-proof garments	422,061	Feb. 25	2375	627 628	50	1039
Rothgiesser, Georg, Essen, Germany. Velocipede	442,275	Dec. 9	1005	265	53	1466
Rothlisberger, Erneste, Lima, Ohio. Metal-screw machine	434,204	Aug. 12	1145	298 299	52	990
Rothlisberger, Erneste, assignor of forty-nine one-hundredths to J. W. Wegman and G. W. Buchanan, Lima, Ohio. Electric-arc lamp	435,248	Aug. 26	2791	740	52	1325
Rothschild, Marks. (See Rothschild, Ralph and M.)						
Rothschild, Ralph and M., New York, N. Y. Shoe-fastener	438,186	Oct. 14	786	214	53	158
Rothwell, Richard P., New York, N. Y. Apparatus for sinking shafts	428,021	May 13	1511	384	51	1117
Rothwell, William J., et al. (See Pritschan, Arthur F., assignor.)						
Rottger, William, Clinton, Mo. Hip-strap attachment	433,602	Aug. 5	241	62	52	803
Rouillon, Louis, Ithaca, N. Y. Photographic-printing frame	419,360	Jan. 14	1078	285	50	228
Rouis, George W., New York, N. Y. Shade or globe holder for candles	442,669	Dec. 16	1620	417	53	1597
Round & Son, David. (See Holt, Joseph, assignor.)						
Rounds, Charles E. (See Smith, William C., assignor.)						
Rountree, Joseph W., assignor of one-half to T. A. Mitchell, Washington, D. C. Paper-hanger's shears and roller combined	419,712	Jan. 21	1588	424	50	336
Rourk, Matthew J., Lapeer, Mich. Road-cart	441,444	Nov. 25	2947	759	53	1197
Rouse-Duryea Cycle Company. (See Duryea, Charles E., assignor.)						
Rouse, Edwin F., Bay City, Mich. Clothes-drier	437,247	Sept. 30	2998	784	52	1976
Rouse, William H., Fairmont, Minn. Stackers	435,950	Sept. 9	888	233 234	52	1552
Rovane, John, Keokuk, Iowa. Roll-paper holder and cutter	429,548	June 3	677	165	51	1602
Rowan, Andrew, Buffalo, Kans. Vehicle-wheel	424,577	Apr. 1	219	59	51	45
Rowand, Asaph T. (See Lucas, Austin H., assignor.)						
Rowe, George B., Hawarden, Iowa. Holder for parcels or bundles	424,578	Apr. 1	221	60	51	45
Rowe, James, San Francisco, Cal. Composition for protecting piles	440,832	Nov. 18	1929		53	995
Rowe, John W. (See Miller and Rowe.)						
Rowell American Switch Company. (See Rowell, Benton C., assignor.)						
Rowell, Benning, Lafayette, assignor of one-half to G. J. Lange, Chippewa Falls, Wis. Car-coupling	420,700	Feb. 4	380	101	50	639
Rowell, Benning, Badger Mills, Wis., assignor of one-third to N. Sellers, Tower, Minn. Car-coupling	439,564	Oct. 28	2936	781	53	577
Rowell, Benton C., assignor to Rowell American Switch Company, Boston, Mass. Car and device for operating automatic railway-switches	434,889	Aug. 19	2238	587	52	1212
Rowell, Benton C., and F. E. Galloupe, Boston, Mass. Trolley-pole for electric cars	439,192	Oct. 28	2346	631	53	465
Rowell & Co., I. B. (See Rowell, George W., assignor.)						
Rowell, George W., assignor to I. B. Rowell & Co., Menomonee Falls, Wis. Hay-tedder fork	436,152	Sept. 9	1201	314	52	1609
Rowland, Bartholomew R. (See Richardson and Rowland.)						
Rowland, David W., Centreville, Mo. Coffee-mill holder	431,485	July 1	697	175	52	140
Rowland, Henry A., and L. Duncan, Baltimore, Md. System of electrical distribution	443,181	Dec. 23	2530	647 648	53	1779
Rowland, Horace B., assignor to Wilson & Bates, Philadelphia, Pa. Transom-lifter	443,796	Dec. 30	3532	906	53	1933
Rowland, John H., Carlton, Victoria. Vehicle-wheel	424,579	Apr. 1	222	60	51	45
Rowland, John H., Carlton, near Melbourne, Victoria. Miter-board	425,051	Apr. 8	954	255	51	193
Rowland, Lynford, Cheltenham, Pa. Making shovels	432,331	July 15	2022	520	52	405
Rowland, Robert, Romley, Colo., assignor to A. S. Hallidie, San Francisco, Cal. Clip for rope tramways	422,892	Mar. 4	797	204	50	1288
Rowland, William D., Philadelphia, Pa. Scoop or shovel	420,106	Jan. 28	2201	582	50	466
Rowland, William D., Philadelphia, Pa. Wire scoop	420,608	Feb. 4	255	69	50	614
Rowland, William H., Albany, Oreg. Device for injecting medical powders	443,545	Dec. 30	3127	805	53	1905

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Rowlands, Evan. (See Ferguson, Thomas, assignor.)						
Rowlett, William H., Hodges, S. C. Head-rest for railway-chairs.....	438,279	Oct. 14	936	253	53	184
Rowley, John. (See Reed and Rowley.)						
Roxer, Gustav, assignor of one-half to C. G. Rogier, Washington, D. C. Window	438,596	Oct. 14	1389	376	53	274
Roy, Edmond, Paris, France. Valve-gear	436,266	Sept. 9	1369	357	52	1643
Roy, Fernand M. S., Flushing, N. Y. Caulterizing apparatus	423,393	Mar. 11	1557	409	50	1439
Roy, Isaac D., Bono, Ark. Plow-cutter mechanism	437,721	Oct. 7	70	23	53	17
Royal, Ephraim M., Collingdale, and I. B. Turner, Philadelphia, Pa. Composition for coat- ing chills	425,346	Apr. 8	1391	.....	51	279
Royce, Marvin O., and J. Connolly, Somerville, Mass. Hoisting apparatus	434,001	Aug. 12	829	218	52	927
Royce, Wesley, Toledo, Ohio. Pump for removing liquids from low pressure	421,974	Feb. 25	2252	592	50	1016
Royle, John, Jr. (See Royle, Vernon and J., Jr.)						
Royle & Sons, John. (See Frank, Louis H., assignor.)						
Royle, Vernon, Paterson, N. J. Take-up and brake attachment for supply of spools of winding-machines	424,620	Apr. 1	285	74	51	57
Royle, Vernon and J., Jr., Paterson, N. J. Machine for covering wires, cables, &c., and for making tubing and cord	441,808	Dec. 2	278	75, 76	53	1319
Royle, Vernon and J., Jr., Paterson, N. J. Routing machine	442,826	Dec. 16	1916	492	53	1653
Roydsdon, William, Champaign, Ill. Car-coupling	421,766	Feb. 18	1955	514	50	951
Roydsdon, William, Champaign, Ill. Car-coupling	437,801	Oct. 7	198	61	53	40
Royse, Noble K., et al. (See Clark, Joseph V., assignor.)						
Royster, Horace T., Charlotte, N. C. Washing-machine.....	425,000	Apr. 8	882	{ 232 233 }	51	179
Ru Ton, Hiram W., et al. (See Gore, Henry A., assignor.)						
Ruan, John A., Beacon, Iowa. Car-coupling	427,913	May 13	1356	342	51	1085
Ruan, Walter. (See Mennuez, Anthony E., assignor.)						
Ruark, Emerson E., et al. (See Nichols, Henry, assignor.)						
Ruark, Joseph W., et al. (See Nichols, Henry, assignor.)						
Rube, William, St. Louis, Mo. Cold and hot air fine of stoves	434,403	Aug. 12	1459	{ 380 381 }	52	1053
Rubel, Levi G., Chicago, Ill. Binder.....	434,160	Aug. 12	1086	280	52	978
Ruby, Charles G., Beacon, Iowa. Car-coupling	425,001	Apr. 8	883	233	51	179
Ruck, Richard M., South Kensington, county of Middlesex, England. Hook or shackle	427,482	May 6	684	171	51	947
Rudd, Charles H., Evanston, Ill., assignor of one-half to J. W. and J. C. White and H. M. Lewis, trustees, Philadelphia, Pa. Apparatus for electric-railway signaling	426,395	Apr. 22	2986	782	51	609
Rudd, Charles H., Evanston, Ill., assignor of one-half to J. W. and J. C. White and H. M. Lewis, trustees, Philadelphia, Pa. Electric railway signaling apparatus	429,483	June 3	582	142	51	1583
Ruddick, John J., assignor to Interstate Fire Alarm Company, Omaha, Nebr. Fire-alarm box	443,182	Dec. 23	2531	648	53	1779
Rude Brothers Manufacturing Company. (See Bennett and Farlander, assignors.)						
Rudell, Peter E., New York, N. Y. Photographic camera	421,436	Feb. 18	1482	384	50	861
Rudge, Frederick S., Brooklyn, N. Y. Device for securing ferry-boats	425,634	Apr. 15	1840	492	51	375
Rudiger, Charles L., Overbrook, Kans. Fodder-fork	427,271	May 6	380	99	51	885
Rudkin, Joseph A., Brooklyn, N. Y. Stair-pad	421,339	Feb. 18	2059	543	50	970
Rudolph, Frank, Beason, Ill. Road-cart	421,316	Feb. 11	1320	341	50	822
Rudolph, Franklin. (See Clause and Rudolph.)						
Rudolph, Paul. (See Abbe and Rudolph.)						
Rudy, John H., assignor of one-half to A. I. Coddington, Jr., Bound Brook, N. J. Car- coupling	435,772	Sept. 2	602	160	52	1491
Rue, Ross. (See Stoltz, Ferdinand B., assignor.)						
Ruebsam, John E., Washington, D. C. Apparatus for treatment of ankylosis	439,255	Oct. 28	2461	659	53	487
Ruede, James H. (See Whiles, Marian, assignor.)						
Ruef, Charles S., assignor to Grand Detour Plow Company, Dixon, Ill. Harrow	439,691	Nov. 4	97	26	53	627
Rueger, Charles C., Butte City, Mont. Lubricator	436,927	Sept. 23	2505	656	52	1874
Rueger, John A., San Francisco, Cal. Block-puzzle	437,002	Sept. 23	2606	681	52	1894
Ruel, Laurent, Merrimac, Mass. Coach-binge	424,504	Apr. 1	99	28	51	22
Ruenitz, Peter, et al. (See Beach, Ralph H., assignor.)						
Ruffhead, Thomas G., Williamsport, Pa. Car-door	427,369	May 6	511	131	51	912
Ruffin, Marie C. A. (See Bang and Ruffin.)						
Ruger, James W., Buffalo, N. Y. Cutter for cracker-machines	422,039	Feb. 25	2338	618	50	1032
Rugg, Datus E., New York, N. Y. Preparing artificial gums for dental work	439,305	Oct. 28	2558	.....	53	505
Ruggles, Frank A., Three Rivers, Mass. Cultivator	422,161	Feb. 25	2527	668	50	1067
Ruhlman, Rudolph, Trenton, N. J. Register for engines or machines	432,441	July 15	2169	559	52	434
Ruhnke, Carl, Berlin, Germany. Repeating-watch	430,692	June 24	2488	607	51	1979
Rumely, William N., La Porte, Ind. Friction-clutch	428,634	May 27	2428	618	51	1322
Rumford Chemical Works. (See Catlin, Charles A., assignor.)						
Rumph, George B. (See Carille and Rumph.)						
Rummel, Joseph P. (See Gurney and Rummel.)						
Rumrille, Henry J., Camden, N. J. Tent	428,697	May 27	2541	645	51	1342
Rund, Edwin, assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Stuffing- box	433,824	Aug. 5	579	151	52	870
Rundell, Commodore D., assignor of two-thirds to W. H. Jackson and W. P. Chard, Cleve- land, Ohio. Lighting and wick-raising attachment	435,190	Aug. 26	2712	716	52	1309
Rundell, Fred H., Moravia, N. Y. Carpet-stretcher	439,327	Oct. 28	2587	690	53	510
Rundle, Anthony M. (See Murphy and Rundle.)						
Rundquist, Peter, assignor to himself and J. Daly, New York, N. Y. Steam-regulator for hot-water boilers	439,977	Nov. 4	539	142	53	712
Rundquist, William, and L. N. Jackman, Elgin, Ill. Machine for sharpening pencils	438,569	Oct. 14	1353	367	53	267
Runkle, John, Tippecanoe County, Ind. Harrow	443,115	Dec. 23	2416	617	53	1759
Runnells, William F. (See McNeal and Runnells.)						
Runser, Sebastian, Sharon, Pa. Boiler-furnace	439,753	Nov. 4	183	48	53	644
Runyan, George E., Welker, Ohio. Beer-cooler	439,764	Nov. 4	203	52	53	648
Runyan, Milo B., Great Falls, assignor to himself, and E. J. Morison, Philbrook, Mont. Whiffletree-coupling	429,702	June 10	908	222	51	1657
Ruperti, Henri. (See Gräbner and Ruperti.)						
Rupp, Lemon W., Vogansville, Pa. Drill	419,563	Jan 14	1356	363	50	285
Ruppel, Henry. (See McClelland and Ruppel.)						
Ruppel, Henry, assignor of one-half to Dangler Stove and Manufacturing Company, Cleve- land, Ohio. Vapor-burner for stoves	423,085	Mar. 11	1106	289	50	1353
Ruppel, Henry, assignor of one-half to Dangler Stove and Manufacturing Company, Cleve- land, Ohio. Generating duplex vapor-burner	432,332	July 15	2023	520	52	405
Ruscoe, John, Hyde, England, assignor of one-half to J. R. Floyd & Sons, New York, N. Y. Gas-retort lid	439,040	Oct. 21	2107	565	53	414

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Ruse, Joseph. (See Foley, James S., assignor.)						
Rush, Charles and W., Shelburne Falls, Mass. Knife.	428,817	May 27	2724	691	51	1377
Rush, John, South Bend, Ind. Combined roller, cultivator, and seeder.	435,249	Aug. 26	2793	740	52	1325
Rush, William. (See Rush, Charles and W.)						
Rush, William F., Keokuk, Iowa. Cabinet for hotel stationery.	420,107	Jan. 28	2202	583	50	466
Rushforth, Walter E., assignor of one-half to G. H. Leck, Lawrence, Mass. Device for curling hair.	421,869	Feb. 18	2108	553	50	980
Rushforth, William H., Rutherford, N. J. Purifier for steam-boilers.	419,476	Jan. 14	1246	330	50	262
Rusk, John W., assignor of one-half to A. Winchell, Uhrichsville, Ohio. Jack for extracting pistons.	440,609	Nov. 11	1555	400	53	915
Russell, A. L., et al. (See Mellett, Lemuel, assignor.)						
Russell, Albert H., Kansas City, Mo. Vapor-stove.	419,564	Jan. 14	1357	363	50	285
Russell, Albert H., Kansas City, Mo. Petroleum-burner for stoves.	422,317	Feb. 25	2776	730	50	1113
Russell, Burt, and H. T. Parsons, Braidwood, Ill. Automatic dumping-cage.	432,568	July 22	2377	613	52	484
Russell, Charles. (See Beardslee, Kaiser, and Russell.)						
Russell, Charles P., Greenfield, Mass., assignor to Wiley & Russell Manufacturing Company, of Massachusetts. Screw-cutting die.	442,827	Dec. 16	1917	493	53	1654
Russell, Charles P., Greenfield, Mass., assignor to Wiley & Russell Manufacturing Company, of Massachusetts. Screw-cutting die.	442,828	Dec. 16	1919	493	53	1654
Russell, Charles T., et al. (See Snee, William, assignor.)						
Russell & Company. (See Heggem, Charles O., assignor.)						
Russell, Edwin C., Skowhegan, Me. Electric-arc lamp.	418,987	Jan. 7	517	129	50	109
Russell, Edwin C., Boston, Mass. Electric-arc lamp.	432,284	July 15	1953	499 500	52	394
Russell, Edwin G. (See DeVore, Levi M., assignor.)						
Russell & Erwin Manufacturing Company. (See Burgess, Charles M., assignor.)						
Russell & Erwin Manufacturing Company. (See Forster, John R., assignor.)						
Russell & Erwin Manufacturing Company. (See Jones, Horace K., assignor.)						
Russell & Erwin Manufacturing Company. (See Russell, Henry E., Jr., assignor.)						
Russell & Erwin Manufacturing Company. (See Voight, Henry G., assignor.)						
Russell, Henry E., Jr., New Britain, Conn. Lock-bolt.	434,470	Aug. 19	1568	407	52	1081
Russell, Henry E., Jr., New Britain, Conn. Latch.	436,381	Sept. 16	1567	412	52	1690
Russell, Henry E., Jr., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Pin for the hinges of stove-doors.	431,078	July 1	75		52	17
Russell, Henry E., Jr., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Master-key lock.	438,188	Oct. 14	788	214 215	53	158
Russell, Israel E., et al. (See Burke, Stephen L., assignor.)						
Russell, Jacob, Brooklyn, N. Y. Horseshoe.	428,231	May 20	1826	458	51	1188
Russell, James H., St. John, New Brunswick, Canada. Snow-plow.	420,467	Feb. 4	67	15	50	577
Russell, James M., Anderson, Ind. Mechanical telephone.	437,624	Sept. 30	3586	937 938	52	2091
Russell, John A., Chicago, Ill. Clothes-wringer.	429,178	June 3	108	25	51	1492
Russell, John B., Detroit, Mich. Pepsin.	424,357	Mar. 25	3002		50	1730
Russell, John H., Boston, Mass. Paper box.	437,383	Sept. 30	3227	841	52	2019
Russell, John R., Somerville, Mass. Ash-sifter.	440,966	Nov. 18	2145	556	53	1036
Russell, Lee, Luling, Tex. Fumigator.	435,860	Sept. 2	738	193	52	1518
Russell, Manning W., Homer, La. Animal-trap.	422,253	Feb. 25	2675	706	50	1094
Russell, Mynders C., et al. (See Ramus, Charles E., assignor.)						
Russell, Perry M., Kingston, Ohio. Rotary slide for stove-ovens.	420,891	Feb. 4	696	179	50	695
Russell Street Cigarette Company. (See Russell, William A., assignor.)						
Russell, Thomas H., Massillon, Ohio. Thrashing-machine.	421,975	Feb. 25	2253	593	50	1017
Russell, William A., assignor to Russell Street Cigarette Company, Chicago, Ill. Car-omnibus.	434,527	Aug. 19	1657	434	52	1100
Russell, William A., assignor to Russell Street Cigarette Company, Chicago, Ill. Car-omnibus.	434,726	Aug. 19	1367	517 518	52	1163
Russell, William F., East Orange, N. J. Shade-support.	434,161	Aug. 12	1087	280	52	978
Russell, William O., Lawrence, Mass. Machine for tearing wood pulp.	426,217	Apr. 22	2728	714	51	554
Russell, William T., Worcester, Mass. Soap-shaker.	428,144	May 20	1695	430	51	1161
Rust, Arthur E., assignor of one-half to S. R. Rust, Pine Meadow, Conn. Bench-plane.	435,951	Sept. 9	890	234	52	1532
Rust, Samuel, Cincinnati, Ohio. Mallet.	434,091	Aug. 12	967	253	52	956
Rust, Solon R. (See Rust, Arthur E., assignor.)						
Ruston, Benjamin. (See Ruston, Hopkins, and Ruston.)						
Ruston, Samuel S., W. E. Hopkins, and B. Ruston, assignors to Adamant Manufacturing Company, Syracuse, N. Y. Manufacturing plastering compounds.	433,743	Aug. 5	448		52	843
Rutherford, Jacob S., Beatrice, Nebr. Device for grading and leveling roads.	442,549	Dec. 9	1437	368	53	1550
Rutschman, Francis S., Philadelphia, Pa. Soap-press.	430,888	June 24	2804	687 688	51	2041
Ruttan, Henry N., Winnipeg, Manitoba, Canada. Elevated conduit for electric wires.	428,145	May 20	1695	430	51	1162
Rutter, Jacob R. (See McLimans, William C., assignor.)						
Ruttkar, Charles R., assignor to A. J. Baker, W. H. Allen, and F. E. Forrest, Booneville, Ind. Composition for blackboards.	429,063	May 27	3092		51	1450
Rutzler, Enoch. (See Cunningham, William F., assignor.)						
Rutzler, Enoch, Brooklyn, N. Y. Pipe-hanger.	429,816	June 10	1073	264	51	1688
Rutzler, Enoch, Brooklyn, N. Y. Pipe-hanger.	431,010	June 24	2989	734	51	2075
Rutzler, Enoch, Brooklyn, N. Y. Exhaust-head for steam-pipes.	434,119	Aug. 12	1022	265	52	966
Rutzler, Enoch, New York, N. Y. Pipe-hanger.	443,198	Dec. 23	2584	664	53	1792
Rund, Edwin, assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Water-heater.	443,797	Dec. 30	3533	906	53	1983
Ryan, Cornelius J., et al. (See Sawyer, Edward C., assignor.)						
Ryan, Edward H., Armourdale, Kans. Smoke-consuming attachment.	426,863	Apr. 29	3698	964	51	755
Ryan, Edward M., deceased, Brooklyn, N. Y.; J. M. Ryan administrator. Bath or flesh brush.	431,486	July 1	699	175	52	140
Ryan, Edward M., deceased, Brooklyn, N. Y.; J. M. Ryan administrator. Brush.	431,487	July 1	699	175	52	140
Ryan, Elizabeth, executrix. (See Ryan, Joseph.)						
Ryan, James J., Brooklyn, N. Y. Salve.	433,257	July 29	3464		52	700
Ryan, James M., administrator. (See Ryan, Edward M.)						
Ryan, John, Pecatonica, and W. A. McDonald, Leaf River, Ill. Draft-equalizer.	420,360	Jan. 28	2595	689	50	537
Ryan, John P. (See Devison, Daniel B., assignor.)						
Ryan, Joseph, deceased, St. Louis, Mo.; E. Ryan, executrix. Means for lubricating gas-pumps.	437,341	Sept. 30	3143	822	52	2003
Ryan, Joseph, deceased, St. Louis, Mo.; E. Ryan, executrix. Cylinder-cock.	438,022	Oct. 7	544	150	53	103
Ryan, Martin W., Lake Charles, La. Lumber-drying kiln.	441,196	Nov. 25	2521	651	53	1119
Ryan, Patrick S., Rutland, Vt. Milk-cooler.	430,545	June 17	2231	547	51	1921
Ryan, Peter. (See Ihde, Fredrick C., assignor.)						
Ryan, William H., Natick, and M. W. Bent, Wayland, Mass.; said Ryan assignor to said Bent. Machine for applying sole-linings.	432,839	July 22	2807	719	52	566

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Ryckman, Garret E. (See Donley, James F., assignor.)						
Ryder, Andrew V., Unionport, Ohio. Sulky-plow	429,064	May 27	3092	797	51	1450
Ryder, Benjamin P., <i>et al.</i> (See Phillips, Russell, assignor.)						
Ryder, Charles J. (See Ritchie, William E., assignor.)						
Ryder, Elisha, Hartford, Conn. Game-board	420,737	Feb. 4	430	114	50	648
Ryder, Francis. (See Ryder, Frank W., assignor.)						
Ryder, Frank W., assignor of one-half to F. Ryder, Coldwater, Mich. Farm-gate	434,404	Aug. 12	1463	381	52	1054
Ryer, Edward C., Philadelphia, Pa. Calendar	442,337	Dec. 9	1104	289	53	1483
Ryer, Katherine A., Brooklyn, N. Y. Hair-curler	432,569	July 22	2379	613	52	484
Ryer, William H., Steele City, Nebr. Water-heating attachment for drums	427,798	May 13	1179	296	51	1052
Ryer, William H., Steele City, Nebr. Oven attachment for drums	427,799	May 13	1180	296	51	1053
Ryer, William H., Steele City, Nebr. Bucket for burning trash	427,800	May 13	1181	297	51	1053
Rylands, Dan, Barnsley, England. Coupling for glass-lined pipes and fittings	438,023	Oct. 7	546	150	53	103
Rylands, Dan, J. Crowder, and R. Morant, Barnsley, England; said Crowder and Morant assignors to said Rylands. Manufacturing glass-lined pipe-fittings	430,041	June 10	1425	354	51	1756
Ryley, Alfred G. (See Diffey, Alexander A., assignor.)						
Ryley, William, South Yara, Victoria, assignor to Wolsley Sheep Shearing Machine Company, Limited, Sydney, New South Wales. Sheep-shearing machine	442,239	Dec. 9	951	251	53	1456
Ryman, Mike, Warner, S. D. Band-cutter and feeder	427,272	May 6	381	99	51	885
Rynerson, Wallace M. (See Vincent, Knox, and Rynerson.)						
Ryno, John L. (See Slaght and Ryno.)						
Ryon, Eppa H., Canton, Ohio. Tool for enameling watch-dials	428,417	May 20	2119	532	51	1244
Sabold, Frank W., Albany, N. Y. Circuit for electric railways	442,140	Dec. 9	807	218	53	1428
Sacco, Carlo. (See Giussani, Gaetano, assignor.)						
Sacco, Joseph, Paris, France, assignor to I. Joel, London, England. Apparatus for automatically photographing, developing, and delivering the finished pictures	432,903	July 22	2899	742	52	584
Sachs, Isaac, Claysville, Pa. Cultivator	430,693	June 24	2489	608	51	1980
Sack, Charles, assignor of one-half to F. D. Guild, Lebanon, Mo. Carpet-stretcher	431,488	July 1	700	176	52	140
Sack, Christian R., Plagwitz, near Leipsic, Saxony, Germany. Steam-cultivator	427,117	May 6	146	38	51	841
Sack, Joseph, Dusseldorf, Germany. Individual telephone-call	423,575	Mar. 18	1822	480	50	1498
Sack, Paul H., Duisburg, Germany. Rolling-mill	431,623	July 8	906	227	52	188
Sackett, Charles E., Danbury, Conn. Machine for combing and brushing hatters' furs not on the skin	426,218	Apr. 22	2729	714	51	554
Sackett, Hiram B., Council Bluffs, Iowa. Coal-screen	426,864	Apr. 29	3699	965	51	755
Sacks, Louis, and H. Richmond, Newark, N. J. Boot or shoe last	443,199	Dec. 23	2584	664	53	1793
Sadler, James R. (See Sadler and Carter.)						
Sadler, Samuel B., and J. R., and D. M. Carter, Fairfield, N. C. Car-coupling	438,024	Oct. 7	547	151	53	103
Sadler, Warren H. (See Will, William K., assignor.)						
Sadravezt, Peter, San Antonio, Tex. Flour-separator	433,096	July 29	3230	631	52	653
Saettele, Edmund M., St. Louis, Mo. Puzzle	432,904	July 22	2901	744	52	585
Safety Car Heating and Lighting Company. (See Dixon, Robert M., assignor.)						
Safety Electric Light Company. (See Hewett, Ernest M. G., assignor.)						
Safety Incandescent Oil and Gas Lamp Syndicate. (See Déimel, Fritz, assignor.)						
Safety Spike and Rail Joint Company. (See Fennerty, John M., assignor.)						
Safford, Albert M., Providence, R. I. Machine for trimming book-pads	426,685	Apr. 29	3426	898	51	702
Safford, Harry E., Allegheny, Pa. Fire-extinguisher	439,565	Oct. 28	2937	781	53	577
Safford, Joseph A., Boston, Mass. Leather-skiving machine	442,399	Dec. 9	1192	310	53	1501
Sage, Clinton H., Kenton, Ohio. Dredger-derrick	425,257	Apr. 8	1263	337	51	256
Sage, Ira Y., <i>et al.</i> (See Phillips, Columbus, assignor.)						
Sage, William J., Connellsville, Pa. Washing-machine	436,089	Sept. 9	1100	285	52	1592
Sagendorph, Longley L., Cincinnati, Ohio. Metallic lathing	422,318	Feb. 25	2778	731	50	1113
Sagendorph, Longley L., Philadelphia, Pa. Metallic roofing	425,830	Apr. 15	2124	567	51	431
Sagendorph, Longley L., Philadelphia, Pa. Metallic lathing	438,327	Oct. 14	1006	273	53	198
Sagendorph, Longley L., assignor of one-half to H. P. Lloyd, Cincinnati, Ohio. Sheet-metal lock-joint	425,002	Apr. 8	884	233	51	179
Sagendorph, Longley L., Cincinnati, Ohio, assignor of one-half to C. N. Harder, Philmont, N. Y. Fire-proof construction for buildings	420,282	Jan. 28	2490	661	50	517
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic roofing	422,319	Feb. 25	2778	731	50	1114
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Water-proof joint for metal roofing	426,627	Apr. 29	3341	875	51	687
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic finishing-plate	433,217	July 29	3407	880	52	688
Sager, Charles A. (See Sager, James H., assignor.)						
Sager, James H., assignor of one-half to C. A. Sager, Rochester, N. Y. Child's seat for bicycles	442,207	Dec. 9	908	241	53	1447
Saggau, Marx D., Delavan, Wis. Windmill	420,921	Feb. 4	742	190	50	704
Sagne, James E., Rochester, N. Y. Valve	420,042	June 10	1428	355	51	1757
Sahn, Ludwig, Bellefontaine, Mo. Combined wagon-seat and end-gate	427,618	May 13	892	225	51	997
Sailer, John M., Milton Junction, assignor to Flexible Engine and Threshing Machine Company, Rock County, Wis. Engine	424,505	Apr. 1	100	28, 29	51	22
Sailer, John M., Milton, assignor to J. and R. Barlass, Janesville, Wis. Belt-shifter	439,692	Nov. 4	98	26	53	627
Sajous, Charles E., Devon, assignor to S. M. Bergner, Philadelphia, Pa. Drawing-board	429,203	June 3	147	36	51	1499
Sajous, Charles E., Devon, assignor to S. M. Bergner, Philadelphia, Pa. Drawing-board	429,586	June 3	732	177	51	1613
Saladee, Cyrus W., Cleveland, Ohio. Running-gear for vehicles	418,753	Jan. 7	136	33	50	30
Saladee, Cyrus W., Cleveland, Ohio. Spring-platform for road-wagons	433,308	July 29	3537	913	52	715
Saladee, Cyrus W., Cleveland, Ohio. Road-wagon	434,299	Aug. 12	1297	337	52	1020
Saladee, Cyrus W., Cleveland, Ohio. Road-wagon	434,300	Aug. 12	1299	338	52	1020
Saladee, Cyrus W., Cleveland, Ohio. Spring-platform for road-wagons	435,861	Sept. 2	739	198	52	1518
Saladee, Cyrus W., Cleveland, Ohio. Running-gear for road-wagons	438,189	Oct. 14	789	215	53	158
Saladee, Cyrus W., Cleveland, Ohio. Spring-platform for road-wagons	441,901	Dec. 2	426	113	53	1348
Saladin, Jules A., Nancy, France. Apparatus for turning malt	440,850	Nov. 18	1957	503	53	1000
Salé, Jacob, Philadelphia, Pa. Hammock-supporting structure	441,507	Nov. 25	3042	783	53	1214
Salger, Charles F. T., Chicago, Ill. Channel-cutter	425,003	Apr. 8	885	233	51	179

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Salick, Joseph, Watertown, Wis. Watch-maker's tool.....	433,218	July 29	3408	880	52	688
Salisbury, Alfred J., Hueneme, Cal. Windmill-governor.....	418,877	Jan. 7	349	84	50	73
Salisbury, Levi E., Providence, R. I., and A. Wrightson, Philadelphia, Pa.; said Salisbury assignor to said Wrightson. Knitting-machine.....	434,205	Aug. 12	1153	{ 299 300 }	52	991
Salisbury, Wilber S., assignor, by mesne assignments, to Electric Cutting Machine Company, Chicago, Ill. Cloth-cutting machine.....	431,998	July 8	1503	{ 380 381 }	52	302
Salisbury, Wilber S., assignor, by mesne assignments, to Electric Cutting Machine Company, Chicago, Ill. Cloth-cutting machine.....	431,999	July 8	1505	381	52	303
Salmon, Joshua S. (See Stoops, William H., assignor.)						
Salmon, Samuel. (See Cox and Salmon.)						
Salmon, Samuel. (See Ely and Salmon.)						
Salmon, Samuel, assignor to E. B. Cox, Drifton, Pa. Apparatus for dumping coal.....	419,077	Jan. 7	646	{ 168 169 }	50	136
Salmon, Thomas H., et al. (See Newberry and Sharp, assignors.)						
Salmon, William C., Stenbenville, Ohio. Steam cooking apparatus.....	429,099	May 27	3148	812	51	1462
Salmon, William H. (See McKiernan, Charles A., assignor.)						
Salomon, Fritz, assignor to F. Krupp, Essen-on-the-Ruhr, Germany. Obtaining oxygen.....	440,777	Nov. 18	1837		53	978
Salomon, Siegmund L., New York, N. Y. Labeling-machine.....	435,615	Sept. 2	374	101	52	1445
Salt Union. (See Higgin, Thomas, assignor.)						
Saltzkorn, Emil, and L. Nicolai, Dresden, Germany. Knife for cutting and scoring paste-board.....	442,738	Dec. 16	1771	458	53	1624
Salvage, William L., Chattanooga, Tenn. Changeable ribbon-spool for type-writing machines.....	428,860	May 27	2783	707	51	1390
Salzman, Christian H., Chicago, Ill., assignor to D. M. Osborne & Company, Auburn, N. Y. Self-binding harvester.....	441,110	Nov. 18	2376	{ 616 617 }	53	1082
Salzman, Christian H., Chicago, Ill., assignor to D. M. Osborne & Company, Auburn, N. Y. Corn-harvester.....	441,809	Dec. 2	282	{ 76 77 78 }	53	1319
Sammons, Benjamin F., Sumner, Mo. Pump-piston.....	419,713	Jan. 21	1589	424	50	336
Sammons, Benjamin F., Sumner, Mo. Traction-engine.....	429,648	June 10	826	201	51	1641
Sammons, Benjamin F., Avalon, Mo. Device for transmitting motion.....	440,851	Nov. 18	1961	505	53	1001
Sammons, Joseph F., Jackson, Mich. Burial-casket lid.....	419,714	Jan. 21	1591	424	50	336
Samoniel, William, Mount Carmel, Ill. Latch and lock combined.....	438,862	Oct. 21	1849	491	53	363
Sample, Alzina, Hudson, Mich. Fire-escape.....	428,635	May 27	2430	618	51	1323
Sample, Erastus B., Penn Yan, N. Y. Spring for vehicles.....	432,840	July 22	2809	719	52	567
Sample, George W., York, Pa. Soap-cutter.....	436,195	Sept. 9	1274	332	52	1622
Sampson, Charles H., and P. J. Wright; said Sampson assignor to C. E. Sampson, Minneapolis, Minn. Machine for dressing valves.....	435,904	Sept. 2	821	218	52	1534
Sampson, Clara E. (See Sampson and Wright, assignors.)						
Sampson, Herbert F., assignor of one-half to J. L. Ellis, Boston, Mass. Washer-connection for door-knobs.....	435,250	Aug. 26	2794	741	52	1325
Sampson, Marthin O. (See West and Sampson.)						
Sampson, Thomas H., New Orleans, La. Apparatus for treating lumber.....	419,798	Jan. 21	1713	455	50	360
Samson, Adolph, assignor to Pratt & Letchworth, Buffalo, N. Y. Machine for making corrugated nails.....	419,973	Jan. 21	1985	{ 521 522 }	50	415
Samuel, Edward. (See Angerer and Samuel.)						
Samuel, Edward, Philadelphia, Pa. Traction mechanism for railways.....	421,840	Feb. 18	2060	543	50	970
Samuel, Edward, assignor to W. Wharton, Jr., and Company, Incorporated, Philadelphia, Pa. Railway-casting.....	424,728	Apr. 1	452	120	51	89
Samuels, Asser J., Amsterdam, Netherlands. Velocipede.....	425,052	Apr. 8	955	255	51	193
Samuels, Frank W., Indianapolis, Ind. Game.....	431,727	July 8	1102	274	52	224
Sannelson, Andrew G., Slater, assignor of one-half to J. H. Larson, R. P. Viland, O. O. Legvold, C. Soderland, O. M. Johnson, E. Peterson, and A. K. Ersland, Story County, Iowa. End-gate for wagons.....	440,062	Nov. 4	658	175	53	737
Sanborn, Albert E. (See Merrow and Sanborn.)						
Sanborn, Alexander A. (See Seymour, Louis I., assignor.)						
Sanborn, Edmond B., assignor of three-fourths to C. E. Montgomery, A. Bareuther, and F. Heilig, Oshkosh, Wis. Coupling for street-cars.....	421,870	Feb. 18	2109	553	50	980
Sanborn, George S., assignor of seven-twelfths to J. A. Fleet and E. Williams, Lynn, Mass. Exercising apparatus.....	419,285	Jan. 14	957	252	50	203
Sanborn, John W., Quincy, Mass. Eyeglass-case.....	438,363	Oct. 14	1059	288	53	208
Sanborn, Osmer W., Lowe, Kans. Draft-equalizer.....	435,457	Sept. 2	113	32	52	1397
Sanche, Hercules, Detroit, Mich. Electric connection.....	430,974	June 24	2933	720	51	2064
Sanchez, Frank J. (See Wehrl and Sanchez.)						
Sandell, Gustaf, Brooklyn, assignor to Eagle Pencil Company, New York, N. Y. Holder for crayons, &c.....	432,570	July 22	2379	613	52	484
Sandell, Gustaf R., Brooklyn, assignor to Eagle Pencil Company, New York, N. Y. Pencil-sharpener.....	421,767	Feb. 18	1957	514	50	951
Sandell, William F., et al. (See Smith and Bachman, assignors.)						
Sanders, George A., et al. (See Newman, Nelson, assignor.)						
Sanders, Harry G., assignor of one-half to F. J. Pollok, Louisiana, Mo. Churn.....	433,909	Aug. 5	693	180	52	892
Sanders, Henry C., London, England. Paint-tube box.....	440,507	Nov. 11	1386	{ 358 359 }	53	884
Sanders, James E., assignor to Georgia Hay Press Company, Dalton, Ga. Hay-press.....	436,725	Sept. 16	2102	553	52	1790
Sanders, Newell, and J. Buchanan, assignors to Chattanooga Plow Company, Chattanooga, Tenn. Cane-mill.....	441,508	Nov. 25	3043	783	53	1214
Sanders, Samuel, Montezuma, Iowa. Vehicle-top support.....	430,439	June 17	2069	510	51	1891
Sanders, Sidney, Springfield, Mass. Hammock.....	419,361	Jan. 14	1078	285	50	228
Sanders, Werden A. (See Jones and Sanders.)						
Sanders, William, Liverpool, England. Photographic camera.....	433,963	Aug. 12	780	{ 204 205 }	52	918
Sanderson, Frederick. (See Sweet, Hoffmann, and Sanderson.)						
Sanderson, Frederick, Chicago, Ill. Door-bell.....	428,636	May 27	2431	619	51	1323
Sanderson, Frederick, Chicago, Ill. Door-bell.....	432,265	July 15	1955	500	52	394
Sanderson, Herbert H., trustee. (See Mason, Allan, assignor.)						
Sanderson, Herbert H., trustee. (See Wilson and Mason, assignors.)						
Sandford, Charles, assignor of two-thirds to W. Feeney and A. Coe, Madoc, Ontario, Canada. Latch and lock combined.....	429,322	June 3	336	79	51	1535
Sandham, Henry, assignor of one-third to G. T. Andrew, Boston, Mass. Making colored and other prints.....	439,566	Oct. 28	2939		53	578
Sands, Bernard, New York, N. Y. Cape-overcoat.....	423,346	Mar. 11	1490	391	50	1427
Sands, James T. (See Baker, Francis M., assignor.)						
Sands, Thomas J., Broad Brook, Conn. Section tension-indicator for yarn-dressers.....	437,134	Sept. 23	2801	730	52	1933

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Sands, William R. (See Budd and Sands.)						
Sandusky Tool Company. (See Montgomery, Joseph A., assignor.)						
Sandwich Enterprise Company. (See Beal, Thomas W., assignor.)						
Saner, Basil, Paterson, N. J. Heddle-machine	426,473	Apr. 29	3109	{ 815 816 817 }	51	642
Sanford, Aaron C., assignor of two-thirds to G. W. Sanford and T. A. Gatsel, Thomaston, Conn. Clock-bell	439,193	Oct. 28	2347	631	53	465
Sanford, Albert, Oshkosh, Wis. Wedge	426,071	Apr. 22	2502	661	51	510
Sanford, Emerson E., Milan, Tenn. Pea thrasher and separator	428,958	May 27	2924	{ 749 750 }	51	1419
Sanford, George D. (See Morrison and Sanford.)						
Sanford, George M., Kilbourn, Iowa, assignor of one-half to J. Bottomly, Brookfield, Mo. Mowing machine	422,162	Feb. 25	2528	668	50	1067
Sanford, George W., <i>et al.</i> (See Sanford, Aaron C., assignor.)						
Sanford, George W., Mountain Home, Ark. Gate	424,134	Mar. 25	2671	711	50	1666
Sanford, John C., Cohoes, N. Y. Undershirt	432,442	July 15	2172	559	52	435
Sanford, William C., Amsterdam, N. Y. Axminster or Moquette carpet fabric	428,022	May 13	1513	384	51	1117
Sanford, William H., Mountain Home, Ark. Combined ditching-machine, grader, and loader	427,273	May 6	383	100	51	886
Sanger, Eugene M., New York, N. Y. Bottle and bottle-stopper	439,693	Nov. 4	100	26	53	627
Sangster, James. (See Sangster, Smith L. and J.)						
Sangster, Smith L. and J., Burke's Station, Va. Car-coupling	439,694	Nov. 4	101	27	53	628
Sanguinetti, Herbert, <i>et al.</i> (See Thame, Henry, assignor.)						
Sanguinetti, Herbert, <i>et al.</i> (See Thame, James R., assignor.)						
Sanitary Supply Company. (See Rosenfield, William W., assignor.)						
Sanno, Walter de, Corry, Pa. Variable cut-off for engines	428,861	May 27	2785	708	51	1391
Sansoney, Mack, Kenosha, Wis. Harness-rosette	438,950	Oct. 21	1976	527	53	388
Sant, Abraham, Sr., and E. A. Boardwell, Whitehall, Mich. Whiffletree-hook	428,354	May 30	2018	507	51	1225
Santenard, François N., Paris, France. Lubricator	429,155	June 3	69	18	51	1485
Sapp, Thompson S. (See Wright, William A., assignor.)						
Sardy, John L., New York, N. Y. Head-band for surgical mirrors	428,761	May 27	2637	668	51	1361
Sargeant, Samuel S., Newark, N. J. Buckle-guard	426,517	Apr. 29	3171	833	51	654
Sargent, Allan C. (See Sargent, Frederick G. and A. C.)						
Sargent, Ara L. (See McDaniel, Charles W., assignor.)						
Sargent, Arthur G., East Tilton, assignor of one-half to Laconia Car Company, Laconia, N. H. Thermostat	441,855	Dec. 2	357	94	53	1334
Sargent, Arthur G., East Tilton, assignor of one-half to Laconia Car Company, Laconia, N. H. Thermostat	441,856	Dec. 2	359	94, 95	53	1354
Sargent & Company. (See Page, Albert A., assignor.)						
Sargent & Company. (See Sargent, Henry B., assignor.)						
Sargent & Company. (See Sargent and Stevens, assignors.)						
Sargent & Company. (See Shaw and Page, assignors.)						
Sargent & Company. (See Sparks, William E., assignor.)						
Sargent, Fitzwilliam, Aurora, Ill. Electric train-signal	440,508	Nov. 11	1387	359	53	884
Sargent, Frederick G., Graniteville, Mass. Wool-washing machine	430,321	June 17	1902	466	51	1859
Sargent, Frederick G., Graniteville, Mass. Wool-washing machine	433,581	Aug. 5	207	55, 56	52	796
Sargent, Frederick G., Graniteville, Mass. Wool-washing machine	433,582	Aug. 5	209	56, 57	52	797
Sargent, Frederick G., Graniteville, Mass. Burring-machine	439,194	Oct. 28	2348	{ 631 632 }	53	466
Sargent, Frederick G., Graniteville, Mass. Fiber-washing machine	439,195	Oct. 28	2350	632	53	466
Sargent, Frederick G. and A. C., Graniteville, Mass. Machine for preparing and burring wool	422,635	Mar. 4	409	{ 101 102 }	50	1214
Sargent, Frederick G. and A. C., Graniteville, Mass. Picker-cylinder and applying coverings thereto	425,087	Apr. 8	1005	269	51	203
Sargent, Frederick G. and A. C., Graniteville, Mass. Squeeze-roll for wool-washers and similar machines	431,174	July 1	212	53	52	44
Sargent, Frederick G. and A. C., Graniteville, Mass. Machine for burring wool	433,186	July 29	2363	870	52	679
Sargent, Frederick G. and A. C., Graniteville, Mass. Wool-washing machine	433,583	Aug. 5	212	57	52	798
Sargent, Henry B., assignor to Sargent & Company, New Haven, Conn. Cylinder-lock	437,939	Oct. 7	404	114	53	78
Sargent, Henry B., assignor to Sargent & Company, New Haven, Conn. Master-key cylinder-lock	443,261	Dec. 23	2679	687	53	1809
Sargent, Henry B., and B. C. Stevens, assignors to Sargent & Company, New Haven, Conn. Machine for rolling metal	441,902	Dec. 2	428	114	53	1349
Sargent, James T., Cleveland, Ohio. Wash-board	421,317	Feb. 11	1321	341	50	822
Sargent, James T., Cleveland, Ohio. Wash-board	421,318	Feb. 11	1322	342	50	822
Sargent, James T., Cleveland, Ohio. Wash-board	437,869	Oct. 7	299	89	53	58
Sargent, John N., Aurora, Ind. Combined vise, punch, and drill	437,047	Sept. 23	2665	697	52	1906
Sargent, Milton O., Malden, Mass., assignor of three-fourths to J. N. George, Plaistow, N. H. C. A. Stearns, Watertown, and C. L. Bly, Bradford, Mass. Electric-current controller	433,744	Aug. 5	449	116	52	843
Sargent, Riley H., Walworth, Nehr. Wind-wheel attachment	427,483	May 6	685	172	51	947
Sargent, Roswell C. (See Pless, William B., assignor.)						
Sargent, William B., New York, N. Y. Copying-press	419,286	Jan. 14	958	253	50	203
Sargent, William D., Evanston, Ill. Car-brake	423,279	Mar. 11	1404	366	50	1409
Sargent, William D., Evanston, assignor to Congdon Brake Shoe Company, Chicago, Ill. Brake-shoe	426,072	Apr. 22	2504	661	51	510
Sargent, William H., South Weymouth, Mass. Filter	434,570	Aug. 19	1719	449	52	1113
Sargent, William H., South Weymouth, Mass. Filter	434,571	Aug. 19	1720	450	52	1113
Sarrazin, Jules, New Orleans, La. Automatic mosquito-bar frame	435,191	Aug. 26	2713	717	52	1309
Sassaman, James J., Benton, Ark. Fence	437,248	Sept. 30	3001	784	52	1977
Sasse, August H., Evansville, Ind. Gate for draw-bridges	438,951	Oct. 21	1977	528	53	388
Sater, Hans H., Dubuque, Iowa. Plow	420,247	Jan. 28	2434	647	50	508
Sater, Hans H., Dubuque, Iowa. Cultivator	420,248	Jan. 28	2436	648	50	508
Sater, Hans H., Dubuque, Iowa. Plow	420,249	Jan. 28	2437	648	50	508
Satterfield, Joseph M., Bellaire, Ohio. Wall-lamp	420,250	Jan. 28	2440	649	50	509
Satterlee, Arthur B., New York, N. Y. Sun-dial	436,153	Sept. 9	1202	314	52	1609
Satterstrom, John, Buffalo, Minn. Lock	425,461	Apr. 15	1575	{ 421 422 }	51	323
Sattley, Archibald. (See Sattley, Marshall, assignor.)						
Sattley Manufacturing Company. (See Heineke, Martin, assignor.)						
Sattley Manufacturing Company. (See Sattley and Heinecke, assignors.)						
Sattley, Marshall, assignor of one-half to A. Sattley, Taylorville, Ill. Cultivator	422,543	Mar. 4	256	66	50	1185

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Sattley, Marshall, and M. Heinecke, assignors to Sattley Manufacturing Company, Springfield, Ill. Straw-stacker	442,750	Dec. 16	1785	462	53	1627
Saucerman, Samuel, Des Moines, Iowa. Building for storing and feeding hay	440,369	Nov. 11	1138	293	53	838
Saucerman, Simon, Monroe, Wis. Shock-compressor	427,190	May 6	252	65	51	861
Sauder, Henry K., Akron, Ohio. Type-writer	427,118	May 6	147	39	51	841
Sauder, John M., Bloomsburg, Pa. Hinge for folding seats	420,246	Jan. 23	2432	647	50	507
Sauer, Henry W., New York, N. Y. Vault-cover	436,639	Sept. 16	1967	516	52	1763
Sauer, Joseph W., Milwaukee, Wis. Ball-catcher's mitten	434,120	Aug. 12	1022	265	52	966
Saugman, Christian J. A., and S. Hansen, Racine, Wis. Wagon-reach protector	432,084	July 15	1642	421	52	336
Saulter, William, Toronto, Ontario, Canada. Stove-pipe thimble	431,853	July 8	1300	326	52	263
Saumenig, Frank, Springfield, Ohio. Thermostat for incubators	433,910	Aug. 5	694	180	52	892
Saunders, Emmett A., Naugatuck, Conn. Rubber boot	437,907	Oct. 7	352	102	53	68
Saunders, Samuel L., Lynn, Mass. Rack for holding boots and shoes	440,439	Nov. 11	1276	330	53	863
Saunders, T., et al. (See Reeser, John W., assignor.)						
Saunders, Theodore, Danbury, Conn., assignor to E. A. Nichols, New York, N. Y. Bottle-washing machine	439,898	Nov. 4	409	106	53	687
Saunderson, Llewellyn. (See Adeney and Saunderson.)						
Saunderson, Llewellyn. (See Head and Saunderson.)						
Saunderson, Llewellyn, Kingstown, county of Dublin, Ireland. Electrode for arc lamps ..	433,041	July 29	3145	808	52	636
Saurer, Adolph. (See Buss and Saurer.)						
Saurer, Adolph, and V. Kobler, assignors to F. Saurer & Söhne, Arbon, Switzerland. Ma- chine for threading needles of embroidering-machines	438,448	Oct. 14	1178	{ 319 320 321 }	53	231
Saurer, Daniel F., Laud, Ind. Combined mower and hay-tedder	423,491	Mar. 18	1705	{ 449 450 }	50	1477
Saurer, Daniel F., Laud, Ind. Combined mower and hay-tedder	438,492	Oct. 14	1238	336	53	244
Saurer & Söhne, F. (See Saurer and Kobler, assignors.)						
Saussy, Clement, Savannah, Ga. Automatic railway-switch	441,586	Nov. 25	3166	816	53	1238
Sauter, Frank, Brooklyn, N. Y. Nose-bag	426,572	Apr. 29	3258	855	51	671
Sautter, Charles F., Brooklyn, N. Y. Tray for tumblers or other articles	424,028	Mar. 25	2521	670	50	1637
Sautter & Co., Cuenod. (See Thury, René, assignor.)						
Savage, Edmund, Albany, N. Y. Automatic coupling-pipe for steam-heating systems for railway-cars	437,908	Oct. 7	355	{ 102 103 }	53	69
Savage, Eli, Providence, R. I. Railway-car brake	419,362	Jan. 14	1080	285	50	228
Savage, George S., et al. (See Jobs, Spencer C., assignor.)						
Savage, William J., Columbus, Ohio. Box for watch-movements	435,324	Aug. 26	2917	775	52	1347
Savery, Thomas H., Wilmington, Del. Paper-winding device	423,448	Mar. 18	1641	{ 432 433 }	50	1464
Saville, Clifford, Hackensack, N. J. Weather-strip	434,890	Aug. 19	2239	588	52	1213
Sawhill, Frelinghuysen, Hastings, Nebr. Teeth-separator	440,509	Nov. 11	1390	359	53	885
Sawtelle, Albert H., Lynn, Mass., assignor to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine	434,996	Aug. 26	2423	641	52	1255
Sawtelle, Charles A., et al. (See Cochran, Edward A., assignor.)						
Sawyer, Albert A., Gandy, Nebr. Lister-cultivator	429,964	June 10	1304	322	51	1733
Sawyer, Albert P., et al. (See Farnham, Isaiah H., assignor.)						
Sawyer, Andrew W., Providence, R. I. Sleeve-holder	431,125	July 1	137	36	52	29
Sawyer, Burnside E., Athol, Mass. Drawing-board	435,980	Sept. 9	930	245	52	1560
Sawyer, Burnside E., Athol, Mass. Parallel-ruler	436,842	Sept. 23	2329	613	52	1841
Sawyer, Edmund H. (See Green and Sawyer.)						
Sawyer, Edward C., assignor to C. J. Ryan and J. B. McDonald, Waterloo, N. Y. Dump- ing-car	421,976	Feb. 25	2254	593	50	1017
Sawyer, George C., Canton, N. Y. Fruit-jar	423,957	Mar. 25	2416	641	50	1618
Sawyer, George C., Canton, N. Y. Faucet	427,191	May 6	254	66	51	861
Sawyer, Houghton, San Francisco, Cal. Automatic switch for cable railways	429,869	June 10	1152	285	51	1703
Sawyer, James H., Troy, Pa. Washing-machine	420,313	Jan. 23	2527	670	50	525
Sawyer, Nowell F., Haverhill, Mass. Damper-regulator	434,471	Aug. 19	1569	408	52	1081
Sawyer, Orley W. (See Stigman, John, assignor.)						
Sawyer, Orren A., and M. M. Lahue, Lowell, Mass. Shuttle checking and releasing mech- anism for looms	430,694	June 24	2490	{ 608 609 }	51	1980
Sawyer, Orren A., and M. M. Lahue, Lowell, Mass. Loom	440,833	Nov. 18	1930	{ 495 496 }	53	995
Sawyer, Robert F., Chicago, Ill. Switch-board for electric-lighting systems	437,516	Sept. 30	3435	899	52	2062
Sawyer, Scott, White River, Colo. Buckle	440,655	Nov. 18	1625	419	53	939
Sawyer Spindle Company. (See Burlingame, Henry A., assignor.)						
Sawyer Spindle Company. (See Buttrick and Flanders, assignors.)						
Sawyer Spindle Company. (See McMullan, James H., assignor.)						
Sawyer, Thomas J., Worcester, Mass. Auxiliary pedal mechanism and brake for sewing- machines	421,056	Feb. 11	949	244	50	752
Sawyer, Willard W., and W. A. Force, New York, N. Y.; said Sawyer assignor to said Force. Self-inking hand-stamp	420,967	Feb. 11	815	211	50	727
Sawyer, William A., Bridgewater, N. H., assignor to Metropolitan Elevator Company, Portland, Me. Elevator	424,904	Apr. 1	727	194	51	140
Sawyer, William A., Bridgewater, N. H., assignor to Metropolitan Elevator Company, Portland, Me. Street-sweeper	426,073	Apr. 22	2504	{ 661 662 }	51	510
Sawyers, Ethan A. (See Latham, Ephraim, assignor.)						
Saxe, John L., Waterbury, Conn. Riveting-machine	437,249	Sept. 30	3002	{ 785 786 787 788 }	52	1977
Saxon, Frank, Worthington, Minn. Boiler-leveling device for road-engines	436,267	Sept. 9	1372	{ 357 358 }	52	1643
Saxon, Samuel A., Morrilton, Ark. Grappling-hook	435,590	Sept. 2	321	90	52	1437
Saxon, Silas J., and W. H. James, Colfax, Wash. Fence-post	423,633	Mar. 18	1924	50	50	1517
Saxton, Edward H., Cleveland, Ohio. Burial-casket	430,440	June 17	2070	511	51	1891
Saxton, Thomas G., assignor of part to O. G. Vanderhoof and J. H. Talbott, Lexington, Ky. Printing attachment for paper-reels	423,394	Mar. 11	1558	409	50	1439
Sayer, Robert C., Redland, Bristol, county of Lancaster, England. Apparatus for utilizing rain-water	422,451	Mar. 4	129	36	50	1161
Sayers, John, Harrodsburg, Ky. Tobacco-hanger	429,965	June 10	1305	323	51	1733
Sayers, Joseph. (See Lundholm and Sayers.)						
Sayle, Robert G., Hale's Corners, Wis. Horse-tail holder	432,085	July 15	1643	421	52	336
Sayles, William H., Corning, N. Y. Railway time-signal	441,981	Dec. 2	544	{ 146 147 }	53	1369
Scaife, William L., Allegheny, Pa. Lock-gate and dam	419,237	Jan. 14	959	253	50	203

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Scandlan, John, Jr., and G. A. Gross, Broken Straw, N. Y. Fifth-wheel.....	431,152	July 1	175	45	52	37
Scanlan & Co. (See Keifel, Fred. W., Jr., assignor.).....						
Scanland, John W., Selma, Ohio. Wad for shotguns.....	419,220	Jan. 14	865	227	50	185
Scantlebury, William, Washington, D. C. Air-motor.....	442,400	Dec. 9	1195	310	53	1501
Scarborough, Joe T., Lafayette, Ala. Combined seed-planter and fertilizer-distributor.....	422,452	Mar. 4	131	36	50	1162
Scarborough, John N., Americus, Ga. Link-lifter and link-guide for car-couplings.....	426,865	Apr. 29	3700	965	51	756
Scarles, Alfred H., assignor of one-half to W. D. Stevens, Springfield, Mass. Machine for cleaning coils of wire.....	434,891	Aug. 19	2240	588	52	1213
Scarles, Benjamin, assignor to Clinton Wire Cloth Company, Clinton, Mass. Metallic lathing.....	420,738	Feb. 4	430	114	50	648
Scarles, Benjamin, assignor of one-half to Clinton Wire Cloth Company, Clinton, Mass. Wire-netting machine.....	433,633	Aug. 5	280	75	52	811
Scarritt, Sanford G., and J. H. Mosley, St. Louis, Mo.; said Mosley assignor to said Scarritt. Reversible car-chair.....	429,966	June 10	1306	323	51	1733
Scarritt, Sanford G., and J. H. Mosley, St. Louis, Mo.; said Mosley assignor to said Scarritt. Reversible car-chair.....	429,967	June 10	1307	{ 323 324 }	{ 51 }	1734
Scates, Eben E. (See Cutts and Scates.).....						
Scates, Isaac H., <i>et al.</i> (See Bromberg, Samuel A., assignor.).....						
Scattergood, Charles F. (See Scattergood, Henry V. and C. F.).....						
Scattergood, Henry V., assignor to W. M. Brown, Albany, N. Y. Sectional saw for cotton-gins.....	420,666	Feb. 4	337	88	50	630
Scattergood, Henry V. and C. F., assignors to W. M. Brown, Albany, N. Y. Baling-press.....	422,320	Feb. 25	2779	731	50	1114
Schaadt, Henry S., and F. L. Clark, St. Louis, Mo. Welt-trimming machine.....	429,065	May 27	3093	798	51	1450
Schaaf, Ferdinand, Frankfurt-on-the-Main, Prussia, Germany. Repetition-action for pianos.....	426,332	Apr. 22	2282	758	51	588
Schaal, Eugen, Feuerbach, Württemberg, Germany. Manufacture of artificial copal. (Re-issue.).....	11,069	Apr. 1	786		51	153
Schade, Adolph v., Newport, R. I. Bottle-washing machine.....	425,643	Apr. 15	1853	495	51	378
Schade, John, assignor to Hopkins & Dickinson Manufacturing Company, Brooklyn, N. Y. Lock.....	421,977	Feb. 25	2255	593	50	1017
Schade, John, and F. B. Case, Brooklyn, N. Y. Lock.....	419,890	Jan. 21	1867	491	50	391
Schade, John, and F. B. Case, Brooklyn, N. Y. Sash-fastener.....	419,891	Jan. 21	1868	491	50	392
Schadewald, Frederick C. (See Ziebarth and Schadewald.).....						
Schadt, John J., Allentown, Pa. Axle-nut.....	425,635	Apr. 15	1842	492	51	376
Schaefer, Carl, Oberhausen, Germany. Steam-boiler.....	437,384	Sept. 30	3228	{ 841 842 }	{ 52 }	2019
Schaefer, Charles W., Cleveland, Ohio. Chalk-sharpener, chalk-dust collector, and weight.....	443,008	Dec. 16	2211	569	53	1712
Schaefer, George W., and F. Mehnert, Goshen, Ind. Seed-distributing disk.....	439,025	Oct. 21	2085	558	53	411
Schaefer, Peter, assignor to American Vehicle Company, Chicago, Ill. Velocipede.....	433,542	Aug. 5	140	40, 41	52	794
Schaeffer, Barnett. (See Schaeffer, Isidor A. and B.).....						
Schaeffer, Isidor A. and B., assignors to R. Schaeffer, New York, N. Y. Machine for marking patterns.....	443,798	Dec. 30	3535	907	53	1983
Schaeffer, John S., Newark, N. J. Pavement.....	421,618	Feb. 18	1759	461	50	913
Schaeffer, Rosa. (See Schaeffer, Isador A. and B., assignors.).....						
Schaeitzke, Ferdinand A., Milwaukee, Wis. Grater.....	440,901	Nov. 18	2038	525	53	1017
Schafer, Christian E., assignor of one-half to D. Connelly, Cleveland, Ohio. Stay-bar for boilers, tanks, &c.....	437,458	Sept. 30	3351	877	52	2044
Schaffer, Charles, <i>et al.</i> (See Reckenzaun, Anthony, assignor.).....						
Schaffer, John, <i>et al.</i> (See Burke, Stephen L., assignor.).....						
Schaffer, Louis, Oakland, Cal. Ventilating-outlet for refrigerator-chambers.....	425,831	Apr. 15	2125	567	51	431
Schaffers, Victor F., Antwerp, Belgium. Mechanical motor for use on land and water ways.....	440,234	Nov. 11	929	{ 238 239 }	{ 53 }	801
Schaffstädt, Heinrich, Giessen, Germany. Shower-bath, &c.....	425,702	Apr. 15	1943	516	51	395
Schaffhaus, Jean, New York, N. Y. Mashing-machine.....	431,624	July 8	910	{ 228 229 }	{ 52 }	189
Schaller, Michael D., Lowell, assignor of one-half to I. J. Evans, Rome, N. Y. Wagon-seat lock.....	420,701	Feb. 4	381	101	50	639
Schamburg, Hiram, <i>et al.</i> (See Kimball, Frank W., assignor.).....						
Schaper, Kaspar H., Linn's Mills, Mo. Counting-register.....	423,880	Mar. 18	2285	603	50	1586
Scharar, Christian H., Scranton, Pa. Device for creating draft.....	418,818	Jan. 7	237	58	50	51
Scharr, Jonathan, Philadelphia, Pa. Washing-machine.....	420,108	Jan. 28	2203	583	50	467
Schatz, Carl H. B., Hamburg, Germany. Horseshoe.....	438,952	Oct. 21	1978	528	53	388
Schaub, John, Chicago, Ill. Automatic meat-hanger.....	436,362	Sept. 16	1568	412	52	1690
Schauck, La Fayette, Rochester, N. Y. Hot-air register.....	423,968	June 10	1309	324	51	1734
Schaum, Otto W., Philadelphia, Pa. Glass-bar bracket for looms for weaving silk ribbon or fringe.....	440,370	Nov. 11	1139	294	53	838
Scheatzka, Herman, Bothell, Wash. Wrench.....	438,243	Oct. 14	876	237	53	173
Scheble, Eugene S. (See McWhirter and Scheble.).....						
Schoen, Thomas, St. Helena, Cal. Lawn-sprinkler.....	436,942	Sept. 23	2524	661	52	1878
Scheffbauer, Rupert, assignor of one-half to C. Beil, New York, N. Y. Electric-arc lamp.....	420,314	Jan. 28	2528	670	50	525
Scheffler, David M., New Castle, Ind., assignor to Hausmann, McComb & Dunn, Chicago, Ill. Veterinary dental forceps.....	426,074	Apr. 22	2508	662	51	511
Scheffler, Frederick A. (See Scheffler, Theodore and F. A.).....						
Scheffler, Theodore, Paterson, N. J. Snow-plow.....	421,768	Feb. 18	1959	515	50	952
Scheffler, Theodore, Paterson, N. J. Snow-plow.....	421,841	Feb. 18	2060	{ 543 544 }	{ 50 }	970
Scheffler, Theodore, Paterson, N. J., and F. A. Scheffler, assignors to Erie City Iron Works, Erie, Pa. Steam-engine governor.....	421,871	Feb. 18	2111	554	50	980
Schefold, Frank, New Albany, Ind., assignor to W. C. De Pauw Company, of Indiana. Means for transferring molten glass.....	424,825	Apr. 1	611	160	51	118
Schefold, Frank, New Albany, Ind., assignor to W. C. De Pauw Company, of Indiana. Means for transferring pots containing molten glass.....	424,826	Apr. 1	612	161	51	118
Schehr, Henry, Detroit, Mich. Road-cart.....	425,832	Apr. 15	2126	567	51	431
Scheidemann, Ferdinand L. (See Bender and Scheidemann.).....						
Scheidler, George. (See Shoettle, Charles, assignor.).....						
Scheidler, Reinhard, Newark, Ohio. Reversing mechanism.....	421,523	Feb. 18	1614	416	50	886
Scheinberger, Ignaz. (See Urban, Otto, assignor.).....						
Schelp, Frederick, Jr., St. Louis, Mo. Vehicle-spring.....	440,063	Nov. 4	659	176	53	737
Schenck, Charles S., New York, N. Y. Coal-elevating crane.....	425,552	Apr. 15	1703	455	51	349
Schenck, Charles S., New York, N. Y. Means for conveying or transferring coal, &c.....	420,238	June 17	1736	432	51	1826
Schenck, Charles S., New York, N. Y. Means for securing push-plates of coal-conveyer belts.....	435,025	Aug. 26	2468	653	52	1263
Schenck, Charles S., assignor to J. Halle, New York, N. Y. Gate for coal-conveyers.....	424,937	Apr. 1	774	206	51	150
Schenck, John P. (See Getler, Charles F., assignor.).....						
Schenck, William A., Cleveland, Ohio. Roll-paper holder and cutter.....	440,928	Nov. 18	2088	539	53	1025

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Schenck, William T. Y., San Francisco, Cal. Fire-hydrant	430,301	June 17	1868	459	51	1852
Schenkel, George F., and J. G. Rees, Philadelphia, Pa. Spice-mill	424,226	Mar. 25	2791	744	50	1691
Schenkel, Joseph A., Allegheny, Pa. Furniture	426,686	Apr. 29	3428	899	51	703
Scheppers Brothers. (See Harrison, Thomas, assignor.)						
Scherbel, Jean. (See Remus, Carl T., assignor.)						
Scherer, François, Paris, France. Electric trap	424,729	Apr. 1	453	121	51	90
Scherer, Maria C., New York, N. Y. Commode	426,963	Apr. 29	3827	1000	51	781
Scherer, Maria C., New York, N. Y. Bedstead	438,244	Oct. 14	877	238	53	174
Scherf, Theodore, Elizabeth, N. J. Sand-molding machine	439,430	Oct. 28	2745	732	53	540
Schermerhorn, Clarence M., assignor of one-half to J. H. Bowley and L. Warner, Union, Ill. Milk-strainer	433,659	Aug. 5	326	83	52	819
Schermerhorn, George W., Philadelphia, Pa. Boat	429,649	June 10	827	201	51	1641
Scheu, William, Philadelphia, Pa. Paper-file	442,829	Dec. 16	1921	493	53	1655
Scheuber, August W., assignor to S. Zinn, New York, N. Y. Bag-lock	436,268	Sept. 9	1375	358	52	1644
Scheuer, Simon, New York, N. Y. Buckle	419,363	Jan. 14	1082	286	50	228
Scheuer, Simon, New York, N. Y. Clasp for pocket-books	427,801	May 13	1182	297	51	1053
Scheuerle, Henry A., Philadelphia, Pa. Device for placing belts upon pulleys	433,825	Aug. 5	5-0	151	52	870
Scheuritzel, Charles P., and J. L. Hess, Brooklyn, N. Y. Dynamo-electric machine	443,407	Dec. 23	2908	748	53	1854
Schick, Charles H., Burlington, Iowa. Hame-tug	427,619	May 13	894	225	51	997
Schickner, William G., and L. K. Marty, Cincinnati, Ohio; said Marty assignor to said Schickner. Cash indicator and register	436,383	Sept. 16	1569	412	52	1691
Schiefer, Andrew, Home City, assignor to Addyston Pipe and Steel Company, Addyston, Ohio. Hinge for flasks, &c.	440,724	Nov. 18	1738	446	53	961
Schiewer, Adam, New York, N. Y. Suspenders	423,958	Mar. 25	2417	642	50	1618
Schiesl, William W., Milwaukee, Wis. Child's carriage	431,401	July 1	562	141	52	114
Schiffmann, Johannes, New York, N. Y. Producing indelible aniline ink	428,146	May 20	1636		51	1162
Schiffmann, William W., St. Paul, Minn. Speed-regulator for electric motors	442,208	Dec. 9	909	242	53	1447
Schildhauer, Henry. (See Cornelius and Schildhauer.)						
Schill, Emil W., assignor of one-half to A. Becker, Newark, N. J. Jewelry	434,405	Aug. 12	1464	381	52	1054
Schill, Henry, Toledo, Ohio. Adjustable gage for snppoting weather-boards	418,754	Jan. 7	138	33	50	30
Schiller, Charles J., assignor to Shniedewend & Lee Company, Chicago, Ill. Impression throw-off for printing-presses	434,955	Aug. 26	2367	627	52	1244
Schilling, August M., Chicago, Ill. Machine for punching holes	424,358	Mar. 25	3003	797	50	1730
Schilling, Ferdinand M., Sonnerberg, Germany. Stand for toys and the like	425,709	Apr. 15	1952	519	51	397
Schilling, John L., Bellaire, Ohio. Counter for the game of spider	434,572	Aug. 19	1721	450	52	1113
Schilling, Joseph, assignor of one-half to C. H. Griswold and J. B. Boyd, Erie, Pa. Carpet-stretcher	432,769	July 22	1711	694	52	547
Schilling, Stollwerck & Co. (See Stollwerck, Heinrich, assignor.)						
Schilling, John J., New York, N. Y. Pavement	425,258	Apr. 8	1265		51	256
Schilling, John J., New York, N. Y. Building-block	427,914	May 13	1357	342	51	1086
Schilling, John J., New York, N. Y. Mixing or stirring vessel	429,484	June 3	583	142	51	1584
Schiltz, John M., Philadelphia, Pa. Machine for barbing wire nails	424,227	Mar. 25	2792	745	50	1691
Schimmelbusch, Curt, Berlin, Germany. Mask for chloroforming	429,287	June 3	274	65	51	1522
Schimper & Co., William. (See Oldenbusch, Ernst, assignor.)						
Schindler, Anthony J., and K. Schneider, New York, N. Y. Thumb-tack	420,702	Feb. 4	383	102	50	639
Schindler, John, Bridgeport, Conn. Fire-proof chimney-tube	433,042	July 29	3146	808	52	636
Schinneller, Jacob, Pittsburg, Pa. Furnace for burning hydrocarbon oils	434,092	Aug. 12	968	254	52	956
Schirner, Adolf, Berlin, Germany. Holder for incandescent electric lamps	433,371	July 29	3618	933	52	731
Schlatter, Charles, Hoboken, N. J., assignor to himself and P. Nordmann, New York, N. Y. Stop-watch	426,396	Apr. 22	2988	783	51	609
Schlauch, George, assignor of one-half to R. M. Slaymaker, Lancaster, Pa. Atomizer	435,458	Sept. 2	114	32	52	1397
Schlegel, Albert A., et al. (See Schlegel, Herman T., assignor.)						
Schlegel, Herman T., assignor of three-fourths to A. A. Schlegel and M. J. Gilbo, Akron, Ohio. Electric actuating mechanism for clocks	440,241	Nov. 11	938	242	53	803
Schlegelmilch, Leopold, Boston, Mass. Globe or shade holder	421,319	Feb. 11	1324	342	50	823
Schlegel, Adolphus W., and P. A. N. Winand, Philadelphia, Pa. Gas and hydrocarbon engine	434,609	Aug. 19	1785	466	52	1126
Schleicher, Charles, Louisville, Ky. Car-coupling	433,043	July 29	3147	809	52	637
Schleicher, John C., Mount Vernon, N. Y. Protector for pianos	433,826	Aug. 5	581	152	52	870
Schleicher, Wilhelm, Dusseldorf-on-the-Rhine, Prussia, Germany. Folding chair	428,959	May 27	2926	750	51	1419
Schleicher, William A., et al. (See Jones, Robert V., assignor.)						
Schleicher, William H., New York, N. Y. Glass-bar bracket for looms for weaving silk ribbon or fringe	439,807	Nov. 4	262	66	53	659
Schleicher, William H., New York, N. Y. Glass-bar bracket for looms for weaving silk ribbon or fringe	442,727	Dec. 16	1754	454	53	1621
Schleiff, Francis A. and F. A., Jr., and P. Ehnke, New York, N. Y. Cigar-bunching machine	439,978	Nov. 4	540	142	53	712
Schlereth, George, and M. Katzenberg, Albuquerque, N. Mex. Ter. Folding bottle-basket	430,255	June 17	1765	438	51	1833
Schlesinger, Hngo. (See Knecht and Schlesinger.)						
Schlesinger, Louis, and L. Bowmann, assignors to Capitol Manufacturing Company, Chicago Ill. Wrench	424,359	Mar. 25	3010	799	50	1731
Schlesinger, William M., Philadelphia, Pa. Operating electric brakes for electrically-propelled cars	441,330	Nov. 25	2765	715	53	1161
Schlichte, Arnold W., New York, N. Y. Web-cutting attachment for lining-machines	420,283	Jan. 28	2491	661	50	518
Schlicht & Field Company. (See Jewell, Major R., assignor.)						
Schlichting, Albert T., and J. Smith, Brooklyn, assignors of three-fifths to A. Kern, New York, N. Y. Fruit-jar	423,703	Mar. 18	2029	535	50	1537
Schliel, Albert, Westphalia, Mo. Knife	432,770	July 22	2712	694	52	547
Schliemann, Andrew J., Adrian, Mich. Distributing-case for postal cars and post-offices	426,964	Apr. 29	3828	1000	51	781
Schlingman, Adolph, West Alexandria, Ohio. Washing-machine	429,870	June 10	1155	285	51	1704
Schlingmann, William, St. Louis, Mo. Lamp-support	426,549	Apr. 29	3221	844	51	663
Schlomer, Peter, Newport, Pa. Shaft-tug	441,329	Nov. 25	2764	715	53	1161
Schloss, Joseph W., New York, N. Y. Button	440,371	Nov. 11	1141	294	53	838
Schloss & Sons. (See Smith, Charles F., assignor.)						
Schlosser, George J., Leadville, Colo. Automatic fanning-mill	441,331	Nov. 25	2768	715	53	1162
Schlosstein, Frederick A., Newark, N. J. Finger-ring	442,757	Dec. 16	1797	465	53	1630
Schlueter, Otto, Washington, D. C. Extension bracket-bar	438,190	Oct. 14	792	216	53	159
Schlumberger, Albert, Paris, France. White safety-paper	443,116	Dec. 23	2417		53	1759
Schlutter, John, Baltimore, Md. Door-hanger	423,280	Mar. 11	1406	366	50	1410
Schmalhausen, Lewis R., Charleston, Ill. Extension-bracket	441,513	Nov. 25	3043	785	53	1216
Schmalz, Charles, and R. N. Watts, Uintah, Utah Ter. Concave for thrashing-machines	433,044	July 29	3148	809	52	687

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Schmalz, François, and J. C. Firmbach, Brooklyn, N. Y., assignors to American Waltham Watch Company, Waltham, Mass. Applying designs to watch-dials	424,228	Mar. 25	2794	50	1692
Schmasen, Henry, St. Louis, Mo. Sash-balance	423,881	Mar. 18	2286	{ 603 604 }	50	1586
Schmauser, Theodore, Allegheny, Pa. Therapeutic galvanic apparatus	423,959	Mar. 25	2418	642	50	1618
Schneiser, Carl, Bradford, Pa. Money-wrapper	425,910	Apr. 15	2241	594	51	451
Schmeitz, Leonard, Syracuse, N. Y. Door-hanger	425,524	Apr. 15	1667	{ 444 445 }	51	342
Schmemann, Friedrich, Philadelphia, Pa. Tubular parabolic roof structure	432,771	July 22	2713	694	52	547
Schmemann, Friedrich, Philadelphia, Pa. Tubular floor structure	435,155	Aug. 26	2656	703	52	1299
Schmemann, Friedrich, Philadelphia, Pa. Arch pipe-truss for roofs	435,156	Aug. 26	2658	703	52	1299
Schmid, Albert. (See Beckfeld and Schmid.)						
Schmid, Albert. (See Beckfeld and Siegfried, assignors.)						
Schmid, Albert, Allegheny, assignor to Westinghouse Electric Company, Pittsburg, Pa. Armature for dynamos, &c.	428,289	May 20	1918	{ 482 483 }	51	1205
Schmid, Albert, Allegheny, assignor to Westinghouse Electric Company, Pittsburg, Pa. Armature for dynamos	434,206	Aug. 12	1156	300	52	992
Schmid, Albert, Allegheny, assignor to Westinghouse Electric Company, Pittsburg, Pa. Electric motor and frame	442,459	Dec. 9	1289	{ 333 334 }	53	1521
Schmid, Albert, and J. C. Beckfeld, Allegheny, Pa. Gas-engine	421,534	Feb. 18	1616	416	50	886
Schmid, Albert, and J. C. Beckfeld, Allegheny, Pa. Air-engine	421,525	Feb. 18	1617	416	50	886
Schmid, Albert, and E. C. Means, Allegheny, said Schmid assignor to Westinghouse Electric Company, Pittsburg, Pa. Collecting-contact for electric machines	421,320	Feb. 11	1324	342	50	823
Schmid, August. (See Zimmermann, Schmid, and Wunderle.)						
Schmid, Charles, Chicago, Ill. Slide-valve mechanism	423,492	Mar. 18	1706	450	50	1477
Schmid, Charles, assignor to American Valve and Governor Company, Chicago, Ill. Valve mechanism for engines	437,672	Sept. 30	3653	{ 953 954 }	52	2105
Schmid, Jakob. (See Gnehm and Schmid.)						
Schmid, Jakob, assignor to Society of Chemical Industry, Basle, Switzerland. Orthonitro-paradiamido-diphenyl	425,525	Apr. 15	1668	.....	51	342
Schmidlapp, Jacob, New York, N. Y. Vehicle-spring	429,247	June 3	208	52	51	1512
Schmidt, Albert A. (See Gartner, Alfred, assignor.)						
Schmidt, Alexey W. v., San Francisco, Cal. Shell for high explosives	422,636	Mar. 4	411	102	50	1215
Schmidt, Carl A. G., Langensalza, Prussia, Germany. Apparatus for steaming fabrics	422,321	Feb. 25	2783	732	50	1114
Schmidt, Carl A. G., Langensalza, Prussia, Germany. Dye-vat	425,703	Apr. 15	1944	516	51	396
Schmidt, Charles G., Cincinnati, Ohio. Refrigerator-wagon	430,150	June 17	1600	398	51	1801
Schmidt, Charles R., Baltimore, Md. Water-closet	423,182	Mar. 11	1252	326	50	1382
Schmidt, Eduard, Vienna, Austria-Hungary. Compound for treating grape-vines	422,544	Mar. 4	257	66	50	1185
Schmidt, Frederick C., New York, N. Y. Pavement	442,784	Dec. 16	1835	475	53	1638
Schmidt, Fredrick M., Brooklyn, N. Y. Electro-magnet	438,780	Oct. 21	1700	456	53	337
Schmidt, Friedrich, Brooklyn, N. Y. Lotion	434,727	Aug. 19	1988	.....	52	1163
Schmidt, Herman C., Johnstown, N. Y. Extension fire-ladder and truck	437,625	Sept. 30	3588	{ 938 939 }	52	2092
Schmidt, Joseph G. and J. Philadelphia, Pa., and C. W. Harris, Hartford, Conn. Garment-clasp	421,145	Feb. 11	1070	275	50	776
Schmidt, Joseph G., assignor to H. Troemner, Philadelphia, Pa. Weighing-scales	423,183	Mar. 11	1253	326	50	1382
Schmidt, Joseph J., Jamaica, and C. A. Jouson, Brooklyn, N. Y. Adjustable fan-supporting bracket	421,146	Feb. 11	1071	275	50	777
Schmidt, Josephine. (See Schmidt and Harris.)						
Schmidt, Josephine, Philadelphia, Pa. Clasp	421,086	Feb. 11	989	253	50	760
Schmidt, Louis. (See Morrison and Schmidt.)						
Schmidt, Louisa M., Cincinnati, Ohio. Fruit-can holder	421,437	Feb. 18	1484	385	50	862
Schmidt, Max E., and J. L. Silsbee, Chicago, Ill. Railway construction	440,725	Nov. 18	1739	{ 446 447 }	53	961
Schmidt, Otto, and C. Loeffel, Chicago, Ill. Lock	426,866	Apr. 29	3701	965	51	756
Schmidt, Philipp, La Crosse, Wis. Safety device for elevators	432,443	July 15	2173	559	52	435
Schmidt, Wilhelm, Halberstadt, Prussia, Germany. Utilizing exhaust	429,774	June 10	1005	247	51	1676
Schmidt, William F., St. Louis, Mo. Chuck or tool-holder	434,066	Aug. 12	1465	381	52	1054
Schmidt, William F., St. Louis, Mo., assignor to Chouteau Manufacturing Company, of Missouri. Throttle-valve for direct-acting engines	433,150	July 29	3313	856	52	669
Schmitz, William, assignor of one-half to J. G. Haist, New York, N. Y. Base-ball game. Schmitt, Charles. (See Nottberg and Schmitt.)	439,899	Nov. 4	411	107	53	688
Schmitt, Charles A., Kansas City, Mo. Link-motion for lubricators, &c.	434,839	Aug. 19	2143	{ 561 562 }	52	1195
Schmitt, Edward D., and H. I. Mason, Cuyahoga Falls, Ohio, assignor to Falls Rivet and Machine Company, of Ohio. Pulley	434,610	Aug. 19	1787	466	52	1126
Schmitt, Edward D., Cuyahoga Falls, Ohio, assignor to Falls Rivet and Machine Company, of Ohio. Friction-clutch	434,611	Aug. 19	1788	466	52	1126
Schmitt, George H. (See Settles and Schmitt.)						
Schmitt, Henry G., Hendy Creek, N. Y. Device for displacing and replacing knives in sickle-bars	441,776	Dec. 2	232	60	53	1309
Schmitt, Jacob, Allegheny, Pa. Treating hides	434,645	Aug. 19	1861	.....	52	1140
Schmitt, Johann, assignor of one-third to J. B. Coblenzer, Coblentz, Germany, and C. G. Rommenhöller, Rotterdam, Netherlands. Knitting-machine	421,626	Feb. 18	1620	{ 417 418 }	50	887
Schmitt, John B. (See Koch and Danuer, assignors.)						
Schmitt, Kasper, Dewar, Iowa. Heater	442,141	Dec. 9	808	218	53	1428
Schmitt, Wilhelm, Baltimore, Md. Spring bed-bottom	428,637	May 27	2433	619	51	1323
Schmitz, Edward, Winsted, Conn. Mitering attachment for circular saws	420,739	Feb. 4	431	114	50	649
Schmitz, Ernst, and R. F. Paulsen, Chicago, Ill. Attachment for screw-cutting lathes	431,625	July 8	911	229	52	189
Schmitz, Robert, Cleveland, Ohio. Electric-alarm device for clocks	425,004	Apr. 8	887	{ 234 235 }	51	180
Schmuck, Solomon H., Cleveland, Ohio. Mop-wringer	434,033	Aug. 12	869	229	52	935
Schnarrenberger, Jacob H., assignor of one-half to T. Reynolds, Springfield, Ohio. Adding and subtracting machine	418,930	Jan. 7	442	{ 108 109 }	50	92
Schnarrenberger, Jacob H., assignor of one-half to T. Reynolds, Springfield, Ohio. Cash register and indicator	422,545	Mar. 4	258	66, 67	50	1185
Schnarrenberger, Jacob H., assignor to T. Reynolds, Springfield, Ohio. Adding-machine	429,431	Oct. 28	2747	732	53	540
Schnarrenberger, Jacob H. and J. F., assignors of one-third to C. C. Funk, Springfield, Ohio. Cash register and indicator	422,040	Feb. 25	2339	618	50	1032
Schnarrenberger, John F. (See Schnarrenberger, Jacob H. and J. F.)						
Schnatz, George J. (See Blauss, Ferdinand, assignor.)						
Schneck, Fred, Buchanan, Mich. Folding bed	419,288	Jan. 14	963	254	50	204
Schneebeil, Gustav A. (See Townsend and Schneebeil.)						
Schneer, Isaac, New York, N. Y. Hemming attachment for sewing-machines	420,251	Jan. 28	2442	649	50	509

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Schneider, Alexander M., New York, N. Y. Embroidering-machine	419,221	Jan. 14	566	{ 227 228 }	50	185
Schneider, August, Dresden-Neustadt, Saxony, Germany. Detachable dog-line	431,402	July 1	563	141	52	114
Schneider, August, Dresden, Germany. Collar for training animals	441,706	Dec. 2	123	33	53	1256
Schneider, Caspar, Stapleton, N. Y. Insecticide solution	421,196	Feb. 11	1151	-----	50	791
Schneider, Charles W., <i>et al.</i> (See Porter, William H., assignor.)						
Schneider, Christoph, <i>et al.</i> (See Ahlström, Alfred C., assignor.)						
Schneider, Edward B., <i>et al.</i> (See Brewer, Russell, assignor.)						
Schneider, Henri, Le Creusot, France. Apparatus for transporting ammunition from the magazines of vessels to guns in the turrets	419,289	Jan. 14	964	254	50	204
Schneider, Henri, Creusot, France. Gas-check for ordnance	427,370	May 6	512	131	51	912
Schneider, Henri, Creusot, France. Hydranlic brake for ordnance	428,418	May 20	2120	533	51	1245
Schneider, Henri, Paris, France. Recoil-check for ordnance	428,960	May 27	2927	{ 750 751 }	51	1419
Schneider, Henri, Paris, France. Recoil-check for heavy ordnance	442,919	Dec. 16	2080	{ 534 535 }	53	1685
Schneider, Hippolyte, Pittsburg, Pa. Shaft-bearing	424,360	Mar. 25	3012	799	50	1731
Schneider, Hippolyte, Pittsburg, Pa. Shaft-bearing	428,526	May 20	2262	574	51	1271
Schneider, Hippolyte, assignor of one-half to C. Huff, Pittsburg, Pa. Shaft-coupling	435,325	Aug. 26	2918	775	52	1347
Schneider, John, New York, N. Y. Magnetic lock	428,256	May 20	1664	468	51	1194
Schneider, John G., assignor of one-half to F. Riedle, Chicago, Ill. Street-car	442,830	Dec. 16	1922	{ 493 494 }	53	1655
Schneider, Joseph, and J. Miller, Kansas City, Mo. Refrigerator	422,637	Mar. 4	412	{ 102 103 }	50	1215
Schneider, Joseph F., and D. K. Carson; said Carson assignor to W. H. Myers, St. Louis, Mo. Metallic pole for electric wires, &c.	431,955	July 8	1440	365	52	290
Schneider, Karl. (See Schindler and Schneider.)						
Schneider, Peter, Brooklyn, N. Y. Coin-operated machine	421,619	Feb. 18	1760	461	50	913
Schneider, William E., Washington, D. C. Camera-shutter	433,745	Aug. 5	452	117	52	843
Schneider, William E., Washington, D. C. Camera	433,746	Aug. 5	454	{ 117 118 }	52	844
Schneller, George O., Ansonia, Conn. Hook and eye	440,373	Nov. 11	1143	295	53	839
Schnetzler, Conrad, assignor to O. F. and C. J. Nash, Ontario Centre, N. Y. Vegetable-slicer	436,022	Sept. 9	9-8	259	52	1571
Schoch, Martin L., New Berlin, Pa. Thill-coupling	423,634	Mar. 18	1924	507	50	1517
Schoch, Martin L., New Berlin, Pa. Tobacco-pipe top and stuffer	427,915	May 13	1358	342	51	1086
Schoch, Martin L., New Berlin, Pa. Dipper	432,905	July 22	2902	744	52	585
Schoch, Martin L., New Berlin, Pa. Spoon	439,432	Oct. 28	2749	733	53	540
Schoell, George, Philadelphia, Pa. Vegetable cutter or slicer	419,364	Jan. 14	1082	286	50	229
Schoeller, George W., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Eye- glass	433,372	July 29	3619	934	52	731
Schoen, Charles T., Philadelphia, Pa. Corner-strap for cars	419,715	Jan. 21	1592	425	50	336
Schoen, Charles T., Philadelphia, Pa. Side bearing for railway-cars	420,629	Feb. 4	289	77	50	620
Schoen, Charles T., Philadelphia, Pa. Die for the manufacture of side bearings for railway- cars	420,630	Feb. 4	290	77	50	620
Schoen, Charles T., Philadelphia, Pa. Truss brake-beam	426,075	Apr. 22	2510	662	51	511
Schoen, Charles T., Philadelphia, Pa. Draw-bar-spring pocket	426,143	Apr. 22	2620	638	51	534
Schoen, Charles T., Philadelphia, Pa. Manufacture of journal-box keys	426,604	Apr. 29	3303	867	51	680
Schoen, Charles T., Philadelphia, Pa. Center bearing-plate for railway-cars	428,527	May 20	2264	575	51	1272
Schoen, Charles T., Philadelphia, Pa. Metallic car	432,066	July 15	1644	{ 422 423 }	52	336
Schoen, Charles T., Philadelphia, Pa. Bolster guide-bar for car-trucks	437,722	Oct. 7	71	23	53	17
Schoen, Charles T., Philadelphia, Pa. Corner-band for cars	437,723	Oct. 7	72	23	53	17
Schoen, Charles T., Philadelphia, Pa. Follower-plate for draw-bars	437,940	Oct. 7	406	115	53	78
Schoen, Charles T., Philadelphia, Pa. Center-bearing plate for cars	440,335	Nov. 11	1088	279	53	828
Schoenberger & Co. (See Haight, Charles L., assignor.)						
Schoenefeldt, Henry, <i>et al.</i> (See Daellenbach, Charles K., assignor.)						
Schoenfeld, Charles, assignor to Diebold Safe and Lock Company, Canton, Ohio. Prison	424,936	Apr. 1	773	205	51	150
Schoepf, George B., Madison, Minn. Side spring for vehicles	431,403	July 1	563	141	52	114
Schoettl, Josef, Brooklyn, N. Y. Atomizer	442,785	Dec. 16	1836	475	53	1638
Schoettle, George J., Collinsville, Ill. Sleeve and head-brace for pick-handles	428,528	May 20	2265	575	51	1272
Schoff, Frederic, Philadelphia, Pa. Universal-joint coupling	420,284	Jan. 28	2492	661	50	518
Schoff, Frederic, Philadelphia, Pa. Casing for flexible shafts	428,023	May 13	1514	384	51	1117
Schoff, Frederic, Philadelphia, Pa. Portable reaming and tapping tool	437,459	Sept. 30	3352	877	52	2045
Schoff, Frederic, Philadelphia, Pa. Corner-drill press	439,567	Oct. 28	2940	781	53	578
Schoff, Frederic, Philadelphia, Pa. Drill-support	441,509	Nov. 25	3044	784	53	1215
Schoff, Henry W. (See Dugan and Schoff.)						
Schofield, Albert B., New York, N. Y. Can-opener	421,197	Feb. 11	1151	294	50	791
Schofield, Albert B., New York, N. Y. Paving-block	441,332	Nov. 25	2769	716	53	1162
Schofield, Albert B., Brooklyn, N. Y. Ice-pick	441,333	Nov. 25	2770	716	53	1162
Schofield, Daniel, Camden, N. J. Car-coupling	435,192	Aug. 26	2713	717	52	1310
Schofield, Henry, Stanington, near Sheffield, county of York, England. Apparatus for opening and closing stuff-taps	422,979	Mar. 11	947	248	50	1324
Schofield, James, assignor of one-half to P. B. Wachtel, Petoskey, Mich. Machine for shear- ing and punching	423,960	Mar. 25	2422	643	50	1619
Schofield, James D., Rogers, Tex., assignor to Fremont Cultivator Company, Bellevue, Ohio. Planter	434,051	Aug. 12	892	235	52	939
Schofield, James M., Merced, Cal. Bottle-stopper	419,477	Jan. 14	1247	330	50	262
Schofield, John, Holyoke, Mass. Sash-holder	429,364	June 3	400	95	51	1547
Schofield, John, New Haven, Conn. Vending apparatus	437,048	Sept. 23	2666	697	52	1906
Schofield, Richard. (See Hinkley and Schofield.)						
Schofield, Richard, assignor of seven-twelfths to J. Penman, Paris, Ontario, Canada. Card- grinder	428,529	May 20	2266	575	51	1272
Schofield, Silas C., assignor to L. M. Devore, Freeport, Ill. Curry-comb	426,744	Sept. 16	2144	564	52	1798
Scholding, John H., Yonkers, N. Y. Fire-extinguishing apparatus	432,906	July 22	2903	744	52	585
Schöler, Wilhelm, Eiland, Solingen, Germany, assignor to F. W. Nelle, New York, N. Y. Cigar-cutter	436,269	Sept. 9	1375	358	52	1644
Scholes, Frank, Huntington, Ind. Grading-machine	438,863	Oct. 21	1851	491	53	363
Schofield, James J., Martinsville, Ind. Sight	426,333	Apr. 22	2882	759	51	589
Scholl, Nicholas, Chillicothe, Ohio. Show-rack	419,222	Jan. 14	868	{ 228 229 }	50	186
Scholl, Peter, assignor of one-fourth to J. Rademacher, North Kankana, Wis. Pulp- screen shaker	411,903	Dec. 2	430	114	53	1349
Schöllhorn, August L., assignor to W. Schöllhorn & Co., New Haven, Conn. Pencil-holder for calipers	437,250	Sept. 30	3009	788	52	1978

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Schöllhorn & Co., William. (See Schöllhorn, August L., assignor.)						
Scholz, Karl, assignor to H. Byk, Berlin, Germany. Obtaining permanent hydroquinone.	427,620	May 13	894	51	997
Scholz, Stefan A., Tschirnau, Germany. Pen-holder	425,583	Apr. 15	1750	468	51	357
Schön, Moritz, Crimmitszschau, Saxony, Germany. Steam-inhaler	421,527	Feb. 18	1624	419	50	887
Schönemann, August, Wernigerode, Prussia, Germany. Apparatus for killing poultry	433,151	July 29	3315	{ 856 857 }	52	669
Schonley, Joseph A., Brooklyn, N. Y. Loading attachment for carts	440,440	Nov. 11	1277	330	53	863
Schoolcraft, J. Teller, <i>et al.</i> (See Rabinowicz, Israel, assignor.)						
Schoonmaker, Daniel, Cincinnati, Ohio. Hame	420,361	Jan. 28	2596	690	50	538
Schoonmaker, Eveline, Three Rivers, Mich. Bath-tub seat	424,730	Apr. 1	454	121	51	90
Schoonmaker, John, Honesdale, Pa. Shoe-fastening	421,321	Feb. 11	1325	342	50	823
Schoonover, Horace H., Fishkill-on-the-Hudson, N. Y. Car-coupling	432,087	July 15	1647	423	52	336
Schoop, Paul, Zurich, Switzerland. Secondary battery	434,093	Aug. 12	971	254	52	956
Schoop, Paul, Zurich, Switzerland. Making electrodes for secondary batteries	434,301	Aug. 12	1300	338	52	1020
Schorio, Anthony, Fort Lee, N. J. Pad for copying-presses	427,802	May 13	1183	297	51	1053
Schott, Arnold. (See Schreiner and Schott.)						
Schott Brothers. (See Thurston, Horace, assignor.)						
Schott, John C. (See Thurston, Horace, assignor.)						
Schott, Leo, <i>et al.</i> (See Kuehn, Albert J., assignor.)						
Schott, Mathilde, New Haven, Conn. Surgical knife	431,153	July 1	176	45	52	87
Schott, Mathilde, New Haven, Conn. Die and dice-box	435,635	Sept. 2	405	109	52	1451
Schrader, Frederick, Philadelphia, Pa. Bicycle	420,922	Feb. 4	742	{ 190 191 }	50	704
Schrader, Hart. (See Gold, Joseph S., assignor.)						
Schrader, Lambert P., Clay Centre, Kans. Cultivator for listed corn	431,079	July 1	76	19	52	17
Schrader, Lambert P., Clay Centre, Kans. Attachment for cultivators	440,578	Nov. 11	1495	386	53	905
Schram, Michael J. (See Gintner, Henry S., assignor.)						
Schram, Berthold, Milwaukee, Wis. Attachment for telephone-desks	428,818	May 27	2725	691	51	1378
Schraube, Conrad, Ludwigshafen-on-the-Rhine, Bavaria, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Rosinduline monosulpho-acid	428,530	May 20	2267	.....	51	1272
Schraube, Conrad, Ludwigshafen-on-the-Rhine, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Red dye	430,975	June 24	2935	.....	51	2064
Schraube, Conrad, Ludwigshafen-on-the-Rhine, Bavaria, assignor to Badische Anilin and Soda Fabrik, Mannheim, Germany. Rosinduline sulpho-acid	431,404	July 1	564	.....	52	115
Schraube, Conrad, assignor to Badische Anilin and Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Yellow-red dye	443,408	Dec. 23	2910	748	53	1854
Schraudner, Frederick, St. Louis, Mo. Overhead railway-switch	434,840	Aug. 19	2145	562	52	1195
Schreck, Victor G., Savannah, Ga. Blind-stop	441,587	Nov. 25	3167	816	53	1238
Schreiber, Martin, Nuremberg, Bavaria, Germany. Inkstand	418,988	Jan. 7	518	129	50	109
Schreiber, Martin, Nuremberg, Bavaria, Germany. Magazine pencil-case	424,621	Apr. 1	287	74	51	57
Schreiber, Philip J., Dayton, Ohio. Spectacle-frame	440,064	Nov. 4	660	176	53	737
Schreidt, Frank, Mansfield, Ohio. Automatic relief-valve	433,543	Aug. 5	143	41	52	785
Schreidt, Frank, and T. E. Barrow, Mansfield, Ohio. Cash-carrier	422,254	Feb. 25	2676	706	50	1095
Schreiner, Friedrich, and A. Schott, Philadelphia, Pa. Stereotyping-matrix	427,803	May 13	1183	297	51	1053
Schreiner, Henry, Philadelphia, Pa. Device for replacing derailed locomotives and cars	443,200	Dec. 23	2585	665	53	1793
Schreiner, Henry, Philadelphia, Pa. Car-starter	443,211	Dec. 23	2603	670	53	1796
Schreuder, Jens G., Edgewood, Pa. Relay	442,338	Dec. 9	1105	289	53	1483
Schreuder, Jens G., Edgewood, Pa. Charging apparatus for switch and signal mechanisms	442,339	Dec. 9	1106	289	53	1483
Schreyer, Benjamin Z. (See Schreyer, Gottlieb, assignor.)						
Schreyer, Frank. (See Moore and Schreyer.)						
Schreyer, Gottlieb, assignor of one-third to B. Z. Schreyer, Columbus, Ohio. Paving-block	420,020	Jan. 21	2059	542	50	429
Schrivver, John H., York Springs, Pa. Thill-coupling	429,485	June 3	584	142	51	1584
Schröder, John. (See Hahn and Schröder.)						
Schroeder, August, Rheidt, Germany. Friction-clutch	442,260	Dec. 9	982	{ 258 259 }	53	1462
Schroeder, Charles E., assignor of one-half to J. L. F. Schroeder, Crown Point, Ind. Machine for welding calks to horseshoes	433,423	July 29	3691	953	52	747
Schroeder, Charles E., assignor of one-half to J. L. F. Schroeder, Crown Point, Ind. Machine for welding calks to horseshoes	440,372	Nov. 11	1141	294	53	838
Schroeder, John, San Francisco, Cal. Gaiter-boot	422,840	Mar. 4	702	180	50	1272
Schroeder, John, assignor of one-half to L. Raschen, San Francisco, Cal. Propulsion of vessels	443,168	Dec. 23	2512	642	53	1775
Schroeder, Julius L. F. (See Schroeder, Charles E., assignor.)						
Schroeder, Martin. (See Hartmann, Nicholas, assignor.)						
Schroeder, Max, assignor to himself and W. Grillo, Neumühl-Hamborn, Germany. Extracting fats and oils	433,152	July 29	3315	857	52	670
Schroen, Frank C., Baltimore, Md. Electric signal for railways	436,154	Sept. 9	1203	{ 314 315 }	52	1609
Schroeter, Herman. (See Hill, Hugo, assignor.)						
Schrop, Ira S., South Bend, Ind. Meter-record	434,207	Aug. 19	1157	300	52	992
Schroyer, Charles A., Chicago, Ill. Pressure-recorder for air-brakes	420,144	Apr. 22	2621	688	51	534
Schroyer, Charles A., Chicago, Ill. Draw-bar for cars	438,386	Oct. 14	1090	297	53	214
Schruben, James L. (See Reuter and Schruben.)						
Schryver, Charles, Boston, Mass., assignor of two-thirds to R. C. Massie and J. A. Scott, Rich Hill, Mo. Car-coupling	441,707	Dec. 2	124	33	53	1286
Schubert, August, Oneida, N. Y. Spring-vehicle	418,931	Jan. 7	445	109	50	93
Schubert, August, Oneida, N. Y. Spring-vehicle	418,932	Jan. 7	446	109	50	93
Schubert, Michael T., Malaczka, Austria-Hungary. Siphon	421,057	Feb. 11	950	244	50	752
Schuch, Peter A., Louisville, Ky. Churn	427,192	May 6	255	66	51	861
Schuckers, Jacobs W., Philadelphia, Pa. Type-writing machine	423,576	Mar. 18	1824	{ 480 481 }	50	1498
Schuckers, Jacobs W., Newark, N. J., assignor to Clyde Type Writer Company, of West Virginia. Type-writing machine	433,097	July 29	3232	832	52	653
Schuckers, Jacobs W., Newark, N. J., assignor to Essex Typewriter Company, of West Virginia. Type-writing machine	441,197	Nov. 25	2522	{ 651 652 653 }	53	1119
Schuckers, Jacobs W., Newark, N. J., assignor to Essex Typewriter Company, of West Virginia. Type-writing machine	441,257	Nov. 25	2646	{ 687 688 689 690 }	53	1139
Schuckers, Jacobs W., Newark, N. J., and M. O. Rehfuß, Philadelphia, Pa., assignors to Essex Typewriter Company, of West Virginia. Type-writing machine	441,198	Nov. 25	2532	{ 655 656 657 }	53	1121
Schuessler, Bernhard, Philadelphia, Pa. Wash-boiler	434,841	Aug. 19	2149	562	52	1196

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Schuler, Bartholomew A., St. Joseph, Mo. Crupper-stuffing machine	428,419	May 20	2122	533	51	1245
Schultz, Andrew, <i>et al.</i> (See Lewandowski and Zalikowski, assignors.)						
Schultz, George, Old Charlton, England. Electrical switch	441,588	Nov. 25	3168	816	53	1239
Schultz, Louis. (See Koch, Matthias, assignor.)						
Schultz, Louis, <i>et al.</i> (See Stocker, Rudolf, assignor.)						
Schultz, William, New York, N. Y. Medicated paper	433,827	Aug. 5	582		52	870
Schulz, Frank, Detroit, Mich. Plow	433,373	July 29	3620	934	52	731
Schulze, Charles G., New Orleans, La. Press for molding vulcanized rubber stamps, &c	419,290	Jan. 14	965	254 255	50	204
Schulze, Johann L. F., Leyda, Germany. Velocipede	442,240	Dec. 9	953	502	53	1457
Schulze, Robert, Covington, Ky. Centrifugal bolt	432,635	Mar. 18	1926	507	50	1518
Schulze-Berge, Franz G. A. (See Schulze-Berge, Hermann and F. G. A.)						
Schulze-Berge, Hermann, Rochester, Pa. Removing molten glass from pots	421,620	Feb. 18	1762	461	50	914
Schulze-Berge, Hermann, Rochester, Pa. Manufacture of glassware	421,621	Feb. 18	1765	462	50	914
Schulze-Berge, Hermann, Rochester, Pa. Apparatus for printing upon bulged articles	435,459	Sept. 2	115	32	52	1397
Schulze-Berge, Hermann, Rochester, Pa. Apparatus for the manufacture of glassware	439,196	Oct. 28	2352	633	53	466
Schulze-Berge, Hermann, Rochester, Pa. Manufacture of glassware	439,197	Oct. 28	2355	633	53	467
Schulze-Berge, Hermann, Rochester, Pa. Apparatus for the manufacture of glassware	439,198	Oct. 28	2358	633 634	53	467
Schulze-Berge, Hermann, Rochester, Pa., and F. G. A. Schulze-Berge, Brooklyn, N. Y. Air-pump	428,638	May 27	2434	619 620	51	1323
Schumacher, Emil, Litchfield, Ill. Roofing	442,920	Dec. 16	2081	535	53	1685
Schumacher, Gotfried, Morris, Ind. Movable frog for railway-crossings	430,441	June 17	2071	511	51	1892
Schumacher, Marie W., Philadelphia, Pa. Dust box or pau	435,251	Aug. 26	2795	741	52	1325
Schumacher, Mathias, Buxton, N. D. Land-roller	419,892	Jan. 21	1869	491	50	392
Schumacher, Mathias W., Reynolds, N. D. Horizontal windmill	441,510	Nov. 25	3045	784	53	1215
Schumaker, Henry H. (See Cameron and Schumaker.)						
Schumann, Theodore, Atlanta, Ga. Cash-indicator	438,089	Oct. 7	644	176	53	124
Schummel, Carl, Hoboken, N. J. Rubber shoe	432,149	July 15	1755	450	52	357
Schupbach, Christian C., Grand Island, Nebr. Window-screen	442,495	Dec. 9	1349	347	53	1533
Schurr, August F., Pittsburg, assignor of one-half to C. Tepel, Bennett's Station, Pa. Boot or shoe sole protector	442,241	Dec. 9	954	252	53	1457
Schüssler, John, Brooklyn, N. Y. Hair-combing machine	432,638	Mar. 4	413	103	50	1215
Schustek, Daniel. (See Andrews, Schustek, and Costello.)						
Schuster, John W., <i>et al.</i> (See Koehler, William H., assignor.)						
Schuster, Woldemar, Markneukirchen, Germany. Chin-rest for violins	439,199	Oct. 28	2361	634	53	468
Schutte, Louis, Philadelphia, Pa. Automatic condenser	427,193	May 6	256	66, 67	51	862
Schutte, Louis, Philadelphia, Pa. Automatic jet apparatus	434,997	Aug. 26	2423	641	52	1255
Schütz, Anton, and A. Weber, Solingen, Germany. Vent for casks or barrels	429,323	June 3	338	80	51	1535
Schütz, Louis. (See Fricke and Schütz.)						
Schuwirth, Charles. (See Cromer, Thomas L., assignor.)						
Schuwirth, Charles. (See Cromer and Schuwirth.)						
Schuyler, Daniel, San Diego, Cal. Music-leaf turner	430,302	June 17	1869	459 460	51	1852
Schuyler Electric Company. (See Lemp, Hermann, assignor.)						
Schuyler Electric Company. (See Lemp and Wightman, assignors.)						
Schuyler Electric Light Company. (See Waterhouse, Addison G., assignor.)						
Schwab, Charles M., North Braddock, Pa. Feed device for rolling-mills	431,626	July 8	913	229 230	52	189
Schwachheim, Hermann, assignor of one-half to G. A. Kirchner, Brooklyn, N. Y. Faucet	434,094	Aug. 12	972	255	52	956
Schwahn, Albert F. (See Briggs, Joseph M., assignor.)						
Schwahn, Albert F. (See Briggs and Schwahn.)						
Schwahn, Rudolph, Eau Claire, Wis. Sausage-machine	442,242	Dec. 9	955	253	53	1457
Schwalbach, Edward, Jr., assignor to A. G. Jennings, Brooklyn, N. Y. Work-clamping guide for sewing-machines	421,978	Feb. 25	2257	594	50	1017
Schwalbach, Mathias, Milwaukee, Wis. Clock-escapement	421,622	Feb. 18	1767	462	50	914
Schwalm, William B. (See Helvern and Schwalm.)						
Schwamer, Christian C., Winterset, Iowa. Neck-yoke coupling	419,223	Jan. 14	870	229	50	186
Schwamer, Christian C., Winterset, Iowa. Bridle attachment	421,016	Feb. 11	888	229	50	741
Schwamer, Christian C., Winterset, and J. F. Kiedaisch, Keokuk, Iowa. Bung and spigot combined	419,716	Jan. 21	1593	425	50	337
Schwartz, Charles, Brooklyn, N. Y. Sign	418,755	Jan. 7	139	34	50	31
Schwartz, Charles, Brooklyn, N. Y. Frame for signs	418,756	Jan. 7	140	34	50	31
Schwartz, Frank, Halifax, Canada. Electric clock	440,441	Nov. 11	1278	330 331	53	863
Schwartz, Jacob, Philadelphia, Pa. Coping-stone	433,219	July 29	3409	880	52	688
Schwartz, Thomas P., Stockton, Cal. Combination-tool	433,098	July 29	3235	833	52	653
Schwartz, York, Hanover, Germany. Producing photographic films	436,587	Sept. 16	1896		52	1749
Schwarz, Frank H. D., St. Louis, Mo. Photographic magazine camera	425,005	Apr. 8	888	235	51	180
Schweickhart, George. (See Stoll, Jacob, assignor.)						
Schweitzer, Joseph, Paris, France. System of grooves for millstones	439,900	Nov. 4	412	107	53	688
Schwencke, Theodor, assignor to P. Strobel & Sons, New York, N. Y. Folding table	422,639	Mar. 4	416	104	50	1216
Schwend, Frank C., and J. B. Wilson, Montgomery, Ala. Mosquito-bar frame	439,256	Oct. 28	2462	660	53	487
Schwerter, Augustus, New York, N. Y. Seconds-hand tool for watch-makers	442,142	Dec. 9	810	213	53	1428
Schwertführer, Max, Stuttgart, Germany. Locking device for printing-plates	436,614	Sept. 16	1924	505	52	1754
Schwertführer, Max, Stuttgart, Württemberg, Germany. Velocipede	436,673	Sept. 16	2033	530	52	1776
Schwing, Walter E. (See Folmer, William F., assignor.)						
Seiple, Henry M., Bordentown, N. J. Drying apparatus	439,328	Oct. 28	2588	690 691	53	511
Seofield, Andrew J., C. W. Seville, Ortonville, G. E. Wilson and R. H. Dixon, Stillwater, Minn. Band-cutter and feeder for thrashing-machines	427,016	Apr. 29	3908	1019 1020	51	796
Seofield, Charles H., Utica, N. Y. Cutting or trimming device	434,956	Aug. 26	2368	627	52	1244
Seofield, Fred N., Phoenix, Ariz. Ter. Speed-indicator for vehicles	441,334	Nov. 25	2771	716 717	53	1169
Seofield, Levi, Grand Haven, Mich. Refrigerator	418,819	Jan. 7	239	59	50	52
Seofield, Levi, Grand Haven, Mich. Check-row attachment	419,291	Jan. 14	966	255	50	205
Seofield, Levi, Grand Haven, Mich. Latch	423,493	Mar. 18	1710	451	50	1478
Seoggins, Jesse C., Greeley, Kans. Crate	432,907	July 22	2904	745	52	585
Scott, Louis K., Chicago, Ill. Hand-stamp	427,916	May 13	1359	342	51	1086
Scotland, Andrew, and H. F. Brink, Maltaville, N. Y. Automatic railway-signal	424,506	Apr. 1	101	29	51	23
Scott, Adam. (See Hoop, Robert, assignor.)						
Scott, Albert L., Allegheny, Pa. Voltaic armor	428,420	May 20	2123	533	51	1245
Scott, Alexander, Cronly, N. C. Fiher-rubbing machine	425,006	Apr. 8	893	236	51	181
Scott, Archibald, assignor of one-half to J. L. Ernest, Uniontown, Wash. Singletree-hook	428,531	May 20	2268	576	51	1272

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Scott, Charles D., Garland, Pa. Log-car	423,086	Mar. 11	1107	289	50	1353
Scott, Daniel, assignor to himself and H. C. Becker, Brooklyn, N. Y. Chimney or ventilator cap	424,135	Mar. 25	2672	711	50	1667
Scott, Edward, Pittsburg, Pa. Steam-engine	422,980	Mar. 11	948	249	50	1324
Scott, Edward E., East Saginaw, Mich. Safety-trap for discharge-pipes	419,717	Jan. 21	1594	425	50	337
Scott, Erastus W., Danielsonville, Conn. Whip-socket	426,605	Apr. 29	3304	867	51	680
Scott, Erastus W., Danielsonville, Conn. Cap for whip-sockets	426,606	Apr. 29	3305	867	51	680
Scott, Ernest G., assignor to Lever Bros., Port Sunlight, near Birkenhead, England. Making carbon tetrachloride	435,862	Sept. 2	741	-----	52	1518
Scott, Eugene E., Whitesborough, Tex. Apparatus for raising or lowering wagon-bodies	442,460	Dec. 9	1290	334	53	1521
Scott, Everett, Roaring Creek, W. Va. Car-coupling	427,371	May 6	513	131	51	913
Scott, Frank J., Toledo, Ohio. Fire-place and hollow mantel therefor	426,687	Apr. 29	3430	899	51	703
Scott, George, Birkenhead, county of Chester, England. Game	432,170	July 15	1782	458	52	362
Scott, George B. (See Bergmann and Scott.)						
Scott, George B., Lakewood, N. J. Printing-telegraph	431,784	July 8	1183	296	52	239
Scott, Gordon J., Schenectady, N. Y. Binding-post	434,892	Aug. 19	2242	588	52	1213
Scott, Henry P. (See Barker, Henry C., assignor.)						
Scott, Jacob R., Nyack, N. Y. Sole-trimming machine	434,359	Aug. 12	1384	364	52	1038
Scott, Jacob R., Nyack, N. Y. Skiving-machine	439,433	Oct. 28	2750	733	53	541
Scott, Jacob R., Nyack, N. Y. Skiving machine	443,409	Dec. 23	2911	749	53	1854
Scott, James A., et al. (See Schryver, Charles, assignor.)						
Scott, Jere A., Ann Arbor, Mich. Plotting-stake	429,650	June 10	830	202	51	1641
Scott, John. (See Cassidy and Smith, assignors.)						
Scott, John, Jr. (See Davis and Scott.)						
Scott, John, Taunton, Mass. Making dies	428,961	May 27	2930	752	51	1420
Scott, John, and J. A. McAvoy, Williamantic, Conn. Spinning-frame	440,200	Nov. 11	870	224	53	789
Scott, John G. (See Reid, Edwin B., assignor.)						
Scott, John H., Coventry, R. I. Machine for mixing paints	434,728	Aug. 19	1988	518	52	1163
Scott, John W. L., assignor of one-half to C. N. Travous, Edwardsville, Ill. Sewing-machine	443,009	Dec. 16	2211	569	53	1713
Scott, Lothian K., Yorktown, England. Telescopic sight	428,962	May 27	2931	{ 752 753 }	51	1420
Scott, Robert D., et al. (See Killinger, Melrose M., assignor.)						
Scott, Robert D., Pontiac, Mich. Road-cart	423,087	Mar. 11	1107	290	50	1353
Scott, Robert D., Pontiac, Mich. Road-cart	438,493	Oct. 14	1240	336	53	244
Scott, Robert W., assignor of one-half to L. N. D. Williams, Philadelphia, Pa. Shirt of knit fabric	422,640	Mar. 4	416	104	50	1216
Scott, Robert W., assignor of one-half to L. N. D. Williams, Philadelphia, Pa. Drawers of knit fabric	422,641	Mar. 4	417	104	50	1216
Scott, Robert W., assignor of one-half to L. N. D. Williams, Philadelphia, Pa. Spring-supported needle for knitting-machines	433,747	Aug. 5	459	118	52	844
Scott, Robert W., and L. N. D. Williams, Philadelphia, Pa. Circular-knitting machine	419,565	Jan. 14	1358	{ 363 364 }	50	286
Scott, Robert W., and L. N. D. Williams, Philadelphia, Pa. Circular-rib-knitting machine	421,147	Feb. 11	1073	276	50	777
Scott, Robert W., and L. N. D. Williams, Philadelphia, Pa. Stocking	430,695	June 24	2493	609	51	1980
Scott, Tully. (See Crannell, Charles W., assignor.)						
Scott, Walter, Hot Springs, S. D. Solar attachment for transit-instruments	431,286	July 1	382	96	52	78
Scott, Walter, Plainfield, N. J. Printing-press	425,710	Apr. 15	1952	{ 519 520 }	51	397
Scott, Walter, Plainfield, N. J. Machine for cutting and folding sheets into pamphlets	426,647	Apr. 29	3369	883	51	692
Scott, Walter, Plainfield, N. J. Dampening-machine	430,256	June 17	1766	{ 438 439 }	51	1832
Scott, Walter, Plainfield, N. J. Inking apparatus for printing-presses	430,889	June 24	2806	688	51	2041
Scott, Walter, Plainfield, N. J. Web-printing machine	436,155	Sept. 9	1206	315	52	1610
Scott, Walter, Plainfield, N. J. Sheet-delivery apparatus for printing-presses	439,306	Oct. 28	2558	683	53	505
Scott, Walter, Plainfield, N. J. Mold for backing electrotpe and casting stereotype plates	442,276	Dec. 9	1006	265	53	1466
Scott, William. (See Young, Edward T., assignor.)						
Scott, William, Medford, Mass. Water-closet	419,566	Jan. 14	1361	{ 364 365 }	50	286
Scott, William, Medford, Mass. Seat-connection for water-closets	433,964	Aug. 12	785	205	52	918
Scott, William A., Edgerton, Mo. Gate	427,119	May 6	148	39	51	841
Scott, William A., Jr., and W. Wehrmeyer, Pittsburg, Pa. Checkrein-holder	423,636	Mar. 18	1928	507	50	1518
Scott, William H., Fredonia, assignor to F. Will, Rochester, N. Y. Oven-door for cooking-stoves	434,893	Aug. 19	2243	588	52	1213
Scott, William J., Philadelphia, Pa. Shutter fastener and bower	426,334	Apr. 22	2853	759	51	589
Scott, William J., and W. B. Wheeler, Minneapolis, Minn. Railway-ticket	421,979	Feb. 25	2258	594	50	1017
Scott, William M., et al. (See Smallman, James W., assignor.)						
Scovel, James D., Detroit, Mich. Knockdown crate	431,287	July 1	385	96, 97	52	78
Scovill & Adams Company. (See Adams, Washington I., assignor.)						
Scovill & Adams Company. (See Fuller, Willard H., assignor.)						
Scovill Manufacturing Company. (See Goss, Chauncey P., assignor.)						
Scovill Manufacturing Company. (See Hyde, Theophilus R., Jr., assignor.)						
Scovill Manufacturing Company. (See Lines, John, assignor.)						
Scovill Manufacturing Company. (See Morris, Marion A., assignor.)						
Scovill Manufacturing Company. (See Shipley, Alfred J., assignor.)						
Scovill Manufacturing Company. (See Sperry, Henry T., assignor.)						
Scovill Manufacturing Company. (See Welton, Edwin D., assignor.)						
Scovill Manufacturing Company. (See Welton, Frank R., assignor.)						
Scoville, Hiram H. (See Spring and Scoville.)						
Scranton, James P. (See Hargreaves, Porter, and Scranton.)						
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	418,757	Jan. 7	141	34, 35	50	31
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	418,758	Jan. 7	143	35	50	31
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	420,109	Jan. 28	2204	583	50	467
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Annunciator	423,494	Mar. 18	1713	451	50	1478
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Carbon-rod for arc lamps	423,637	Mar. 18	1929	507	50	1518
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Cut-out for electric-arc lamps	423,638	Mar. 18	1930	508	50	1518
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple switch-boards	427,120	May 6	149	39, 40	51	841

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switch-board testing apparatus	427,121	May 6	151	40	51	842
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Magneto-electric machine	427,122	May 6	153	40	51	842
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric loop-switch	427,123	May 6	154	41	51	842
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Calling apparatus for metallic-circuit telephone-exchange systems	427,194	May 6	259	67	51	862
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switch-board test system	427,621	May 13	895	225	51	997
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Switch-board	427,622	May 13	896	225	51	998
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple-switch-boards	427,623	May 13	898	226	51	998
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switch-board test-circuit	427,624	May 13	900	226	51	998
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple switch-board	427,917	May 13	1361	343	51	1086
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Single-cord multiple-switch-board system	428,698	May 27	2543	{ 645 646 }	51	1343
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Safety cut-out	433,045	July 29	3149	809	52	637
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Loop-key	433,046	July 29	3150	810	52	637
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple switch-boards	433,047	July 29	3151	810	52	638
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Combination telephone-key	433,424	July 29	3693	953	52	747
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Regulator for dynamo-electric machines	435,525	Sept. 2	215	59, 60	52	1416
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Regulator for dynamo-electric machines	435,526	Sept. 2	218	60, 61	52	1417
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Regulator for dynamo-electric machines	435,527	Sept. 2	221	61	52	1417
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switch-board system	442,143	Dec. 9	810	{ 218 219 }	53	1428
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	442,144	Dec. 9	815	219	53	1429
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switch-board system	442,145	Dec. 9	818	{ 219 220 }	53	1430
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	442,146	Dec. 9	821	220	53	1430
Scribner, Fanny L., et al. (See Scribner, George W., assignor.)						
Scribner, George W., assignor to F. L. Scribner and C. A. Bagwell, Chatham, Canada. Reed-organ	441,589	Nov. 25	3168	817	53	1239
Scroggins, James A. (See Okey and Scroggins.)						
Scrymgeour, David, Foxborough, Mass. Slate-frame	426,145	Apr. 22	2623	688	51	534
Scull, Daniel. (See Tubbs, Nelson J., assignor.)						
Scully, Harry F., Chicago, Ill. Tailor's measure	435,714	Sept. 2	523	138	52	1476
Scully, John S. (See Carter, Edwin E., assignor.)						
Scully, John S. (See Carter, Edwin E., assignor.) (Reissue.)						
Scully, Thomas, assignor to F. J. Oakes, Long Island City, N. Y. Extracting apparatus	419,224	Jan. 14	871	229	50	186
Scully, William J. (See Watkins, Thomas, assignor.)						
Scurry, Hiram T. (See Mathews and Scurry.)						
Sea-Shore Electric Railway Company. (See Blauvelt, Warren S., assignor.)						
Seabrooks, Jacob, Beaver Falls, Pa. Filter	421,521	Feb. 18	1611	415	50	885
Seabury, Charles E., Stony Brook, N. Y. Car-coupling	429,365	June 3	400	95	51	1547
Seabury, Frederick W., Providence, R. I. Dental vulcanizer	443,699	Dec. 30	3385	869	53	1953
Seabury, Samuel, Bergen Point, N. J. Gun-carriage	420,170	Jan. 28	2300	{ 608 609 }	50	484
Seabury, Samuel, U. S. Navy. Breech-loading cannon	425,584	Apr. 15	1750	{ 469 470 }	51	358
Seabury, Samuel, U. S. Navy. Cartridge for breech-loading cannon	441,904	Dec. 2	431	115	53	1349
Seabury, Samuel, U. S. Navy, assignor of one-half to L. Wilson and J. B. M. Grosvenor, New York, N. Y. Breech-loading cannon	431,214	July 1	276	69	52	56
Seale, Elias A., assignor to Alabama Metal Wheel Company, Brewton, Ala. Wheel	439,359	Oct. 28	2632	703	53	519
Sealy, Robert. (See Wall, Thomas, assignor.)						
Seam Machine Company. (See Harlow, Charles F., assignor.)						
Seaman, Albert R., New Cumberland, W. Va. Honey-extractor	434,729	Aug. 19	1989	518	52	1163
Seaman, Benjamin S., Corning, N. Y. Horse-muzzle	421,109	Feb. 11	1020	261	50	766
Seaman, George B. (See Eaton and Seaman.)						
Seaman, Homer U., Washington, Pa. Engraver's vise or block	420,968	Feb. 11	816	212	50	727
Seaman, Homer U., Washington, Pa. Engraver's block	420,969	Feb. 11	818	212	50	727
Seaman, Homer U., Washington, Pa. Engraver's vise	420,970	Feb. 11	819	212	50	728
Seaman, John A., Chicago, Ill. Expanding-tool	428,786	May 27	2676	678	51	1368
Seaman, Milton L. B., Krum, Tex. Bill-file	420,468	Feb. 4	69	16	50	577
Seaman, Robert. (See De Lacy, Charles M., assignor.)						
Seaman, William. (See Eynon and Seaman.)						
Seamans, Irving M., assignor to Buffalo Dental Manufacturing Company, Buffalo, N. Y. Automatic gas-regulator for water-heating apparatus	422,841	Mar. 4	703	181	50	1272
Seamon, William H., Rolla, Mo. Insulator	430,696	June 24	2495	609	51	1981
Searight, Samuel G., Butler, Ind. Damper	435,125	Aug. 26	2616	692	52	1291
Searle, Frank, Virginia City, Mont. Tricycle	440,442	Nov. 11	1281	331	53	863
Searle, Frederick, Worcester, Mass. Method of and machine for producing V-welded cut-ter-stock	442,550	Dec. 9	1438	369	53	1550
Searle, John Q. C., Chicago, Ill. Means for heating railway-cars. (Reissue)	11,101	Aug. 5	722	{ 187 188 }	52	899
Searles, Orren I., et al. (See Rand, Allen S., assignor.)						
Searles, Orren I., G. F. Jackson, and F. M. Gustin, Fort Madison, Iowa. Cistern-cleaning machine	433,099	July 29	3236	833	52	654
Searls, Anson, Newark, N. J. Top-prop nut	443,799	Dec. 30	3537	907	53	1983
Sears, Andrew T., Cambridge, assignor of one-half to F. D. Marden, Boston, Mass. Scaffolding	436,806	Sept. 23	2267	598	52	1829
Sears, Joseph. (See Burnet, Sears, and Burnham.)						
Sears, Joseph, and O. G. Burnham, assignors to American Stock Food and Fibre Company, Chicago, Ill. Apparatus for delinting cotton-seeds or the hulls	440,282	Nov. 11	1009	{ 259 260 }	53	814
Seat, Samuel A., and M. W. Perkins, Hematite, Mo. Brake for vehicles	421,522	Feb. 18	1613	415	50	885

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Seath, James. (See Wagner and Seath.)						
Seaton, Benjamin C., assignor of two-thirds to J. M. Overton, Nashville, Tenn. Bolster-spring	429,651	June 10	831	202	51	1642
Seaton, Charles S., assignor of one-half to J. A. Seaton, Cleveland, Ohio. Dies for heading bolts.	424,136	Mar. 25	2673	711	50	1667
Seaton, John A. (See Seaton, Charles S., assignor.)						
Seaton, John L. (See Chase and Seaton.)						
Seaver, George, Tigerton, Wis. Veneer-drying machine.	428,147	May 20	1697	430	51	1162
Seaver, William. (See Jones and Seaver.)						
Seay, Samuel, Jr., U. S. Army. Car-coupling	423,532	Mar. 18	1771	465	50	1488
Sechler Carriage Company, D. M. (See Sechler, Daniel M., assignor.)						
Sechler, Daniel M., assignor to D. M. Sechler Carriage Company, Molino, Ill. Vehicle-seat	421,322	Feb. 11	1325	323	50	823
Sechrist, Charles J. (See Hammon and Sechrist.)						
Sechrist, William, assignor of one-half to L. D. Davis, Erie, Pa. Valve-gear	443,463	Dec. 23	3001	771	53	1872
Seder, Frank J., Cleveland, Ohio. Ink-feeding attachment for printing-presses.	424,029	Mar. 25	2522	670 671	50	1637
Sedgwick, Alonzo, Poughkeepsie, assignor, by mesne assignments, to D. H. Burrell & Co., Little Falls, N. Y. Rolling-machine.	441,905	Dec. 2	432	115	53	1349
Sedgwick, Frederick, Chicago, Ill., assignor to American Spring Company, of Illinois. Manufacturing steel-coated wire	443,464	Dec. 23	3002	771	53	1872
Sedmiradsky, Adolf, assignor to Kalamazoo Knitting Company, Milwaukee, Wis. Circular-knitting machine	434,528	Aug. 19	1658	434	52	1100
See, Christian, St. Paul, Minn. Delivery-wagon	438,191	Oct. 14	793	216	53	159
See, Horace, Philadelphia, Pa. Piston	422,453	Mar. 4	133	36	50	1162
See, Horace, Philadelphia, Pa. Horizontal piston	422,454	Mar. 4	134	37	50	1162
See, Horace, New York, N. Y. Extractor for removing air, grease, and sediment from feed-water	439,695	Nov. 4	102	27	53	628
Seebach, George W., New York, N. Y. Spring-gun	441,512	Nov. 25	3047	784	53	1215
Seebach, Louis, C. George, and L. Bush, Listowel, Ontario, Canada. Car-starter	432,908	July 22	2906	745	52	586
Seed Dry Plate Company, M. A. (See Seed, Miles A., assignor.)						
Seed Dry Plate Company, M. A. (See Swaine and Moody, assignors.)						
Seed, Miles A., assignor to M. A. Seed Dry Plate Company, St. Louis, Mo. Detective-camera	436,745	Sept. 16	2145	564 565	52	1798
Seeger, Carl H., Manitowoc, Wis. Dental engine	421,323	Feb. 11	1326	343	50	823
Seeger, Louis F., Jr., Ahnapee, Wis. Dental mold	432,909	July 22	2907	745	52	586
Seely, John A., Brooklyn, N. Y. Electric connector	419,365	Jan. 14	1053	286	50	229
Seely, John A., Brooklyn, N. Y. Electric-wire molding	423,449	Mar. 18	1643	433	50	1465
Seely, John A., New York, N. Y. Insulating-casing	420,171	Jan. 28	2304	609	50	485
Seely, John A., New York, N. Y. Fuse-plug	424,229	Mar. 25	2795	745	50	1692
Seely, John A., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Telephone-signal apparatus	431,531	July 1	769	192	52	153
Seely, Marquis F., et al. (See Douglas, Charles H., assignor.)						
Seely, Obadiah, Syracuse, N. Y. Spring-hinge	438,115	Oct. 7	682	186	53	132
Seemann, Rudolf W., Germantown, Nebr. Car or barn door hasp	432,841	July 22	2809	720	52	567
Seery, James F. (See Andrews and Seery.)						
Sefton, John L., and J. T. Ferres, assignors to J. W. Sefton Manufacturing Company, Anderson, Ind. Paper box	440,656	Nov. 18	1626	419	53	939
Sefton Manufacturing Company, J. W. (See Sefton and Ferres, assignors.)						
Segur, Harvey, assignor of one-half to P. W. Smith, Decatur, Ind. Saw-mill feed	432,444	July 15	2176	560	52	435
Segur, Joseph M., Adrian, Mich. Hand corn-planter	427,625	May 13	903	226	51	999
Segur, Joseph M., Adrian, Mich. Hand corn-planter. (Reissue)	11,094	July 8	1516	384 385	52	305
Segur, Joseph M., Adrian, Mich. Hand corn-planter. (Reissue)	11,095	July 8	1519	385	52	306
Segur, Joseph M., Adrian, Mich. Picture-hook	441,511	Nov. 25	3046	784	53	1215
Seib, George A., assignor of one-half to O. Starke, New York, N. Y. Electric door-opener.	420,834	Feb. 4	592	152	50	676
Seib, William J., Chicago, Ill. Apparatus for brewing	428,328	Oct. 14	1007	273	53	198
Seibel, Phillip, St. Louis, Mo. Beer-filtering apparatus	428,965	Apr. 29	3829	1001	51	781
Seiberling, John F., Akron, Ohio. Grain-binder trip mechanism	426,550	Apr. 29	3222	844 845	51	663
Seiberling, John F., Akron, Ohio. Grain-binder	426,867	Apr. 29	3702	966	51	756
Seiberling, John F., Akron, Ohio. Harvester and binder	429,652	June 10	833	203	51	1642
Seiberling, John F., Akron, Ohio. Cord-holder for grain-binders	430,697	June 24	2496	609 610	51	1981
Seiberling, John F., Akron, Ohio. Cord-holder for grain-binders	440,510	Nov. 11	1391	360	53	885
Seibert, Nicholas, Malden, Mass. Conduit system for electric railways	432,571	July 22	2381	613 614	52	484
Seibert, Nicholas, Malden, Mass. Conduit for electric railways	441,258	Nov. 25	2654	688 689	53	1140
Seidel, William F. (See Conn and Seidel.)						
Seiders, William H., and G. H. Hood, Spring Green, Wis. Rope-clasp	430,043	June 10	1431	356	51	1757
Seiders, William H., and G. H. Hood, Spring Green, Wis. Tool-chuck	434,026	Aug. 12	860	227	52	932
Seigle-Goujon, Adolphe, Lyons, France. Vapor-burner	439,307	Oct. 28	2562	684	53	505
Seiler, George, Spring Forge, Pa. Apparatus for recovering alkali	420,835	Feb. 4	594	152	50	676
Seiler, Paul, San Francisco, Cal. Visual annunciator for call-boxes	421,882	Feb. 18	2125	557	50	983
Seinecke, Adolph E., Camp Dennison, assignor to L. C. Strauss, Cincinnati, Ohio. Starting and propelling device for revolving mechanical toys	430,322	June 17	1904	466	51	1859
Seiser, George F. (See Honaker and Seiser.)						
Seitz, Edward, Peoria, Ill. Tuck-marking attachment for sewing-machines	425,960	Apr. 15	2333	618	51	469
Seitz, John H., Detroit, Mich. Mold for candies	419,718	Jan. 21	1595	425	50	337
Seldner, Charles J., assignor of one-third to L. Strouse, Baltimore, Md. Garment-supporter.	443,465	Dec. 23	3003	771	53	1872
Seley, James A., Sumner, Iowa. Expansion-drill	440,065	Nov. 4	661	176	53	737
Seley, William W., Waco, Tex. Car-coupling	440,726	Nov. 18	1742	447	53	961
Selt, Edward D., South Orange, N. J. Carburetor	443,584	Dec. 30	3197	822	53	1919
Sell, Edgar E., Philadelphia, Pa. Convertible furniture	430,442	June 17	2072	511 512	51	1892
Sellers, Albert F. (See Bacon and Sellers.)						
Sellers & Company, William. (See Benson, Samuel, assignor.)						
Sellers & Company, William. (See Lewis, Wilfred, assignor.)						
Sellers, George H., Ridley Park, Pa. Drill or auger	443,297	Dec. 23	2739	703	53	1821
Sellers, George H., Ridley Park, Pa., assignor to Edge Moor Iron Company, of Delaware. Means for cleaning ashes from flues	426,648	Apr. 29	3371	884	51	692
Sellers, George H., Ridley Park, assignor to Edge Moor Iron Company, Edge Moor, Pa. External wall of steam-boiler chambers or of flues	430,811	June 24	2696	660 661	51	2020

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Sellers, Joseph M., Keighley, county of York, England. Prepaid automatic delivery mechanism.	430,698	June 24	2498	610	51	1981
Sellers, Nelson. (See Rowell, Benning, assignor.)						
Sellers, William, Philadelphia, Pa., assignor to Edge Moor Iron Company, of Delaware. Annealing steel castings and steel forgings.	429,775	June 10	1006	{ 247 248 248	51	1677
Sellers, William, Philadelphia, Pa., assignor to Edge Moor Iron Company, of Delaware. Furnace for heating metals.	429,776	June 10	1011	{ 248 249 249	51	1677
Selling, Edward, Wurzburg, Bavaria, Germany. Calculating-machine.	420,667	Feb. 4	338	88, 89	50	630
Sellmer, Marian P. (See Gilmer, John G., assignor.)						
Sellon, Charles A., Pike, N. Y. Apparatus for sinking well-pipes.	431,920	July 8	1384	351	52	279
Selowsky, Gustave, New York, N. Y. Retaining-pin for neck-wear.	424,137	Mar. 25	2674	711	50	1667
Selzer, William A., Milwaukee, Wis. Brush.	438,864	Oct. 21	1852	492	53	364
Semmes, Raphael T., Atlanta, Ga. Trace-carrier.	443,870	Dec. 30	3638	936	53	2004
Semoun, William H. (See Olmsted, David, assignor.)						
Semouin, Peter, Evansville, Ind., assignor to P. Semouin, Jr., Memphis, Tenn. Railway track and tie.	421,769	Feb. 18	1960	515	50	952
Senden, Julius H., Lexington, Mo. Thill-coupling.	439,979	Nov. 4	544	143	53	713
Senftner, Robert. (See Rochow, Ferdinand, assignor.)						
Seng, Wendelin, Chicago, Ill. Lounge-leg.	421,980	Feb. 25	2259	594	50	1018
Seng, Wendelin, Chicago, Ill. Lounge-hinge.	436,546	Sept. 16	1832	482	52	1737
Senner, Rudolph, assignor of one-half to H. Drews, Pforzheim, Baden, Germany. Jewelry.	434,302	Aug. 12	1302	339	52	1031
Senteney, James L., Cook's Mills, Ill. Straw-stacker.	436,674	Sept. 16	2034	{ 530 531 244	52	1776
Seutz, Carl, Brooklyn, N. Y. Drying apparatus.	421,058	Feb. 11	952	{ 244 245	50	753
Separk, Willis D. (See Leaird, Meggs, Pond, and Separk.)						
Sercombe, Parker H. (See Bolte, Frank H., assignor.)						
Sergeant, Benjamin E., Greensborough, N. C. Tether.	422,642	Mar. 4	418	104	50	1216
Sergeant, Henry C., New York, N. Y. Valve for reciprocating engines.	422,095	Feb. 25	2426	{ 640 641 706	50	1047
Sergeant, Henry C., New York, N. Y. Compressor.	422,255	Feb. 25	2677	{ 707 707	50	1095
Sergeant, Henry C., New York, N. Y. Direct-acting engine.	430,757	June 24	2605	637	51	2002
Serjeant, William H., and A. Northcott, Fulham, county of Middlesex, England. Safety-rein.	426,868	Apr. 29	3705	967	51	757
Serkey, Joseph von, assignor of three-fourths to R. King, Chicago, Ill. Tumbling-box.	439,901	Nov. 4	414	107	53	688
Serrell, Edward W., Jr., New York, N. Y., and E. Fougereol, Paris, France. Machinery for heating silk-cocoons.	427,243	May 6	341	87, 88	51	877
Serrell, Lemuel W., Plainfield, N. J., and H. L. Lufkin, New York, N. Y. Regulation of electric motors.	420,469	Feb. 4	70	16	50	577
Serve, Jean P., Givors, France. Mechanism for making ribbed tubes.	438,025	Oct. 7	549	151	53	104
Serve, Jean P., Givors, France. Mechanism for polishing tubes.	438,026	Oct. 7	551	151	53	104
Serve, Jean P., Givors, France. Apparatus for pickling tubes.	440,511	Nov. 11	1393	360	53	885
Serve, Jean P., Givors, France. Manufacture of ribbed tubes.	440,512	Nov. 11	1394	360	53	885
Service, Charles L., Albany, N. Y. Music-leaf turner.	426,146	Apr. 22	2624	688	51	534
Servus, Ferdinand, Berlin, Germany. Frame for pictures, mirrors, &c.	432,910	July 22	2908	745	52	586
Servus, Ferdinand, Berlin, Germany, assignor to R. D'Heureuse, New York, N. Y. Locking device for picture-frames.	440,201	Nov. 11	870	224	53	789
Sesemann, Henry F. (See Krohne and Sesemann.)						
Sessions, Edward C., Oakland, Cal. Street-railway car.	432,954	July 22	2991	768	52	600
Sessions, Henry H., assignor to Pullman's Palace Car Company, Chicago, Ill. Curtain-rod for car-berths.	440,657	Nov. 18	1627	{ 419 420	53	939
Sessions, Henry H., assignor to Pullman's Palace Car Company, Chicago, Ill. Curtain-rod for sleeping-cars.	440,658	Nov. 18	1628	420	53	940
Sessler, Henry, New York, N. Y. Safety-catch for jewelry.	421,981	Feb. 25	2260	594	50	1018
Settlage, H. C., et al. (See Brokaw, Harvey, assignor.)						
Settles, Thomas R., and G. H. Schmitt, Tarentum, Pa. Making plate-glass.	431,489	July 1	701	176	52	141
Seubel, Philip, New York, assignor to Edison Machine Works, Schenectady, N. Y. Electric conductor.	425,961	Apr. 15	2334	619	51	469
Severance, Asahel J., assignor of one-half to J. D. Brown, New York, and W. M. Clark, Albany, N. Y. Manufacturing iron or steel.	429,744	June 10	963	.....	51	1668
Severance, Asahel J., assignor of one-half to J. D. Brown, New York, and W. M. Clark, Albany, N. Y. Welding compound.	429,777	June 10	1017	.....	51	1677
Severance, Benjamin G., Salem, Ind. Corn and cane cutter and buncher.	419,719	Jan. 21	1596	426	50	337
Severance, Edson, J., Morrison, Ill. Meat-tenderer.	437,517	Sept. 30	3439	899	52	2062
Severance, James R., Poughkeepsie, N. Y. Grain-binder.	424,507	Apr. 1	103	30	51	23
Severance, John N., Boston, Mass. Device for transmitting motion.	422,163	Feb. 25	2529	{ 668 669	50	1067
Severance, John N., Boston, Mass., assignor to American Wire Fastening Company, of New Hampshire. Boot or shoe nailing machine.	434,998	Aug. 26	2426	{ 641 642	52	1255
Severo, Frank. (See Grisel and Severo.)						
Severo, Frank, et al. (See Grisel, George, assignor.)						
Sevey, Hiram B., Vienna, Me. Combined metal-working machine.	429,324	June 3	339	80	51	1535
Serville, Charles W. (See Scofield, Servile, Wilson, and Dixon.)						
Sewall, James H., Portland, Me., assignor to Consolidated Car Heating Company, Albany, N. Y. Hose-coupling.	421,110	Feb. 11	1021	261	50	766
Sewall, James H., Portland, Me., assignor to Consolidated Car Heating Company of West Virginia, Albany, N. Y. Hose or pipe coupling.	437,518	Sept. 30	3440	899	52	2062
Sewall, Minott W. (See Pratt and Sewall.)						
Sewall, Minott W., New York, N. Y. Controlling shut-off and throttle valves.	430,089	June 10	1511	375	51	1773
Sewall, Minott W., New York, N. Y. Mechanism for actuating shut-off and throttle valves.	430,090	June 10	1513	{ 375 376 376	51	1773
Sewell, Alfred L., Evanston, Ill. Clasp and tag for envelopes.	425,053	Apr. 8	956	256	51	193
Sexton, William H., Dugger, Ind. Coal-separator.	427,124	May 6	156	41	51	842
Seybold, Charles, Cincinnati, Ohio. Paper-cutting machine.	432,088	July 15	1647	{ 423 424	52	337
Seybold, Charles, Cincinnati, Ohio. Book-trimming machine.	442,295	Dec. 9	1032	{ 272 273	53	1471
Seyfarth, Edward, Launk, Ill. Credit-slip tablet.	439,434	Oct. 28	2752	733	53	541
Seymour, Albert P., Syracuse, N. Y. Arc-lamp attachment.	427,195	May 6	261	68	51	862
Seymour, Benjamin F., Denver, Colo. Shoe-tie fastener.	438,245	Oct. 14	878	238	53	174
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Spoke-facer.	423,961	Mar. 25	2423	643	50	1619
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Spoke-driver.	426,147	Apr. 22	2625	689	51	534

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Swing-saw	427,196	May 6	262	68	51	863
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Tenouing-machine	430,788	June 24	2648	{ 649 650 788 789 }	{ 51 52 }	{ 2011 1978 }
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Machine for jointing and facing carriage and wagon spokes	437,251	Sept. 30	3010	788	52	1978
Seymour, Charles E., Hurley, Wis. Spike-puller	425,526	Apr. 15	1609	445	51	342
Seymour, Charles E., Hurley, Wis. Concentrator	436,807	Sept. 23	2269	598	52	1830
Seymour, Charles E., Hurley, Wis. Ore-concentrator	436,808	Sept. 23	2270	599	52	1830
Seymour, Charles J., Brookline, Mass. Elevator and conveyer	423,821	Mar. 18	2190	{ 578 579 }	{ 50 53 }	{ 1568 1036 }
Seymour, George H., Marienfeld, Tex. Copy-holder	440,967	Nov. 18	2146	556	53	1036
Seymour, Henry A., Washington, D. C., assignor to Short Electric Railway Company, Cleveland, Ohio. Crossing for electric conductors	423,495	Mar. 18	1714	451	50	1478
Seymour, J. M. (See Patten, Francis J., assignor.)						
Seymour, James M. (See Ives, Edward B., assignor.)						
Seymour, James M. (See Miner, Willard M., assignor.)						
Seymour, James M., Jr., Newark, N. J. Exhaust-fan	420,470	Feb. 4	71	16	50	578
Seymour, James M., Jr., Newark, N. J. Fan-hub	425,585	Apr. 15	1754	470	51	358
Seymour, John S., St. Louis, Mo. Roundabout	437,909	Oct. 7	358	103	53	69
Seymour, Louis I. (See Main, Charles T., assignor.)						
Seymour, Louis I., Plymouth, assignor to A. A. Sanborn, Somerville, Mass. Flue-cleaner. Seymour Manufacturing Company. (See Wooster, Letsome T., assignor.)	433,100	July 29	3237	833	52	654
Seymour, Oliver E., St. Louis, Mo. Shoe-nicking machine	434,360	Aug. 12	1386	364	52	1038
Seymour Paper Company, et al. (See Carpenter, James H., assignor.)						
Seymour, Ralph C., Chicago, Ill. Printing-press	434,730	Aug. 19	1990	{ 518 519 }	{ 52 53 }	{ 1164 1165 }
Shaaber, Jacob, Reading, Pa. Car-coupling	433,309	July 29	3538	914	52	715
Shackleton, Joseph, New York, N. Y. Heating apparatus for buildings	419,366	Jan. 14	1084	286	50	229
Shaeffer, Arling, Denver, Colo. Stringed musical instrument	421,033	Feb. 11	913	236	50	746
Shafer, Benjamin F., New York, N. Y. Automatic electrical annunciator	422,981	Mar. 11	951	249	50	1325
Shafer, Ebenezer B., New York, N. Y. Telegraph apparatus	420,393	Jan. 28	2643	701	50	547
Shafer, Philip. (See Koelsch and Shafer.)						
Shafer, William B., Somerset, Pa. Holder for paper bags	427,918	May 13	1363	343	51	1086
Shaffer, Charles H., Rockford, Ill. Electrical thermostat	441,622	Nov. 25	3226	832	53	1251
Shaffer, Charles H., assignor of one-half to Jones, Woodruff & Co., Rockford, Ill. Electric fire-alarm	426,688	Apr. 29	3432	900	51	703
Shaffer, Nelson, Hull, Iowa. Set and lever for thrashing-machines	422,982	Mar. 11	952	250	50	1325
Shaffer, Simon B., Ekalaka, Mont. Magazine-gun	435,905	Sept. 2	823	{ 218 219 }	{ 52 53 }	{ 1534 1535 }
Shailer, Fisk, Chester, Conn. Spectacle-case	421,438	Feb. 18	1485	385	50	862
Shain, Charles F., New York, N. Y. Fire-escape ladder	438,387	Oct. 14	1091	297	53	215
Shallenberger, Herbert B. (See Rockwood and Shallenberger.)						
Shallenberger, Oliver B. (See Lange and Shallenberger.)						
Shallenberger, Oliver B., Rochester, assignor to Westinghouse Electric Company, Pittsburgh, Pa. Meter for alternating electric currents	419,367	Jan. 14	1085	287	50	229
Shallenberger, Oliver B., Rochester, assignor to Westinghouse Electric Company, Pittsburgh, Pa. Armature for electric meters	426,335	Apr. 22	2884	759	51	589
Shallenberger, Oliver B., Rochester, assignor to Westinghouse Electric Company, Pittsburgh, Pa. Dynamo-electric machine	431,235	July 1	311	77	52	63
Shallenberger, Oliver B., Rochester, and H. M. Byllesby, assignors to Westinghouse Electric Company, Pittsburgh, Pa. System of electrical distribution	434,162	Aug. 12	1088	280	52	979
Shambarger, Stephen D., assignor of one-half to H. Norton, New Britain, Conn. Wrench	441,199	Nov. 25	2543	657	53	1192
Shambaugh, Isaac H., Avilla, Ind. Churn	443,410	Dec. 23	2912	749	53	1555
Shampel, William J., Chagrin Falls, Ohio. Clamp	442,733	Dec. 16	1762	456	53	1622
Shanahan, Dennis, et al. (See Whiteford, Robert, assignor.)						
Shanahan, John J., assignor to himself, J. J. McComish, and National Worsted Mills, Incorporated, Providence, R. I. Stop-motion for looms	439,606	Oct. 28	3010	798	53	592
Shanck, Henry K., Cleveland, Ohio. Gas-engine	430,200	Oct. 28	2361	{ 634 635 118 119 }	{ 53 52 }	{ 468 845 }
Shank, Charles A., assignor of one-half to B. P. Wilson, Philadelphia, Pa. Vehicle-brake	433,748	Aug. 5	461	118	52	845
Shank, Willard A., Amoskeag, Ga. Journal-cap	442,786	Dec. 16	1838	475	53	1639
Shanks, Frank F., La Cygne, Kans. Planter	431,288	July 1	386	97	52	79
Shannon, Andrew R., Watertown, assignor of one-half to Moffett, Hodgkins & Clarke, Syracuse, N. Y. Blasting-car	431,289	July 1	388	98	52	79
Shannon, James F., assignor of one-half to A. W. Falkenthal, Macomb, Ill. Car-coupling	428,355	May 20	2019	508	51	1225
Shannon, Oscar M., Chicago, Ill. Burner for mixed gas and air	429,066	May 27	3095	798	51	1450
Shannon, Oscar M., Chicago, Ill. Gas cooking-stove frame	430,091	June 10	1514	376	51	1774
Shannon, Oscar M., assignor to Chicago Laundry Dryer Company, Chicago, Ill. Apparatus for heating apartments by gas	428,963	May 27	2935	763	51	1421
Shannon, Oscar M., assignor of two-thirds to W. A. Sumner and M. E. Dayton, Chicago, Ill. Gas and air burner	429,798	June 10	1040	255	51	1682
Shannon, Oscar M., assignor to Chicago Laundry Dryer Company, Chicago, Ill. Water-heating device	429,799	June 10	1041	{ 255 256 }	{ 51 51 }	{ 1682 1683 }
Shannon, William H., Stockton, assignor of one-half to J. H. Crystal, Ceres, Cal. Carburetor	427,197	May 6	263	68	51	863
Shantz, Dilman B., Berlin, Ontario, Canada. Lathe for turning buttons	427,919	May 13	1364	{ 343 344 345 346 }	{ 51 51 52 52 }	{ 1087 1087 290 679 }
Shantz, Dilman B., Berlin, Ontario, Canada. Lathe for turning buttons	427,920	May 13	1367	345	51	1087
Shantz, Dilman B., Berlin, Ontario, Canada. Lathe for turning buttons	431,956	July 8	1441	365	52	290
Shapleigh, Marshall S., Philadelphia, Pa. Safety cut-out	433,187	July 29	3364	870	52	679
Shapleigh, Waldron, Camden, assignor to Electric Storage Battery Company, Gloucester City, N. J. Electrode for secondary batteries	438,116	Oct. 7	683	.....	53	132
Shapleigh, Waldron, Camden, assignor to Electric Storage Battery Company, Gloucester City, N. J. Purifying lead or alloys thereof	438,117	Oct. 7	684	.....	53	132
Shapley, Edmund L., assignor to H. M. Knight, London, England. Skirt-elevator	428,964	May 27	2937	{ 753 754 }	{ 51 51 }	{ 1421 1421 }
Shapter, Thomas B. (See Milner, George, assignor.)						
Sharaf, Israel, Livermore Falls, Me. Nut for carriage-axles	443,117	Dec. 23	2419	617	53	1759
Sharkey, John. (See Tacey and Sharkey.)						
Sharon, Frank E., San Francisco, Cal. Hose-coupling	439,902	Nov. 4	416	108	53	689
Sharp, Charles, and G. Consene, Mexico, N. Y. Thill-coupling	429,871	June 10	1156	285	51	1704

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Sharp, J. P. (See Copp, Monroe M., assignor.)						
Sharp, Jacob G. (See Subers, Thomas N., assignor.)						
Sharp, Jacob G., <i>et al.</i> (See Huston, William J., assignor.)						
Sharp, John S. (See Hovermale, Jefferson D., assignor.)						
Sharp, John W. (See Newberry and Sharp.)						
Sharp, Lee C., and J. A. Gutsche, Plattsmouth, Nebr. Car-truck	421,111	Feb. 11	1023	262	50	767
Sharp, Robert G., New York, N. Y. Means for suspending curtains	428,965	May 27	2938	754	51	1422
Sharp, William A., Meadow Bluff, W. Va. Dumping-car	430,546	June 17	2232	548	51	1921
Sharpe, John, assignor of one-half to R. H. Reid, Toronto, Ontario, Canada. Combined cash indicator, register, and calculator	429,486	June 3	585	{ 143 } { 144 }	{ 51 } { 51 }	1584
Sharpe, Lemuel W., assignor to S. S. McKinley, Osage, Minn. Running-gear for vehicles	440,778	Nov. 18	1838	473	53	978
Sharples, David T. (See Sharples, Philip M. and D. T.)						
Sharples, Philip M., West Chester, Pa. Motor for centrifugal machines	435,591	Sept. 2	322	90	52	1437
Sharples, Philip M., West Chester, Pa. Reaction-motor governor	442,462	Dec. 9	1293	335	53	1522
Sharples, Philip M., West Chester, Pa., and D. T. Sharples, Elgin, Ill. Centrifugal separator	442,461	Dec. 9	1291	{ 334 } { 335 }	{ 53 } { 53 }	1521
Sharples, Stephen P. (See Mitchell and Sharples.)						
Sharpneck Anti-Friction Journal Box Company. (See Sharpneck, William S., assignor.)						
Sharpneck, William S., Chicago, Ill. Rock-drill chuck	441,026	Nov. 18	2230	577	53	1053
Sharpneck, William S., Chicago, Ill. Anti-friction journal-box	441,027	Nov. 18	2231	577	53	1053
Sharpneck, William S., assignor to F. T. Wheeler, Chicago, Ill. Rotary gas-engine	428,762	May 27	2638	668	51	1361
Sharpneck, William S., assignor of one-half to F. T. Wheeler, Chicago, Ill. Rock-drill	432,679	July 22	2558	655	52	518
Sharpneck, William S., assignor to F. T. Wheeler, Chicago, Ill. Speed-governor for gas-engines	441,024	Nov. 18	2227	{ 575 } { 576 }	{ 53 } { 53 }	1052
Sharpneck, William S., assignor to F. T. Wheeler, Chicago, Ill. Gas-engine governor	441,025	Nov. 18	2229	576	53	1053
Sharpneck, William S., assignor to F. T. Wheeler, Chicago, Ill. Gas-engine	441,028	Nov. 18	2232	577	53	1053
Sharpneck, William S., assignor to F. T. Wheeler, Chicago, Ill. Gas-engine valve	441,029	Nov. 18	2233	578	53	1054
Sharpneck, William S., assignor, by mesne assignments, of one-half to Sharpneck Anti-Friction Journal Box Company, Chicago, Ill. Journal-box	442,831	Dec. 16	1923	494	53	1655
Sharps, Levi M., deceased, Lake View, Oreg.; W. M. Sharps administrator. Water-wheel	443,151	Dec. 23	2486	635	53	1770
Sharps, William M., administrator. (See Sharps, Levi M.)						
Sharts, Theodore, New York, N. Y. Concrete illuminating-tile	432,249	July 15	1889	486	52	382
Shatsick, Arthur O., St. Louis, Mo. Sash-fastener	425,462	Apr. 15	1577	422	51	323
Shattuck, Charles A., assignor of one-half to N. R. Miller, Boston, Mass. Powder-distributor						
Shattuck, Laforest A., Bloomsburg, Pa. Fountain-pen	421,112	Feb. 11	1026	262	50	767
Shattuck, Laforest A., Bloomsburg, Pa. Fountain-pen	423,822	Mar. 18	2191	579	50	1568
Shattuck, Laforest A., Bloomsburg, Pa. Fountain-pen	440,202	Nov. 11	872	224	53	790
Shattuck, Laforest A., Bloomsburg, Pa. Fountain-pen	441,111	Nov. 18	2378	617	53	1082
Shattuck, Laforest A., Bloomsburg, Pa. Fountain-pen	443,628	Dec. 30	3264	840	53	1931
Shattuck, William H. (See Taylor, Robert J., assignor.)						
Shattuck, William P., Minneapolis, Minn. Automatic fence-machine	418,759	Jan. 7	147	36, 37	50	32
Shaugnessy, James. (See Rohrbach and Shaugnessy.)						
Shaul, David M., Vermillion, S. D. Cultivator	430,323	June 17	1906	467	51	1859
Shaul, John D., Williamsburg, Iowa. Draft-adjusting stay for vehicles	430,890	June 24	2509	689	51	2042
Shaver, Henry L., Cohoes, N. Y. Suspender-securing pin	443,118	Dec. 23	2420	618	53	1759
Shaver, Oliver P., <i>et al.</i> (See Dickey, Aaron F., assignor.)						
Shaw, Alton J., Milwaukee, Wis. Electric crane	430,487	June 17	2141	{ 526 } { 527 }	{ 51 } { 51 }	1905
Shaw, Caleb S., Fishing Creek, N. J. Animal-trap	428,966	May 27	2939	754	51	1422
Shaw, Charles H., Brooklyn, N. Y. Time-stamp	421,623	Feb. 18	1769	462	50	915
Shaw, Charles H., Brooklyn, N. Y. Darning-last	440,659	Nov. 18	1629	421	53	940
Shaw, Charles H., Brooklyn, N. Y., assignor to A. J. Robinson, Boston, Mass. Umbrella-cover	422,643	Mar. 4	420	105	50	1216
Shaw, Charles H., assignor to Thompson & Norris, Brooklyn, N. Y. Sulphur candle	427,252	Sept. 30	3011	789	52	1978
Shaw, Charles H., Brooklyn, assignor of one-half to R. H. Thompson, New York, N. Y. Darning-last	441,709	Dec. 2	126	34	53	1287
Shaw, Charles N., Petoskey, Mich. Scoop	431,921	July 8	1385	351	52	279
Shaw, Charles N., Petoskey, Mich. Paddle for handling butter, &c	438,953	Oct. 21	1979	528	53	388
Shaw, Charles W., <i>et al.</i> (See Hall, William H., assignor.)						
Shaw, Clarence M., <i>et al.</i> (See Newhall, John F., assignor.) (Reissue.)						
Shaw, Daniel T. (See Monk and Shaw.)						
Shaw, Edgar, Portland, Me. Fastening device for tools	428,421	May 20	2124	534	51	1245
Shaw, Edwin F., Boston, Mass. Portable gymnastic apparatus	425,636	Apr. 15	1843	{ 492 } { 493 }	{ 51 } { 51 }	376
Shaw, Elnor H., Clay Centre, Kans. Ice-cream freezer	428,148	May 20	1698	431	51	1162
Shaw, Elton R., San Francisco, assignor to Mosher, Shaw & Craig, San José, Cal. Drier	427,198	May 6	264	68, 69	51	863
Shaw, Floyd L., assignor of two-thirds to B. K. Kalloch, Rockland, Me. Winding-arbor for clocks	441,708	Dec. 2	125	34	53	1287
Shaw, Frank, Syracuse, N. Y. Shaft-coupling	441,445	Nov. 25	2948	{ 759 } { 760 }	{ 53 } { 53 }	1197
Shaw, Frank T., <i>et al.</i> (See Brown, Levi S., assignor.)						
Shaw, James F., assignor of one-fourth to J. M. Quivey, Jackson, Mich. Boot	424,138	Mar. 25	2675	712	50	1667
Shaw, John, Haughville, assignor to Acorn Steam Boiler and Heating Company, Indianapolis, Ind. Adjustable stove-back	430,699	June 24	2500	611	51	1981
Shaw, John F., and E. L. Miller, Westfield, N. Y.; said Miller assignor to said Shaw. Adjustable toy chair	435,656	Sept. 2	439	117	52	1458
Shaw, John H., and A. A. Page, assignors to Sargent & Company, New Haven, Conn. Door-bell	436,588	Sept. 16	1896	498	52	1749
Shaw, Joseph, Lockwood, near Huddersfield, county of York, England. Governor for regulating the supply of gas	426,148	Apr. 22	2627	689	51	535
Shaw, Levi M., Gypsum, Kans., assignor to H. C. Staver, Chicago, Ill. Piston engine	442,401	Dec. 9	1197	311	53	1502
Shaw, Linus H. (See Dunn, George F., assignor.)						
Shaw, Moses G., Franklin Falls, N. H. Animal-trap	440,336	Nov. 11	1090	279	53	828
Shaw, Oliver H., assignor to H. W. Orndorf and C. Edmondson, Tom's Brook, Va. Harness-oil	439,607	Oct. 28	3012	-----	53	592
Shaw, Robert E. (See Loflin and Shaw.)						
Shaw, Samuel E., Scranton City, Iowa. Calf-weaner	419,078	Jan. 7	647	169	50	136
Shaw Stocking Company. (See Gifford and French, assignors.)						
Shaw Stocking Company. (See Gordon, James F., assignor.)						
Shaw, Thomas F., <i>et al.</i> (See Corbett, Joseph, assignor.)						
Shaw, Walter, <i>et al.</i> trustees. (See Day, George W., assignor.)						
Shaw, William. (See Story, Asa A., assignor.)						
Shaw, William A., Manchester, county of Lancaster, England. Device for ruling parallel lines	423,823	Mar. 18	2194	579	50	1569

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Shaw, William A., Shelby, Ohio. Fence-post	424,139	Mar. 25	2676	712	50	1667
Shaw, William C., assignor of one-half to P. W. Hawkins, White Plains, and E. G. Bowling, Aquasco, Md. Car-coupling	425,189	Apr. 8	1172	310	51	237
Shaw, William C., assignor of two-thirds to R. W. Hawkins, White Plains, A. Hawkins, La Plata, and F. W. Matthews, Allen's Fresh, Md. Fountain paint-carrier	437,519	Sept. 30	3441	900	52	2063
Shaw, William H., Brooklyn, N. Y. Manger	429,969	June 10	1311	324	51	1734
Shaw, William T., London, England. Damping apparatus	438,193	Oct. 14	796	217	53	160
Shaw, Wright, Bredbury, England. Drop-box-operating mechanism for looms	436,547	Sept. 16	1833	483	52	1737
Shawhan, Jabea F., Detroit, Mich., assignor to Shawhan Motor Company, of Michigan. Electric-motor car	438,192	Oct. 14	794	217	53	159
Shawhan Motor Company. (See Shawhan, Jabea F., assignor.)						
Shay, Dennis. (See Brown and Shay.)						
Shay, John H. (See Hinman, Wilbur S., assignor.)						
Shea, James J. (See Thielen, Paul, assignor.)						
Shea, John F. (See Price, William H., assignor.)						
Shea, John H., St. Paul, Minn. Glass valve-seat	419,720	Jan. 21	1598	427	50	337
Shea, William J., and C. Birkery, Hartford, Conn. Gripper for printing-presses	433,101	July 29	3238	833	52	654
Sheafe, Charles A., Murfreesborough, Tenn. Fishing-rod holder	440,727	Nov. 18	1745	447	53	962
Sheard, John T. (See Harrison and Sheard.)						
Shearer, John, South Bend, Ind. Plow-shield	425,259	Apr. 8	1266	338	51	256
Shearer, Theodore M., and J. W. McKee, Butler, Pa. Reversing-lever for steam-engines	418,760	Jan. 7	153	37	50	33
Shearer, Uriah S. (See Richardson, Shearer, and Meils.)						
Shearer, William W., Port Angeles, Wash. Wire-drawing drum	437,135	Sept. 23	2802	730	52	1933
Sheasley, Jacob, <i>et al.</i> (See Lafferty, Erastus S., assignor.)						
Shedd, Charles W., Grand Rapids, Mich. Apparatus for making vinegar	427,626	May 13	904	227	51	999
Shedd, Charles W., Grand Rapids, Mich. Soldering-iron	428,532	May 20	2269	576	51	1273
Shedlock, William, London, England. Washing-machine	421,198	Feb. 11	1152	295 296	50	791
Sheehan, John E., Skowhegan, Me. Automatic spring safety-hook	437,253	Sept. 30	3012	790	52	1979
Sheehy, James J. (See Amiss, Joseph M., assignor.)						
Sheeley, David C., assignor of one-half to J. Frick, Waynesborough, Pa. Baby-jumper	430,324	June 17	1907	467	51	1860
Sheen, Clendon H. (See Dom and Sheen.)						
Sheerer, Jacob. (See Hunter and Sheerer.)						
Sheets, George W. (See Leinard and Sheets.)						
Sheets, Nial R., and M. T. Goforth, assignors of one-half to J. R. and C. E. Holton, Dighton, Kans. Churn-dasher	435,369	Aug. 26	2996	794	52	1362
Sheffer, Allen R., <i>et al.</i> (See McArthur, James, assignor.)						
Sheffield, Albert J., Griggsville, Ill. Electric belt	420,740	Feb. 4	433	115	50	649
Sheffield, Edward, <i>et al.</i> (See Soper, Philo O., assignor.)						
Sheffield Land, Iron, and Coal Company. (See Hitt, Marcellus M., assignor.)						
Sheffield Velocipede Car Company. (See Nacey, Patrick, assignor.)						
Sheffield Velocipede Car Company. (See Probert, Hubert F., assignor.)						
Sheffield, William B., Kansas City, Mo. Automatic ink-distributor for printing-presses	434,957	Aug. 26	2369	628	52	1245
Sheihley, William J. S., assignor of one-half to Fredericks, Munro & Co., Lock Haven, Pa. Roof for nail or other furnaces	422,893	Mar. 4	798	204	50	1288
Shelburn, Cephas C., Escarbaba, Tex. Car-coupling	419,721	Jan. 21	1599	427	50	338
Shelburn, Cephas C., Colorado, Tex. Pump	442,209	Dec. 9	911	242	53	1448
Shelby, Christopher C., Paterson, N. J. Garment-supporter	429,778	June 10	1018	249	51	1677
Shelby, Christopher C., Paterson, N. J. Garment-supporter	429,779	June 10	1019	249	51	1678
Shelby, William R., <i>et al.</i> (See Tracy, William P., assignor.)						
Sheldon, Irving L., Danbury, Conn. Machine for cutting out tops and bottoms of paste-board boxes	427,199	May 6	265	69	51	864
Sheldon, John. (See Nettlefold and Sheldon.)						
Sheldon, John, assignor to Nettlefolds, Limited, Birmingham, England. Machinery for reducing the diameter and for tapering screw-blanks, &c.	441,073	Nov. 18	2317	600 601	53	1071
Sheldon, Mark A., Detroit, Mich. Tack-driving tool	438,865	Oct. 21	1852	492	53	364
Sheldon, Nicholas. (See Sheldon, William D., assignor.)						
Sheldon, Robert, East Greenwich, R. I. Car-brake mechanism	443,871	Dec. 30	3639	937	53	2004
Sheldon, Rosecrans. (See Durrin and Sheldon.)						
Sheldon, Rufus H., Jr., Rock Falls, Ill. Grain-harvester	427,443	May 6	636	159	51	937
Sheldon, William D., assignor to N. Sheldon, Providence, R. I. Train-signal for railways	441,030	Nov. 18	2234	578	53	1054
Sheldon, William D., assignor to N. Sheldon, Providence, R. I. Train-signal	441,031	Nov. 18	2237	579 580	53	1054
Sheldon, William D., assignor to N. Sheldon, Providence, R. I. Railway-gate	441,032	Nov. 18	2241	580	53	1055
Sheldon, William D., assignor to N. Sheldon, Providence, R. I. Train-signal for railways	441,033	Nov. 18	2243	580 581	53	1056
Sheldon, William D., assignor to N. Sheldon, Providence, R. I. Lighting railways	441,034	Nov. 18	2245	581	53	1056
Sheldrick, David J., assignor to J. A. Jeffrey, Columbus, Ohio. Drive-chain	428,862	May 27	2786	708	51	1391
Sheldrick, David J., assignor to J. A. Jeffrey, Columbus, Ohio. Drive-chain	428,863	May 27	2787	708	51	1391
Sheldrick, David J., assignor to J. A. Jeffrey, Columbus, Ohio. Drive-chain	432,089	July 15	1651	424	52	337
Sheldrick, David J., assignor to J. A. Jeffrey, Columbus, Ohio. Drive-chain	433,965	Aug. 12	787	205	52	918
Shellabarger, David S. (See True, Harod H., assignor.)						
Shellabarger, Edward F., Beaver Falls, Pa. Steel-cleaning brush	437,626	Sept. 30	3592	939	52	2093
Shellabarger, Michael M., Beaver Falls, Pa. Wire fence	422,842	Mar. 4	704	181	50	1272
Shellenback, Peter. (See Walters and Shellenback.)						
Shelley, John C., Stockton, Cal. Cable railway	438,259	Oct. 14	896	243	53	177
Shelton, James L., Inez, Va. Water-wheel	429,780	June 10	1020	249 250	51	1678
Shelton, Walter M., Atlee's Va. Bread-raiser	420,110	Jan. 28	2206	541	50	467
Shelton, Walter M., Atlee's Station, Va. Whip	441,710	Dec. 2	128	34	53	1287
Shelton, William J., Columbia, Tex. Electro-medical belt	424,827	Apr. 1	613	161	51	118
Shelton, William V., Constantinople, Turkey, assignor to P. S. Justice, London, England. Alloy	423,281	Mar. 11	1408	.....	50	1410
Shenk, Jacob M., <i>et al.</i> (See Weaver, Isaac D., assignor.)						
Shenston, Thomas S., Brantford, Ontario, Canada. Car-brake	426,336	Apr. 22	2885	759	51	589
Shepard, Amos, Plantsville, Conn. Meal-cutter	432,644	Mar. 4	421	105	50	1217
Shepard, Charles D., New York, N. Y. Centrifugal liquid-separator	427,804	May 13	1184	298	51	1053
Shepard, Charles G., <i>et al.</i> (See Adams, Peter, assignor.)						
Shepard, E. L., <i>et al.</i> , trustees. (See Krueger, August F., assignor.)						
Shepard, Fred. (See Cook and Shepard.)						
Shepard, Freedom G., assignor to Nichols & Shepard Company, Battle Creek, Mich. Thrashing-machine	427,372	May 6	515	131	51	913

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Shopard, Henry W., Camden, N. J., assignor to United States Chemical Company, Philadelphia, Pa. Making alum cake.	443,685	Dec. 30	3361	53	1949
Shepard, Jennie A., Fossil, Oreg. Reel for winding skeins of yarn, zephyr, &c.	435,460	Sept. 2	117	33	52	1397
Shepard, Walter J., <i>et al.</i> (See Adams, Peter, assignor.)						
Shepard, William A., Elgin, Ill. Combined inhaler and spirometer	433,153	July 29	3317	857	52	670
Shepardson, Byron W., <i>et al.</i> (See Rhodes, Jay B., assignor.)						
Shepardson, George R., <i>et al.</i> (See Rhodes, Jay B., assignor.)						
Shepard, Francis J., and H. Forncrook, Concord, Wis. Railway-signal	429,390	June 3	445	105	51	1556
Shepherd, Charles H., New York, N. Y. Valve	424,580	Apr. 1	224	61	51	46
Shepherd, Charles H., New York, N. Y. Automatic discharge-valve for sewer-pipes	429,156	June 3	71	18	51	1486
Shepherd, Francis H. (See Meyer and Shepherd.)						
Shepherd, Francis H., Davenport, Iowa, and J. W. Meyer, Rock Island, Ill. Machine for unwinding and trimming wall-paper	441,335	Nov. 25	2772	717	53	1163
Shepherd, Frederick S., <i>et al.</i> (See Locke, Jesse A., assignor.)						
Shepherd, Henry T., Bentonport, Iowa. Plant-protector	427,921	May 13	1369	346	51	1088
Shepherd, James, Davenport, England. Covering for rollers used in textile machinery	433,493	Aug. 5	78	23	52	772
Shepherd, John, Memphis, Mich. Revolving harrow	432,286	July 15	1957	501	52	394
Shepherd, Josiah, North Lewisburg, Ohio. Slop-jar and commode	427,627	May 13	905	227	51	1000
Shepherd, Josiah, and E. M. Davis, North Lewisburg, Ohio. Ironing-board	438,194	Oct. 14	797	217	53	160
Sheppard, Elisha T., assignor of one-third to D. S. Turner, Experiment, Va. Cutter-bar	432,445	July 15	2177	560	52	436
Sheppard, Franklin L., Philadelphia, Pa. Hot-air furnace	433,749	Aug. 5	462	119	52	845
Sheppard, George S. (See Tobey, Le Roy, assignor.)						
Sheppard, John L., Charleston, S. C. Chaff-burning furnace	420,971	Feb. 11	820	{ 212 213 }	50	728
Sheppard, Simpson, F. Hazlett, and S. J. Cluff, Dublin, Ireland. Apparatus for blowing glass	437,823	Oct. 7	232	71, 72	53	46
Sherd, William S., Northfield, Minn. Strap-clamp	430,891	June 24	2810	689	51	2042
Sheridan, Charles B., <i>et al.</i> (See Malm, Alexander, assignor.)						
Sheridan, T. W. & C. B. (See Malm, Alexander, assignor.)						
Sheridan, Theodore W., <i>et al.</i> (See Malm, Alexander, assignor.)						
Sheridan, Thomas F., Springfield, Ill. Automatic machine for cutting small pinions	420,836	Feb. 4	596	{ 152 153 154 }	50	676
Sheridan, Thomas F., Springfield, Ill. Stem winding and setting watch. (Reissue)	11,100	Aug. 5	720	187	52	898
Sheridon, William, Toledo, Ohio. Wheel	442,832	Dec. 16	1924	494	53	1655
Sherlock, Jonathan, Milton, Mass. Vehicle-seat lock	443,010	Dec. 16	2213	569	53	1713
Sherlock, Robert E., and M. Freeman, Grenfell, North-West Territories, Canada. Show-case	433,828	Aug. 5	583	152	52	870
Sherman, Abram, assignor of one-half to F. W. Miller, Pacific Junction, Iowa. Fastening for shingles	443,058	Dec. 16	2257	586	53	1727
Sherman, Adrian C., Rossville, Kans. Self-registering canceling-stamp	421,624	Feb. 18	1771	463	50	915
Sherman, Charles S., assignor of one-half to Windsor Machine Company, Windsor, Vt. Turret-lathe	423,088	Mar. 11	1108	290	50	1353
Sherman, Dwight E. (See Taylor and Sherman.)						
Sherman, Frank L., Providence, R. I. Fastening device for studs, &c.	434,138	Aug. 12	1051	271	52	971
Sherman, Gardner M., Springfield, Mass. Vaporizer	432,842	July 22	2810	720	52	567
Sherman, Gardner M., Springfield, Mass. Vaporizer	432,843	July 22	2812	720	52	567
Sherman, Gardner M., Springfield, assignor to Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Vaporizer	436,063	Sept. 9	1057	{ 274 275 }	52	1585
Sherman, George H. (See Ede, Joseph, assignor.)						
Sherman, George R., Providence, R. I. Dress-form	424,230	Mar. 25	2797	746	50	1692
Sherman, George W., Pearsall's, N. Y. Sonnette	427,274	May 6	384	100	51	886
Sherman, Howard B., Battle Creek, Mich. Hose band-clamp	427,709	May 13	1032	259	51	1025
Sherman, James M., St. Louis, Mo. River dredge or excavator	431,405	July 1	566	142	52	115
Sherman, John A., Boston, Mass., assignor to Norton Door Check and Spring Company, Portland, Me. Pneumatic door-check	428,232	May 20	1827	458	51	1188
Sherman, John E. (See Cook and Sherman.)						
Sherman, Louis, Minneapolis, Minn. Barrel-heater	423,496	Mar. 18	1715	452	50	1479
Sherman, Marcus B. (See McConnell and Sherman.)						
Sherman, Theodore S., Castleton, Vt. Currycomb	439,435	Oct. 28	2753	733	53	541
Sherman, Thomas H., <i>et al.</i> (See Garland, Frank M., assignor.)						
Sherman, William D. (See Handy and Sherman.)						
Sherman, William F., Lowell, assignor to C. S. Bates, Braintree, Mass. Car-axle	429,325	June 3	340	80	51	1536
Sherman, William W., San Francisco, Cal. Self-closing gas-burner	440,443	Nov. 11	1282	332	53	864
Sherrell, Henry, McMinnville, Tenn. Muzzle	430,547	June 17	2233	548	51	1922
Sherry, Jennie. (See Sherry, John H. and J.)						
Sherry, John H. and J., Canton, Ohio. Door-check	443,262	Dec. 23	2680	687	53	1810
Sherwin-Williams Company. (See Roberts, John W., assignor.)						
Sherwood, Andrew T., San Francisco, Cal. Uterine supporter	436,861	Sept. 23	2398	626	52	1853
Sherwood, Anna R., Fredericktown, Ohio. Wax-pad	419,079	Jan. 7	648	170	50	137
Sherwood, Gideon F., Salem, Oreg. Sliding gate	440,283	Nov. 11	1013	260	53	814
Sherwood, L. E. (See Johnson and Bailey, assignors.)						
Sherwood Manufacturing Company. (See Hart, Thomas J., assignor.)						
Shetter, Charles A. (See Neiman and Shetter.)						
Shetter, Egbert P., assignor of one-half to C. A. Mullen, Renfrew, Pa. Apparatus for generating and burning gaseous fuel in furnaces	423,347	Mar. 11	1492	{ 391 392 }	50	1427
Shevlin, George F. (See Baker and Shevlin.)						
Shibe, Benjamin F., Bala, assignor to American Patents Company, Philadelphia, Pa. Base-ball cover	442,147	Dec. 9	824	{ 220 221 }	53	1431
Shiber, Charles C., Wilkes-Barré, Pa. Composition of matter	440,066	Nov. 4	662	.....	53	737
Shiel, Michael. (See Brewer, Charles W., assignor.)						
Shields, Burnard A., Dennison, Ohio. Car-coupling	423,450	Mar. 18	1644	{ 433 434 }	50	1465
Shields, Charles A., trustee. (See Webb, Samuel D., assignor.)						
Shields, Christopher, Philadelphia, Pa. Pipe-joint	433,750	Aug. 5	463	119	52	845
Shields, William E., assignor of one-half to L. W. Feighner, Nashville, Mich. Windmill	441,035	Nov. 18	2246	581	53	1056
Shiffler, William H. (See Widfield, George B., assignor.)						
Shimer, A. R. (See Shimer, Jacob T., assignor.)						
Shimer, Jacob T., assignor to A. R. Shimer, South Bethlehem, Pa. Coping for fences	432,000	July 8	1508	382	52	303
Shimer, Milton J., Freemansburg, Pa. Broom-holder	429,781	June 10	1021	250	51	1678
Shimer, Samuel J., Milton, Pa. Washer-making machine	430,892	June 24	2811	{ 689 690 691 }	51	2042
Shinn, James W., assignor of one-half to E. H. Janney, Alexandria, Va. Locomotive machinery	432,090	July 15	1652	424	52	337
Shinn, John, Roxborough, assignor of one-half to W. B. Keefer, Philadelphia, Pa. Machine for printing woven fabrics	440,750	Nov. 18	1784	460	53	969

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Shinn, William J., Hermitage, Mo. Gate	430,220	June 17	1708	{ 424 425 }	51	1821
Shipberd, William C., Cleveland, Ohio. Thill-coupling	433,048	July 29	3153	810	52	638
Shipley, Alfred J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Glove-fastener	428,967	May 27	2940	754	51	1422
Shipley, Alfred J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Button	437,003	Sept. 23	2606	681	52	1894
Shipley, Alfred J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Glove-fastener	437,004	Sept. 23	2608	681	52	1894
Shipley, Alfred J., assignor to Scovill Manufacturing Company, Waterbury, Conn. Button	439,903	Nov. 4	417	108	53	689
Shipley, Ralph J., Waterbury, Conn., assignor to G. W. McGill, Riverdale, N. Y. Machine for forming pins for pin-fasteners	420,362	Jan. 28	2597	{ 690 691 }	50	538
Shipman, George M., et al. (See Barnes, Lewis, assignor.)						
Shipman, George W., Terre Haute, Ind. Muffler	425,637	Apr. 15	1844	493	51	376
Shipman, Madison D., et al. (See Pringle, Eugene, assignor.)						
Shipman, Madison D., et al. (See Whitney, Edmund B., assignor.)						
Shipman, Madison D., De Kalb, Ill. Glove-fastener	429,179	June 3	110	26	51	1493
Shipman, Madison D., De Kalb, Ill. Glove-fastener	437,254	Sept. 30	3013	790	52	1979
Shipman, Madison D., De Kalb, Ill. Glove-fastener	438,866	Oct. 21	1854	492	53	364
Shipman, Madison D., De Kalb, Ill. Separable button	439,696	Nov. 4	104	27	53	628
Shipp, William M., Jr., Midway, Ky. Car-axle box	419,799	Jan. 21	1715	{ 455 456 }	50	361
Shippee, Charles W., (See Sweet, Edgar A., assignor.)						
Shippee, Charles W., Milford, Mass. Pull-strap for boots or shoes	435,981	Sept. 9	932	245	52	1560
Shipsey, William, San Luis Obispo, Cal. Door-check	436,809	Sept. 23	2272	599	52	1831
Shipway, Thomas H. (See Bowler, Giles, assignor.)						
Shipway, Thomas H., and J. R. Dowdell, Toronto, Ontario, Canada. Annunciator	421,439	Feb. 18	1486	385	50	862
Shirley, Daniel, Hutchinson, Kans. Salt-pan	443,948	Dec. 30	3761	961	53	2026
Shmiedewend & Lee Company. (See Bechman, Henry F., assignor.)						
Shmiedewend & Lee Company. (See Schiller, Charles J., assignor.)						
Shobe, Abraham A., and W. Embley, Jerseyville, Ill. Electric railway	433,544	Aug. 5	144	41	52	785
Shobe, Edward, assignor of one-half to W. A. Barrington, Louisville, Ky. Coffee or tea pot	424,361	Mar. 25	3013	799	50	1732
Shobe, Edward, Louisville, Ky., and J. F. Platt, New Albany, Ind. Strainer-pail	428,699	May 27	2547	646	51	1343
Shobe, Jacob S., Columbus, Ohio. Gate	421,440	Feb. 18	1487	385	50	862
Shock, Abraham H., Lancaster, Pa. Cigar-bunching machine	433,102	July 29	3239	834	52	654
Shock, Abraham H., assignor of one-half to S. Kaufman, Lancaster, Pa. Cigar-making machine	419,893	Jan. 21	1870	{ 491 492 }	50	392
Shock, Abraham H., assignor of one-half to S. Kaufman, Lancaster, Pa. Cigar-bunching machine	422,455	Mar. 4	137	{ 37 38 39 }	50	1163
Shoemaker, Frank A. (See Dennis and Shoemaker.)						
Shoemaker, Frank A., assignor of one-half to J. W. Dennis, Buffalo, N. Y. Steam-engine	437,941	Oct. 7	407	115	53	78
Shoemaker, George H., assignor of one-half to J. C. Decker, South Bend, Ind. Spark-arrester	421,872	Feb. 18	2113	554	50	980
Shoemaker, John J. (See Wisehaupt, Edwin J., assignor.)						
Shoettle, Charles, assignor of one-half to G. Scheidler, Chicago, Ill. Device for protecting the fair-stitching on shoes during treeing	425,088	Apr. 8	1006	269	51	203
Sholder, Louis H., Cleveland, Ohio. Husking-glove	429,653	June 10	837	203	51	1643
Sholder, Louis H., Cleveland, Ohio. Miner's candlestick	430,488	June 17	2145	527	51	1906
Sholder, Louis H., Cleveland, Ohio. Corn-hook	431,822	July 8	1248	312	52	253
Sholes, David W., assignor to himself and C. H. Backus, Hampshire, Ill. Letter-opener	425,586	Apr. 15	1755	470	51	359
Sholes, David W., assignor to himself and C. H. Backus, Hampshire, Ill. Envelope-opener	425,587	Apr. 15	1756	471	51	359
Sholl, Raymond P., Bartonville, Ill. Self-oiling car-axle	424,731	Apr. 1	456	121	51	90
Shone, George, East St. Louis, Ill. Double-hulled vessel	424,508	Apr. 1	106	31	51	23
Shonk, George W. (See Richards, Philip, assignor.)						
Shook, F. Marion. (See Koch and Shook.)						
Shook, James W. (See Smith, Collins, and Shook.)						
Shook, Levi, et al. (See Colin, Theodore F., assignor.)						
Shook, Wilbur F. (See Williams, Robert E., assignor.)						
Shooter, Edward E., assignor of one-half to O. H. Blocker, Maxton, N. C. Animal-trap	420,021	Jan. 21	2060	543	50	429
Shoots, James D., and C. E. Carpenter, Horseheads, N. Y. Watch-bow fastener	420,741	Feb. 4	434	115	50	649
Shores, John B., Cassville, Tenn. Harrow	425,148	Apr. 8	1104	293	51	222
Shorey, George L., Lynn, Mass. Device or apparatus for heating purposes	440,203	Nov. 11	874	225	53	790
Shorey, George L., Lynn, Mass. Washing-machine	440,204	Nov. 11	877	{ 225 226 }	53	790
Shorey, Samuel W., Boston, Mass. Button	421,441	Feb. 18	1489	386	50	862
Shorkley, George, New York, N. Y. Photographic camera	438,494	Oct. 14	1241	{ 336 337 }	53	244
Short, Benjamin F., Buena Vista, Ga. Wagon-body	423,184	Mar. 11	1255	327	50	1383
Short, Charles G. and R. L., St. Louis, Mo., said Charles G. Short assignor to said R. L. Short. Telethermometer	443,872	Dec. 30	3640	937	53	2005
Short Electric Railway Company. (See Seymour, Henry A., assignor.)						
Short, Job, St. Louis, Mo. Grain huller and sifter	431,785	July 8	1185	297	52	240
Short, Robert L. (See Short, Charles G. and R. L.)						
Short, Sidney H., Cleveland, Ohio. Device for suspending electric conductors at crossings	422,006	Feb. 25	2428	641	50	1048
Short, Sidney H., Cleveland, Ohio. Electric railway	422,645	Mar. 4	422	105	50	1217
Short, Sidney H., Cleveland, Ohio. Trolley or collector wheel for electric railways	427,628	May 13	906	227	51	1000
Short, Sidney H., Cleveland, Ohio. Electric railway	431,711	July 8	1078	269	52	219
Short, Sidney H., Cleveland, Ohio. Support for car-motors	434,034	Aug. 12	870	229	52	935
Short, Sidney H., Cleveland, Ohio. Insulating joint	438,495	Oct. 14	1243	337	53	245
Short, Susan D. (See Hazelton, Ivory, assignor.)						
Shortle, Patrick J., and J. Leitch, Gilbertville, Mass. Mechanism for guiding the edges of webs to cloth-finishing machines	432,494	July 15	2259	584	52	454
Shortt, Edward G., Carthage, assignor of one-half to C. G. Emery, Brooklyn, N. Y. Steam-engine	437,460	Sept. 30	3353	877	52	2045
Shotwell, Walter S., Grand Rapids, Mich. Wooden-dish machine	420,363	Jan. 28	2600	{ 691 692 }	50	439
Shondy, Israel, Jr., and L. L. Miller, Rockford, Ill. Power-converter	431,854	July 8	1300	326	52	263
Shondy, Israel, Jr., and L. L. Miller, Rockford, Ill. Agricultural boiler	434,209	Aug. 12	1158	301	52	992
Shoulder Tie Plate Company. (See Halsey, Charles D., assignor.)						
Shouler, Thomas S., Leicester, England. Latch	442,739	Dec. 16	1772	458	53	1624
Showalter, Curtis H., assignor of two-thirds to W. N. and J. R. Vanleer, Brookville, Pa. Railway chair and support	439,041	Oct. 21	2108	565	53	415
Shrague, John W. (See Lockwood, Charles L., assignor.)						
Shreve, Ephraim G., Long Branch, N. J. Car-stall for horses	420,111	Jan. 28	2207	584	50	567

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Shrewsbury & Talbot Cab and Noiseless Tyre Company. (See Unwin, Howard, assignor.)						
Shrimpton, Henry, Cincinnati, Ohio. Game	432,287	July 15	1958	501	52	394
Shubert, Harold C., assignor to L. K. Curlett and J. Rose, Chicago, Ill. Electric burglar-alarm	429,817	June 10	1074	264	51	1688
Shubert, Harold C., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	439,904	Nov. 4	418	108	53	689
Shuck, Francis E., Moberly, Mo. Storm-door	421,034	Feb. 11	915	236	50	746
Shufelt, Helen S., Minneapolis, Minn. Fire-proof door or shutter	435,461	Sept. 2	118	33, 34	52	1398
Shuford, Luther H., and W. F. Fowler, Courtland, Miss. Device for cleaning gin-saws	433,049	July 29	3154	811	52	638
Shuford, Quincy A., Tyler, Tex. Anal speculum	424,140	Mar. 25	2677	712	50	1667
Shull, John, Findlay, Ohio. Ironing-table	428,533	May 20	2272	{ 576 577 527 528 }	{ 51 51 51 51 }	{ 1273 1273 1273 1273 }
Shull, John H., Findlay, Ohio. Frame house	430,489	June 17	2146	528	51	1906
Shull, Walter, <i>et al.</i> (See Blackburn, William, assignor.)						
Shults, Frederic W., Galion, Ohio. Bracing and securing device	440,852	Nov. 18	1963	505	53	1001
Shults, Chancy C., Winterset, Iowa. Pitman-coupling	420,112	Jan. 28	2208	584	50	468
Shults, Chancy C., Winterset, Iowa. Child's carriage	423,089	Mar. 11	1111	290	50	1353
Shults, George J., Avoca, N. Y. Spring-and-bracket connection for platform-rockers	425,149	Apr. 8	1105	294	51	222
Shultz Belting Company. (See Shultz, John A. J., assignor.)						
Shultz, Charles E. (See Wilcox, John L., assignor.)						
Shultz, John A. J., assignor to Shultz Belting Company, St. Louis, Mo. Link driving-belt	425,704	Apr. 15	1945	516	51	396
Shultz, John F., Martinsville, Pa. Bag-fastener	423,298	Dec. 23	2742	704	53	1821
Shultz, Llewellyn B. (See Miller and Shultz.)						
Shumaker, Charles F., Silver Creek, N. Y. Flour and middlings separator	437,942	Oct. 7	409	115	53	78
Shumaker, William H., and D. Lawrence, Bay Horse, Idaho. Railway-rail brace	442,643	Dec. 16	1581	409	53	1588
Shupe, Charles R., <i>et al.</i> (See Bibikov, Nicholas A., assignor.)						
Shupe, Charles R., <i>et al.</i> (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Shute, Chancy B. (See Straut and Shute.)						
Shute, William F., Gloucester, Mass. Package stringing and tying machine	431,080	July 1	77	19	52	17
Shutt, Wilbur T., Ramsey, Ill. Car-coupling	435,863	Sept. 2	742	198	52	1519
Shyer, Nathan B., Hopkinsville, Ky. Index	429,970	June 10	1312	{ 324 325 }	{ 51 51 }	{ 1735 1735 }
Sias, Horace, Boston, Mass. Pile-driver-hammer guide	438,899	Oct. 21	1901	505	53	373
Sibley, Albert P., and G. O. Ware, South Bend, Ind. Split pulley	437,520	Sept. 30	3443	900	52	2063
Sibley, Edwin E. (See Henrici, William A. E., assignor.)						
Sibley, Edwin E., assignor to American Fire Hose Manufacturing Company, Chelsea, Mass. Circular-knitting machine	430,593	June 17	2306	567	51	1936
Sibley, George F., assignor of one-half to E. Leedom, Whitehall, Mich. Log-boom	437,521	Sept. 30	3444	900	52	2063
Siccardi, Giovanni B., New York, N. Y. Propelling mechanism for cars	428,639	May 27	2437	620	51	1324
Sickels, Frederick E., Kansas City, Mo. Valve for steam-engines	424,581	Apr. 1	225	61	51	46
Sickler, Harley N., Buffalo, N. Y. Device for holding blacking and shoe-brushes	437,690	Dec. 16	1657	426	53	1603
Sickler, James, assignor of one-half to L. G. Hamilton, Salina, Kans. Calcining gypsum	442,140	Sept. 23	2822	52	52	1936
Sickles, Charles H. (See Foster, George N., assignor.)						
Siddall, Daniel, The Dalles, Oreg. Dental elevator	427,275	May 6	385	100	51	886
Siddall, William, Frontier, Mich. Adding-machine	419,368	Jan. 14	1087	{ 287 288 }	{ 50 50 }	{ 230 230 }
Siebel, Arthur, Düsseldorf, Germany. Roofing and isolating material	441,036	Nov. 18	2247	582	53	1057
Sieben, Henry. (See Holmes and Sieben.)						
Siebens, George, assignor of one-third to Pech Manufacturing Company, Storm Lake, Iowa. Well-drilling apparatus	436,675	Sept. 16	2036	{ 531 532 }	{ 52 52 }	{ 1777 1777 }
Sieber, George W. (See Brigger, Gottfried, assignor.)						
Siebert, Henry, Bayonne, N. J., and W. Siebert, New York, N. Y. Clip for silver-ware cases	425,190	Apr. 8	1174	310	51	238
Siebert, William. (See Siebert, Henry and W.)						
Siedentopf, Frederick, assignor of one-half to J. H. Briggs, J. N. Phillips, A. Grimes, J. Q. Buton, J. B. Reynolds, J. F. Gulick, and J. C. Harper, Terre Haute, Ind. Apparatus for making salt	418,761	Jan. 7	154	37	50	34
Siefken, Burchard H. A., Omaha, Nebr. Sponge-holder	427,200	May 6	230	69	51	864
Siegel, Andrew, Hyde Park, Mass. Lasting-pinchers	418,762	Jan. 7	156	37	50	34
Siegel, John, Montreal, Canada. Heel-protector for rubber shoes	437,049	Sept. 23	2668	697	52	1907
Siegner, Carl, Frankfurt-on-the-Main, Prussia, Germany. Hot-water stove	425,711	Apr. 15	1957	520	51	398
Siegenthaler, Charles, Sr., Columbus, Nebr. Shoe	437,316	Sept. 30	3107	814	52	1995
Siegenthaler, George B., Wooster, Ohio. Rubber sandal	440,513	Nov. 11	1396	369	53	886
Siebert, Friedrich A. (See Döring and Siebert.)						
Siegfried, Robert. (See Beckfeld and Siegfried.)						
Siegrist, August, Buffalo, N. Y. Current-motor	442,402	Dec. 9	1204	{ 311 312 316 }	{ 53 53 51 }	{ 1504 1504 1088 }
Siekmann, August, Rice Lake, Wis. Combination-lock	427,922	May 13	1370	342	51	1088
Siem, Gustav C. (See Voelkerding and Siem.)						
Siemens, Alexander, <i>et al.</i> (See Biedermann and Harvey, assignors.)						
Siemens, Ernst W. v., Berlin, Germany. Electric meter	428,290	May 20	1920	483	51	1205
Siemens, Frederick, <i>et al.</i> (See Biedermann and Harvey, assignors.)						
Siemens-Lunzen Company. (See Gordon, Thomas, assignor.)						
Siersdorfer, Michael, <i>et al.</i> (See Hamilton, Harvey R., assignor.)						
Siersdorfer, Michael, <i>et al.</i> (See Perrine, Alfred T., assignor.)						
Siersdorfer, Michael, Louisville, Ky. Apple corer and slicer	419,722	Jan. 21	1599	427	50	338
Siersdorfer, Michael, Louisville, Ky. Towel-holder	420,252	Jan. 28	2443	649	50	509
Siersdorfer, Michael, Louisville, Ky. Fire-place protector	420,972	Feb. 11	821	213	50	728
Siersdorfer, Michael, Louisville, Ky. Addressing-machine	423,185	Mar. 11	1256	327	50	1383
Siersdorfer, Michael, Louisville, Ky. Barrel-filler	423,577	Mar. 18	1825	481	50	1498
Siersdorfer, Michael, Louisville, Ky. Combined inkstand, pistol-case, and burglar-alarm	425,347	Apr. 8	1392	371	51	279
Siersdorfer, Michael, Louisville, Ky. Cutlery polisher and sharpener	428,321	May 20	1969	494	51	1214
Sift, Isaac, assignor of one-half to M. Wengrowsky, New York, N. Y. Watch-guard	424,362	Mar. 25	3014	800	50	1732
Sigafoos, Josiah J., Ubet, Mont. Automatic farm-gate	420,364	Jan. 25	2603	692	50	539
Sigler, Samuel B., Martinsburg, W. Va. Lifting-jack	438,496	Oct. 14	1244	337	53	245
Sigmund, Charles. (See Davidson and Sigmund.)						
Sigsbee, Charles D., Annapolis, Md. Mechanical movement	441,112	Nov. 18	2381	{ 617 618 }	{ 53 53 }	{ 1083 1083 }
Sigsbee, Georgia M., Boston, Mass. Armpit-shield	428,534	May 20	2273	577	51	1274
Sigsbee, Georgia M., Boston, Mass. Underwaist	436,862	Sept. 23	2399	626	52	1854
Sihler, Frederick W., <i>et al.</i> (See Barker, Henry C., assignor.)						
Sikes, George W., Hope, Miss. Horse-detacher	432,911	July 22	2909	746	52	586
Sil-Crusta Manufacturing Company. (See Blaisdell, Frederick E., assignor.)						
Silbereisen, William L. (See Chaubertlain and Silbereisen.)						
Silberman, Joseph, assignor of one-half to S. Kleinman, Nashville, Tenn. Plow	443,229	Dec. 23	2611	676	53	1801

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Silberstein, Charles, and J. Amos, Los Angeles, Cal. Smoothing-iron.....	433,545	Aug. 5	145	41	52	785
Silberzahn, John D., assignor of one-half to F. J. Meier, Milwaukee, Wis. Lathe.....	443,335	Dec. 23	2803	720	53	1834
Siliceo, José, Jr., Mexico, Mexico. Galvanic battery.....	429,703	June 10	910	222	51	1658
Silkman, Edward J., assignor of two-thirds to G. D. Penniman and T. K. Worthington, Baltimore, Md. Type-writing machine.....	436,319	Sept. 9	1447	{ 377 378 }	52	1658
Sill, Edward L., Emerson, Kans. Fastening for tool-handles.....	443,011	Dec. 16	2214	570	53	1713
Sill, Richard V. R., assignor of one-half to S. Hendrie, Detroit, Mich. Electric railway.....	425,911	Apr. 15	2242	594	51	451
Sill, Richard V. R., assignor of one-half to S. Hendrie, Detroit, Mich. Electric railway.....	425,912	Apr. 15	2244	595	51	452
Sillesky, Daniel R., Lockport, N. Y. Shirt.....	433,103	July 29	3243	{ 834 835 }	52	655
Silliman, Robert F., Troy, N. Y. Car-coupling.....	422,983	Mar. 11	953	250	50	1325
Silsbee, Joseph L. (See Schmidt and Silsbee.)						
Silsby, Harvey H., La Cygne, Kans. Device for holding a hog's snout and severing the tendon thereon.....	422,041	Feb. 25	2343	619	50	1033
Silver & Deming Manufacturing Company. (See Silver, Emmor W., assignor.)						
Silver, Emmor W., assignor to Silver & Deming Manufacturing Company, Salem, Ohio. Feed-cutter.....	424,434	Mar. 25	3150	{ 835 836 }	50	1760
Silver, Hugh, assignor of one-half to S. S. Ritchie, Lindsay, Canada. Combined wood and paper veneer.....	438,246	Oct. 14	879	238	53	174
Silver, William, Tamworth, New South Wales. Wool or hair clipping machine.....	440,902	Nov. 18	2039	525	53	1017
Silverberg, Adolf, and C. Detering, Bedburg, Germany. Carbonizing apparatus.....	440,968	Nov. 18	2148	556	53	1037
Silvernail, Alpheus L., Ionia, Mich. Geographical clock.....	425,833	Apr. 15	2128	568	51	431
Silvers, Walter B., assignor of one-third to C. W. Baggerly, Indianapolis, Ind. Spring trace-holder.....	432,250	July 15	1891	489	52	382
Silvertooth, Jacob, Fulton, Ky. Combined seed-planter, harrow, and cultivator.....	426,689	Apr. 29	3434	{ 300 901 }	51	704
Silvester, Walter L., Brooklyn, N. Y. Clamp for wash-basins.....	435,715	Sept. 2	525	139	52	1477
Simes, William F., Philadelphia, Pa. Disinfectant.....	433,877	Aug. 5	652	.....	52	884
Simmons, Charles E. (See Klippel, Thomas W., assignor.)						
Simmons, Charles H. (See Neu, Gustave S., assignor.)						
Simmons, Charles H., Brooklyn, N. Y. Support for electric lights and conductors.....	429,067	May 27	3096	798	51	1450
Simmons, Dehaldemer. (See Hayes, James J., assignor.)						
Simmons, Eckley C. (See Howell and Simmons.)						
Simmons, George W., Oak Grove, Iowa. Car-coupling.....	428,640	May 27	2438	620	51	1324
Simmons, James, Thomasville, Ga. Oil-drip cup.....	439,568	Oct. 28	2941	781	53	578
Simmons, James D., Hagerstown, Md. Phosphatic fertilizer.....	432,091	July 15	1653	.....	52	337
Simmons, John L., Duluth, Minn. Explorer's instrument.....	441,777	Dec. 2	233	60	53	1309
Simmons, Joseph C., and W. H. Turner, Martinsville, Ohio. Fence.....	419,567	Jan. 14	1363	365	50	286
Simmons, Joseph C., and W. H. Turner, Martinsville, Ohio. Check-row attachment for corn-planters.....	426,919	Apr. 22	2732	715	51	555
Simmons, Luther, Buckner, Mo. Apparatus for heating tires.....	426,741	Apr. 29	3522	920	51	721
Simmons, Thomas H., et al. (See Baldwin, Ransom G., assignor.)						
Simmons & Wellford. (See Glankler, Frank, assignor.)						
Simmons, William W. (See Glankler, Frank, assignor.)						
Simms, Henry W., Bay City, Mich. Shade-roller fixture.....	420,417	Jan. 28	2671	708	50	552
Simms, Henry W., Bay City, Mich. Shade-roller fixture.....	420,418	Jan. 28	2674	709	50	552
Simms, George W. M., De Soto, Mo. Car-mover.....	435,326	Aug. 26	2919	775	52	1347
Simon, Adam, Pittsburg, Pa. Nut-lock.....	432,572	July 22	2382	614	52	485
Simon, Alfred W., Akron, N. Y., assignor of one-half to D. M. Little, Salem, Mass. Photographic camera.....	422,984	Mar. 11	954	251	50	1325
Simon, Gustave. (See Meyenberg and Simon.)						
Simon, Herman J., Peshtigo, Wis. Sleigh-bob.....	441,200	Nov. 25	2544	657	53	1122
Simon, Karl. (See Simon, Peter and K.)						
Simon, Paul, Sulzbach, near Saarbrücken, Prussia, Germany. Machine for the manufacture of plate-glass.....	425,348	Apr. 8	1393	371	51	280
Simon, Peter and K., Cologne, Germany. Governor-wheel.....	431,406	July 1	569	{ 142 143 }	52	115
Simon, Simon B., New York, N. Y. Cap for cruetts or other vessels.....	423,639	Mar. 18	1932	508	50	1519
Simon, Théodore, Paris, France. Mirror magnifying-glass.....	426,869	Apr. 29	3706	967	51	757
Simonds & Co., George A. (See Pell, Lyman P., assignor.)						
Simonds, Frank A., Grand Rapids, Mich. Stealer-carriage for shingle-machines.....	437,724	Oct. 7	73	24	53	17
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,472	Aug. 19	1570	{ 408 409 }	52	1081
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,473	Aug. 19	1572	409	52	1082
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,474	Aug. 19	1574	410	52	1083
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,475	Aug. 19	1576	{ 410 411 }	52	1083
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,476	Aug. 19	1578	{ 411 412 }	52	1084
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,477	Aug. 19	1580	{ 412 413 414 }	52	1084
Simonds, George F., Fitchburg, Mass. Device for securing rings or annular pieces on shafts.....	434,478	Aug. 19	1584	414	52	1085
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,479	Aug. 19	1584	{ 414 415 }	52	1085
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,480	Aug. 19	1586	415	52	1086
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,481	Aug. 19	1588	415	52	1086
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,482	Aug. 19	1589	416	52	1087
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,483	Aug. 19	1590	{ 416 417 }	52	1087
Simonds, George F., Fitchburg, Mass. Ball-bearing.....	434,484	Aug. 19	1592	{ 417 418 }	52	1088
Simonds, George F., Fitchburg, Mass. Apparatus for and method of making rolled forgings.....	440,763	Nov. 18	1805	467	53	973
Simonds, George F., Fitchburg, Mass., assignor to Simonds Rolling Machine Company, of Massachusetts. Making irregular-shaped metal articles.....	419,292	Jan. 14	968	{ 255 256 257 }	56	205
Simonds, George F., and J. J. Grant, Fitchburg, Mass. Machine for making rolled forgings.....	427,125	May 6	156	41, 42	51	843
Simonds, George W. (See Jarboe, Walter S., assignor.)						
Simonds Rolling Machine Company. (See Simonds, George F., assignor.)						
Simoneau, Joseph M., assignor of one-half to E. P. Morse, Ware, Mass. Leasing mechanism for warp-dressers.....	438,563	Oct. 14	1344	{ 364 365 }	53	266

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Simons, Brother & Co. (See Browning, Joseph, assignor.)						
Simons, Millard W. (See Marble, George W., assignor.)						
Simons, William W. (See Marble, George W., assignor.)						
Simonson, James H. (See Mathias, David H., assignor.)						
Simonton, Frank H., assignor to T. C. Simonton, Jr., Paterson, N. J. Breech-loading gun.	436,726	Sept. 16	2103	554	52	1790
Simonton, Thomas C., Jr. (See Simonton, Frank H., assignor.)						
Simpkin, William, assignor to Richmond Street Motor Company, Richmond, Va. Condenser.	428,233	May 20	1828	459	51	1188
Simpkin, William, assignor to Richmond Street Motor Company, Richmond, Va. Street-motor	428,573	May 20	2332	591	51	1284
Simpkins, Alvin T., St. Louis, Mo. Baker's oven	419,369	Jan. 14	1090	288	50	230
Simpson, Alexander, and J. B. Alvord, Scranton, Pa. Coal-breaking machine	432,446	July 15	2178	{ 560 561 }	{ 52	436
Simpson, Charles H. (See McPhail and Simpson.)						
Simpson, Clara B., Minneapolis, Minn. Ruching	424,732	Apr. 1	456	122	51	91
Simpson, Clara B., Minneapolis, Minn. Safety-band	442,243	Dec. 9	957	253	53	1458
Simpson, David C., assignor to Simpson Label Company, Limited, Edinburgh, Scotland. Composition for fixing ink-impressions	442,463	Dec. 9	1294	.....	53	1522
Simpson, Edward. (See McPhail and Simpson.)						
Simpson, Elisha O. (See Wright and Simpson.)						
Simpson, George, Philadelphia, Pa. Water purifier and cooler	423,824	Mar. 18	2196	580	50	1569
Simpson, Hall, Miller & Company. (See Hawkins, Westel E., assignor.)						
Simpson, Hortensius C., Shrewsbury, county of Salop, assignor to Universal Water Power Company, (limited), London, England. Water-wheel	427,629	May 13	907	{ 227 228 }	{ 51	1000
Simpson, Isaiah H., Brunswick, Me. High-water alarm	441,982	Dec. 2	542	147	53	1370
Simpson, James, McKeesport, Pa. Pipe-welding apparatus	420,213	Jan. 28	2378	{ 631 632 }	{ 50	497
Simpson, James, McKeesport, Pa. Pipe-welding apparatus	437,795	Oct. 7	75	24, 25	53	17
Simpson, James, McKeesport, Pa. Pipe-welding apparatus	437,726	Oct. 7	77	26	53	18
Simpson, James, McKeesport, Pa. Tang for pipe-skelps	441,201	Nov. 25	2546	658	53	1192
Simpson, James C., St. Louis, Mo. Mining plant	419,595	Jan. 14	1409	377	50	296
Simpson, James C., St. Louis, Mo., and L. Stockett, Collinsville, Ill. Coal-screen	427,526	May 6	751	{ 186 187 }	{ 51	960
Simpson, James H. (See Lauder and Simpson.)						
Simpson, James H., assignor of four-fifths to J. Binford and T. S. Wheelwright, Richmond, Va. Safety-lamp attachment	433,911	Aug. 5	696	180	52	892
Simpson, James T., Washington, D. C. Lamp-shade	443,169	Dec. 23	2513	643	53	1775
Simpson, John. (See Jeffery and Simpson.)						
Simpson, John, assignor of one-half to D. A. Robinson, Minneapolis, Minn. Wagon-dump	418,763	Jan. 7	156	38	50	34
Simpson, John N. (See McCaul, William J., assignor.)						
Simpson, John W., Thomaston, Conn. Machine for grinding scissors or shears	436,156	Sept. 9	1209	315	52	1610
Simpson, Joseph C., Oakland, Cal. Harness	430,303	June 17	1872	460	51	1853
Simpson Label Company. (See Simpson, David C., assignor.)						
Simpson, Lewis A., Paris, France. Heating apparatus	425,463	Apr. 15	1578	492	51	324
Simpson, Monroe I. (See Ware and Simpson.)						
Simpson, Orville, College Hill, Ohio. Grinding-mill	423,704	Mar. 18	2030	536	50	1537
Simpson, Peter G., Millvale, assignor of one-half to H. A. Heupel, Allegheny, Pa. Lathe-carriage	431,855	July 8	1302	326	52	263
Simpson, Robert, Hanford, Cal. Cultivator	441,382	Nov. 25	2845	734	53	1176
Simpson, Sophia C., et al. (See Weber, William, assignor.)						
Simpson, Thomas H., et al. (See Cook, Frank S., assignor.)						
Simpson, William, Salford, assignor to R. Miller, Manchester, England. Loom mechanism for producing intermediate selvages	438,781	Oct. 21	1701	{ 456 457 }	{ 53	337
Sims, Albert C., Winona, Kans. Weather-strip	424,905	Apr. 1	729	194	51	141
Sims, Charles B., McConnell, Tenn. Meat-smoker	434,052	Aug. 12	895	235	52	940
Sims, Edward S. (See Hayward and Sims.)						
Sims, Elijah, Aurora, Ill. Fence-post	419,080	Jan. 7	649	170	50	137
Sims, Elijah, Aurora, Ill. Wire fence	437,005	Sept. 23	2609	682	52	1894
Sims, Elijah, Jr., Americus, Kans. Fence-post	437,050	Sept. 23	2669	698	52	1907
Sims, Francis M., Manchester, assignor to M. Blumann, London, England. Lamp for burning heavy hydrocarbon oils	441,446	Nov. 25	2950	760	53	1197
Sims, Lewis C., assignor to P. A. Millard, Martinsburg, Ohio. Eaves-trough	419,568	Jan. 14	1364	365	50	287
Sims, William S., Pittsburg, Pa. Roll	421,625	Feb. 18	1772	463	50	915
Sims, William S., Pittsburg, Pa. Speed-regulator for pulleys	433,660	Aug. 5	326	84	52	819
Sinclair, Alexander, Smithville, N. J., assignor, by mesne assignments, of one-half to R. W. Martin, Philadelphia, Pa. Shuttle-changing mechanism for looms	428,322	May 20	1970	{ 494 495 }	{ 51	1214
Sinclair, James. (See Hill, Frederick B., assignor.)						
Sinclair, James. (See Rose, George, assignor.)						
Sinclair, James P., Mottville, N. Y. Churn	439,697	Nov. 4	105	27	53	628
Sinclair Manufacturing Company. (See Sinclair, R. B., assignor.)						
Sinclair, R. B., Alameda, Cal., assignor to Sinclair Manufacturing Company, of California. Windmill	436,293	Sept. 9	1411	{ 367 368 }	{ 52	1652
Singer, Benjamin F., assignor of one-half to R. M. Slaymaker, Lancaster, Pa. Dumping-receptacle	428,731	May 27	2594	657	51	1352
Singer & Co., A. L. (See Reens, Israel, assignor.)						
Singer Fire Alarm Company of Buffalo. (See Singer, William F., assignor.)						
Singer, George, Coventry, county of Warwick, England. Elastic tire for wheels	429,818	June 10	1075	264	51	1688
Singer, George, and R. H. Lea, Coventry, England. Locking device for velocipedes	435,157	Aug. 26	2660	704	52	1300
Singer, Jasper H., New York, N. Y. Bagatelle-board	424,141	Mar. 25	2678	712	50	1668
Singer Manufacturing Company of New Jersey. (See Allen, Edward B., assignor.)						
Singer Manufacturing Company of New Jersey. (See Cummings, Evelyn D., assignor.)						
Singer Manufacturing Company of New Jersey. (See Diehl, Philip, assignor.)						
Singer Manufacturing Company of New Jersey. (See Diehl and Brandt, assignors.)						
Singer Manufacturing Company of New Jersey. (See Elliott, John F., assignor.)						
Singer Manufacturing Company of New Jersey. (See Griest, John M., assignor.)						
Singer Manufacturing Company of New Jersey. (See Staples, Elial M., assignor.)						
Singer, William F., Carthage, assignor to Singer Fire Alarm Company of Buffalo, (limited), Buffalo, N. Y. Thermostat	424,363	Mar. 25	3015	800	50	1732
Singer, William F., Carthage, assignor of one-half to G. L. Haviland, Syracuse, N. Y. Thermostat	425,089	Apr. 8	1007	269	51	203
Singer, William F., Carthage, assignor to Singer Fire Alarm Company of Buffalo, Limited, Buffalo, N. Y. Electrical automatic fire-alarm system	436,640	Sept. 16	1969	517	52	1763
Singlo, John, Syracuse, N. Y. Paper bag	426,607	Apr. 29	3306	868	51	680
Singleton, Don, Union City, Tenn. Thill-rod	428,641	May 27	2439	621	51	1324
Singleton, George F., Chicago, Ill. Signal-light for cabs	422,256	Feb. 25	2679	707	50	1095

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Singley, Joseph J., El Dorado, Kans. Shelf for supporting cheese	442,148	Dec. 9	825	221	53	1431
Singley, Samuel, New York, N. Y., assignor to Magnolia Anti-Friction Metal Company, of New York. Anti-friction alloy	429,157	June 3	72	.....	51	1486
Singley, Samuel, New York, N. Y., assignor to Magnolia Anti-Friction Metal Company, of New York. Anti-friction alloy	429,158	June 3	72	.....	51	1486
Singley, Samuel, assignor, by mesne assignments, to Magnolia Anti-Friction Metal Company, New York, N. Y. Anti-friction composition	429,248	June 3	209	.....	51	1512
Singley, Samuel, St. Louis, Mo., assignor, by mesne assignments, to Magnolia Anti-Friction Metal Company, New York, N. Y. Anti-friction alloy	429,249	June 3	209	.....	51	1512
Sinker-Davis Company. (See Rinderknecht, Charles J., assignor.)						
Sinning, Charles. (See West and Sinning.)						
Sinsel, Georg A., Leipsic, Saxony, Germany. Automatic sale apparatus	432,333	July 15	2024	{ 520 521 }	{ 52 51 }	405
Sintz, Clark, Springfield, Ohio. Gas-engine	426,337	Apr. 22	2886	760	51	590
Sintzel, Henry, Toronto, Canada. Gas-heating sad-iron	436,384	Sept. 16	1572	413	52	1691
Sip-Hale Manufacturing Company. (See Hale, Samuel, assignor.)						
Sisum, William H. H., Brooklyn, N. Y. Stock-car	423,533	Mar. 18	1772	465	50	1488
Sites, Frank B., assignor of one-half to H. D. Bokop, Defiance, Ohio. Crate	428,642	May 27	2440	621	51	1324
Skaar, O. R., <i>et al.</i> (See Brown, Theodore H., assignor.)						
Skaife, Walter, Commercial Road, county of Middlesex, England. Riveting-machine	421,324	Feb. 11	1328	{ 343 344 }	{ 50 52 }	824
Skattebo, Ole O., assignor of one-half to J. Hanson, Hannaford, N. D. Plane	434,361	Aug. 12	1387	365	52	1038
Skellenger, Charles F., Hubbard, Iowa. Wagon-tire	433,494	Aug. 5	78	23	52	772
Skerry, Joseph A., and J. Derosier, Worcester, Mass. Transparent filler	424,080	Mar. 25	2593	.....	50	1651
Skeyen, Jacob B., Hillsborough, N. D. Mechanical motor	433,912	Aug. 5	697	181	52	893
Skillman, Edward. (See McNeal, Charles, assignor.)						
Skinkio, Eugene T., Englewood, and J. M. Westerlin, Lake View, Ill. Ammonia expansion-coil	426,690	Apr. 29	3437	901	51	704
Skinner, Amos. (See Higgins and Skinner.)						
Skinner, Charles, Pearsall's, N. Y. Measuring-faucet	424,691	Apr. 1	390	103	51	76
Skinner, Charles C., assignor of one-half to H. H. Budgett, Long Prairie, Minn. Sled-brake	436,464	Sept. 16	1694	446	52	1713
Skinner, Courtland, Spencer, Iowa. Fence-machine	420,113	Jan. 23	2209	{ 584 585 }	{ 50 50 }	468
Skinner, Edward B., assignor of one-half to L. T. and S. E. Curtis, Flint, Mich. Road-cart	419,612	Jan. 14	1430	383	50	300
Skinner, Elias, Grand Rapids, Mich. Combined folding bed and cabinet	441,590	Nov. 25	3169	817	53	1239
Skinner, George A., Rochester, N. Y. Weighing-scales	410,579	Nov. 11	1496	386	53	905
Skinner, Henry, Gravesend, county of Kent, assignor of one-half to P. F. Oddie, Middlesex, England. Blower, pump, engine, &c	419,723	Jan. 21	1600	{ 427 428 }	{ 50 50 }	338
Skinner, Henry, Gravesend, county of Kent, assignor of one-half to P. F. Oddie, County of Middlesex, England. Blower, pump, engine, and meter	423,497	Mar. 18	1716	452	50	1479
Skinner, Henry A., Greenfield, Mass. Automatic shut-off for water-pipes	418,960	Jan. 7	395	97	50	82
Skinner, Henry E., assignor to E. T. Allen, San Francisco, Cal. Trolling-spoon	435,026	Aug. 26	2469	654	52	1263
Skinner, John. (See Emerson and Skinner.)						
Skinner, John M. (See Hegner and Skinner.)						
Skinner, Merrill R., Toledo, Ohio. Casing-head	428,422	May 20	2125	534	51	1245
Skoda, Emil v., Pilsen, Bohemia, Austria-Hungary. Recoil-brake for guns	422,099	Feb. 25	2432	642	50	1049
Skoda, Emil v., Pilsen, Bohemia, Austria-Hungary. Automatic quick-firing gun	429,819	June 10	1076	265	51	1688
Skornicki, Felix P., Jersey City, N. J. Clothes-line pulley	432,334	July 15	2026	521	52	406
Slack, William H. H. (See Taylor, Luke W., assignor.)						
Slade, Frank N. (See Lechner, Francis M., assignor.)						
Slager, Albert L., Springfield, Ohio. Clothes-wringer	432,495	July 15	2260	584	52	454
Slager, Albert L., and G. E. Linn, assignors to G. S. Fos Company, Springfield, Ohio. Lawn-mower	432,092	July 15	1653	425	52	337
Slaght, Arthur T., <i>et al.</i> (See Reason, Walter M., assignor.)						
Slaght, Daniel C., and J. L. Ryno, Farmer Village, N. Y. Wagon-jack	443,603	Dec. 30	3228	830	53	1925
Slaght, Elias E., <i>et al.</i> (See Mason, Edward J., assignor.)						
Slagle, L. H., <i>et al.</i> (See Lafferty, Erastus S., assignor.)						
Slane, McGuire, Bell Ranch, N. Mex. Ter., assignor to Invisible Hinge Company, New Haven, Conn. Hinge	429,391	June 3	446	105	51	1556
Slangerup, August F., and Z. T. Heap, New Orleans, La. Furnace	419,478	Jan. 14	1248	331	50	263
Slate, Nathaniel P., Tangent, Oreg. Baling-press	430,490	June 17	2148	528	51	1906
Slater, James H., Hart, Mich. Gate	428,864	May 27	2789	709	51	1391
Slattery, Dennis P. (See Johns and Slattery.)						
Slaughter, Nicholas H., assignor of one-third to D. S. Gurley, High Point, N. C. Brace or stay for bedsteads	441,037	Nov. 18	2248	582	53	1057
Slaughter, Nicholas H. C., High Point, N. C., assignor of two-thirds to E. D. Steele and N. Beeson. Milk and butter cooler	421,199	Feb. 11	1155	296	50	792
Slawson, George W., Davenport, Nebr. Screen-door	434,485	Aug. 19	1595	418	52	1088
Slaymaker, Jasper. (See Williamson, Daniel, assignor.)						
Slaymaker, Robert M. (See Schlauch, George, assignor.)						
Slaymaker, Robert M. (See Singer, Benjamin F., assignor.)						
Slayton, Augustus W., and F. J. Reinhold, Detroit, Mich.; said Reinhold assignor to said Slayton. Odometer	430,443	June 17	2074	512	51	1892
Slayton, Charles A. (See Avery, Edward N., assignor.)						
Sleat, John F., Nowington, England. High-speed engine	442,708	Dec. 16	1696	435	53	1611
Sleek, Henry, <i>et al.</i> (See Bridges, William C., assignor.)						
Sleeper, Charles W., Island Pond, Vt. Can forming and soldering machine	429,872	June 10	1157	{ 286 287 }	{ 51 51 }	1704
Sleeper, George A. (See Williams, John H., assignor.)						
Sleeper, Joseph F., and J. P. Miller, assignors to F. P. Holt, Laconia, N. H. Straight-fash- ioning knitting-machine	440,903	Nov. 18	2040	{ 526 527 }	{ 53 53 }	1017
Sleigh, Hannah P., Harmar, Ohio. Trunk	421,442	Feb. 18	1489	386	50	862
Sleight Manufacturing Company. (See Pederson, Ole, assignor.)						
Slentz, A'burtrice O., assignor to Peerless Reaper Company, Canton, Ohio. Harvester	441,038	Nov. 18	2249	{ 582 583 584 }	{ 53 53 53 }	1057
Slentz, Alburtrice O., assignor to Peerless Reaper Company, Canton, Ohio. Grain-binding harvester	441,039	Nov. 18	2254	584	53	1058
Slentz, Edmund P., Idlewood, and J. B. McGrow, assignors of three-eighths to J. A. Suee, Pittsburg, Pa. Electric railway	424,364	Mar. 25	3016	{ 800 801 }	{ 50 50 }	1732
Slovin, Thomas, St. Louis, Mo. Vehicle	424,365	Mar. 25	3019	801	50	1733
Slick, Edwin E., Braddock, Pa. Apparatus for stamping metal bars	443,119	Dec. 23	2421	618	53	1759
Slining, George J., assignor of one-half to S. Mitchell, Negaunee, Mich. Cylinder-head for rock drills	437,051	Sept. 23	2670	698	52	1907

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Sloan, Andrew J., <i>et al.</i> (See Heald, Alfred, assignor.)						
Sloan, Charles. (See Sloan, J. and C.)						
Sloan, J. and C., Homer, Mich. Fence.....	437,522	Sept. 30	3445	900	52	2063
Sloau, Mat., <i>et al.</i> (See Johnson, Oliver, assignor.)						
Sloan, Sextus, Painesville, Ohio. Device for converting motion.....	438,647	Oct. 21	1475	398	53	296
Sloan, Stephen S., assignor of one-half to J. M. Lambing, Corry, Pa. Slate-eraser.....	436,863	Sept. 23	2400	626	52	1854
Sloat, Oliver M., Brooklyn, N. Y. Bridle-bit.....	435,252	Aug. 26	2796	741	52	1326
Slocum, Caroline H., Milwaukee, Wis. Tack-puller.....	436,157	Sept. 9	1210	315	52	1611
Slocum, Charles A., assignor of one-half to C. I. Williams, Utica, N. Y. Advertising and discount coupon book, sheet, or card.....	430,044	June 10	1431	356	51	1757
Slocum, George S., Newport, R. I. Automatic wire-finder for trolley-heads.....	439,308	Oct. 28	2564	684	53	506
Slocum, John C., assignor to Filer & Stowell Company, Limited, Milwaukee, Wis. Band-saw mill.....	434,731	Aug. 19	1992	{ 519 } 520	{ 52 }	1164
Sloss, Aaron M., <i>et al.</i> (See Wolf, Julius J., assignor.)						
Slote, William, Brooklyn, N. Y. Fishing-reel.....	437,627	Sept. 30	3592	939	52	2093
Slusser, John V., assignor of one-half to O. M. Dunn, Memphis, Tenn. Railway-car replacer.....	421,873	Feb. 18	2114	{ 554 } 555	{ 50 }	981
Sly, John W., assignor of one-half to A. F. Lynn, Rhodes, Iowa. End-gate.....	423,348	Mar. 11	1495	392	50	1438
Sly, Morgan H., Alexis, Ill. Printing-press.....	443,012	Dec. 16	2215	570	53	1713
Smades, John S., Springfield, Mo. Hose-wrench.....	421,443	Feb. 18	1490	386	50	863
Smale, John P., Pasadena, Cal. Extension-ladder.....	443,800	Dec. 30	3538	908	53	1984
Small, Eldridge F., Swampscott, Mass. Schooner.....	419,225	Jan. 14	872	229	50	186
Small, Henry, San Antonio, Tex. Car-coupling.....	424,509	Apr. 1	107	31	51	24
Small, Perry, Boston, Mass. Hydraulic steering apparatus.....	437,523	Sept. 30	3446	901	52	2064
Small, William H. H., St. Louis County, Mo. Washing-machine.....	420,742	Feb. 4	435	{ 115 } 116	{ 50 }	649
Smalley, Allen, <i>et al.</i> (See McDermot, James W., assignor.)						
Smalley, Charles F. and C. C., Manitowoc, Wis. Truck-frame for tread-powers.....	426,474	Apr. 29	3112	818	51	642
Smalley, Clarence C. (See Smalley, Charles F. and C. C.)						
Smalley, M. A., <i>et al.</i> (See McDermot, James W., assignor.)						
Smalley, Orric, Jr., assignor to Morse Twist Drill and Machine Company, New Bedford, Mass. Apparatus for testing and straightening drills.....	427,805	May 13	1186	298	51	1053
Smalley, Samuel, Rich Hill, Mo. Gate.....	441,336	Nov. 25	2775	718	53	1163
Smallman, James W., Nuneaton, county of Warwick, assignor to W. M. Scott, C. O. Ellis, and E. W. Wilkinson, Birmingham, England. Ejecting mechanism of sporting guns or rifles.....	423,825	Mar. 18	2197	580	50	1569
Smallwood, Samuel B., Long Island City, N. Y. Assorting machine.....	425,705	Apr. 15	1946	517	51	396
Smart, Fred A. J., Effingham Falls, assignor of two-thirds to G. W. Lougee and A. P. Merrow, Freedom, N. H. Plant-protector.....	419,370	Jan. 14	1091	288	50	231
Smart, James S., assignor of one-half to C. A. Randall, Salem, Mass. Beer or ale faucet.....	421,770	Feb. 18	1961	515	50	952
Smead, Ephraim A., Tioga, Pa. Pipe-wrench and pipe and bolt cutter.....	422,257	Feb. 25	2680	707	50	1095
Smead, Isaac D., Toledo, Ohio. Vault-heater.....	426,551	Apr. 29	3224	845	51	664
Smead, Isaac D., Toledo, Ohio. Construction of buildings.....	426,552	Apr. 29	3225	{ 845 } 846	{ 51 }	664
Smead & Northcott. (See Stine, David L., assignor.)						
Smidt, William H., <i>et al.</i> (See Benwell, Thomas B., assignor.)						
Smidt, William H., New York, N. Y. Shoe lacing-stud and making the same.....	434,959	Aug. 26	2374	629	52	1246
Smiley, De Witt C., Jr., and G. Batty, assignors of one-third to J. Hausman, Newark, N. J. Apparatus for tapping and connecting mains.....	435,548	Sept. 2	256	71, 72	52	1424
Smiley, Fred H., San José, Cal. Journal-bearing.....	435,592	Sept. 2	324	90	52	1437
Smith, Abia B., assignor to G. V. Willson, Pittsburg, Pa. Mowing-machine finger-bar.....	441,337	Nov. 25	2776	718	53	1163
Smith, Abner J., Eastwood, Ky. Harness.....	427,630	May 13	909	228	51	1000
Smith, Abraham. (See Claunch and Smith.)						
Smith, Addison, assignor to A. A. Naughton, New York, N. Y. Brush for blacking or oiling boots.....	441,712	Dec. 2	131	35	53	1288
Smith, Addison C., Algona, Iowa. Wash-boiler.....	440,660	Nov. 18	1630	421	53	940
Smith, Adrian R., San Francisco, Cal. Feed-water heater and purifier.....	433,104	July 29	3245	835	52	656
Smith, Agnes W. H., Beaver Dam, Wis. Milk-can.....	420,253	Jan. 28	2444	649	50	509
Smith, Albert E., Wausau, Wis. Automatic offsetting device for saw-mill carriages.....	443,336	Dec. 23	2804	{ 720 } 721	{ 53 }	1834
Smith, Albert S., <i>et al.</i> (See Mills, James, assignor.)						
Smith, Alexander, Dayton, Ohio. Clothes-drier.....	428,535	May 20	2274	577	51	1274
Smith, Alexander F., The Hague, Netherlands. Brako for cars.....	420,703	Feb. 4	383	102	50	640
Smith, Alfred B., Chicago, Ill. Street-sweeper.....	435,103	Aug. 26	2581	{ 681 } 682	{ 52 }	1284
Smith, Alfred C. (See Berlin, Charles F., assignor.)						
Smith, Alfred W., Boston, Mass. Policeman's club.....	443,263	Dec. 23	2681	687	53	1810
Smith, Allen F., and H. W. Lant, Indianapolis, Ind. Gutter-bracket.....	419,724	Jan. 21	1601	428	50	338
Smith, Allen G., Columbus, Ontario, Canada. Truss.....	419,226	Jan. 14	873	230	50	187
Smith, Alonzo D., New Woodstock, N. Y. Truss.....	436,270	Sept. 9	1376	359	52	1644
Smith, Alvin C., Plain City, Ohio. Vehicle-wheel.....	434,999	Aug. 26	2429	643	52	1256
Smith, Andrew A., Paonia, Colo. Vehicle-brake.....	419,293	Jan. 14	970	257	50	205
Smith, Andrew J., Soldier's Home, Kans. Wire-conduit.....	425,913	Apr. 15	2245	595	51	452
Smith, Ann E., Springfield, Ohio. Egg-lifter.....	433,546	Aug. 5	147	42	52	785
Smith, Anthony P., Newark, N. J. Connecting branch sleeve and tapping apparatus.....	419,974	Jan. 21	1987	{ 522 } 523	{ 50 }	416
Smith & Anthony Stove Company. (See McHugh, Timothy, assignor.)						
Smith & Anthony Stove Company. (See West, Augustine C., assignor.)						
Smith, Arthur, Brockley, county of Kent, England. Refining cocoanut-oil.....	432,251	July 15	1892		52	382
Smith, Arthur B., Wilmette, Ill. Carburetor.....	433,495	Aug. 5	80	23	52	772
Smith, Arthur L., and J. P. Betts, Auburn, N. Y. Road-cart.....	434,095	Aug. 12	973	255	52	957
Smith, Austin H., Brooklyn, N. Y. Stone-crusher.....	423,282	Mar. 11	1409	366	50	1410
Smith, Benjamin A., Camden, N. J. Shoe-fastener.....	437,255	Sept. 30	3014	790	52	1979
Smith, Benjamin C., Brooklyn, assignor to F. Adee & Co., New York, N. Y. Pipe-connection for wash-trubs.....	425,553	Apr. 15	1705	456	51	350
Smith, Benjamin O., Chillicothe, Mo. Horse-collar fastener.....	432,093	July 15	1656	425	52	338
Smith Brothers Manufacturing Company. (See Grasser, Charles, assignor.)						
Smith, C. D., <i>et al.</i> (See Harris and Smith, assignors.)						
Smith, Calvin A. (See Miller, Samuel L., assignor.)						
Smith, Calvin L., New York, N. Y. Photographic camera.....	418,764	Jan. 7	158	38, 39	50	35
Smith, Catharine A. P. (See Smith, Nicholas, assignor.)						
Smith, Charles, Jackson, Ohio. Axle-lubricator and wrench.....	441,074	Nov. 18	2321	601	53	1071
Smith, Charles A. (See Haskell, William, assignor.)						
Smith, Charles A., Pawtucket, R. I. Drafting-triangle.....	437,870	Oct. 7	300	89	53	59

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Smith, Charles D. (See Smith, Thomas B. and C. D.)						
Smith, Charles E., Cambridge, N. Y. Band-lamp support	443,212	Dec. 23	2604	670	53	1796
Smith, Charles F., West Bay City, Mich. Kindling-wood press	432,772	July 22	2715	694	52	548
Smith, Charles F., assignor to Schloss & Sons, Brooklyn, N. Y. Warp-knitting machine	422,646	Mar. 4	422	105 106 801 802	50	1217
Smith, Charles G., Detroit, Mich. Excelsior-cutting machine	424,366	Mar. 25	3020	801 802	50	1733
Smith, Charles G., assignor of one-half to H. M. Hill, Washington, D. C. Leveling-instrument	438,954	Oct. 21	1980	528	53	389
Smith, Charles H. (See Rion, Henry W., assignor.)						
Smith, Charles H., and O. B. North, assignors to O. B. North & Company, New Haven, Conn. Hame-tug	419,800	Jan. 21	1716	456	50	361
Smith, Charles H., assignor to O. B. North & Company, New Haven, Conn. Snap-hook	421,200	Feb. 11	1156	296	50	792
Smith, Charles L., Pittsburg, Pa. Step-ladder	423,962	Mar. 25	2425	643	50	1620
Smith, Charles L., Pittsburg, Pa. Step-ladder	443,299	Dec. 23	2742	704	53	1821
Smith, Charles L., and C. H. Westerman, Jamestown, N. Y. Portable drilling-machine	430,700	June 24	2501	611 612	51	1982
Smith, Charles R., Providence, R. I. Roll for ornamenting ring-stock	433,050	July 29	3155	811	52	639
Smith, Charles R., assignor of two-thirds to E. D. Williams and F. M. Mathewson, Providence, R. I. Making seamless gold-plated wire	428,056	May 13	1564	395 396	51	1127
Smith, Charles W. (See Tucker and Smith.)						
Smith, Charles W., assignor of one-half to A. B. Carpenter, Pelzer, S. C. Animal-trap	431,856	July 8	1304	326	52	264
Smith, Charles W., and C. J. Lyons, Boston, Mass. Electric switch	438,260	Oct. 14	896	243	53	177
Smith, Chester L., Norriston, Pa. Ironing-machine	418,765	Jan. 7	164	39, 40	50	36
Smith, Chester W. M., San Francisco, Cal. Metallic railway-car	439,085	Oct. 21	2181	586	53	430
Smith, Comly S. (See Taylor and Smith.)						
Smith, Comly S., Riverside, N. J. Ferrule	425,464	Apr. 15	1581	422	51	324
Smith & Company, James. (See Cunningham, Herman E., assignor.)						
Smith, Daniel H., Holyoke, Mass. Velocipede	428,356	May 20	2021	508	51	1226
Smith, DeWane B., Deerfield, N. Y. Harrow	423,705	Mar. 18	2031	536	50	1537
Smith, Dwight L., Waterbury, Conn. Buckle	439,436	Oct. 28	2754	734	53	541
Smith, Dwight S., et al. (See Boeck, Charles H., assignor.)						
Smith, Earle H., New York, N. Y. Sewing-machine	418,820	Jan. 7	240	59	50	52
Smith, Edgar J., Kansas City, Mo. Hood for stoves	437,052	Sept. 23	2670	698	52	1907
Smith, Edward and F., London, England. Advertising-sign	440,779	Nov. 18	1839	473	53	979
Smith, Edward A., Greeley, Colo. Potato-digger	440,514	Nov. 11	1396	361	53	886
Smith, Edward F., Corry, Pa. Rotary pump	432,216	July 15	1848	474	52	374
Smith, Edward F., Rochester, assignor of one-half to N. R. Streetér, Grotou, N. Y. Handle for coffee or tea pots	425,349	Apr. 8	1394	371	51	280
Smith, Edward M. (See Cassidy and Smith.)						
Smith, Edward S., Ovid, Mich. Letter file and perforator	419,160	Jan. 7	766	203	50	159
Smith, Edward S., Waterbury, Conn. Garment-supporter	429,549	June 3	678	165	51	1602
Smith, Edward S., Waterbury, Conn. Stocking-supporter	438,867	Oct. 21	1856	492	53	365
Smith, Edward S., Waterbury, Conn., assignor to G. and G. A. Frost and G. H. Phelps, Newton, Mass. Garment-supporter	420,419	Jan. 28	2675	709	50	553
Smith, Edwin F., assignor of one-half to T. A. Fredericks, Syracuse, N. Y. Veneer-cutting machine	419,975	Jan. 21	1990	523 524	50	416
Smith, Edwin F., and T. A. Fredericks, Syracuse, N. Y. Veneer-cutting machine	435,158	Aug. 26	2661	704	52	1300
Smith, Edwin H., Baltimore, Md. Harvester-cutter	426,966	Apr. 29	3832	1001	51	782
Smith & Egge Manufacturing Company. (See Egge, Frederick, assignor.)						
Smith & Egge Manufacturing Company. (See Hill, George F., assignor.)						
Smith & Egge Manufacturing Company. (See Smith, Friend W., assignor.)						
Smith, Eldridge J. (See Douglas, Charles H., assignor.)						
Smith, Elias D. (See Whinner, Louis, assignor.)						
Smith, Eliza B. (See Badollet, John M., assignor.)						
Smith, Eliza K., San Francisco, Cal. Marker, cutter, and polisher for plastic stone-work	425,110	Apr. 8	1033	276	51	209
Smith, Elvin L., Mansfield, Mass. Rein-grip	434,362	Aug. 12	1389	365	52	1038
Smith, Emmet L., assignor to Reliance Corset Company, Jackson, Mich. Corset	418,989	Jan. 7	520	129 130	50	109
Smith, Emmet L., assignor to Reliance Corset Company, Jackson, Mich. Corset	422,985	Mar. 11	956	251	50	1325
Smith, Ernest, New Philadelphia, Ohio. Reclining and folding chair	438,570	Oct. 14	1355	367	53	267
Smith, Eugene C., assignor to Universal Lock Company of New York, New York, N. Y. Lock	429,159	June 3	73	18, 19	51	1486
Smith, Eugene C., New York, N. Y., assignor to Universal Lock Company, of New York. Lock. (Reissue)	11,119	Nov. 11	1561	401	53	917
Smith Exhaust Pipe Company. (See Smith, John Y., assignor.)						
Smith Feed Water Heater and Purifier Company. (See Smith, William J., assignor.) (Re-issue.)						
Smith, Ferdinand D., Cortland, N. Y. Game-counter	440,374	Nov. 11	1145	295	53	839
Smith, Fernando B., Canton, Ohio. Scraper	422,986	Mar. 11	956	252	50	1326
Smith, Fernando B., Canton, Ohio. Oil-can	440,205	Nov. 11	879	226	53	791
Smith, Floyd G., Buckhannon, W. Va. Machine for dressing toothed chisels	428,357	May 20	2024	508	51	1236
Smith, Francis W. (See Smith, Richard W., assignor.)						
Smith, Frank C. (See Kinsey and Smith.)						
Smith, Frank E. (See Learzaf and Smith.)						
Smith, Frank H., Chicago, Ill. Game apparatus and sample-exhibitor	432,447	July 15	2179	561 562	52	437
Smith, Frank L., Blue Island, Ill. Monkey-wrench	439,201	Oct. 28	2364	635	53	469
Smith, Frank P. (See Bateman, Charles, assignor.)						
Smith, Frank P., assignor of one-half to G. W. Eaves, Atlanta, Ga. Axle-box	442,089	Dec. 2	722	194	53	1404
Smith, Frank R., New Vienna, Ohio. Pad-fastener for horse-collars	420,892	Feb. 4	697	179	50	695
Smith, Franklin A., Jr., Providence, R. I. Button-fastener	423,451	Mar. 18	1645	434	50	1465
Smith, Franklin A., Jr., Providence, R. I. Button-fastener	427,126	May 6	159	42	51	843
Smith, Franklin B., Clyde, N. Y. Fruit-slicer	427,373	May 6	516	132	51	913
Smith, Fred S., assignor of one-half to D. H. Baldwin & Co., Cincinnati, Ohio. Organ-bellows	440,375	Nov. 11	1146	295	53	839
Smith, Frederick. (See Smith, Edward and F.)						
Smith, Frederick F., assignor of one-half to R. W. Ross and C. W. Higinbotom, Vandalia, Ill. Combined square, plumb, and level	423,090	Mar. 11	1111	291	50	1354
Smith, Frederick J., assignor to S. W. Card & Co., Mansfield, Mass. Screw-cutting die	427,385	Sept. 30	3230	842	52	2019
Smith, Friend W., Bridgeport, Conn. Mail-bag staple	427,923	May 13	1372	346	51	1088
Smith, Friend W., Jr., Bridgeport, Conn. Wire-chain link	435,327	Aug. 26	2920	775	52	1347
Smith, Friend W., Jr., and S. S. Williamson, assignors to Lightning Check Punch Company, Bridgeport, Conn. Bank-check punch	419,161	Jan. 7	767	203 204	50	159

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Smith, Friend W., assignor to Smith & Egge Manufacturing Company, Bridgeport, Conn. Pendent handle.....	443,013	Dec. 16	2218	571	53	1714
Smith, Gabriel S., Towanda, assignor of one-half to G. C. Jackson, Dushore, Pa. Boiler-flue cleaner.....	441,858	Dec. 2	362	95	53	1335
Smith, Gary B., assignor to J. W. Smith and L. S. Walter, Kansas City, Mo. Spring-bed-bottom.....	438,956	Oct. 21	1982	529	53	389
Smith, George, and E. S. Bright, Baltimore, Md. Cracker facing and stacking machine.....	420,743	Feb. 4	436	116	50	650
Smith, George, and E. S. Bright, assignors of one-third to J. D. Mason & Co., Baltimore, Md. Cracker-stacking machine.....	424,435	Mar. 25	3151	836	50	1761
Smith, George A., Halifax, Canada. Galvanic battery.....	443,976	Dec. 30	3810	972	53	2036
Smith, George A., assignor of one-half to J. B. Gathright, Louisville, Ky. Convertible open-fire grate and stove.....	422,355	Feb. 25	2843	749	50	1125
Smith, George C. (See Smith, William F., Jr., and G. C.)						
Smith, George F., Elmira, N. Y., assignor of two-thirds to W. G. Hunter, B. L. Harris, and J. Kessler, Sr. and Jr., Pittsburg, Pa. Butter-package.....	438,195	Oct. 14	797	217	53	160
Smith, George F., and W. H. Bachman, Grand Rapids, assignors to said Smith, W. F. Sandell, Lowell, and R. Bachman, Grand Rapids, Mich. Folding bed.....	437,053	Sept. 23	2672	698	52	1908
Smith, George J. (See Smith, William B. and G. J.)						
Smith, George J., Milwaukee, Wis. Whiffletree.....	437,006	Sept. 23	2611	682	52	1894
Smith, George L., Newark, N. J. Checkrein-loop.....	420,172	Jan. 28	2305	609	50	485
Smith, George R., B. F. Collins, and J. W. Shook, Elizabethtown, Ky. Sewing-machine motor.....	435,328	Aug. 26	2921	776	52	1347
Smith, George W. (See Wemple and Smith.)						
Smith, George W., Baltimore, Md. Spike.....	424,081	Mar. 25	2594	692	50	1651
Smith, George W., Seneca Falls, N. Y. Sand-paper head.....	434,210	Aug. 12	1159	302	52	992
Smith, George W., assignor of one-half to J. B. Hendricks, Union City, Ind. Signal-lantern.....	440,206	Nov. 11	880	226 227	53	791
Smith, George Y. (See McGrath and Smith.)						
Smith, George Y., Minneapolis, Minn. Method of and apparatus for manufacturing artificial fuel.....	425,350	Apr. 8	1395	372	51	280
Smith, George Y., Minneapolis, Minn. Artificial fuel.....	425,351	Apr. 8	1398	.....	51	281
Smith, George Y., Minneapolis, Minn. Artificial-fuel press.....	430,701	June 24	2503	612 613	51	1982
Smith, Gilbert S. (See Lake, Jacobs, and Smith.)						
Smith, Giles S., Ballwin, Mo. Bolt.....	437,054	Sept. 23	2674	699	52	1908
Smith, Gussie R., <i>et al.</i> (See Soule, James B., assignor.)						
Smith, Hamilton E., New York, N. Y. Guide for endless aprons.....	441,983	Dec. 2	549	147 148	53	1371
Smith, Hamilton E., New York, N. Y. Mechanism for transmitting motion.....	441,984	Dec. 2	550	148	53	1371
Smith, Harold B. (See Chamberlain, Smith, and Warner.)						
Smith, Harris B., Bridgeport, Conn. Magnetic ore-separator.....	430,752	June 24	2606	638 639	51	2002
Smith, Harvey B. (See Westenhaver, Edward, assignor.)						
Smith & Heiskell, <i>et al.</i> (See Smith & Heiskell, assignors.)						
Smith, Henry, Milwaukee, Wis. Apparatus for washing grain.....	439,905	Nov. 4	421	108	53	690
Smith, Henry H., <i>et al.</i> (See Boeck, Charles H., assignor.)						
Smith, Henry J., Pompton, N. J. Electric detonator or primer.....	436,023	Sept. 9	991	259	52	1572
Smith, Henry R. (See Webster, James G., assignor.)						
Smith, Henry T., Carroll, Ohio. Sash-fastener.....	425,191	Apr. 8	1174	311	51	238
Smith, Henry T., assignor to R. C. Smith, trustee, Providence, R. I. Making seamless plated hollow wire.....	422,647	Mar. 4	426	106	50	1217
Smith, Henry T., assignor to R. C. Smith, trustee, Providence, R. I. Making ingots for jewelers' use.....	427,924	May 13	1373	347	51	1088
Smith, Henry T., assignor to R. C. Smith, trustee, Providence, R. I. Manufacture of hollow plated-metal ingots and seamless wire.....	432,496	July 15	2261	585	52	454
Smith, Henry T., assignor to Standard Seamless Wire Company, Providence, R. I. Device for supporting shells in the manufacture of seamless plated wire.....	434,681	Aug. 19	1919	501	52	1150
Smith, Henry V., Melbourne, Victoria. Knob attachment.....	419,894	Jan. 21	1874	493	50	392
Smith, Henry W., St. Louis, Mo. Stock-car.....	421,982	Feb. 25	2261	595	50	1018
Smith, Herbert W., Everton, Mo. Wagon-brake.....	440,515	Nov. 11	1397	361	53	886
Smith, Horace F., and W. Garrett, assignors to Joliet Steel Company, Joliet, Ill. Apparatus for driving rod-mills.....	423,826	Mar. 18	2198	580	50	1569
Smith, Horace S., C. Pettigrew, and W. Garrett, Joliet, assignors to Illinois Steel Company, Chicago, Ill. Rod-mill.....	440,376	Nov. 11	1148	295 296	53	839
Smith, Howard F. (See Thompson, Otis D., assignor.)						
Smith, Hugh L., <i>et al.</i> (See Boeck, Charles H., assignor.)						
Smith, Ida, <i>et al.</i> (See Clark, John, assignor.)						
Smith, Isaac and J., Halifax, county of York, England. Apparatus for scouring wool, &c.....	432,573	July 22	2383	614	52	485
Smith, Isaac C., <i>et al.</i> (See Parker, Jonas, assignor.)						
Smith, Israel C. (See Herrinton, Edward E., assignor.)						
Smith, Israel C., Grand Rapids, Mich. Combined folding bed and dressing-case.....	435,773	Sept. 2	603	161	52	1491
Smith, J. T., <i>et al.</i> (See Harris and Smith, assignors.)						
Smith, J. W., <i>et al.</i> (See Smith, Gary B., assignor.)						
Smith, Jacob K. (See Beimling, Henry F., assignor.)						
Smith, James. (See Taylor and Smith.)						
Smith, James, and T. F. Horen, Cleveland, Ohio. Buoyant screw-propeller.....	432,335	July 15	2027	521	52	406
Smith, James A., Kansas City, Kans. Baling-press.....	424,367	Mar. 25	3024	802	50	1734
Smith, James A., and S. R. Libbey, Lincoln, Kans.; said Libbey assignor to said Smith. Calf-weaner.....	438,247	Oct. 14	880	239	53	174
Smith, James D., assignor of one-half to J. L. Ferrell, Philadelphia, Pa. Gas-engine.....	418,821	Jan. 7	242	59, 60	50	52
Smith, James G. (See Kratzer, David N., assignor.)						
Smith, James G., Jamestown, N. Y. Letter-box.....	420,114	Jan. 28	2212	586	50	469
Smith, James H. (See Walker, Francis M., assignor.)						
Smith, James H., Fond du Lac, Wis. Seeder.....	422,987	Mar. 11	957	252	50	1326
Smith, James H., Belleville, Ill. Drilling-machine.....	438,027	Oct. 7	552	152	53	104
Smith, James H., Longsight, Manchester, county of Lancaster, A. Goddard, Stockport, county of Chester, L. Higginbottom and T. Manneck, Longsight, Manchester, county of Lancaster, England. Apparatus for cutting pile fabrics.....	426,076	Apr. 22	2511	663	51	511
Smith, James M., Greenwich, Conn. Coupling for carriage-poles.....	419,371	Jan. 14	1091	289	50	231
Smith, James M., London, Ind. Liniment.....	419,372	Jan. 14	1093	.....	50	231
Smith, James N. (See Johnsen and Smith.)						
Smith, James R., assignor of one-third to D. McShane, Shady Nook, Ky. Horse-detacher.....	432,574	July 22	2384	615	52	485
Smith, James T., New York, N. Y. Parasol for children's carriages.....	421,771	Feb. 18	1962	515	50	952

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Smith, James V. (See Stine and Smith.)						
Smith, Jason, Rockland, Mass. Sole-cutting machine.....	426,870	Apr. 29	3707	{ 967 968 969 }	{ 51	757
Smith, Jeremiah F. and M. A., Keokuk, Iowa. Toy projectile.....	442,464	Dec. 9	1295	335	53	1522
Smith, Jeremiah W., Athens, Ga. Gin-saw-gumming machine.....	437,628	Sept. 30	3593	939	52	2093
Smith, Jesse M., and R. M. Wright, Anderson, S. C. Sash-balance.....	428,643	May 27	2441	{ 621 622 }	{ 51	1325
Smith, John, Buffalo, N. Y. Combined cigar case and extinguisher.....	420,704	Feb. 4	385	102	50	640
Smith, John, Melbourne, Victoria. Paint.....	441,075	Nov. 18	2322		53	1071
Smith, John, and J. Stake, Halifax, England. Wool-combing machine.....	438,755	Oct. 21	1668	{ 447 448 }	{ 53	330
Smith, John A. (See Sullivan and Smith.)						
Smith, John A., Rochester, N. Y. Blind mortise-joint.....	422,843	Mar. 4	705	181	50	1272
Smith, John A., Rochester, N. Y. Paneling doors or other wood-work.....	422,844	Mar. 4	706	181	50	1273
Smith, John E., Brazilton, Kans. Tongue-support.....	439,202	Oct. 28	2365	636	53	469
Smith, John F., <i>et al.</i> (See Bowman, William H., assignor.)						
Smith, John F., Washington County, Md. Feeding-tank for locomotives.....	420,973	Feb. 11	822	213	50	728
Smith, John F., Brownwood, Tex. Hay-press.....	437,524	Sept. 30	3448	901	52	2064
Smith, John F., assignor of one-half to G. Dysinger, Ionia, Mich. Sand-band for vehicles.....	429,654	June 10	839	203	51	1643
Smith, John G., St. Louis, Mo. Manufacturing spring-beds, &c.....	422,845	Mar. 4	707		50	1273
Smith, John H. (See Blackhall and Smith.)						
Smith, John H., Southport, England. Patch for breaches in ships.....	438,196	Oct. 14	798	218	53	160
Smith, John J. C., Passaic, N. J. Pen cleaner and support.....	433,878	Aug. 5	653	169	52	884
Smith, John L., Philadelphia, Pa. Canopy or awning.....	421,772	Feb. 18	1963	516	50	953
Smith, John L., Unionville, Mo. Churn.....	428,323	May 20	1972	495	51	1215
Smith, John L. and J. Unionville, Mo. Horse hay-rake.....	430,151	June 17	1602	399	51	1801
Smith, John Q., Weimar, Tex. Machine for sharpening gin-saws.....	431,197	July 1	245	62, 63	52	51
Smith, John R., Neosho, Mo., and W. Childs, Fort Smith, Ark. System of telegraphic and telephonic exchange.....	442,734	Dec. 16	1763	457	53	1622
Smith, John S. (See Montgomery, Floyd E., assignor.)						
Smith, John V., Cambridge, and J. Smythe, Arlington, Mass. Piano-stool.....	433,310	July 29	3539	914	52	716
Smith, John W. (See Conner, William M., assignor.)						
Smith, John W., Boston, Mass., and H. L. Heiskell, Oxen Hill, assignors to Smith and Heiskell, and T. B. Harrison, Washington, D. C. Means for stencil-printing.....	443,801	Dec. 30	3539	908	53	1984
Smith, John Y., assignor to Smith Exhaust Pipe Company, Doylestown, Pa. Protecting blast or exhaust pipes for locomotive-boilers.....	423,283	Mar. 11	1410	367	50	1411
Smith, Joseph. (See Smith, Isaac and J.)						
Smith, Joseph. (See Smith, John L. and J.)						
Smith, Joseph, assignor of two-thirds to W. S. Smith and W. M. Heimach, Philipsburg, Pa. Insect-trap.....	426,967	Apr. 29	3833	1002	51	782
Smith, Joseph B., Manchester, N. H. Support for electric conductors.....	418,766	Jan. 7	165	40	50	37
Smith, Joseph D., Mount Elgin, Ontario, Canada. Anchor for posts.....	431,857	July 8	1305	327	52	264
Smith, Joseph F., Great Cacapon, W. Va. Stump-extractor.....	432,094	July 15	1657	426	52	338
Smith, Joseph H., Baltimore, Md. Confectionery-machine.....	432,912	July 22	2911	746	52	587
Smith, Joseph R., assignor to Waterbury Button Company, Waterbury, Conn. Button.....	424,733	Apr. 1	457	122	51	91
Smith, Joseph R., assignor to Waterbury Button Company, Waterbury, Conn. Bodkin for attaching buttons.....	430,405	June 17	2027	499	51	1883
Smith, Joseph R., assignor to Waterbury Button Company, Waterbury, Conn. Button.....	430,406	June 17	2027	500	51	1884
Smith, Joseph R., assignor to Waterbury Button Company, Waterbury, Conn. Glove-fastener.....	436,158	Sept. 9	1211	316	52	1611
Smith, Joshua M., Springfield, assignor of one-half to C. F. Wolfe, New Moorfield, Ohio. Scapling and bolting machine.....	430,789	June 24	2649	650	51	2011
Smith, Julius. (See Schlichting and Smith.)						
Smith, Lawrence T., Providence, R. I. Electric motor.....	424,734	Apr. 1	458	122	51	91
Smith, Lewis A., <i>et al.</i> (See Bowen, Evan H., assignor.)						
Smith, Lewis G., Dallas, Tex. Extension-table.....	436,196	Sept. 9	1275	332	52	1623
Smith, Lewis M. (See Cook, George W., assignor.)						
Smith, Lydia, Leonardville, Kans. Splasher-holder for wash-stands.....	434,053	Aug. 12	896	236	52	940
Smith, Lyman B. (See McIlvain, Gose, and Pickett, assignors.)						
Smith, Mablon F., Monticello, Ind. Farm-gate.....	430,702	June 24	2507	613	51	1983
Smith, Malcolm H., New York, N. Y. Skirt-protector.....	423,186	Mar. 11	1257	327	50	1383
Smith, Marcellus S., and M. R. Wright, Independence, Mo. Noiseless blackboard-eraser.....	423,534	Mar. 18	1774	465	50	1489
Smith, Margaret A. (See Smith, Jeremiah F. and M. A.)						
Smith, Martin A., Atlantic, Iowa. Band-cutter and feeder.....	426,077	Apr. 22	2513	{ 663 664 }	{ 51	512
Smith, Martin V., Pittsburg, Pa. Steam-boiler smoke-consuming furnace.....	440,235	Nov. 11	931	{ 239 240 }	{ 53	801
Smith, Martin V., assignor to Pittsburgh Metallurgy Company, Pittsburg, Pa. Burning fuel and utilizing the heat and gases.....	424,828	Apr. 1	615	{ 161 162 }	{ 51	119
Smith, Martin V., assignor to Pittsburgh Metallurgy Company, Pittsburg, Pa. Steam-boiler furnace.....	424,829	Apr. 1	617	162	51	119
Smith, Martin V., assignor to Pittsburgh Metallurgy Company, Pittsburg, Pa. Gas-furnace.....	425,260	Apr. 8	1267	{ 338 339 }	{ 51	256
Smith, Marvin O., New Buffalo, Mich. Clamp for drag-saws.....	420,115	Jan. 28	2213	586	50	469
Smith, Mary F. (See Smyth, William L., assignor.)						
Smith, Michael H., Halifax, county of York, England. Motor for electric railways.....	432,646	July 22	2492	641	52	505
Smith, Michael J. (See Wyckoff, Lunquist, and Smith.)						
Smith Middlings Purifier Co., George T. (See Beardslee and Hand, assignors.)						
Smith Middlings Purifier Co., George T. (See Holt, Noah W., assignor.)						
Smith, Millard S., and G. J. Kelly, Stockville, Nebr. Mechanism for converting and transmitting motion from windmills, &c.....	424,510	Apr. 1	108	31	51	24
Smith, Morris F., New Haven, Conn. Slide-calipers.....	423,284	Mar. 11	1412	367	50	1411
Smith, Nathan J., Pontiac, Mich. Semaphore signaling apparatus.....	442,340	Dec. 9	1108	289	53	1424
Smith, Nathaniel E., assignor of one-half to J. R. McPherson, Jersey City, N. J. Table for railway-cars.....	440,969	Nov. 18	2149	557	53	1037
Smith, Nathaniel E., assignor of one-half to J. R. McPherson, Jersey City, N. J. Car-coupling.....	443,466	Dec. 23	3004	{ 771 772 }	{ 53	1872
Smith, Nicholas, assignor to C. A. P. Smith, Logansport, Ind. Lift-pump.....	436,548	Sept. 16	1835	483	52	1738
Smith, Noah, Cincinnati, Ohio. Car-brake.....	425,638	Apr. 15	1845	493	51	376
Smith, O. C. (See Tewksbury, George C., assignor.)						
Smith, Oberlin, Bridgeton, N. J. Drink-mixer.....	423,706	Mar. 18	2032	536	50	1537
Smith, Oliver C., Ipswich, Mass., assignor to Electric Rapid Transit Company, of New Hampshire. Mechanical movement.....	422,356	Feb. 25	2844	750	50	1126

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Smith, Oliver C., Ipswich, Mass., assignor to Electric Rapid Transit Company, of New Hampshire. Railway-truss	430,304	June 17	1874	461	51	1853
Smith, Oliver C., Ipswich, Mass., assignor to Electric Rapid Transit Company, of New Hampshire. Gearing for motor-cars	438,197	Oct. 14	800	218	53	160
Smith, Orbin F., Osceola, Iowa. Hay-stacker	424,030	Mar. 25	2523	671	50	1638
Smith, Orren M., Philadelphia, Pa. Ferrule-plug and machine for making the same	438,498	Oct. 14	1246	338	53	245
Smith, Orren M., Philadelphia, Pa. Apparatus for cutting umbrella-notches	439,437	Oct. 28	2754	734	53	542
Smith, Orren M., assignor to J. W. Grange, Philadelphia, Pa. Making umbrella-notches	436,676	Sept. 16	2037	532	52	1777
Smith, Orren M., assignor to J. W. Grange, Philadelphia, Pa. Ferrule	438,497	Oct. 14	1245	337	53	245
Smith, Orson W., Charlevoix, Mich. Cheese-cutter	441,985	Dec. 2	551	148	53	1371
Smith, P. Minturn, <i>et al.</i> (See Easton, James W., assignor.)						
Smith, Peter, New York, N. Y. Flue-cleaner	419,976	Jan. 21	1992	524	50	416
Smith, Philip W. (See Segur, Harvey, assignor.)						
Smith, Presley B., Alameda, assignor to M. Morgenstern and J. A. Behr, San Francisco, Cal. Fountain-pen	442,644	Dec. 16	1582	409	53	1588
Smith, Quitman A., Rochester, N. Y. Bicycle-lock	441,857	Dec. 2	360	95	53	1335
Smith, R. W. (See Glass and Arnold, assignors.)						
Smith, Rachel I. (See Matson, David B., assignor.)						
Smith, Richard, Sherbrooke, Quebec, Canada, and P. Dillon, Lawrence, Mass. Machine for agitating liquids	423,285	Mar. 11	1413	367	50	1411
Smith, Richard F. (See Avery and Smith.)						
Smith, Richard H., Springfield, Mass. Hand printing-stamp	435,159	Aug. 26	2663	704	52	1300
Smith, Richard W., assignor of one-half to F. W. Smith, Kenwood, N. Y. Monkey-wrench	431,236	July 1	314	77	52	63
Smith, Richmond P., assignor of one-half to T. G. Owen, Marshfield, Oreg. Tool for manipulating insertible saw-teeth	433,913	Aug. 5	698	181	52	893
Smith, Robert, Sidney, Ohio. Folding table	424,830	Apr. 1	619	162	51	119
Smith, Robert, assignor of one-half to G. W. Strange, Toronto, Canada. Catch-basin top and trap	440,067	Nov. 4	662	176	53	737
Smith, Robert D. O., Mishawaka, Ind. Electric controller for power mechanisms	436,843	Sept. 23	2331	613	52	1841
Smith, Robert T. (See Monroe, David M., assignor.)						
Smith, Robert T., Baltimore, Md. Can for hermetically-sealed goods	420,116	Jan. 28	2214	586	50	469
Smith, Robert T., Baltimore, Md. Can-soldering machine	420,078	Apr. 22	2515	664	51	512
Smith, Robert W., Frankfort, Ky. Shoe-upper	419,479	Jan. 14	1249	331	50	263
Smith, Rollin R., <i>et al.</i> (See Soule, James B., assignor.)						
Smith, Roswell C., trustee. (See Smith, Henry T., assignor.)						
Smith, Roswell T., Nashua, N. H. Automatic stitch-adjusting mechanism for embroidering-machines	422,894	Mar. 4	799	{ 204 205 }	{ 50 }	1288
Smith, Roswell T., Nashua, N. H. Street-railway switching device	433,547	Aug. 5	147	42	52	745
Smith, Roswell T., Nashua, N. H. Street-railway switching device	433,548	Aug. 5	149	42	52	786
Smith, Roswell T., Nashua, N. H. Card-board-cutting machine	434,958	Aug. 26	2370	628	52	1245
Smith, Roswell T., Nashua, N. H. Type-writing machine	443,547	Dec. 30	3132	806	53	1906
Smith, Roswell T., Nashua, N. H., assignor to G. F. King, Swampscott, Mass. Type-writing machine	443,546	Dec. 30	3128	{ 805 806 }	{ 53 }	1905
Smith, Rudolph C., Yonkers, N. Y. Hydraulic elevator	420,548	Feb. 4	167	42	50	596
Smith, Rudolph C., Yonkers, N. Y. Hydraulic elevator	420,549	Feb. 4	169	42	50	597
Smith, Rudolph C., assignor to Otis Brothers & Company, Yonkers, N. Y. Elevator	418,878	Jan. 7	351	85	50	73
Smith, Rudolph C., Yonkers, N. Y., assignor to Otis Brothers & Company, of New York. Hoisting machinery	425,261	Apr. 8	1268	339	51	256
Smith, Rudolph C., Yonkers, N. Y., assignor to Otis Brothers & Company, of New York. Traction-engine	425,262	Apr. 8	1270	{ 339 340 }	{ 51 }	257
Smith, Rudolph C., Yonkers, N. Y., assignor to Otis Brothers & Company, of New York. Thrust-bearing	425,263	Apr. 8	1272	340	51	257
Smith, Rudolph C., Yonkers, N. Y., assignor to Otis Brothers & Company, of New York. Elevator	438,388	Oct. 14	1093	297	53	215
Smith, Rudolph C., Yonkers, N. Y., assignor to Otis Brothers & Company, of New York. Elevator	439,734	Nov. 4	157	41	53	638
Smith, Samuel A., Newark, N. J. Record-sheet	437,256	Sept. 30	3015	790	52	1979
Smith, Samuel A., Glendale, N. Y. Ox-yoke	443,243	Dec. 23	2651	681	53	1804
Smith, Samuel R., Cincinnati, Ohio. Band-saw mill	442,645	Dec. 16	1583	{ 409 410 }	{ 53 }	1529
Smith, Samuel W., New York, N. Y. Telegraph-transmitter	443,381	Dec. 23	2873	739	53	1847
Smith, Sidney, Cambridge, Mass. Sulphur-burner	421,201	Feb. 11	1157	297	50	792
Smith, Sidney, Cambridge, Mass. Lead-lined digester	428,149	May 20	1700	431	51	1162
Smith, Sidney, Cambridge, Mass. Fire and water indicator for steam-boilers	432,773	July 22	2716	695	52	548
Smith, Sidney, Cambridge, Mass. Digester	443,922	Dec. 30	3716	951	53	2018
Smith, Sidney, Cambridge, Mass. Digester	443,923	Dec. 30	3718	951	53	2019
Smith, Sidney, Cambridge, Mass. Digester	443,924	Dec. 30	3719	952	53	2019
Smith, Solomon, Ravenna, Ohio. Clothes-line	443,411	Dec. 23	2913	749	53	1855
Smith, Solomon P., Waterford, N. Y. Air-current governor	426,628	Apr. 29	3342	876	51	687
Smith, Solomon P., Waterford, N. Y. Air-current governor	426,649	Apr. 29	3373	885	51	692
Smith & Sons Carpet Company, Alexander. (See Ducros and Tynneson, assignors.)						
Smith & Sons Carpet Company, Alexander. (See Tynneson and Ducros, assignors.)						
Smith, Stephen D., Orlando, Fla. Centrifugal ore-separator	431,858	July 8	1306	327	52	264
Smith, Susan E., Minneapolis, Kans. Pig-trough	436,956	Sept. 23	2542	665	52	1882
Smith, Sydney. (See Johnson, James, assignor.)						
Smith, Sylvester. (See Ball, George N., assignor.)						
Smith, Theodore, Philadelphia, Pa. Window-screen	441,088	Nov. 18	2342	606	53	1075
Smith, Thomas B. and C. D., Bridgeport, Ohio. Bill-file	440,904	Nov. 18	2043	{ 527 528 }	{ 53 }	1018
Smith, Thomas C. (See Muckle and Smith.)						
Smith, Thomas D., Saugus, assignor of two-thirds to F. Lougee, Lynn, and H. Lougee, Newtonville, Mass. Railway-gate	437,727	Oct. 7	79	27	53	18
Smith, Thomas H., Honey Grove, Tex. Cotton-chopper	435,462	Sept. 2	119	34	52	1398
Smith, Thomas J., Jackson, Mich. Picket-fence machine	418,990	Jan. 7	520	130	50	110
Smith, Thomas J., assignor of one-half to J. W. Hines, Baltimore, Md. Street-sweeping machine	436,746	Sept. 16	2149	{ 565 566 }	{ 52 }	1798
Smith, Thomas L., Milwaukee, Wis., assignor to Pratt & Whitney Company, Hartford, Conn. Screw-cutting die	421,773	Feb. 18	1965	516	50	953
Smith, Thomas L., and P. W. Post, Reedsburg, Wis. Carving-machine	443,802	Dec. 30	3541	{ 908 909 }	{ 53 }	1984
Smith, Thomas S., Washington, D. C. Brake for vehicles	436,090	Sept. 9	1102	286	52	1592
Smith, Uriah, Battle Creek, Mich. Tablet for rapid writing	418,991	Jan. 7	522	130	50	110
Smith, Virgil R. (See Harris and Smith.)						
Smith, Walter, assignor of two-thirds to T. T. Chick and J. H. Milne, Toronto, Ontario, Canada. Skirt-supporter for corsets	420,471	Feb. 4	73	17	50	578

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Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Electric meter	420,214	Jan. 28	2380	632	50	498
Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Carbon for electric lamps	422,456	Mar. 4	143	39	50	1164
Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Manufacture of carbons for electric lamps	422,895	Mar. 4	803	205	50	1289
Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Composition for supports for secondary-battery electrodes	427,710	May 13	1033	.....	51	1025
Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Incandescent-lamp socket and key	435,047	Aug. 26	2501	661	52	1269
Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Cut-out	435,048	Aug. 26	2502	662	52	1269
Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Cut-out for electric lamps	435,049	Aug. 26	2505	662	52	1270
Smith, Walter F., Philadelphia, Pa., assignor to United Electric Improvement Company, Gloucester City, N. J. Terminal switch or cut-out device for electric-lighting systems	438,118	Oct. 7	685	186	53	132
Smith, Walter M., Jesmond, Newcastle-upon-Tyne, county of Northumberland, England. Valve for engines	425,264	Apr. 8	1273	{ 340 341 342 }	{ 51 51 51 }	{ 257 257 258 }
Smith, Walter M., Jesmond, Newcastle-upon-Tyne, county of Northumberland, England. Relief-valve for locomotives	425,265	Apr. 8	1274	{ 341 342 342 }	{ 51 51 51 }	{ 258 258 258 }
Smith, Walter P., and R. Maynard, assignors to J. E. C. Koch, London, England. Lowering-gear for fire-escapes	439,438	Oct. 28	2756	734	53	542
Smith, Warren S., Stone Church, Pa. Wagon-brake	419,081	Jan. 7	650	170	50	137
Smith, Wesley, Pierce, Ohio. Gate	428,536	May 20	2275	577	51	1274
Smith, Wesley, assignor of one-half to H. Kablo and W. H. Cray, Toledo, Ohio. Preserving meat, &c.	431,407	July 1	570	.....	52	116
Smith, Wilbur A., and F. H. Peckwell, Bridgeport, Conn.; said Peckwell assignor to said Smith. Construction of tenement houses	432,774	July 22	2717	695	52	548
Smith, William. (See Hill, Smith, and O'Donnell.)						
Smith, William, Brooklyn, N. Y. Adjustable drill-frame	422,648	Mar. 4	427	107	50	1218
Smith, William, Aberdeen, county of Aberdeen, Scotland. Car for conveyance of ships on ship-railways	430,353	June 17	1952	{ 479 480 }	{ 51 51 }	{ 1868 1868 }
Smith, William, and J. H. Wilson, Clarinda Iowa, assignors to O. Ingalsbe, Cameron, Mo. Fence-machine	423,395	Mar. 11	1559	409	50	1440
Smith, William, Herne Hill, county of Surrey, and J. P. O'Donnell, Westminster, county of Middlesex, England. Railway signaling apparatus	437,802	Oct. 7	199	61, 62	53	40
Smith, William A., and W. W. Dutton, Lima, Ohio; said Dutton assignor to said Smith. Cut-off for pipes	424,368	Mar. 25	3025	803	50	1735
Smith, William B., Helston, and G. J. Smith, Truro, county of Cornwall, England. Means for igniting fuses without exposing flames or sparks	429,597	June 10	752	181	51	1627
Smith, William B., Helston, and G. J. Smith, Truro, county of Cornwall, England. Means for igniting fuses without exposing flames or sparks	429,598	June 10	752	181	51	1627
Smith, William C., Brooklyn, N. Y. Attachment for ruling-machines	439,360	Oct. 28	2634	{ 703 704 }	{ 53 53 }	{ 519 519 }
Smith, William C., assignor of one-half to C. E. Rounds, New Haven, Conn. Stationary fire-extinguishing apparatus	423,286	Mar. 11	1415	367	50	1411
Smith, William E., Berwick, Pa. Fountain-pen	427,444	May 6	637	160	51	938
Smith, William F., Leominster, assignor to Union Desk Company, Boston, Mass. Covered top for desks, tables, &c.	430,092	June 10	1515	376	51	1774
Smith, William F., Jr., and G. C. Smith, assignors of one-third to J. E. Cowles, New York, N. Y. Cigar-stump receptacle	439,309	Oct. 28	2566	685	53	503
Smith, William H., Chicago, Ill. Steam-boiler	424,735	Apr. 1	461	123	51	91
Smith, William H., Fairfield, Nebr. Fence-making machine	429,655	June 10	840	204	51	1643
Smith, William J., Charlottesville, assignor to W. H. Waddell, Lexington, Va. Station-indicator	420,974	Feb. 11	823	{ 213 214 }	{ 50 50 }	{ 729 729 }
Smith, William J., San Francisco, Cal., assignor to Smith Feed Water Heater and Purifier Company, of Illinois. Feed-water heater and purifier. (Reissue.)	11,089	June 24	3016	740	51	2081
Smith, William J., Charlottesville, and J. W. Fox, Lexington, assignors of one-half to A. Ayres and G. C. Jordan, Staunton, Va. Electric railway-signal	431,011	June 24	2990	735	51	2075
Smith, William L., assignor of one-half to W. H. H. Ayars, Indianapolis, Ind. Car-coupling	424,658	Apr. 1	339	89	51	66
Smith, William M., and J. Caldwell, Philadelphia, Pa. Mechanism for transmitting rotative motion	427,374	May 6	518	132	51	913
Smith, William M., and J. Caldwell, Philadelphia, Pa. Ventilating-fan	427,375	May 6	518	132	51	914
Smith, William P., Renton, Washington. Horse-checking device	419,082	Jan. 7	651	{ 170 171 }	{ 50 50 }	{ 137 137 }
Smith, William R., New York, N. Y., and A. L. Washburn, Niantic, Conn., assignors to Standard Automatic Scale Company, New York, N. Y. Coin-controlled weighing-scales	418,822	Jan. 7	247	60	50	52
Smith, William R., assignor to Standard Automatic Scale Company, New York, N. Y. Coin-controlled weighing-scales	437,166	Sept. 23	2871	{ 746 747 }	{ 52 52 }	{ 1944 1944 }
Smith, William R., assignor to Standard Automatic Scale Company, New York, N. Y. Coin-operated indicating mechanism	440,728	Nov. 18	1745	448	53	962
Smith, William R., assignor to Standard Automatic Scale Company, New York, N. Y. Coin-controlled weighing-scales	441,711	Dec. 2	130	34	53	1287
Smith, William S., et al. (See Smith, Joseph, assignor.)						
Smith, Wright D., assignor to Huyett & Smith Manufacturing Company, Detroit, Mich. Dust-collector	430,444	June 17	2076	513	51	1893
Smith, Edwin, Gloucester, Mass. Cough remedy	438,955	Oct. 21	1982	.....	53	389
Smoke Consuming Furnace Company. (See Treacy, Laurence J., assignor.)						
Smolianinoff, Sergey D., San Francisco, Cal., assignor, by mesne assignments, to Americanite Manufacturing Company, of Virginia. Explosive compound	432,336	July 15	2028	.....	52	406
Snyder, Henry E., Philadelphia, Pa., assignor to Wefel & Smith Spice Company, of Pennsylvania. Blacking-box holder	438,900	Oct. 21	1902	505	53	373
Smyth, David M., Northwood, N. H. Machine for gathering signatures	431,215	July 1	279	70	52	57
Smyth, David M., Northwood, N. H., assignor to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine	435,616	Sept. 2	377	{ 101 102 }	{ 52 52 }	{ 1446 1446 }
Smyth, David M., Northwood, N. H., assignor to Smyth Manufacturing Company, Hartford, Conn. Book	438,389	Oct. 14	1094	298	53	215
Smyth Manufacturing Company. (See Jacobs, Arthur I., assignor.)						
Smyth Manufacturing Company. (See Otis, Charles H., assignor.)						
Smyth Manufacturing Company. (See Reynolds and Jacobs, assignors.)						
Smyth Manufacturing Company. (See Smyth, David M., assignor.)						
Smyth, Samuel, Pittston, Pa. Water-motor	429,392	June 3	447	105	51	1557
Smyth, William H., et al. (See Spicer, John P., assignor.)						
Smyth, William L., Van Wie's, assignor to M. F. Smith, Bethlehem, N. Y. Excavating-elevator	421,113	Feb. 11	1026	{ 262 263 }	{ 50 50 }	{ 768 768 }

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Smythe, Jerome. (See Smith and Smythe.)						
Smythe, Samuel R., Allegheny, Pa. Cover for furnaces	431,012	June 24	2992	735	51	2076
Smythe, Samuel R., Allegheny, Pa. Regenerative furnace	433,603	Aug. 5	241	63	52	803
Smythe, Samuel R., Allegheny, Pa. Regenerative furnace	433,604	Aug. 5	243	64, 65	52	803
Snailliam, Moses W., et al. (See Turner, Richard, assignor.)						
Snead, Harriet V., et al. (See Snead, Harry V., assignor.)						
Snead, Harry V., assignor of three-fourths to R. B. Lewis, H. V. Snead, New York, N. Y., and W. B. Fonda, Morristown, N. J. Letter-box	428,968	May 27	2941	755	51	1422
Snedeker, Ralph C., assignor of one-half to G. W. Murphy, Terre Haute, Ind. Rod-packing	431,532	July 1	771	192	52	154
Snee, John A. (See Slentz and McGrew, assignors.)						
Snee, John A., et al. (See Snee, William, assignor.)						
Snee, William, assignor of seven-eighths to J. A. Snee and A. P. Norton, Pittsburg, Pa. Electric railway-signal apparatus	431,408	July 1	570	143	52	116
Snee, William, assignor of three-fourths to G. W. Spencer, Pittsburg, and J. H. Canfield, McKeesport, Pa. Pilot for street-railway cars	443,014	Dec. 16	2219	571	53	1714
Snee, William, assignor to J. A. Snee, C. T. Russell, W. Guckert, J. H. Canfield, Pittsburg, and J. P. Nill, McKeesport, Pa. Steam-generator	423,827	Mar. 18	2199	581	50	1570
Sneider Arms Company of Baltimore City. (See Sneider, Charles E., assignor.)						
Sneider, Charles E., assignor of one-half to M. G. Gill, Baltimore, Md. Breech-loading magazine-gun	422,846	Mar. 4	707	182	50	1273
Sneider, Charles E., assignor to Sneider Arms Company of Baltimore City, Baltimore, Md. Breech-loading gun	435,329	Aug. 26	2923	776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	52	1348
Snelgrove, William, King's Norton, England. Electrical weighing-machine	436,910	Sept. 23	2475	646 647 648 649	52	1868
Snell, Cornelius R., et al. (See Cristman, William J., assignor.)						
Snell, George W., St. Johnsville, N. Y. Game	429,326	June 3	341	80	51	1536
Snellenburg, Samuel, Philadelphia, Pa. Reciprocating propeller for vessels	426,871	Apr. 29	3711	969	51	758
Snepp, Walter P., German, Ind. Gang-cultivator	436,957	Sept. 23	2544	666	52	1882
Snevely, James E., Chetopa, Kans. Elevator-car	430,354	June 17	1954	480 481	51	1868
Snider, Worthington J. (See Deuser and Snider.)						
Snidow, John M., Big Stony Creek, Va., assignor to J. W. Boughton, Philadelphia, Pa. Saw-turning device	438,119	Oct. 7	687	186	53	132
Snoburger, Andrew J. (See Wood and Snoburger.)						
Snodgrass, George M., Honey Grove, Tex. Millstone-dress	430,893	June 24	2815	691	51	2043
Snover, James, Holyoke, Mass. Paper-calendering machine	440,377	Nov. 11	1149	296	53	840
Snow, Abner, Round Rock, Tex. Gate	431,409	July 1	573	143	52	116
Snow, Elmer W. and J. F. Pawtucket, R. I. Fan	421,626	Feb. 18	1773	463	50	916
Snow, George B., Buffalo, N. Y. Safety device for vulcanizing apparatus	443,873	Dec. 30	3641	937	53	2005
Snow, George M., et al. (See Look, Luther, assignor.)						
Snow, J. Frank. (See Snow, Elmer W. and J. F.)						
Snow, William, and J. A. Johns, Washington, D. C. Liniment	437,728	Oct. 7	80		53	18
Snow, William W., Hillburn, N. Y. Car-wheel	430,239	June 17	1738	433	51	1827
Snow, William W., Hillburn, N. Y. Composition of manganese and iron for brake-shoes	435,050	Aug. 26	2507		52	1270
Snyder, Charles L., assignor of one-half to I. M. Ridge, Kansas City, Mo. Street-car	423,396	Mar. 11	1562	410	50	1440
Snyder, Charles L., assignor of one-half to I. M. Ridge, Kansas City, Mo. Steam street-car	423,397	Mar. 11	1562	410 411	50	1441
Snyder, Charles L., assignor of one-half to I. M. Ridge, Kansas City, Mo. Multiple-cylinder engine	423,398	Mar. 11	1564	411 412	50	1441
Snyder, David, Fall River, Mass. Hemming and tucking attachment for sewing-machines	423,452	Mar. 18	1646	434	50	1465
Snyder, David, and S. C. Beatty, Colliers, W. Va. Link or splice for chains	419,725	Jan. 21	1602	428	50	338
Snyder, Derry, Elkland, Pa. Two-wheeled vehicle	421,444	Feb. 18	1491	366	50	863
Snyder, Edward. (See Carney and Snyder.)						
Snyder, Emanuel, Sparta, Mich. Drawing-knife	443,874	Dec. 30	3642	937	53	2005
Snyder, Helen M., Pine Bluff, Ark. Hand-rubber	426,054	Apr. 8	957	256	51	193
Snyder, Howard A., Philadelphia, Pa. Advertising device	428,423	May 20	2126	534	51	1246
Snyder, Howard A., Philadelphia, Pa. Advertising device	439,329	Oct. 28	2589	691	53	511
Snyder, James M., Springfield, Ill. Wire-fence-weaving machine	419,480	Jan. 14	1250	331 332	50	263
Snyder, James W., and G. H. Grabe, Coudersport, Pa. Copy-holder	428,700	May 27	2548	646	51	1344
Snyder, John F., Roanoke, Ill. Stuffing-box for piston-rods	429,656	June 10	841	204	51	1643
Snyder, John M., Hollidaysburg, Pa. Damper-regulator	441,591	Nov. 25	3171	817	53	1239
Snyder, Laurence M., Brookville, Pa. Neck-yoke	441,593	Nov. 25	3173	818	53	1240
Snyder, Peter, et al. (See Kerns, Thomas J., assignor.)						
Snyder, Peter A., and G. Homan, assignors of one-third to E. Manners, Jersey City, N. J. Railway-car label	431,290	July 1	389	98	52	80
Snyder, Riley D., Avon, Ind. Cultivator attachment for double-shovel plows	441,592	Nov. 25	3172	818	53	1239
Snyder, Ulides, Louisville, Ohio. Car-coupling	431,728	July 8	1102	274	52	225
Snyder, Waldo V., Canton, Ohio. Toy	430,152	June 17	1603	399	51	1801
Snyder, William B., Stratford, Conn., assignor of one-half to W. Thomas, Norwalk, Fla. Orange-picker	438,292	Oct. 14	956	259	53	188
Snyder, William S., Wapakoneta, Ohio. Churn	425,706	Apr. 15	1948	518	51	396
Sobey, William, assignor to J. I. Case Plow Works, Racine, Wis. Sulky-plow	437,666	Sept. 30	3645	952	52	2104
Sobotka, Gustav, assignor to Fleischmann & Company, New York, N. Y. Apparatus for purifying air	443,300	Dec. 23	2745	704	53	1822
Soby, Charles. (See Gray, William, assignor.)						
Société Anonyme le Ferro-Nickel. (See Marbeau, Henry, assignor.)						
Société Barotte, Meyer & Compagnie. (See Barotte, Henri, assignor.)						
Société du Traitement des Quinquinas. (See Lisle, Emile A., de, assignor.)						
Société L. Durand, Huguenin & Compagnie. (See Mayer, Carl A., assignor.)						
Société Richard Frères. (See Richard, Felix, assignor.)						
Société L'Incandescence Electrique. (See Panthouier, Casimir, assignor.)						
Society of Chemical Industry. (See Gnehm, Robert, assignor.)						
Society of Chemical Industry. (See Mohler, Johannes, assignor.)						
Society of Chemical Industry. (See Schmid, Jakob, assignor.)						
Socolofsky, Reinhart H., Tampa, Kans. Churn	432,575	July 22	2385	615	52	488
Soden, Thomas J., Brooklyn, N. Y. Fastening for mailing-boxes	442,758	Dec. 16	1798	465	53	1630
Soderland, Charles, et al. (See Samuelson, Andrew G., assignor.)						
Soeding, Gustav, Philadelphia, Pa. Coin-controlled strength-tester	431,013	June 24	2993	735	51	2076
Soggs, Clayton. (See Soggs, Henry and C.)						
Soggs, Henry and C., assignors of one-half to C. E. Weeks, Jamestown, N. Y. Mail-bag catcher and deliverer	441,986	Dec. 2	553	149	53	1371
Solmer & Co. (See Weber, Peter, assignor.)						
Sohn, John B., Fresno City, Cal. Washing-machine	430,548	June 17	2234	548	51	1922

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Solano, Renaldo, assignor of three-fourths to J. W. Howard, D. R. Morse, Brooklyn, N. Y., and L. G. Fisher, Chicago, Ill. Motor.	424,659	Apr. 1	341	89	51	66
Solano, Renaldo, assignor of three-fourths to J. W. Howard, D. R. Morse, Brooklyn, N. Y., and L. G. Fisher, Chicago, Ill. Valve for motors.	424,660	Apr. 1	342	90, 91	51	67
Solano, Renaldo, assignor of two-thirds to J. W. Howard and D. R. Morse, Brooklyn, N. Y. Railway-car.	437,729	Oct. 7	81	27	53	18
Solberg, Aasil, administratrix. (See Solberg, Knudt K.)						
Solberg, Knudt K., deceased, Clarkfield, Minn.; A. Solberg administratrix. Four-horse eveners.	437,730	Oct. 7	83	27	53	19
Solberg, Oysten M., La Crosse, Wis. Ink-eraser.	429,704	June 10	911	222	51	1658
Solemacher-Antweiler, Arnold v., Schloss Wachendorf, near Satzvey, Germany. Artificial building-stone.	437,525	Sept. 30	3450	.....	52	2065
Soley, William H. (See Wolstencroft and Soley.)						
Solid Ingot Company. (See Boulton, James B. D., assignor.)						
Sollers, Nathaniel D., Sollers, Md. Mesh-plate for knitting seines, gill-nets, &c.	442,787	Dec. 16	1839	{ 475 476 }	53	1639
Solmans, Alden. (See Donnelly, Alexander G., assignor.)						
Soloman, William S., assignor of one-half to M. C. Koch, Detroit, Mich. Cash-carrier.	425,007	Apr. 8	895	236	51	182
Solomon, Joseph T., Chicago, Ill. Copy-holder.	430,894	June 24	2817	691	51	2043
Solomon, Moses. (See Cobb and Solomon.)						
Solvay, Ernest, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Making chlorine.	420,837	Feb. 4	601	154	50	677
Solvay, Ernest, Brussels, Belgium, assignor to Solvay Process Company, Syracuse, N. Y. Apparatus for making chlorine.	430,198	June 17	1660	413	51	1812
Solvay Process Company. (See Solvay, Ernest, assignor.)						
Somers, Daniel M., Brooklyn, assignor to Ivison, Blakeman & Co., New York, N. Y. Box.	421,059	Feb. 11	953	245	50	753
Somers, William B., Washington, D. C., assignor of one-half to J. M. Hill, Alexandria, Va. Lamp-burner.	441,987	Dec. 2	556	149	53	1372
Somers, William P., et al. (See Johnson, Oliver, assignor.)						
Somerville, Philip, San Francisco, Cal. Railway-cable crossing.	441,040	Nov. 18	2256	585	53	1058
Somerville, William, Sr., Buffalo, N. Y. Horseshoe.	435,104	Aug. 26	2584	682	52	1285
Sommer, Adolph, Berkeley, Cal. Neutralizing sulphochlorinated organic compounds.	419,726	Jan. 21	1603	.....	50	339
Sommer, John, Jr., Newark, N. J. Faucet.	421,627	Feb. 18	1774	464	50	916
Sommerfeld, Heinrich, Canton, Kans. Car-coupling.	424,582	Apr. 1	226	61	51	46
Sommerfeld, Heinrich, Canton, Kans. Car-coupling.	433,374	July 29	3622	934	52	732
Sommerfeld, Heinrich, Canton, assignor of one-eighth to E. Arner, Emporia, Kans. Car-coupling.	437,055	Sept. 23	2675	699	52	1909
Sommers, Frank, Bellevue, Iowa. Refrigerating ice-house.	419,131	Jan. 7	717	189	50	150
Sommerville, Agnes R., Chicago, Ill. Male-genital electrode.	429,068	May 27	3097	798	51	1450
Sommerville, Corstorphine W., Washington, D. C. Fan attachment for velocipedes or other vehicles.	418,933	Jan. 7	447	110	50	93
Sondheim, Lewis H., New York, N. Y. Lead-pencil.	426,742	Apr. 29	3524	920	51	721
Sonedecker, Ephraim, Cleveland, Ohio. Latch.	434,732	Aug. 19	1995	520	52	1165
Songer, Gordon T., Elizabethton, Tenn. Gate-latch.	442,046	Dec. 16	1586	410	53	1589
Sonnemann, Theodore C., Winchester, Kans. Churn.	426,872	Apr. 29	3712	969	51	758
Soper, Philo O., New York, assignor of one-half to E. Sheffield, Brooklyn, N. Y., and H. R. Taggart, Hasbrouck Heights, N. J. Paper box.	430,405	June 10	1433	356	51	1757
Soper, Rice D., Marshall, Minn. Stove.	443,337	Dec. 23	2807	721	53	1835
Soper, Robert W., assignor of part to M. Hayes, J. and J. Dwyer, G. H. Barbour, C. A. Du Charne, and W. J. Keep, Detroit, Mich. Curve for cash-carrier apparatus.	432,576	July 22	2386	615	52	486
Sorel, Emile E. A., Paris, France. Wheel.	441,041	Nov. 18	2257	585	53	1059
Sörensen, Niels G., Stockholm, Sweden. Gravity-latch.	419,374	Jan. 14	1094	289	50	231
Sörensen, Niels G., Stockholm, Sweden. Lock or latch.	425,707	Apr. 15	1949	{ 518 519 }	51	397
Sörensen, Niels G., Stockholm, Sweden. Lock-handle.	437,007	Sept. 23	2611	682	52	1895
Sorenson, Marius, St. Paul, Minn. Machine for driving spikes.	434,529	Aug. 19	1659	435	52	1100
Sorge, Adolph, Jr., et al. (See McArthur, James, assignor.)						
Sorley, Charles, New York, N. Y., assignor to Anglo-American Electric Light Manufacturing Company, of West Virginia. Treating secondary-battery plates.	419,727	Jan. 21	1604	.....	50	339
Sorley, Charles, New York, N. Y., assignor to Anglo-American Electric Light Manufacturing Company, of West Virginia. Electrode for secondary batteries.	419,728	Jan. 21	1605	.....	50	339
Sorley, Charles, New York, N. Y., assignor to Anglo-American Electric Light Manufacturing Company, of West Virginia. Storage-battery.	420,975	Feb. 11	826	214	50	729
Sorley, Charles, New York, N. Y., assignor to Anglo-American Electric Light Manufacturing Company, of West Virginia. Treatment of storage-battery plates.	422,457	Mar. 4	144	.....	50	1164
Sorley, Charles, New York, N. Y., assignor to Anglo-American Electric Light Manufacturing Company, of West Virginia. Preparing active material for secondary batteries.	423,091	Mar. 11	1112	.....	50	1354
Soseman, Laban and T., Oskaloosa, Iowa. Hay-stacker.	438,500	Oct. 14	1248	338	53	246
Soseman, Thomas. (See Soseman, Laban and T.)						
Sostmann, John B., assignor of one-third to L. Hofman, St. Louis, Mo. Bung-extractor.	441,113	Nov. 18	2383	618	53	1083
Souders, Henry W., Lebanon, Pa. Puzzle.	419,373	Jan. 14	1093	289	50	231
Souders, Milton M., assignor of forty-five one-hundredths to J. L. Kiehl and P. G. Ringer, Lititz, Pa. Automatic railway alarm and signal.	421,983	Feb. 25	2262	595	50	1018
Soulat, Gustave V., Camp Parapet, and A. P. Trouard, New Orleans, La. Grate-bar.	438,499	Oct. 14	1247	338	53	246
Soulé, George W., Meridian, Miss. Baling-press.	419,227	Jan. 14	874	{ 230 231 }	50	187
Soulé, George W., Meridian, Miss. Baling-press.	437,257	Sept. 30	3016	{ 791 792 }	52	1979
Soule, James B., Minneapolis, assignor of one-fourth to R. R. and G. R. Smith, Duluth, Minn. Safety-alarm for elevator or other helts.	433,549	Aug. 5	150	42, 43	52	786
Soule, James B., Minneapolis, assignor of one-fourth to R. R. and G. R. Smith, Duluth, Minn. Safety cut-off for grain-elevators.	433,550	Aug. 5	155	43, 44	52	787
Soule, Richard H., assignor to Standard Car Heating and Ventilating Company, Pittsburg, Pa. Car-heating apparatus.	421,774	Feb. 18	1966	517	50	953
Soule, Richard H., assignor to Standard Car Heating and Ventilating Company, Pittsburg, Pa. Steam-trap.	421,775	Feb. 18	1968	518	50	954
Sourian, François A., Limoges, France. Hydrostatic disappearing turret or shield.	431,922	July 8	1386	{ 351 352 }	52	279
Sourwine, Allen J., et al. (See Hadley, Joshua A., assignor.)						
Sourwine, John D., et al. (See Hadley, Joshua A., assignor.)						
South Bend Iron Works. (See Anderson, Charles, assignor.)						
South Bend Iron Works. (See Dugdale, Thomas, assignor.)						
South Bend Iron Works. (See Feuska, John M., assignor.)						
South Bend Iron Works. (See Oliver and Anderson, assignors.)						
Southard, Abraham M., Denver, Colo. Air-pump.	438,716	Oct. 21	1590	{ 426 427 }	53	316

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Southard, Charles H. T. J. (See Talpey, John H., assignor.)						
Southard, Frank E., and A. E. Klausner, Toledo, Ohio. Manufacture of rubber-tired wheels.	420,609	Feb. 4	256	69	50	615
Southard, Frank E., and A. E. Klausner, Toledo, Ohio. Manufacture of rubber-tired wheels	420,610	Feb. 4	257	69	50	615
Southern Electrical Manufacturing and Supply Company. (See Barrett, Samuel Q., assignor.)						
Southgate, Thomas, London, assignor to T. W. and H. Webley, Birmingham, England. Mechanism for breech-loading small-arms	443,635	Dec. 30	3278	845	53	1934
Southward, Arthur E. (See Haughton and Southward.)						
Southwark Foundry and Machine Company. (See Petsche, Gustav B., assignor.)						
Southwick, George W., Stamford, Conn. Belt-fastener	431,175	July 1	214	53	52	44
Southworth, Owen D., Gasport, N. Y. Carpet-fastener	424,511	Apr. 1	110	32	51	24
Southworth, Walter H., and N. W. Calcutt, Dyersburg, Tenn. Saw-gummer	439,698	Nov. 4	106	28	53	629
Sowar, Joseph S. C. (See Bogle and Sowar.)						
Sowash, Peter H., Slippery Rock, Pa. Jaw-trap	434,842	Aug. 19	2150	563	52	1196
Sowers, Oni P., Statesville, N. C. Stave-jointer	423,498	Mar. 18	1717	452	50	1479
Spaeter, Carl. (See Degener, Paul, assignor.)						
Spahn, Carl A., and H. D. N. Miller, Philadelphia, Pa. Portable chair	430,703	June 24	2507	613	51	1983
Spalding & Bros., A. G. (See Kohler, George C., assignor.)						
Spalding & Brothers, A. G. (See Hirshfeld, Jacob, assignor.)						
Spalding, Frederic O. and H. P., Milwaukee, Wis. Vehicle-pole iron	421,202	Feb. 11	1159	297	50	792
Spalding, Harrison P. (See Spalding, Frederic O. and H. P.)						
Spalding, John V., et al. (See Vincent, Charles H., assignor.)						
Spalding, Palmer, assignor to Bird, Turnbull & Co., Chicago, Ill. Wire fence	431,758	July 8	1144	285	52	233
Spalding, William M. (See Barrows, Frederick B., assignor.)						
Spang, Henry W., New York, N. Y. Dynamo-electric machine	432,577	July 22	2387	615	52	486
Spang, Henry W., New York, N. Y. Dynamo-electric machine	433,051	July 29	3157	811	52	639
Spang, Henry W., New York, N. Y. Lightning-protector for oil-tanks	432,526	Sept. 30	3450	901	52	2065
Spangenberg, Robert F., New Orleans, La. Cotton-seed delinier	427,925	May 13	1374	347	51	1088
Spangler, Harrison D., assignor of one-half to J. B. Keller, Ephrata, Pa. Tobacco-scrapping machine	438,198	Oct. 14	801	218	53	161
Spangler, Jacob W., York, Pa. Corn-planter	418,823	Jan. 7	950	61, 62	50	53
Spangler, Jacob W., assignor of two-thirds to J. Jessop and J. A. Jones, York, Pa. Thill holder or tug	430,093	June 10	1516	376	51	1774
Spannagel, August, and F. Springorum, assignors to Phoenix Actien-Gesellschaft für Bergbau und Huttenbetrieb, Haar, near Ruhrort, Prussia, Germany. Recarbonizing steel	430,199	June 17	1662	414	51	1812
Spanoghe, Josse-Egide, Antwerp, assignor to A. Marque, Brussels, Belgium. Screw-propeller	435,330	Aug. 26	2926	777	52	1348
Spare, George E., New Haven, Conn. Jump-seat carriage	435,716	Sept. 2	526	139	52	1477
Spare, George E., New Haven, Conn. Jump-seat carriage	435,717	Sept. 2	527	139	52	1477
Spare, George E., assignor to New Haven Carriage Company, New Haven, Conn. Buck-board wagon	422,649	Mar. 4	428	107	50	1218
Sparks, Charles W. and J. W., Myrtle, S. D. Vegetable-drainer	419,729	Jan. 21	1605	428	50	339
Sparks, John A., and W. S. Brown, Eminence, Ky. Fence	428,763	May 27	2639	668	51	1362
Sparks, John W. (See Sparks, Charles W. and J. W.)						
Sparks, William E., assignor to Sargent & Company, New Haven, Conn. Lock	443,264	Dec. 23	2682	687	53	1810
Sparrow, Cornelius A., Mechanicsburg, Ill. Shoe-scraper	419,801	Jan. 21	1717	456	50	361
Sparrow, Frank M., Mattapoisett, Mass. Electric heat-regulating system	433,375	July 29	3623	935	52	732
Spaulding, Albert M., Howardsville, Mich. Gate	427,926	May 13	1375	347	51	1089
Spaulding, Frank. (See Pelton, Josiah J., assignor.)						
Spaulding, George H., assignor of one-third to W. J. Lukens, Chicago, Ill. Corn-harvester	426,475	Apr. 29	3113	{ 818 819 636 }	51	642
Spaulding, George H., assignor of one-half to W. J. Lukens, Chicago, Ill. Corn-harvester	439,203	Oct. 28	2366	{ 637 638 }	53	469
Spaulding, George N., and C. H. Eaton, Harrison, Me. Oar-lock	426,743	Apr. 29	3527	920	51	722
Speakman, Thomas H., Ware, Mass. Chair	428,150	May 20	1702	431	51	1163
Spear, Anson R., assignor to J. H. Heisser and O. B. Clark, Minneapolis, Minn. Envelope	433,052	July 29	3158	812	52	639
Spear, Arthur D., Greenville, S. C. Lightning-arrester	426,338	Apr. 22	2888	760	51	590
Spear, Ephraim W., Boston, Mass., assignor to Intelligent Can Company, Portland, Me. Can	442,210	Dec. 9	912	242	53	1448
Spear, Murray H., London, England, assignor, by mesne assignments, to Carter & Company, Niagara Falls, N. Y. Cover for books	441,114	Nov. 18	2384	618	53	1083
Spear, Ralph, Fürth, Bavaria, Germany. Combined pen, pencil-holder, and eraser	425,527	Apr. 15	1669	445	51	342
Spearing, Robert J., Sherbrooke, Canada. Safety attachment for car-trucks	443,382	Dec. 23	2876	739	53	1848
Spears, Alexander H. (See Beard and Spears.)						
Speckbauch, Bernard H., Newport, Ky. Printing-press	435,774	Sept. 2	604	{ 161 162 }	52	1491
Speechly, George G. (See Morison, Alexander, assignor.)						
Speed, Francis M., San Francisco, Cal. Pipe-machine	437,871	Oct. 7	301	89	53	59
Speed, Joseph J., Waltham Cross, England. Spring for cartridge-magazines	431,410	July 1	574	144	52	116
Speer, William S., Wyconda, Mo. Tongue-support	425,708	Apr. 15	1951	519	51	397
Speer, William W., Pittsburg, Pa. Press for shaping plow-irons	428,151	May 20	1702	432	51	1163
Speicher, John. (See Fearey and Speicher.)						
Speicher, John, Jersey City, assignor to Newark District Telegraph Company, Newark, N. J. Electric fire-alarm system	420,173	Jan. 28	2306	{ 609 610 611 612 }	50	485
Speicher, John, Jersey City, N. J., assignor to Continuous Rail Joint Company of America, of New Jersey. Railway joint	427,017	Apr. 29	3911	1020	51	796
Speicher, John, Jersey City, and F. T. Fearey, Newark, N. J., assignors to Newark District Telegraph Company, of New Jersey. Fire-alarm-telegraph system	426,691	Apr. 29	3439	{ 901 902 }	51	705
Speirs, Alexander, Windham, Me. Force-sprinkler	428,234	May 20	1829	459	51	1188
Speirs, John, Jersey City, N. J., assignor of one-half to C. H. Du Bois, Brooklyn, N. Y. Signaling and line-throwing device	440,207	Nov. 11	884	227	53	792
Spelman, William C., assignor to New York Steel Mat Company, New York, N. Y. Steps or staircase	419,228	Jan. 14	881	231	50	188
Spelman, William C., assignor to New York Steel Mat Company, New York, N. Y. Car-step	419,229	Jan. 14	882	231	50	188
Spelman, William C., assignor to New York Steel Mat Company, New York, N. Y. Metallic mat	438,648	Oct. 21	1476	399	53	296
Spencer, Albert H. (See Stetson, Charles W., assignor.)						
Spencer, Allen D., assignor of one-third to R. M. Wallace, Baltimore, Md. Tool for truuing dynamo-commutators	430,094	June 10	1517	377	51	1774
Spencer, Anderson H., Oenaville, Tex. Baling-press	422,847	Mar. 4	709	182	50	1273

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Spencer, Benjamin A., Aurora, Ill. Clothes-pounder	434,843	Aug. 19	2150	563	52	1196
Spencer, Elijah. (See Pfeffer and Spencer.)						
Spencer, Frank E., Penn Yan, N. Y. Crate	428,152	May 20	1704	432	51	1163
Spencer, George, Hydo, county of Chester, assignor of one-half to W. Jowett, Mellor, Eng- land. Safety-valve	424,031	Mar. 25	2524	{ 671 672 }	50	1638
Spencer, George J. (See Mower and Spencer.)						
Spencer, George W., <i>et al.</i> (See Snee, William, assignor.)						
Spencer, Harvey A. See Spencer, Henry C., assignor.)						
Spencer, Henry C., Washington, D. C., assignor of one-half to H. A. Spencer, New York, N. Y. Student's copy-book	435,051	Aug. 26	2508	662	52	1270
Spencer, Henry V., <i>et al.</i> (See Miller, Lewis, assignor.)						
Spencer, Israel H., St. Louis, Mo. Bell-ringer for locomotives	436,271	Sept. 9	1377	359	52	1645
Spencer, John T., Fontana, Kans. Blacksmith's tongs	427,127	May 6	160	42	51	843
Spencer, Solomon H., Philadelphia, Pa. Automatic gate-closer	436,506	Sept. 16	1755	463	52	1735
Spencer, Thomas W. C., San Francisco, Cal. Automatic throw-off for cable-grips	438,449	Oct. 14	1184	321	53	232
Spencer, William E. (See Merritt and Spencer.)						
Sperl, Heinrich, Munich, Germany. Game-board	437,838	Oct. 7	254	77	53	50
Sperl, Heinrich and H. Amberg, Bavaria, Germany. Game-board	429,250	June 3	210	52	51	1512
Sperl, Helene. (See Sperl, Heinrich and H.)						
Sperry & Co. (See Daniels, Thomas J., assignor.)						
Sperry Electric Company. (See Sperry, Elmer A., assignor.)						
Sperry, Ellie N., Bridgeport, Conn. Check-punch	429,100	May 27	3151	812	51	1462
Sperry, Elmer A., Chicago, Ill. Electric motor and regulator therefor	420,117	Jan. 23	2215	587	50	469
Sperry, Elmer A., Chicago, Ill. Pick for mining-machines	428,787	May 27	2677	679	51	1368
Sperry, Elmer A., Chicago, Ill. Gas-engine	433,551	Aug. 5	159	44	52	787
Sperry, Elmer A., Chicago, Ill. Power-gearing for vehicles	434,097	Aug. 12	978	{ 255 256 }	52	957
Sperry, Elmer A., Chicago, Ill. Power-gearing for vehicles	434,098	Aug. 12	980	256	52	958
Sperry, Elmer A., Chicago, Ill., assignor to Electrical Supply Company, Ansonia, Conn. Lightning-arrester	418,824	Jan. 7	254	62	50	54
Sperry, Elmer A., Chicago, Ill., assignor to Sperry Electric Company, of Illinois. Rotat- ing part of dynamos and motors	434,096	Aug. 12	975	255	52	957
Sperry, Elmer A., Chicago, Ill., assignor to Sperry Electric Company, of Illinois. System of transportation by electricity in mines	434,363	Aug. 12	1390	365	52	1039
Sperry, Fred. W., assignor to W. H. Magness, Jr., and J. R. Tubb, Sparta, Tenn. Station- indicator	438,957	Oct. 21	1983	529	53	389
Sperry, Henry T., assignor to Scovill Manufacturing Company, Waterbury, Conn. Lacing- hook	436,958	Sept. 23	2544	666	52	1882
Sperry, Jasper N. (See Nichols, William P., assignor.)						
Sperry, Timothy S., Flatbush, N. Y. Stair-rod	443,803	Dec. 30	3549	909	53	1987
Spicer, Ambrose C., Battle Creek, Mich. Window-shade holder	441,594	Nov. 25	3174	818	53	1240
Spicer, Ambrose C., Battle Creek, Mich. Window-shade holder	441,595	Nov. 25	3177	819	53	1240
Spicer, John P., Darby, assignor of two-thirds to W. H. Smyth and J. N. Carpenter, Phila- delphia, Pa. Wheel and axle	419,895	Jan. 21	1876	493	50	393
Spicer, Pratt A., New Philadelphia, Ohio. Spring-harrow-tooth holder	434,407	Aug. 12	1466	382	52	1054
Spicklemire, James T., Avon, Ind. Grain-drill	441,713	Dec. 2	133	35	53	1288
Speildoch, Jacob, St. Louis, Mo. Nether garment	425,914	Apr. 15	2246	595	51	452
Spielmann, Charles, assignor to W. A. Force, Brooklyn, N. Y. Consecutive-numbering machine	436,109	Sept. 9	1140	298	52	1599
Spiers, James, and E. H. Booth, San Francisco, Cal. Rock-breaker	419,294	Jan. 14	971	{ 257 258 }	50	206
Spieess, Charles, Baltimore, Md. Dumping-cart	440,580	Nov. 11	1497	386	53	905
Spieess, Gottlieb, San Francisco, Cal. Razor-strop	438,649	Oct. 21	1477	399	53	296
Spigener, Jacob H., Talladega, Ala. Pen-holder	419,083	Jan. 7	652	171	50	138
Spike, Clarence J., and H. V. McLeod, assignors of one-half to A. C. Hawkins, Halifax, Nova Scotia, Canada. Fire-alarm regulator	427,711	May 13	1034	259	51	1025
Spikes, Lizzie, Kaufman, Tex. Table-screen	438,958	Oct. 21	1985	530	53	390
Spiller, Joseph D., Malden, Mass. Last	429,782	June 10	1022	250	51	1678
Spillinger, Joseph, Philadelphia, Pa. Slicer	436,507	Sept. 16	1756	{ 463 464 }	52	1725
Spilman, Henry E., assignor of one-half to J. M. Long, Spilman, W. Va. Nail-keg	428,865	May 27	2790	709	51	1392
Spink, Peter, Covington, Ky. Vinegar apparatus	439,980	Nov. 4	545	144	53	713
Spiral Weld Tube Company. (See Green, George R., assignor.)						
Spiro, Charles, New York, N. Y. Type-writing machine	422,042	Feb. 25	2345	619	50	1033
Spiro, Charles, New York, N. Y. Type-writing machine	435,775	Sept. 2	610	162	52	1492
Spiro, Charles, New York, N. Y. Photographing without a dark-room	437,629	Sept. 30	3595	940	52	2094
Spiro, Charles, New York, N. Y. Means for filling photographic-plate holders without a dark-room	437,630	Sept. 30	3596	940	52	2094
Spiro, Charles, New York, N. Y. Photographic developing apparatus	437,631	Sept. 30	3597	941	52	2094
Spiro, Charles, New York, N. Y. Ribbon-feed shifter for type-writing machines	438,901	Oct. 21	1903	506	53	373
Spitz, Frederick, New York, N. Y. Curtain-fixture	423,187	Mar. 11	1257	327	50	1383
Spitz, Henry B. (See Hersey, Don J., assignor.)						
Spitznagle, Benson, Morrill, Kans. Animal-trap	426,873	Apr. 29	3713	970	51	759
Spivey, Thomas S., Cincinnati, Ohio. Express-messenger's box	429,657	June 10	842	204	51	1644
Splitdorf, Charles F., assignor to himself and J. M. Splitdorf, New York, N. Y. Insulated wire	437,632	Sept. 30	3598	941	52	2094
Splitdorf, John M. (See Splitdorf, Charles F., assignor.)						
Spoelstra, George, J. Vandermeer, and G. Stevens, Grand Rapids, Mich. Street-indicator for street-cars	433,605	Aug. 5	245	65	52	804
Spofford, Marcellus E., Keene, N. H. Stand for oil-cans	433,966	Aug. 12	788	206	52	919
Spofford, Marcellus E., Keene, N. H. Composition for lining barrels	437,258	Sept. 30	3021		52	1980
Sponsler, William H., <i>et al.</i> (See Erb, Paris, assignor.)						
Spooner, Frederick B., Brooklyn, N. Y. Corset-clasp	421,445	Feb. 18	1492	387	50	863
Spooner, John L. P., Providence, R. I. Mold for making compound metal ingots	418,767	Jan. 7	166	40	50	37
Spooner, John L. P., Providence, R. I. Making ingots for plated wire	419,064	Jan. 7	653	171	50	138
Spooner, John L. P., Providence, R. I. Seamless plated ingot	419,085	Jan. 7	655	{ 171 172 }	50	138
Spooner, John L. P., Providence, R. I. Mold	443,338	Dec. 23	2808	722	53	1835
Spooner, John L. P., Providence, R. I. Mold	443,339	Dec. 23	2809	722	53	1835
Spooner, John L. P., Providence, R. I. Mold	443,412	Dec. 23	2915	749	53	1855
Sporer, Mathias, Hartford, Conn. Magazine fire-arm	423,453	Mar. 18	1647	{ 434 435 }	50	1465
Sprague, Almerin R., Milwaukee, Wis. Ink-well cover	442,403	Dec. 9	1207	312	53	1504
Sprague, Carleton, Buffalo, N. Y. Boiler	440,284	Nov. 11	1014	260	53	815

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Sprague, Charles H. (See Corning and Sprague.)						
Sprague, Edwin L. (See Peare, George R., assignor.)						
Sprague Electric Railway and Motor Company. (See Sprague, Frank J., assignor.)						
Sprague, Frank J., New York, N. Y. Electric-railway system	438,293	Oct. 14	956	{ 259 260 }	53	188
Sprague, Frank J., New York, N. Y. assignor to Sprague Electric Railway and Motor Company, of New York. Electric motor and generator	428,732	May 27	2595	658	51	1352
Sprague, Frank J., assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Electric-railway motor	424,436	Mar. 25	3153	{ 836 837 }	50	1761
Sprague, Frank J., assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Electric-railway motor	429,327	June 3	342	81	51	1536
Sprague, Frank J., assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Electric-railway motor	431,823	July 8	1249	{ 312 313 }	52	253
Sprague, Frank J., assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Contact device for electric railways	433,425	July 29	3694	{ 953 954 }	52	747
Sprague, George, Albion, N. Y. Electrical conduit	427,445	May 6	638	160	51	938
Sprague, George L. (See Sprague and Carpenter.)						
Sprague, George W. and J. Studer, Columbus, Ohio. Wrapping-paper holder, printer, and cutter	421,776	Feb. 18	1969	518	50	954
Sprague, Henry W., assignor of five-eighths to R. F. Pettigrew and E. C. Dunning, Sioux Falls, S. D. Car-coupling	421,446	Feb. 18	1494	387	50	863
Sprague, James H., Norwalk, Ohio. Umbrella-runner	429,160	June 3	78	19	51	1486
Sprague, James H., Norwalk, Ohio. Umbrella-frame	429,753	June 10	1092	250	51	1678
Sprague, Joseph J., Carthage, Mo. Electric-motor gearing	437,259	Sept. 30	3022	792	52	1980
Sprague, Lewis G. and G. L., and J. Carpenter, Henderson, N. Y. Checkrein	425,055	Apr. 8	958	256	51	193
Sprague, Myron W. (See Heberling, John, assignor.)						
Sprague, Watson N., Middle Falls, N. Y., and W. H. Fowler, Newton, assignors to G. H. Stevens, Melrose, Mass. Machine for making shoe-shanks	426,397	Apr. 22	2989	783	51	610
Sprague, Welcome, Farnham, N. Y. Machine for cutting green corn off the cob	422,650	Mar. 4	430	{ 107 108 }	50	1218
Sprague, William B., and C. W. Kellogg, Chicago, Ill. Automatic car-register	439,906	Nov. 4	422	109	53	690
Sprangers, John, Kaukauna, Wis. Musical clock	433,220	July 29	3410	880	52	689
Spratt, Henry W., Bangor, Me., assignor to Pern Mower Company, Peru, Ind. Cutting apparatus	437,943	Oct. 7	411	116	53	78
Spreckels, John C. (See Meinen, Diedrich, assignor.)						
Sprenkle, Peter B., York, Pa. Scalping-reel and flour-bolt	433,188	July 29	3366	871	52	680
Spring, George H., Lemars, Iowa. Sash-holder	441,596	Nov. 25	3179	819	53	1241
Spring, John H., York, Pa. Combined eraser, envelope-opener and cigar-cutter	421,874	Feb. 18	2116	555	50	981
Spring, William A., Cicero, and H. H. Scoville, Chicago, Ill. Stone-sawing machine	422,888	Mar. 11	958	252	50	1326
Springer, David R., Philadelphia, Pa. Grain-dumping machine	423,828	Mar. 18	2200	581	50	1570
Springfels, Charles F. D., Buffalo, N. Y. Jeweler's case	427,631	May 13	909	229	51	1000
Springmeyer, Theodore, assignor to J. Mehl & Co., New York, N. Y. Collar and cuff box	428,866	May 27	2791	709	51	1392
Springorum, Fritz. (See Spannagel and Springorum.)						
Springsteen, Nelson E., Royal Oak, Mich. Horse-shield	440,887	Nov. 18	2013	517	53	1011
Springuel, Barthelémy J. (See Bollinckx and Springuel.)						
Sproul, Henry B. (See Fay, Stillman M., assignor.)						
Sproule, Robert F. (See Barker and Sproule.)						
Sprout, Eden, <i>et al.</i> , executors. (See Ericsson, John.)						
Spühl, Heinrich, St. Gall, assignor of one-half to Maschinen Werkstätten & Eisengiesserei St. Georgen bei St. Gallen, St. Georgen, Switzerland. Furoiture-spring-making machine	432,741	July 22	2654	{ 678 679 }	52	537
Spurgeon, Larkin H., Houstonia, Mo. Carpet-stretcher	431,411	July 1	574	144	52	116
Spruling, Andrew B., <i>et al.</i> (See Verrill, Sullivan W., assignor.)						
Squier, Charles A., Battle Creek, Mich. Machine for making tags	443,548	Dec. 30	3134	806	53	1907
Squier, George H., Trempealeau, Wis. Vise	436,641	Sept. 16	1973	518	52	1764
Squire, Charles R., Brooklyn, N. Y., assignor to F. Condit, Morristown, N. J. Sewing-machine	432,955	July 22	2393	769	52	600
Squire, Charles R., Brooklyn, N. Y., assignor to F. Condit, Providence, R. I. Feeding mechanism for sewing-machines	432,956	July 22	2395	769	52	601
Squire, Charles R., Brooklyn, N. Y., assignor to F. Condit, Providence, R. I. Sewing-machine	432,957	July 22	2397	770	52	601
Squire Manufacturing Company, George L. (See Stevens, Henry B., assignor.)						
Squires, John A., Pierpont, N. Y. Center-board for boats, yachts, &c.	438,199	Oct. 14	803	218	53	161
St. Aubin, Charles T. de, and A. Y. Comstock, New York, N. Y. Apparatus for feeding oil to burners	422,848	Mar. 4	711	182	50	1274
St. Clair, Frank, assignor of one-half to J. B. Varick, Manchester, N. H. Conveyer for carrying crushed stone	443,488	Dec. 23	3042	782	53	1880
St. George, Percival W., Montreal, Canada. Construction of sewers or conduits	434,845	Aug. 19	2152	563	52	1196
St. James, Clement, Pittsfield, Mass. Whiffletree-coupling	422,459	Mar. 4	146	39	50	1164
St. John, Carlisle, Des Moines, Iowa. Fire-proof shutter or door	438,652	Oct. 21	1481	401	53	297
St. John, Charles W. (See Dowrie, Thomas W., assignor.)						
St. John, Garland B., Kalamazoo, Mich. Gear-connection for vehicles	422,992	Mar. 11	962	{ 253 254 }	50	1327
St. John, Garland B., Kalamazoo, Mich. Vehicle-coupling	435,865	Sept. 2	745	200	52	1519
St. John, James A., <i>et al.</i> (See Bradley, Jay L., assignor.)						
St. John, Justin M. (See Dobson and St. John.)						
St. John, Roswell H., Cleveland, Ohio. Graphophone	430,759	June 24	2607	639	51	2002
St. John, Roswell H., Cleveland, Ohio. Railway-crossing	430,760	June 24	2610	639	51	2003
St. John, Roswell H., Cleveland, Ohio. Type-bar	435,777	Sept. 2	616	163	52	1493
St. John, Roswell H., Cleveland, Ohio. Signal for railway-crossings	443,124	Dec. 23	2429	620	53	1760
St. John, Roswell H., assignor to St. John Typobar Company, Cleveland, Ohio. Type-bar machine	442,551	Dec. 9	1439	{ 369 370 }	53	1550
St. John Typobar Company. (See St. John, Roswell H., assignor.)						
St. Louis Corset Company. (See McCabe, William, assignor.)						
St. Louis Toy Company. (See Clouse, Joseph N., assignor.)						
St. Marie, Horace A., assignor of one-half to L. Boisseau, Montreal, Quebec, Canada. Elevator or fire-escape	418,827	Jan. 7	260	63	50	55
St. Meyer, Georg, Felton, Pa. Lock	420,285	Jan. 28	2494	662	50	518
St. Onge, Clifford, Negaunee, Mich. Store-service apparatus	438,201	Oct. 14	805	219	53	161
Staats, William H., Chicago, Ill. Coin-tray	421,964	Feb. 25	2265	596	50	1019
Staats, William H., assignor of one-half to J. F. Griffin, Chicago, Ill. Money-changer	422,258	Feb. 25	2681	{ 707 708 }	50	1096
Stabler, James P., Sandy Spring, assignor of part to D. M. Nesbit, Agricultural College, Md., and R. B. Donaldson, Washington, D. C. Submerged water-heater	441,338	Nov. 25	2777	718	53	1163
Stace, Albert E., Greece, N. Y. Shoulder-rest and pillow	428,819	May 27	2726	691	51	1378

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Stadler, Peter C., assignor of one-half to W. P. Ecklin, Paterson, N. J. Take-up mechanism for looms	424,142	Mar. 25	2679	713	50	1668
Staff, John T., Kansas, Ill. Apparatus for canning corn, &c.	438,028	Oct. 7	554	152	53	105
Stafford, Asa J., Concord, N. H. Suspender attachment	428,820	May 27	2727	692	51	1378
Stafford, Frank J. (See Graves, William D., assignor.)						
Stafford, George A., and A. S. Robinson, Raton, N. Mex. Switch for cable railways	438,650	Oct. 21	1478	400	53	296
Stafford, George W. (See Aumann, Cumnock, and Stafford.)						
Stafford, George W., Providence, R. I. Shedding mechanism for looms	439,204	Oct. 28	2376	638	53	471
Stafford, George W., and S. D. Barrett, assignors to G. W. Stafford Manufacturing Company, Providence, R. I. Shedding mechanism for looms	420,118	Jan. 28	2217	587	50	469
Stafford, George W., and C. H. Poland, Providence, R. I. Jacquard attachment for looms	420,119	Jan. 28	2218	587	50	470
Stafford, Henry B., Kansas City, Mo. Sad-iron	426,968	Apr. 29	3634	1002	51	782
Stafford, John, New York, N. Y. Cover for electric subways	429,251	June 3	210	52	51	1512
Stafford, John I., Ramsey, Ill. Car-brake	430,695	June 24	2818	692	51	2043
Stafford Manufacturing Company, George W. (See Stafford and Barrett, assignors.)						
Stafford, Nelson, Brooklyn, N. Y. Coin-receptacle register	439,791	Nov. 4	240	61, 62	53	655
Stager, Henry E., assignor of one-half to J. E. Woodworth, Milwaukee, Wis. Steam-radiator attachment	436,159	Sept. 9	1212	316	52	1611
Stager, Henry E., assignor of one-half to J. E. Woodworth, Milwaukee, Wis. Return-bend for steam-radiators	439,907	Nov. 4	424	109	53	690
Stagg, Thomas H. (See Jacobs and Stagg.)						
Staggs, Harrison, Valencia, Kans. Corn-planter	432,448	July 15	2181	562	52	437
Stahl, Herman, <i>et al.</i> (See Dickey, Aaron F., assignor.)						
Stahl, Karl F., Johnstown, Pa. Cleaning wheel	420,315	Jan. 28	2530		50	526
Stahl, Rudolph F., Boston, Mass. Faucet	428,644	May 27	2443	622	51	1325
Stahl, Telesfor, Providence, R. I. Fishing-float	441,447	Nov. 25	2952	760	53	1198
Stahlberg, Charles, Brooklyn, N. Y. Time-stamp	429,101	May 27	3152	813	51	1462
Stahlberg, Charles, Brooklyn, N. Y., assignor to Accurate Time Stamp Company, of West Virginia. Time-stamp	424,369	Mar. 25	3027	803	50	1735
Stahlschmidt, William, <i>et al.</i> (See Mickler, Jacob H., assignor.)						
Stairs, Gavin L., Maitland, Nova Scotia, Canada. Puzzle	441,988	Dec. 2	557	150	53	1372
Stake, Job. (See Smith and Stake.)						
Stallings, Joseph, Effingham, Ill. Car-coupling	419,614	Jan. 14	1432	384	50	300
Stallman, Ferdinand G., San Francisco, Cal. Mechanism for depressing cables at crossings of cable railways	420,550	Feb. 4	170	42	50	597
Stalter, Robert, New Straitsville, Ohio. Wheel	435,776	Sept. 2	615	163	52	1493
Stambaugh, J. B. (See Hiteshow, William H., assignor.)						
Stamier, Carl H., Hamburg, Germany. Water-gage	442,465	Dec. 9	1296	335	53	1522
Stamm, August, New York, N. Y. Scuttle lock and opener	443,804	Dec. 30	3550	910	53	1987
Stamm, Henry. (See Muehlberg, Charles O., assignor.)						
Stamp, William T. (See Herrinton, Edward E., assignor.)						
Stamps, William O., Dallas, Tex. Fire-extinguishing apparatus	433,053	July 29	3159	812	52	639
Stanback, Marcellus C., <i>et al.</i> (See Wright, James A. and J. B., assignors.)						
Stanchfield, Abner J. (See Baker and Stanchfield.)						
Standard Automatic Scale Company. (See Smith, William R., assignor.)						
Standard Automatic Scale Company. (See Smith and Washburn, assignors.)						
Standard Car Heating and Ventilating Company. (See Soule, Richard H., assignor.)						
Standard Carbon Company. (See Tremaine, Henry A., assignor.)						
Standard Carriage Iron Company. (See Dom, Alexander, assignor.)						
Standard Fireless Engine Company. (See McMahon, Patrick J., assignor.)						
Standard Folding Bed Company. (See Hayes, Ansley, and Eschenbrenner, assignors.)						
Standard Groove Rivet Company. (See Cummings, Henry H., assignor.)						
Standard Life and Accident Insurance Company. (See Deming, James K., assignor.)						
Standard Machinery Company. (See Edgcomb, John S., assignor.)						
Standard Manufacturing Company. (See Haarlander and Grant, assignors.)						
Standard Oil Company. (See Van Develde, John, assignor.)						
Standard Plaiter Company. (See Hine, Charles M., assignor.)						
Standard Recorder Company. (See O'Neill, Henry G., assignor.)						
Standard Rivet Company. (See Strickler, John D., assignor.)						
Standard Seamless Wire Company. (See Smith, Henry T., assignor.)						
Standard Underground Cable Company. (See Reid, Edwin S., assignor.)						
Standard Underground Cable Company. (See Wiley and Acheson, assignors.)						
Standing, William, and A. J. Hoenny, St. Louis, Mo. Adjustable display-frame	439,439	Oct. 28	2756	734	53	542
Standish, Benjamin F., Woodstock, Vt. Clothes-drier	419,896	Jan. 21	1877	493	50	399
Stanford, Arthur L., Evanston, Ill. Hand metal-drill	442,647	Dec. 16	1587	410	53	1589
Stanford, Charles D., Boston, Mass., assignor to Hanford-Stanford Company, of Maine. Spraying device or atomizer for liquids	429,658	June 10	842	204	51	1644
Stanford, Charles D., Boston, Mass., assignor to Hanford-Stanford Company, Portland, Me. Apparatus for cooling and aerating wort for malt liquors	435,000	Aug. 26	2430	643	52	1256
Stanford, Charles P., San Francisco, Cal. Device for operating elevator-hatchway gates	431,676	July 8	1011	251, 252	52	207
Stanford, Jeff H., Brazos Point, Tex. Cotton-chopper	424,906	Apr. 1	730	195	51	141
Stanford, John, Chester, Nova Scotia, Canada. Sled-propeller	433,829	Aug. 5	1584	152	52	871
Stange, August W. (See Ritter and Stange.)						
Stangl, John, Harlem, Mo. Vine-securing device	437,056	Sept. 23	2676	699	52	1909
Stanke, Florian, San Francisco, Cal. Fruit-gatherer	441,659	Dec. 2	363	96	53	1335
Stanley, Arthur F., New York, N. Y. Electric belt	423,707	Mar. 18	2034	537	50	1538
Stanley, Arthur F., New York, N. Y. Annunciator	438,390	Oct. 14	1096	298	53	216
Stanley, Edward, Bridgeport, Pa. Printing attachment for paper-bag machines	428,153	May 20	1705	432	51	1164
Stanley, Edward, Bridgeport, Pa. Paper-bag machinery	432,742	July 22	2656	679, 680	52	537
Stanley Electric Company. (See Stanley, Lucius T., assignor.)						
Stanley, Frank F. (See Lewis, Willard F., assignor.)						
Stanley, Frank F., <i>et al.</i> , trustees. (See Goddu, Louis, assignor.)						
Stanley, George E., Whitman, Mass. Insulator	422,651	Mar. 4	432	108	50	1218
Stanley, James B., and J. H. Cloyes, assignors to Des Moines Buggy Company, Des Moines, Iowa. Running-gear	425,391	Apr. 8	1465	392	51	293
Stanley, James W., Pemberton, Fla. Hand-cultivator	425,150	Apr. 8	1106	294	51	222
Stanley, John C. W., and L. B. Wrightson, London, England. Box-closure	443,120	Dec. 23	2423	618	53	1760
Stanley, Lucius T., Brooklyn, N. Y., assignor to Stanley Electric Company, Philadelphia, Pa. Galvanic battery	419,730	Jan. 21	1606	429	50	339
Stanley, Lucius T., Brooklyn, N. Y., assignor to Stanley Electric Company, Philadelphia, Pa. Portable faradic battery	419,731	Jan. 21	1607	429	50	339

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Stanley, Lucius T., Brooklyn, N. Y., assignor to H. B. Cutter, Philadelphia, Pa. Gear or cog wheel	440,378	Nov. 11	1151	296	53	840
Stanley, Lucius T., Brooklyn, N. Y., and H. B. Cutter, Philadelphia, Pa.; said Stanley assignor to said Cutter. Electrical switch	437,667	Sept. 30	3647	952	52	2104
Stanley Manufacturing Company. (See Richardson, Everett P., assignor.)						
Stanley, Merritt F., assignor of one-half to H. C. and F. C. Anderson, Plymouth, Mich. Spring air-gun	420,316	Jan. 28	2531	671	50	526
Stanley Rule and Level Company. (See Traut, Justus A., assignor.)						
Stanley, William. (See Kendall, Alfred L., assignor.)						
Stanley, William, Jr., Great Barrington, Mass. Potential-controlling device	426,573	Apr. 29	3259	855	51	671
Stanley, William, Jr., Great Barrington, Mass. Regulation of electric motors	426,574	Apr. 29	3260	855	51	671
Stanley, William, Jr., Great Barrington, Mass. Regulation of dynamo-electric machines	431,216	July 1	282	70	52	57
Stanley, William, Jr., Great Barrington, Mass. Self-regulating dynamo-electric generator	431,217	July 1	284	71	52	58
Stanley, William, Jr., Great Barrington, Mass. Self-exciting alternating-current electric generator	431,218	July 1	287	71	52	59
Stanley, William, Jr., Great Barrington, Mass. Regulator for dynamo-electric machines	435,982	Sept. 9	932	245	52	1560
Stanley, William, Jr., Great Barrington, Mass., assignor to G. Westinghouse, Jr., Pittsburgh, Pa. Electrical converter	428,574	May 20	2333	592	51	1285
Stanley, William, Jr., Great Barrington, Mass., assignor to G. Westinghouse, Jr., Pittsburgh, Pa. Building electrical converters	428,575	May 20	2334	592	51	1285
Stanley, William, Jr., Great Barrington, Mass., assignor to Westinghouse Electric and Manufacturing Company, Pittsburgh, Pa. Electrical transmission of power	439,042	Oct. 21	2109	566	53	415
Stanley, William F., South Norwood, England. Portable saw	432,337	July 15	2028	522	52	406
Stanley Works. (See Hart and Corscaden, assignors.)						
Stannard, George F., et al. (See Yenne, Jesse, assignor.)						
Stansbury, Alfred D. (See Hunter and Stansbury.)						
Stansbury, James H., Lawrence, and I. U. Hyatt, Jamaica, N. Y. Barrel truck and jack	423,188	Mar. 11	1258	328	50	1383
Stansel, Alonzo, Yorkville, Ill. Seeding-machine	438,501	Oct. 14	1251	339	53	246
Stansel, Alonzo and M., Yorkville, Ill. Band-cutter	443,875	Dec. 30	3642	938	53	2005
Stansel, Menzo. (See Stansel, Alonzo and M.)						
Stanton, B. I. (See Murphy and Davison, assignors.)						
Stanton, Charles R., assignor of one-half to S. Maag, Stuart, Iowa. Automatic grain-weigher	431,533	July 1	772	192	52	154
Stanton, Clarence W. (See Hart and Stanton.)						
Stanton, Edmund C. (See Stewart, James, assignor.)						
Stanton, Garrett. (See Thurston and Stanton.)						
Stanton, George C., New Iberia, La. Straining-pot	421,777	Feb. 18	1970	517	50	954
Stanton, James G. (See Potter, Isaac J., assignor.)						
Stanton, John A. (See Gibson, Lyman B., assignor.)						
Stanton, John W., Belding, Mich. Device for packing steam-valves	440,444	Nov. 11	1283	332	53	864
Stanton, John W., Belding, Mich. Device for securing pulleys to shafts	443,121	Dec. 23	2424	618	53	1760
Stanwood, James B., Cincinnati, Ohio. Steam-engine	423,963	Mar. 25	2425	644	50	1620
Staples, Alexander T., Birmingham, Mo. Thimble for chimney-flues	421,203	Feb. 11	1160	297	50	793
Staples, Elial M., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Thread-tension-releasing device for sewing machines	434,002	Aug. 12	830	218	52	927
Staples, Elial M., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Presser-foot-actuating mechanism for sewing machines	434,003	Aug. 12	831	219	52	927
Staples, Elial M., and R. H. Arnold, Seneca Falls, N. Y. Steam-generator	440,285	Nov. 11	1016	261	53	815
Staples, Elial M., and R. H. Arnold, Seneca Falls, N. Y. Rocking grate for furnaces	440,286	Nov. 11	1018	262	53	815
Staples, Hiram E. L. T. Covell, and H. E. Heagle, Whitehall, Mich. Root-cutting machine	430,704	June 24	2509	614	51	1984
Stapleton, John H., Detroit, Mich. Curry-comb	434,733	Aug. 19	1996	521	52	1165
Stapleton, Thomas, Cincinnati, Ohio. Perpetual calendar	428,788	May 27	2678	679	51	1369
Stapp, Simeon G. (See Biddison, Clarence E., assignor.)						
Star Electric Company. (See Marshall, Norman, assignor.)						
Starbird, Austin C. (See Emerson and Starbird.)						
Starbuck, Asa and E. E., Bridgeport, Ind. Raising and lowering device for harvesters	437,461	Sept. 30	3355	878	52	2045
Starbuck, Edwin E. (See Starbuck, Asa and E. E.)						
Starck, Johanna, Englewood, Ill. Washing-machine	419,732	Jan. 21	1609	429	50	339
Stare, Elias A., Sibley, Ill. Construction of roads	443,059	Dec. 16	2288	587	53	1727
Stark, David, San Francisco, Cal. Feed-water heater	442,244	Dec. 9	958	253	53	1458
Stark, Frank G., St. Louis, Mo. Lock	426,079	Apr. 22	2517	664	51	512
Stark, James, London, England. Safety apparatus for oil-lamps	436,879	Sept. 23	2429	633	52	1860
Stark, John, Waltham, Mass. Anti-friction bearing for draw-in spindles	422,259	Feb. 25	2683	708	50	1096
Stark, Michael J. (See Gardner, William A., assignor.)						
Starke, Otto. (See Seib, George A., assignor.)						
Starckenberg, Felix, Lynn, Mass. Apparatus for utilizing the force of waves	430,790	June 24	2651	650	51	2012
Starkey, Albert R. (See Dalton, John R., assignor.)						
Starkey, Andrew B., Benkleman, Nebr. Wheel	433,105	July 29	3246	836	52	656
Starkey, John and S. W. Vernier. Minerva, Ohio. Thrashing-machine	418,768	Jan. 7	168	41	50	37
Starks, Nils O., Madison, Wis. Check-row corn-planter	427,633	Sept. 30	3599	941	52	2094
Starkweather, Martin S., Boston, Mass. Bridle blinder or winker	422,652	Mar. 4	433	108	50	1219
Starr, Charles E., Buffalo, N. Y. Washing compound	429,161	June 3	79		51	1487
Starr, Charles M., Edwardsburg, Mich. Machine for making hollow articles from pulp	429,366	June 3	402	96	51	1547
Starr, Edwin P. (See Reiff, William H., assignor.)						
Starr, Eli T., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental engine	418,901	Jan. 7	397	97	50	83
Starr, Eli T., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental chair	443,152	Dec. 23	2487	635	53	1770
Starr, Ferdinand W., Springfield, Ohio. Fastening device	419,375	Jan. 14	1095	289	50	231
Starr, Ferdinand W., Springfield, Ohio. Making corrugated fasteners	427,632	May 13	910	229	51	1001
Starr, Ferdinand W., Springfield, Ohio. Fastener-driver	428,701	May 27	2549	646	51	1344
Starr, Humphrey G., Belvidere, assignor to himself and M. Lomax, Chicago, Ill. Strap-cutter	421,778	Feb. 18	1971	519	50	954
Starr, Julius B., et al. (See Hammell, John, assignor.)						
Starr, William E. (See Voorhis and Starr.)						
Starrett, Laroy S., Athol, Mass. Micrometer-gage	433,311	July 29	3540	914	52	716
Stasch, Bertha, et al. (See Stasch, Emil R., assignor.)						
Stasch, Emil R., assignor to B. Stasch and V. Haischer, Corning, N. Y. Baking-pan	424,370	Mar. 25	3032	804	50	1736
State, Joseph E., Chicago, Ill. Roll-paper holder and cutter	430,153	June 17	1604	399	51	1801
Statler, Ellsworth M., Wheeling, W. Va. Bottle-vending machine	427,806	May 13	1187	298 299	51	1054
Stanb, Leonard A., Warrington, England. Process of and apparatus for decomposing bicarbonate of soda	439,330	Oct. 28	2590	691	53	511
Stanff, Frederick E. A., et al. (See Brenizer, Orson W., assignor.)						
Stauffer, Abraham L., Stevens, Pa. Ice-sawing machine	438,651	Oct. 21	1480	400 401	53	297

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Stauffer, Daniel C., Massillon, Ohio. Clothes-drier	420,838	Feb. 4	603	155	50	677
Stauffer, Ella A., Wichita, Kans. Window-washer	434,734	Aug. 19	1997	521	52	1165
Stauffer, Samuel D. (See Bossler and Stauffer.)						
Stauffer, Samuel D., Marietta, Pa. Railway-tie	425,266	Apr. 8	1276	342	51	258
Staver, Henry C. (See Shaw, Levi H., assignor.)						
Stayman, David F., assignor of one-half to H. P. Glover, Mifflinburg, Pa. Balanced rotary valve	439,608	Oct. 28	3012	798	53	592
Stayman, John W., assignor of one-half to H. J. Funk, Springfield, Ohio. Wood-scraper ..	439,699	Nov. 4	107	28	53	629
Steam Gauge and Lantern Company, <i>et al.</i> (See Betts, Charles L., assignor.)						
Steam Gauge and Lantern Company, <i>et al.</i> (See Betts, Lewis F., assignor.) (Reissue.) ..						
Steam Gauge and Lantern Company, <i>et al.</i> (See Dietz, Frederick, assignor.)						
Steam Gauge and Lantern Company, <i>et al.</i> (See Erb, Charles F., assignor.)						
Stean, Benjamin H., and G. Dyes, Liberty, Mo. Safety device for elevators	441,778	Dec. 2	236	60, 61	53	1310
Stearns, George R. A., Englewood, Ill. Steam-boiler	430,896	June 24	2820	692	51	2043
Stearley, George. (See Hofmann, John, Jr., assignor.)						
Stearly, Samuel, Livermore, Colo. Calf-weaner	433,751	Aug. 5	464	119	52	846
Stearn, Aaron. (See Granger, James B., assignor.)						
Stearns, Albert T. (See Murray, James H., assignor.)						
Stearns, Albert T., Boston, Mass. Shingle-edging machine	427,128	May 6	160	43	51	843
Stearns, Albie E. (See Stearns, Frank H. and A. E.)						
Stearns, Bethuel F., Dexter, Me. Sweep and picker stick attachment for looms	436,160	Sept. 9	1213	316	52	1611
Stearns, Charles A., <i>et al.</i> (See Sargent, Milton O., assignor.)						
Stearns, Charles K., Newton, and G. K. Wheeler, Boston, Mass. Support for overhead electric conductors	422,164	Feb. 25	2532	669	50	1068
Stearns, Frank H. and A. E., Eden, Vt. Machine for rossing bark	431,154	July 1	178	45	52	37
Stearns, William E., Leavenworth, Kans. Bridge	419,897	Jan. 21	1878	494	50	393
Stebbins, Jean R., <i>et al.</i> (See Hatch, George E., assignor.)						
Stebbins, Samuel S., <i>et al.</i> (See Martin, John W., assignor.)						
Stecher, Frank, A., Rochester, N. Y. Truck	421,204	Feb. 11	1161	298	50	793
Steck, George, New York, N. Y. Piano	436,385	Sept. 16	1572	413	52	1691
Stedman, Clarence A., <i>et al.</i> (See Norton, James W., assignor.)						
Stedman, Frank P. (See Stedman, George W. and F. P.)						
Stedman, George W. and F. P., San Francisco, Cal. Suspension-bridge	441,598	Nov. 25	3183	820	53	1241
Stedman, John J., La Porte, Ind. Dental plate	422,165	Feb. 25	2533	669	50	1068
Steggmüller, Richard, New York, N. Y. Can-heading machine	440,379	Nov. 11	1152	{ 297 298 314 315 316 }	{ 53 53 53 53 53 }	{ 840 840 854 854 854 }
Steggmüller, Richard, New York, N. Y. Can-seaming machine	440,411	Nov. 11	1217	{ 315 316 }	{ 53 53 }	{ 854 854 }
Steel Edge Stamping and Retinizing Company. (See Monto, Joseph, assignor.)						
Steele, A. G. (See Johnson, Allen G., assignor.)						
Steele, David R., Waterloo, N. Y. Clutch-controller	425,465	Apr. 15	1582	423	51	324
Steele, Edwin D., <i>et al.</i> (See Slaughter, Nicholas H. C., assignor.)						
Steele, Elisha J., assignor to Cee Brass Manufacturing Company, Torrington, Conn. Du-plex tube	435,193	Aug. 26	2714	717	52	1310
Steele, Frederick C. (See Baulch, Steele, Lees, and Evans.)						
Steele, George F. (See Germausen, Gilbert F., assignor.)						
Steele, James H., Butte City, Mont. Elevator for pug-mills	418,962	Jan. 7	486	121	50	102
Steele, James W., Chicago, Ill. Gate and semaphore operating mechanism	443,729	Dec. 30	3429	880	53	1962
Steele, James W., Chicago, Ill. Railway danger-signal	443,730	Dec. 30	3432	881	53	1963
Steele, James W., Chicago, Ill. Device for actuating semaphores	443,731	Dec. 30	3434	881	53	1963
Steele, James W., Chicago, Ill. Semaphore or gate	443,732	Dec. 30	3436	{ 881 882 }	{ 53 53 }	{ 1964 1964 }
Steele, James W., assignor of one-half to W. F. White, Chicago, Ill. Railway-semicolon ..	430,705	June 24	2510	614	51	1984
Steele, John E., Truxton, N. Y. Running-gear for vehicles	442,833	Dec. 16	1925	495	53	1655
Steele, John Q., Portland, Ind. Harness-buckle	428,154	May 20	1706	433	51	1164
Steele, Robert A., Lawrence, Kans. Implement for debarning cattle	438,959	Oct. 21	1966	530	53	390
Steele, William H., assignor to Cabeene-Barnet Manufacturing Company, Newark, N. J. Coating harness-trimmings	442,149	Dec. 9	826	221	53	1431
Steen, James H., Canton, Ohio. Lamp-chimney cleaner	433,552	Aug. 5	166	45	52	789
Steers, William, Boston, Mass. Machine for sawing metal	441,597	Nov. 25	3182	819	53	1241
Steffen, Alfred. (See Miller, Frederick D., assignor.)						
Steffen, Carl, Vienna, Austria-Hungary. Apparatus for producing white sugar	441,076	Nov. 18	2323	601	53	1071
Steffen, Carl, Vienna, Austria-Hungary. Apparatus for refining leaf sugar in molds	443,549	Dec. 30	3136	807	53	1907
Steffens, Mathew J., Chicago, Ill. Automatic photographic apparatus	429,705	June 10	911	{ 223 224 }	{ 51 51 }	{ 1658 1658 }
Stehle, Anton, Cannstat, Germany. Adjustable asserting-screen	436,615	Sept. 16	1925	506	52	1755
Steiger, Andrew W. (See Felbel and Steiger.)						
Steiger, Andrew W., Bridgeport, Conn., assignor to Yost Writing Machine Company, New York, N. Y. Mechanical movement	442,404	Dec. 9	1209	312	53	1504
Stein, Emil, Berlin, Germany, assignor to J. M. Cohn, New York, N. Y. Needle-clamp for sewing-machines	437,944	Oct. 7	412	116	53	79
Stein, Ida, <i>et al.</i> (See Bibikov, Nicholas A., assignor.)						
Stein, Ida, <i>et al.</i> (See Bibikov, Nicholas A., assignor.) (Reissue.)						
Stein, John J., Brooklyn, N. Y. Exhaust-head	421,017	Feb. 11	889	229	50	741
Stein, Philippe. (See Premeville and Stein.)						
Stein, Samuel P., assignor to T. P. Gould, F. M. Kelly, and J. G. Kurtz, Milton, Pa. Lock ..	440,068	Nov. 4	663	177	53	738
Stein, Samuel P., assignor to T. P. Gould, F. M. Kelly, and J. G. Kurtz, Milton, Pa. Pad-lock ..	440,069	Nov. 4	665	177	53	738
Steinbrenner, Andrew G., St. Louis, Mo. Stock-car	421,528	Feb. 18	1624	419	50	887
Steinecke, Reinhold, New York, N. Y. Folding hammer and box-opener combined	440,905	Nov. 18	2044	528	53	1018
Steiner, August, Homewood, Ill. Corn-husker	436,386	Sept. 16	1573	{ 413 414 }	{ 52 52 }	{ 1691 1691 }
Steiner, David, Adamsburg, Pa. Nut-wrench	424,583	Apr. 1	227	61	51	46
Steiner, Jacob R. (See Peel, William T., assignor.)						
Steiner, Rudolf, Sonneberg, Saxe-Meiningen, Germany. Doll	427,927	May 13	1375	348	51	1089
Steinhauer, George B., Reading, Pa. Arm-rest	443,839	Dec. 30	3603	926	53	1997
Steinhilber, Edward R., Galesburg, Ill. Coal-car	428,235	May 20	1830	459	51	1188
Steinhoff, Henry C., Union, N. J. Water-heating attachment for ranges	440,970	Nov. 18	2151	557	53	1087
Steinhoff, William F., Simcoe, Ontario, Canada. Grinding-machine	420,922	Jan. 21	2061	{ 543 544 }	{ 50 50 }	{ 429 429 }
Steinmann, Frank, St. Louis, Mo. Engine	420,839	Feb. 4	604	155	50	678
Steinmetz, J. L., <i>et al.</i> (See Colvin, Robert J., assignor.)						
Steinmüller, Carl. (See Steinmüller, Lebrecht and C.)						
Steinmüller, Lebrecht and C., Gummersbach, Germany. Steam-generator	418,825	Jan. 7	257	63	50	55

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Steinmüller, Lebrecht and C., Gummersbach, Germany. Steam-generator.....	418,826	Jan. 7	259	63	50	55
Steinthal, Henry M., Scarborough, county of York, England. Machine for running plastic material upon traveling surfaces.....	420,631	Feb. 4	292	77, 78	50	620
Steinthal, Henry M., Scarborough, county of York, England. Manufacturing floor-cloths.....	420,632	Feb. 4	293	.....	50	621
Steinthal, Henry M., Scarborough, county of York, England. Machine for stripping dried plastic material from plates or pads.....	420,633	Feb. 4	295	78	50	621
Steinthal, Henry M., Scarborough, county of York, England. Machine for the manufacture of floor-cloths, &c.....	420,634	Feb. 4	296	78, 79	50	621
Steitz, Jacob R., St. Francis, Wis. Sprinkler.....	427,376	May 6	519	132	51	914
Stell, William, Keighley, England. Coupling mechanism for draw-drums of doubling and twisting machines.....	435,528	Sept. 2	223	62	52	1418
Stellmann, Louis H., Brattleborough, Vt., assignor to Robertson Brothers, Hinsdale, N. H. Perforating-machine.....	436,810	Sept. 23	2273	599	52	1831
Stellweg, Fritz, Berlin, Germany. Regenerative gas-burner.....	435,670	Sept. 2	457	121	52	1462
Stellwagen & Kynoch, <i>et al.</i> (See Courtright, Edgar, assignor.).....						
Stelzer, Carl F. W., assignor to Graf & Co., Berlin, Germany. Making ozone-water.....	420,394	Jan. 28	2645	.....	50	547
Stelzner, Alfred, Wiesbaden, Prussia, Germany. Candle-holder.....	422,989	Mar. 11	959	253	50	1326
Stelzner, Alfred, Wiesbaden, Prussia, Germany. Moistening-pad for envelopes.....	433,634	Aug. 5	282	75	52	811
Stempel, Omar A., St. Louis, Mo. Composite whetstone or hone with metallic core.....	433,502	Oct. 14	1252	339	53	246
Stengel, Charles, Hamilton, Ohio. Caster.....	428,155	May 20	1706	433	51	1164
Stenson, Henry. (See Kjesun and Stenson.).....						
Stephan, George W. (See Stephan, Henry, assignor.).....						
Stephan, Henry, assignor to G. W. Stephan, Springfield, Ohio. Straw-stacker.....	442,751	Dec. 16	1786	{ 462 } 463	{ 53 } 52	1627 1089
Stephen, William C., Austin, Ill. Device for operating elevator-well doors.....	434,486	Aug. 19	1596	418	52	1089
Stephens, John E., Cincinnati, Ohio. Electric brush.....	420,611	Feb. 4	259	69	50	615
Stephens, Samuel, assignor of one-third to A. C. Ayers, Indianapolis, Ind. Rendering apparatus.....	422,260	Feb. 25	2684	708	50	1096
Stephens, William, Santa Rosa, Cal. Electrical traction apparatus.....	433,983	Sept. 9	933	{ 245 } 246	{ 52 } 52	1561 1039
Stephenson, Adolf F., Stromsburg, Nebr. Engine.....	434,364	Aug. 12	1393	366	52	1039
Stephenson, Charles R., Lyon, Miss. Cotton-picker.....	428,867	May 27	2792	{ 709 } 710	{ 51 } 51	1392
Stephenson, Daniel, <i>et al.</i> (See Black, Bernard J., assignor.).....						
Stephenson, Edwin N., Waco, Tex. Mattress-sewing machine.....	439,205	Oct. 28	2378	{ 639 } 640	{ 53 } 51	471 1274
Stephenson, James, Woodbridge, Ontario, Canada. Farm-gate.....	428,537	May 20	2276	578	51	1274
Stephenson, John, New York, N. Y. Cable car.....	421,628	Feb. 18	1775	{ 464 } 465	{ 50 } 50	916
Stephenson, John, New York, N. Y. Grip-carrier.....	421,629	Feb. 18	1778	465	50	917
Stephenson, John, New York, N. Y. Removable truck for electric cars.....	424,371	Mar. 25	3033	804	50	1736
Stephenson, John, New York, N. Y. Electric-car truck.....	424,372	Mar. 25	3034	{ 804 } 805	{ 50 } 50	1736
Stephenson, John, New York, N. Y. Electric-car-truck frame.....	424,373	Mar. 25	3036	805	50	1737
Stephenson, John, New York, N. Y. Trolley-bridge.....	424,374	Mar. 25	3037	{ 805 } 806	{ 50 } 50	1737
Stephenson, John, New York, N. Y. Cable-grip-carrier sleeve.....	427,484	May 6	686	172	51	947
Stephenson, John, New York, N. Y. Storage-battery electric car.....	442,744	Dec. 16	1778	460	53	1625
Stephenson, John, New York, N. Y. Platform-support for tram-cars.....	442,745	Dec. 16	1779	{ 460 } 461	{ 53 } 51	1625 2044
Stephenson, Richard, Wollaston, Mass. Feed mechanism for sewing-machines.....	430,897	June 24	2822	692	51	2044
Stephenson, William, Port Huron, Mich. Paper vest.....	439,765	Nov. 4	204	53	53	648
Stephenson, William J., Florence, Ala. Wagon-brake.....	434,612	Aug. 19	1789	466	52	1127
Stepp, John P. (See Walbridge and Stepp.).....						
Sterrett, John, Morning Sun, Iowa. Breast-collar.....	439,206	Oct. 28	2381	640	53	472
Sterling, George E. and S. T., Camden, Ind. Dust-collector for thrashing-machines and separators.....	428,424	May 20	2127	535	51	1246
Sterling, Sidney T. (See Sterling, George E. and S. T.).....						
Sterling, Theodore W. (See Moreau, Eugène, assignor.).....						
Sterling, William T., Enterprise, Oreg. Harrow.....	427,276	May 6	385	{ 100 } 101	{ 51 } 51	886
Stern, Edward, Philadelphia, Pa. Dynamite-shell.....	424,736	Apr. 1	462	123	51	91
Stern, Edward, Philadelphia, Pa. Projectile.....	423,829	Mar. 18	2203	582	50	1571
Stern, Max, <i>et al.</i> (See Vail, William T., assignor.).....						
Stern, Solomon. (See Graner, John, assignor.).....						
Stern, Wilhelm, and J. Mücke, Berlin, Germany. Generative gas-lamp.....	421,325	Feb. 11	1331	344	50	824
Sternberg, Levi, St. Louis, Mo. Suspenders.....	421,326	Feb. 11	1332	344	50	825
Sternberg, Lothar, New York, N. Y., assignor to F. O. Matthiessen & Wiechers Sugar Refining Company, Jersey City, N. J. Sugar-refining.....	434,074	Aug. 12	940	.....	52	950
Sternbergh & Son, J. H. (See Brill, Henry C., assignor.).....						
Sterner, William N., Cincinnati, Ohio. Two-wheeled vehicle.....	423,830	Mar. 18	2205	582	50	1571
Sternoff-Beyer, Otto, Carlstadt, N. J., assignor to Brooklyn Railway Supply Company. Rail-sweeping attachment for street-cars.....	438,868	Oct. 21	1857	493	53	365
Sterrett, William B., <i>et al.</i> (See Couly, Mahlon S., assignor.).....						
Sterritt, William B., Pittsburg, Pa. Device for forming green-sand cores for railway journal-boxes.....	422,261	Feb. 25	2686	709	50	1097
Sterritt, William B., Pittsburg, Pa. Apparatus for forming sand molds.....	424,831	Apr. 1	620	163	51	130
Stetler, Benjamin F., Lamar, Kans. Thill-coupling.....	428,024	May 13	1516	384	51	1117
Stetson, Bradford, Uxbridge, Mass. Machine for drying fabrics.....	420,215	Jan. 28	2380	633	50	498
Stetson, Charles T., Hanson, Mass. Machine for weaving insulating-coverings on electrical conductors.....	425,056	Apr. 8	959	{ 256 } 257	{ 51 } 52	194 1791
Stetson, Charles T., Hanover, assignor to Whitchee & Emery, Boston, Mass. Lasting-jack.....	436,727	Sept. 16	2104	554	52	1791
Stetson, Charles W., assignor of one-half to A. H. Spencer, Boston, Mass. Switch-operating mechanism.....	422,990	Mar. 11	960	253	50	1326
Stetson, Joseph B., Lincoln, Me. Lantern.....	438,869	Oct. 21	1859	493	53	365
Stetter, Frank J. (See Anderson and Stetter.).....						
Steuerwald, Philip, and A. Cording, Sannemin, Ill. End-gate for wagons.....	423,189	Mar. 11	1260	328	50	1384
Stevens, Abram W. (See Brinkerhoff, Stevens, and Swart.).....						
Stevens, Abram W. (See Brinkerhoff, Stevens, Swart, Stevens, and Nye.).....						
Stevens, Alfred L., Darien, assignor of one-third to W. B. Cochrane, Stamford, Conn. Thill-coupling.....	429,971	June 10	1314	325	51	1735
Stevens, Ansel, Westbrook, Me. Apparatus for drying wood.....	437,731	Oct. 7	84	27, 28	53	19
Stevens, Ansel, Cumberland Mills, assignor of one-half to J. J. Frye, Portland, Me. Mowing-machine.....	430,791	June 24	2653	651	51	2012

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Stevens Arms and Tool Company, J. (See Markham, Edward R., assignor.)						
Stevens Arms and Tool Company, J. (See Stevens, Joshua, assignor.)						
Stevens, Asher B., deceased, Brooklyn, N. Y.; M. N. Baker, administrator and assignor to Rocker Spring Company, Chicago, Ill. Rocking-chair attachment.....	421,529	Feb. 18	1625	{ 419 420 }	50	888
Stevens, Asher B., deceased, Brooklyn, N. Y.; M. N. Baker, administrator, and assignor to Rocker Spring Company, Chicago, Ill. Spring attachment for rocking-chairs.....	423,882	Mar. 18	2286	604	50	1586
Stevens, Asher B., deceased, Brooklyn, N. Y.; M. N. Baker administrator and assignor of one-half to G. Waite, Baldwinsville, Mass. Running-gear for vehicles.....	436,320	Sept. 9	1454	379	52	1660
Stevens, Asher B., New Bridge, N. J., assignor, by mesne assignments, to Rocker Spring Company, Chicago, Ill. Spring attachment for rocking-chairs.....	440,516	Nov. 11	1398	361	53	886
Stevens, Benjamin C. (See Sargent and Stevens.)						
Stevens, C. P. (See Jones, John, assignor.)						
Stevens, Charles W., Yonkers, N. Y., assignor of one-half to J. P. Ross, Newark, N. J. Hat-pouncing machine.....	420,612	Feb. 4	260	70	50	615
Stevens, Clayton S., New Britain, Conn. Music stand and rack.....	430,240	June 17	1739	{ 433 434 }	51	1827
Stevens, Garrit. (See Spoelstra, Vandermeer, and Stevens.)						
Stevens, George. (See Ludlum and Stevens.)						
Stevens, George H. (See Sprague and Fowler, assignors.)						
Stevens, George H., Melrose, Mass. Shank-stiffener.....	434,121	Aug. 12	1025	266	52	966
Stevens, Henry B., Buffalo, assignor to G. L. Squire Manufacturing Company, Evans, N. Y. Hulling-machine.....	425,111	Apr. 8	1034	276	51	209
Stevens, Henry K., Buffalo, N. Y. Cow-milker.....	421,985	Feb. 25	2266	596	50	1019
Stevens, Hiram L. (See Franklin, Isaac N., assignor.)						
Stevens, Howard B., Citra, Fla., assignor of one-half to H. and E. W. Blake, East Pepperell, Mass. Machine for wrapping fruit.....	443,550	Dec. 30	3138	{ 807 808 }	53	1907
Stevens, Isaac W., Bandera County, Tex. Combination sulky plow and cultivator.....	420,472	Feb. 4	74	17	50	578
Stevens, James. (See Brown, Charles E., assignor.)						
Stevens, James F., Freeport, N. Y. Wagon-axle.....	423,831	Mar. 18	2206	582	50	1571
Stevens, James L., Arkansas City, Kans. Combined weather-strip and threshold.....	423,964	Mar. 25	2428	644	50	1620
Stevens, Joel W., assignor to himself and R. Bines, Chicago, Ill. Apparatus for feeding boilers or water-tanks.....	427,633	May 13	912	229	51	1001
Stevens, John C., assignor to E. N. Higley, New York, N. Y. Coin-operated vending-machine.....	435,370	Aug. 26	2998	{ 794 795 }	52	1362
Stevens, John H. (See Wickham and Stevens.)						
Stevens, John H., assignor to L. L. Davis, trustee, Lynn, Mass. Wax-pot for sewing-machines.....	420,120	Jan. 28	2219	588	50	470
Stevens, John O. (See Latham, Charles H., assignor.)						
Stevens, Joseph, Trenton, Mich. Boat raising and lowering device.....	431,534	July 1	773	193	52	154
Stevens, Joshua, assignor to J. Stevens Arms and Tool Company, Chicopee Falls, Mass. Calipers or dividers.....	432,578	July 22	2388	616	52	486
Stevens, Le Roy W. (See Brinkerhoff, Stevens, Swart, Stevens, and Nye.)						
Stevens, Levi, Trenton, N. J. Manufacturing gas.....	443,122	Dec. 23	2425	619	53	1760
Stevens, Nathan P., Concord, N. H. Cut-out.....	428,358	May 20	2025	508	51	1226
Stevens, Ransom H., et al. (See Fairchild, Frank J., assignor.)						
Stevens, Robert L., Columbus, Nebr. Locomotive attachment.....	422,653	Mar. 4	433	108	50	1219
Stevens, Samuel S., Hoosick, N. Y. Paper-making machine.....	430,706	June 24	2512	615	51	1964
Stevens, Samuel S., North Hoosick, N. Y. Centrifugal pulp-drier.....	439,700	Nov. 4	108	28	53	629
Stevens & Son, A. W. (See Brinkerhoff, Stevens, Swart, Stevens, and Nye, assignors.)						
Stevens & Son, A. W. (See Ritty, Sebastian, assignor.)						
Stevens, Wellington D. (See Scarles, Alfred H., assignor.)						
Stevens, William, Philadelphia, Pa. Hatch-door for elevators.....	420,744	Feb. 4	437	116	50	650
Stevens, William E., Southwest Oswego, N. Y. Wagon-brake.....	423,454	Mar. 18	1651	435	50	1466
Stevens, William E., Southwest Oswego, N. Y. Vehicle-brake.....	432,775	July 22	2718	695	52	549
Stevens, William E., assignor of one-half to L. C. Robb, Cincinnati, Ohio. Dry closet.....	431,824	July 8	1251	313	52	253
Stevens, William F., Joppa, Md. Car-telegraph.....	425,466	Apr. 15	1583	423	51	324
Stevens, William L., Clearwater, Nebr. Horse-collar fastener.....	440,517	Nov. 11	1399	362	53	886
Stevens, William L., and E. J. Wescott, Boston, Mass. Trolley for electrically-propelled cars.....	434,682	Aug. 19	1920	501	52	1150
Stevens, William V. (See Bellis, Nelson, assignor.)						
Stevens, William X. (See Vaughn, John W., assignor.)						
Stevens, William X., Washington, D. C. Spectacle-frame.....	421,779	Feb. 18	1972	519	50	955
Stevenson, Edwin D., and C. Wertz, Wadsworth, Ohio. Two-wheeled vehicle.....	426,874	Apr. 29	3715	970	51	759
Stevenson, George P., et al. (See Carr, Robert S., assignor.)						
Stevenson, Hugh, New York, N. Y. Animal-bed.....	424,143	Mar. 25	2681	713	50	1668
Stevenson, Hugh, New York, N. Y. Shaft-lighter.....	424,144	Mar. 25	2681	713	50	1668
Stevenson, John S., assignor to Peninsular Car Company, Detroit, Mich. Bending-machine.....	430,893	June 24	2823	692	51	2044
Stevenson, John S., assignor of one-third to J. H. Ames, Detroit, Mich. Machine for forming ladder-rims.....	435,864	Sept. 2	743	{ 199 200 }	52	1519
Stevenson, Louise, Morristown, N. J. Ice-cream freezer.....	423,092	Mar. 11	1113	291	50	1354
Stevenson, Robert, Ansley, Nebr. Door-check.....	426,339	Apr. 22	2890	761	51	590
Stever, James J., Owosso, Mich. Axle-lubricator.....	439,207	Oct. 28	2382	640	53	472
Stever, Solomon F., Fairfield, Iowa. Wrench.....	434,004	Aug. 12	832	219	52	927
Stever, Solomon F., Fairfield, Iowa. Nut-lock.....	434,005	Aug. 12	833	219	52	927
Steward, Aurelius. (See Diamond and Steward.)						
Stewart, Adam. (See Pearson, Lewis L., assignor.)						
Stewart, Benjamin F., Canton, Ohio. Mechanical motion.....	423,578	Mar. 18	1826	{ 481 482 622 623 }	50	1498
Stewart, Benjamin F., Canton, Ohio. Grain-binder.....	428,645	May 27	2444	{ 622 623 }	51	1325
Stewart, Clarence F., Norwalk, Ohio. Apparatus for manufacturing dowel-pins.....	435,463	Sept. 2	120	34	52	1398
Stewart, Edgar J., Sheboygan, Wis. Mechanism for the manufacture of packing for bottles.....	430,325	June 17	1909	468	51	1860
Stewart, Francis W. (See Levett, Benjamin F., assignor.)						
Stewart, Harry B., St. Louis, Mo. Bottle-stopper.....	428,425	May 20	2127	535	51	1246
Stewart, Harry B., assignor of one-half to C. G. Besch, St. Louis, Mo. Bottle-stopper.....	441,448	Nov. 25	2952	761	53	1198
Stewart, Irvine, et al. (See Nichols, Emory I., assignor.)						
Stewart, James, Jr., Yonkers, N. Y. Sewing-machine.....	432,449	July 15	2182	{ 562 563 }	52	437
Stewart, James, assignor of one-half to E. C. Stanton, New York, N. Y. Electric-lamp adapter.....	420,705	Feb. 4	385	103	50	640
Stewart, James, assignor of one-half to E. C. Stanton, New York, N. Y. Electric-lamp adapter.....	420,706	Feb. 4	386	103	50	640
Stewart, James, assignor of one-half to E. C. Stanton, New York, N. Y. Electric-lamp adapter.....	421,630	Feb. 18	1780	465	50	918

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Stewart, James Q., River Vale, Ind. Shaft-coupling	439,981	Nov. 4	546	144	53	714
Stewart, James T., Philadelphia, Pa. Decorticating-machine	428,257	May 20	1865	{ 468 469 }	51	1194
Stewart, James T., Philadelphia, Pa. Decorticating-machine	442,735	Dec. 16	1765	457	53	1623
Stewart, John, Boston, Mass. Boxing-glove	421,447	Feb. 18	1496	388	50	864
Stewart, John A., Houston, Tex., assignor of one-fourth to C. H. Pope, St. Louis, Mo. Plow ..	422,896	Mar. 4	804	205	50	1289
Stewart, Joseph, Brooklyn, N. Y. Stop mechanism for knitting-machines	432,450	July 15	2187	563	52	438
Stewart, Joseph B., Baltimore, Md. Automatic air-brake	420,121	Jan. 28	2320	588	50	470
Stewart, Joseph H., assignor of two-thirds to J. M. and C. F. Hodges, Bluff City, Tenn. Cider mill and press	438,960	Oct. 21	1988	{ 530 531 }	53	390
Stewart, Joseph H., Bluff City, Tenn., assignor of two-thirds to J. M. and C. F. Hodges. Work-bench	435,331	Aug. 26	2928	777	52	1348
Stewart, Joseph H., assignor of five-sixths to J. M. and C. F. Hodges and A. C. Emmert, Bluff City, Tenn. Temporary binder	434,811	Aug. 19	2105	552	52	1187
Stewart, Joseph H., assignor to J. Thomas, J. H. Caldwell, and J. A. Faw, Bluff City, Tenn. Bow-facing car	419,898	Jan. 21	1879	494	50	394
Stewart, Joseph H., Bluff City, and J. A. Faw; said Stewart assignor to J. H. Caldwell, Bristol, Tenn. Railway-rail	419,086	Jan. 7	657	172	50	138
Stewart, Marcellus A., assignor to himself and A. Lotterhos, Crystal Springs, Miss. Levelling-instrument	440,445	Nov. 11	1284	332	53	864
Stewart, Mary P., Washington, N. J. Toy-game apparatus	429,367	June 3	405	96	51	1548
Stewart, Robert, Kansas City, Mo. Tag-holder	438,769	Oct. 21	1686	452	53	334
Stewart, Robert A., New York, N. Y. Ticket-printing machine	441,779	Dec. 2	237	61	53	1310
Stewart, Robert E., assignor of one-half to R. Gilray, Toronto, Ontario, Canada. Hatchway-operating mechanism	421,448	Feb. 18	1497	388	50	864
Stewart, Robert W., Mount Victory, Ohio. Tile or brick kiln	427,201	May 6	270	70	51	865
Stewart, Samuel, Newark, N. J. Gas-stove	427,129	May 6	162	43	51	843
Stewart, Scott, Rivesville, W. Va. Gate	435,382	Aug. 26	3023	799	52	1366
Stewart, Sylvester N., Philadelphia, Pa. Ponton-bridge	423,455	Mar. 18	1652	436	50	1496
Stewart, Sylvester N., Philadelphia, Pa. Ponton-bridge	427,446	May 6	640	160	51	938
Stewart, Thomas, Philadelphia, Pa. Filtering apparatus	424,375	Mar. 25	3038	{ 806 807 }	50	1737
Stewart, W. A. (See Peck, Elisha, assignor.)						
Stewart, Walter H., Franklin, N. H. Mechanism for controlling the operation of knitting-machines	424,231	Mar. 25	2798	746	50	1692
Stewart, William D., Brooklyn, N. Y. Manufacturing crockery wash-tubs	438,200	Oct. 14	803	219	53	161
Stewart, William H., assignor of one-half to H. N. Strait, Kansas City, Kans. Car-coupling	421,361	Feb. 11	1377	356	50	833
Stewart, William H., assignor to H. N. Strait, Kansas City, Kans. Weighing-scales	423,248	Oct. 14	881	239	53	174
Stewart, William J., et al. (See Parker, Jonas, assignor.)						
Stewart, William J., Chicago, Ill. Tension mechanism for sewing-machines	433,661	Aug. 5	327	84	52	820
Stewart, William M., Schenectady, N. Y. Switch-board	421,114	Feb. 11	1028	{ 263 264 }	50	768
Stewart, William W., Brooklyn, N. Y. Fountain-pen	426,692	Apr. 29	3442	902	51	705
Stewart, William W., Brooklyn, N. Y. Fountain-pen	443,977	Dec. 30	3812	972	53	2036
Stickney, Allison M., Medford, assignor to Wellman Sole Cutting Machine Company, Boston, Mass. Sole-cutting machine	443,123	Dec. 23	2427	{ 619 620 }	53	1760
Stickney, Randolph L., Peabody, assignor of one-half to K. Upton, Salem, Mass. Guard or shield for projecting surfaces	435,371	Aug. 26	3001	795	52	1363
Stiebel, A. C., et al. (See Kisinger, William S., assignor.)						
Stiebel, Henry G. (See Kisinger, William S., assignor.)						
Stiebel, Henry G., Jr. (See Kisinger and Stiebel.)						
Stiebel, Henry G. (See Layman, James H., assignor.)						
Stiebel, Henry G., Cincinnati, Ohio. Water-sprinkler	422,458	Mar. 4	145	39	50	1164
Stiebel, Henry G., Cincinnati, Ohio, and W. S. Kisinger, Bellevue, Ky., assignors to said Stiebel. Street-sprinkler	442,834	Dec. 16	1925	499	53	1656
Stieglitz, Siegmund, New York, N. Y. Game-counter	427,057	Sept. 23	2677	695	52	1909
Stiel, Josef, Cologne, Germany. Enamel for coating bricks	429,659	June 10	844		51	1644
Stieler, Karl, Evansville, Ind. Adjustable chair	421,018	Feb. 11	890	230	50	741
Stienen, Fanny. (See Stienen, Julius, assignor.)						
Stienen, Julius, assignor to F. Stienen, New York, N. Y. Combination sofa and conversation-chair	443,301	Dec. 23	2746	704	53	1822
Stieringer, Luther, New York, N. Y. Staple for electrical conductors	420,635	Feb. 4	298	79	50	622
Stifel, Herman, assignor to N. O. Nelson Manufacturing Company, St. Louis, Mo. Joint of most composed of pipes or tubes	420,023	Jan. 21	2063	{ 543 544 }	50	429
Stigman, John, assignor of one-half to O. W. Sawyer, Marietta, Minn. Draft-equalizer ..	440,287	Nov. 11	1019	262	53	815
Stiles, Aaron K. (See Gaylord, Charles E., assignor.)						
Stiles, Albert W., Rock Creek, Ohio. Garden implement	423,640	Mar. 18	1932	508	50	1519
Stiles, Frederick, Burnet, Tex. Milk-cooler	429,972	June 10	1315	325	51	1735
Stiles, George A., Boston, Mass., assignor to National Sewing Machine Company, New Haven, Conn. Wax-thread sewing-machine	423,456	Mar. 18	1654	{ 436 437 }	50	1467
Stiles, George A., Boston, Mass., assignor to National Sewing Machine Company, New Haven, Conn. Take-up device for sewing-machines	423,457	Mar. 18	1657	437	50	1467
Stiles, George A., Brookline, assignor to J. W. Freuch, Lynn, Mass. Sewing-machine ..	443,655	Dec. 30	3307	853	53	1939
Stiles, Mary A., administratrix. (See Stiles, William C.)						
Stiles Mill and Concentrator Manufacturing Company. (See Stiles, William C., assignor.)						
Stiles, Norman C., Middletown, Conn. Drop-hammer	421,327	Feb. 11	1333	345	50	825
Stiles, Norman C., Middletown, Conn. Fountain-pen	428,969	May 27	2942	755	51	1423
Stiles, Rivington A. (See Zimmermann and Stiles.)						
Stiles, William C., deceased; M. A. Stiles administratrix and assignor to Stiles Mill and Concentrator Manufacturing Company, San Francisco, Cal. Ore-crushing mill	423,832	Mar. 18	2207	583	50	1571
Still, Phillip P., Woodstock, Ill. Combined feed-cutter, thrasher, and separator	437,803	Oct. 7	201	62, 63	53	40
Stille, August H., Richmond, Va. Egg-tester	422,991	Mar. 11	961	253	50	1327
Stillman, Francis H., assignor to J. B. Atherton, New York, N. Y. Machine for covering electrical conductors with lead	443,551	Dec. 30	3144	803	53	1908
Stillman, George A., New Haven, Conn. Hinge	423,287	Mar. 11	1417	368	50	1412
Stillman, Herbert L., Charlestown, R. I. Railway	435,253	Aug. 26	2797	741	52	1326
Stillman, Joseph L., Fresno, Cal. Ant-trap	423,190	Mar. 11	1262	328	50	1384
Stillman, Joseph L., Fresno, Cal. Non-conducting covering	427,928	May 13	1376	348	51	1089
Stillman, Joseph L., Fresno, Cal. Car-coupling	429,952	Nov. 4	547	144	53	714
Stillman, Willett D., Madison, Wis. Iron fence-post	420,122	Jan. 28	2324	588	50	471
Stillwell, Elias, Dadeville, Mo. Churn	420,976	Feb. 11	827	214	50	729
Stillwell, Lewis B., assignor to Westinghouse Electric Company, Pittsburg, Pa. Protector for electric machines	434,163	Aug. 12	1089	281	52	979

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Stilwell & Bierce Manufacturing Company. (See Day, Ralph B., assignor.)						
Stilwell & Bierce Manufacturing Company. (See Stilwell, Edwin R., assignor.)						
Stilwell, Charles, Morristown, N. J. Adjustable bevel-square	419,615	Jan. 14	1433	384	50	300
Stilwell, Edwin R., assignor to Stilwell & Bierce Manufacturing Company, Dayton, Ohio.						
Live-steam feed-water purifier	427,018	Apr. 29	3912	1020	51	797
Stilwell, Edwin R., assignor to Stilwell & Bierce Manufacturing Company, Dayton, Ohio.						
Feed-water heater	427,019	Apr. 29	3913	1021	51	797
Stimpson, Edwin B., Brooklyn, N. Y. Belt-fastening	422,062	Feb. 25	2376	628	50	1039
Stimpson, Edwin B., Brooklyn, N. Y. Stamping and punching machine	438,329	Oct. 14	1008	273 } 274 }	53	199
Stimpson, Edwin B., Brooklyn, assignor to Heiman, Ludwig & Co., New York, N. Y.						
Dress-stay	431,219	July 1	288	71	52	59
Stimson, Charles W., New York, N. Y. Annunciator	426,693	Apr. 29	3443	902	51	705
Stimson & Co., E. A. (See Dickerson, Samuel H., assignor.)						
Stincen, A. M. (See Humphreys, William P., assignor.)						
Stine, David L., Toledo, Ohio, assignor to Smead & Northcott, Elmira, N. Y. Ventilating-heater	420,123	Jan. 28	2225	589	50	471
Stine, Samuel B., assignor of two-thirds to G. M. Brisbin and D. R. Good, Osceola Mills, Pa. Mining-machine	443,585	Dec. 30	3199	823	53	1919
Stine, Samuel B., assignor of two-thirds to G. M. Brisbin and D. R. Good, Osceola Mills, Pa. Mining-machine	443,586	Dec. 30	3201	823	53	1919
Stine, Samuel B., and J. V. Smith, assignors to Stine-Smith Machine Co., Osceola Mills, Pa. Coal-mining machine	443,925	Dec. 30	2723	952	53	2020
Stine-Smith Machine Co. (See Stine and Smith, assignors.)						
Stinebring, George W. (See Cushman and Stinebring.)						
Stiner, Clarence M., New York, N. Y. Lock	435,569	Sept. 2	294	82	52	1432
Stiner, Frank, Spencer, Mass., and E. R. Darling, Pascoag, R. I. Pneumatic dyeing and washing machine	426,875	Apr. 29	3716	970 } 971 }	51	759
Stiner, Frank, and E. R. Darling, North Monson, Mass. Machine for drying fabrics	426,969	Apr. 29	3835	1002 } 1003 }	51	782
Stiner, Frank, and E. R. Darling, North Monson, Mass. Drying fabrics	426,970	Apr. 29	3837	1003	51	783
Stiner, Isaac, New York, N. Y. Water-shield for window-brushes	426,744	Apr. 29	3528	921	51	722
Stinson, Charles K., Boston, Mass., assignor to Colby Wringer Company, Montpelier, Vt. Clothes-wringer	434,303	Aug. 12	1303	339	52	1021
Stinson, William H., Scandia, Kans. Latch	426,080	Apr. 22	2519	664	51	512
Stirckler, John D., Boston, Mass., assignor to Union Button Sewing Machine Company, of Massachusetts. Machine for sewing on buttons	436,321	Sept. 9	1456	370 } 380 }	52	1660
Stirckler, John D., assignor to Standard Rivet Company, Boston, Mass. Riveting	439,043	Oct. 21	2111	566	53	415
Stirling, William. (See Frink, William B., assignor.)						
Stirling, William R., et al. (See Barnes, David L., assignor.)						
Stirling, William R., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Locomotive-smoke-box front plate	440,929	Nov. 18	2088	539	53	1026
Stirling, William R., Chicago, Ill., assignor to himself and A. J. Leith, New York, N. Y. Metallic door	433,376	July 29	3625	935	52	732
Stitt, Washington G., Allegheny, Pa. Pump	426,476	Apr. 29	3118	819	51	643
Stitzel, Frederick, Louisville, Ky. System of electric circuits	435,105	Aug. 26	2585	632 } 633 }	52	1285
Stitzel, Frederick, assignor to American Semaphore Company, Louisville, Ky. System of circuits for electric semaphores	428,970	May 27	2944	755	51	1423
Stitzel, Frederick, and C. Weinedel, Louisville, Ky. Electric semaphore apparatus	428,576	May 20	2335	592 } 593 }	51	1285
Stiver, John M., and G. A. Hilton, Huron, S. D. Fire-escape	425,554	Apr. 15	1706	456	51	350
Stiver, John M., and G. A. Hilton, Huron, S. D. Hame-tug	428,156	May 20	1709	433	51	1164
Stivers, Rufus M. (See Tilton, Joseph, assignor.)						
Stivers, Rufus M., New York, N. Y. Vehicle-spring	429,820	June 10	1081	265 } 266 }	51	1689
Stiveson, Anthony O. and M. A., Middleport, Ohio. Metallic keg	423,833	Mar. 18	2208	583	50	1571
Stiveson, Michael A. (See Stiveson, Anthony O. and M. A.)						
Stoakes, James W., and T. F. Frith, Milan, Ohio. Rein-guide	428,868	May 27	2793	710	51	1392
Stock, George. (See Stock, Gustav and G.)						
Stock, Gustav and G., Chicago, Ill. Lounge	423,641	Mar. 18	1933	509	50	1519
Stock, John J., Watertown, N. Y. Lubricant	430,812	June 24	2697		51	2020
Stockbridge, Virgil D., and A. F. Randall, Washington, D. C. Dumping garbage-receptacle	423,060	Dec. 16	2289	587	53	1727
Stocker, Rudolf, assignor to L. Schultz and J. B. Hagenbuehle, New York, N. Y. Quilting-machine	424,437	Mar. 25	3156	837 } 838 }	50	1761
Stockett, Lewis. (See Simpson and Stockett.)						
Stockford, Benjamin F., South Bend, assignor of one-half to E. Golden, Elkhart, Ind. Nut-wrench	431,081	July 1	78	19	52	18
Stocking, Milton D., Lindenwood, Ill. Thill-coupling	426,149	Apr. 22	2628	690	51	535
Stocks, John T., et al. (See Adams, James A., assignor.)						
Stockstill, David W. (See Atkinson, Mahlon B., assignor.)						
Stockstrom, Louis. (See Babbitt and Stockstrom.)						
Stockton, Edmond D., Atlanta, Ga. Steam-trap	436,294	Sept. 9	1413	368	52	1652
Stockton, James C., Stanberry, Mo. Awning	425,962	Apr. 15	2335	619	51	469
Stodd, Thomas C., Detroit, Mich., assignor to Champion Clasp Company, of Michigan. Corset or analogous fastening	432,844	July 22	2814	720	52	568
Stoddard, Arthur H., assignor to Boston Dental Manufacturing Company, Boston, Mass. Locking device for the flasks of dental vulcanizers	436,009	Sept. 9	969	254	52	1568
Stoddard, Oren, Busti, N. Y. Fire-escape	435,778	Sept. 2	618	163	52	1493
Stoddard, Oscar, assignor of two-thirds to A. D. Besimer and J. S. Dewey, Detroit, Mich. Key-hole guard	423,349	Mar. 11	1496	392	50	1428
Stoddard, William, Saginaw, Mich. Pulley	435,160	Aug. 26	2666	705	52	1301
Stoddard, Armat. (See Cardoza, Albert W., assignor.)						
Stodder, Edward D., San Francisco, Cal. Wave-power motor	441,449	Nov. 25	2954	761 } 762 }	53	1198
Stoerger, Paul, Chicago, Ill. Pug-mill	440,971	Nov. 18	2153	558	53	1038
Stoffel, Henry, St. Mark, Kans. Grain-binder	441,599	Nov. 25	3186	820	53	1243
Stohr, Jodok, assignor to C. Button and M. L. Finckel, Philadelphia, Pa. Knitted cap	442,921	Dec. 16	2082	535	53	1685
Stokes, James W., and E. J. Perrett, Syracuse, N. Y.; said Perrett assignor to said Stokes. Bolt or rivet clipper	433,914	Aug. 5	699	181	52	893
Stokes, Samuel E., Philadelphia, Pa. Controlling device for elevators	439,440	Oct. 28	2757	735	53	542
Stoll, Charles. (See Jensik and Stoll.)						
Stoll, Jacob, assignor to G. Schweickhart, Milwaukee, Wis. Tuyere	420,286	Jan. 28	2496	662	50	519
Stoll, John, Lancaster, Pa. Device for bending wood	433,221	July 29	3411	881	52	689

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Stolle, Hermann C., Davenport, Iowa. Pocket match-safe	439,701	Nov. 4	110	29	53	629
Stollwerck, Heinrich, Cologne, Prussia, Germany, assignor to Schilling, Stollwerck & Co., New York, N. Y. Apparatus for roasting coffee	423,458	Mar. 18	1658	438	50	1467
Stolp, Mary E., assignor of one-half to E. G. Genner and F. F. Clark, trustee, Erie, Pa. Vapor face-bath	427,807	May 13	1191	299	51	1055
Stolpe, Hugo, New York, N. Y. Combined punching and shearing machine	428,340	Apr. 22	2891	761	51	591
Stolpe, Hugo, New York, N. Y. Combined punching and shearing machine. (Reissue)	11,098	July 22	3013	774	52	604
Stoltz, Ferdinand B., Malvern, assignor of one-half to R. Rue, Alliance, Ohio. Brick-sand-ing machine	421,060	Feb. 11	954	245	50	753
Stom, George A., Golden Gate, Cal. Vehicle running-gear	432,150	July 15	1755	450	52	357
Stone, Anson K., Pine Island, Minn. Wheel	437,260	Sept. 30	3023	793	52	1980
Stone, Charles F., Chicago, Ill. Ironing-machine	437,804	Oct. 7	203	63	53	41
Stone, Charles S. (See Dodge, Frank H., assignor.)						
Stone & Co., J. (See Preston, De Russett, Mullan, and McKirdy, assignors.)						
Stone, Draper, Pittsford, N. Y. Horse-collar fastener	421,986	Feb. 25	2266	596	50	1019
Stone, Draper, Pittsford, N. Y. Horse-collar	421,987	Feb. 25	2267	596	50	1019
Stone, Dudley G., Negaunee, Mich. Slicing-machine	429,973	June 10	1316	325	51	1736
Stone, Dudley G., Negaunee, Mich. Bag filler and holder	430,355	June 17	1957	481	51	1869
Stone, Dudley G., Negaunee, Mich. Vent for oil-cans	439,983	Nov. 4	549	145	53	714
Stone, Dudley G., Negaunee, Mich. Stopper for oil-cans and lamp-fillers	439,984	Nov. 4	550	145	53	715
Stone, Edward W., Chicago, Ill. Holder for covers	434,844	Aug. 19	2151	563	52	1196
Stone, Edward W., Chicago, Ill. Drawer attachment	442,496	Dec. 9	1350	347	53	1533
Stone, Florentine L., Brockton, Mass. Feed-pump	427,130	May 6	163	44	51	844
Stone, Florentine L., and A. R. Wellman, assignors to O. A. Miller, Brockton, Mass. Boot or shoe tree	441,115	Nov. 18	2385	618	53	1083
Stone, Frank J. (See Bradbury and Stone.)						
Stone, George M., East Jaffrey, N. H. Burner for petroleum, &c	420,124	Jan. 28	2227	589	50	471
Stone, George W., Jr., Waukesha, Wis. Railway	436,589	Sept. 16	1898	498	52	1749
Stone, Heman W., Jr., Morris, Minn. Shaking-bolt	422,043	Feb. 25	2349	620	50	1034
Stone, Heman W., Jr., Morris, Minn. Middlings-purifier. (Reissue)	11,132	Dec. 9	1520	391	53	1567
Stone, Henry C., Wichita, Kans. Lever	435,529	Sept. 2	224	62	52	1418
Stone, Henry C., Illinois, Kans. Grain-harvester	441,714	Dec. 2	135	35	53	1288
Stone, Henry G., Grand Rapids, Mich. Animal-trap	435,779	Sept. 2	619	164	52	1494
Stone, Herbert F., assignor to Appleton Manufacturing Company, Appleton, Wis. Means for securing pulleys to shafts	427,244	May 6	345	88	51	878
Stone, Herman A., St. Paul, Minn. Force-pump	435,570	Sept. 2	296	82	52	1432
Stone, James, Aurora, Ill. Corset	442,552	Dec. 9	1446	370	53	1552
Stone, James M., Howe, Tex. Plow	438,961	Oct. 21	1989	531	53	391
Stone, John A., assignor to W. Deering & Company, Chicago, Ill. Corn-harvester	442,932	Dec. 16	2023	{ 535 536 537 }	53	1685
Stone, John B. (See White, Frank L., assignor.)						
Stone, John T., Baltimore, Md. Ice-pocket for oyster-packages	438,391	Oct. 14	1098	298	53	216
Stone, John W., Thorntown, Ind. Gate	430,221	June 17	1709	425	51	1821
Stone, Joseph, Boston, Mass. Elevated-railway structure	431,126	July 1	138	36	52	29
Stone, Oren, Flint, Mich. Car-coupling	421,780	Feb. 18	1973	519	50	955
Stone, Roy, New York, N. Y. Means for discharging ashes from steamboats or other ves-sels	420,613	Feb. 4	263	70	50	616
Stone, Roy, New York, N. Y. Rotary cultivator	437,872	Oct. 7	303	90, 91	53	59
Stone, Thomas W., assignor of two-thirds to E. J. Wilson and O. E. D. Barron, Columbus, Ohio. Clothes-wringer	432,252	July 15	1892	487	52	382
Stoneham, John, New York, N. Y. Automatic hatch-operating mechanism	424,033	Mar. 25	2527	672	50	1639
Stoneham, John, New York, N. Y. Horse-detacher	428,876	Apr. 29	3717	971	51	759
Stonemetz, John H., assignor to Stonemetz Printer's Machinery Company, Millbury, Mass. Web-printing machine	429,873	June 10	1162	{ 287 288 }	51	1705
Stonemetz, John H., assignor to Stonemetz Printer's Machinery Company, Millbury, Mass. Stereotype-plate-casting box	442,341	Dec. 9	1110	290	53	1484
Stonemetz Printer's Machinery Company. (See Stonemetz, John H., assignor.)						
Stoner, Allen M., Topeka, Kans. Velocipede	418,963	Jan. 7	487	121	50	103
Stoner, Irwin J., Waupunsee, Ill. Draft-equalizer	429,922	June 3	175	42	51	1505
Stoner, James M., Denver, Colo. Dumping-wagon	432,963	July 22	3008	773	52	603
Stoops, William H., assignor to J. S. Salmon, Boonton, N. J. Sealed lock for cans	429,288	June 3	274	66	51	1523
Stoppelkamp, Joseph, St. Louis, Mo. Fruit-strainer	424,907	Apr. 1	731	195	51	141
Storey, Imle E., Boulder, Colo. Electric motor or generator	418,853	Jan. 7	307	74	50	64
Storey, Imle E., Boulder, Colo. Drilling apparatus	418,854	Jan. 7	307	74	50	64
Storey, Imle E., Boulder, Colo. Incandescent-lamp holder	418,855	Jan. 7	308	75	50	64
Storey, Imle E., Boulder, Colo. Carrier system	418,856	Jan. 7	309	75	50	65
Storey, Imle E., Boulder, Colo. Electric drill	420,500	Feb. 4	104	25	50	584
Storey, Imle E., Brooklyn, N. Y. Fluid-pump	439,792	Nov. 4	245	62	53	656
Storey, John H., and H. J. Bamford, London, county of Middlesex, England. Machine for grinding twist or other drills	428,426	May 20	2128	535	51	1246
Storey, Thomas J., Gananoque, Ontario, Canada. Spring-gear for vehicles	433,830	Aug. 5	587	153	52	871
Storey, William C. (See Poore and Storey.)						
Storie, James D., Oshawa, Canada. Apparatus for treating drive-chains	443,302	Dec. 23	2747	{ 705 706 }	53	1822
Storie, James D., Oshawa, Canada. Machine for preparing drive-chains for shipment	443,303	Dec. 23	2753	706	53	1823
Storie, Ole O., Milwaukee, Wis. Packer for grain-binders	429,706	June 10	916	224	51	1659
Storm, Edward, Poughkeepsie, N. Y. Hub-band	425,008	Apr. 8	897	237	51	182
Storm, George W. (See Humphrey, Abraham S., assignor.)						
Storms, Albert W., et al. (See Mackenzie, James A., assignor.)						
Storms, Archibald. (See Kimball and Storms.)						
Storr, Sellers, Bloomington, Ill. Caster colter and jointer	441,780	Dec. 2	239	61	53	1310
Story, Asa A., Twin Brooks, assignor of one-half to W. Shaw, Millbank, S. D. Thill-coupling	439,609	Oct. 28	3014	799	53	593
Story, Charles B., Brunswick, Me. Cut-out	419,733	Jan. 21	1609	429	50	340
Story, John T. (See Story, Fox, and Hill.)						
Story, John T., Buffalo, N. Y. Combined calendar and memorandum-pad	437,058	Sept. 23	2678	700	52	1909
Story, Mattie F. (See Gregory, John W., assignor.)						
Story, Robert J. and J. T., A. E. Fox, and G. J. Hill, assignors of one-fifth to G. F. Fox, Jr., Buffalo, N. Y. Registering attachment for telephones	428,427	May 20	2130	536	51	1247
Stotlemeyer, Joseph B., Little Orleans, Md. Corn-planter	438,503	Oct. 14	1253	{ 339 340 }	53	247
Stotsenburg, John H. (See Adam, George H., assignor.)						
Stott, James. (See Bland, William, assignor.)						
Stott, James, London, England. Gas-lamp	443,876	Dec. 30	3643	938	53	2005

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Stott, Samuel H., Fulwood, England. Apparatus for diffusing upon plants fertilizing, insect-destroying, or other compounds in liquid form	441,989	Dec. 2	558	{ 150 151 }	{ 53 }	1372
Stouder, Ambrose C., Muncie, Ind. Stabbing attachment for paper-cutting machines	433,496	Aug. 5	81	24	52	773
Stough, Simon J., West Newton, Pa. Shoe	428,157	May 20	1710	433	51	1164
Stoughton, Homer R. (See Blackford, Ethelbert O., assignor.)						
Stoughton, John A., East Hartford, Conn. Electric conductor	421,781	Feb. 18	1974	519	50	955
Stout, Anson C., Forty Fort, Pa. Lantern	434,646	Aug. 19	1862	487	52	1140
Stout, John V., Easton, Pa. Electro-magnetic valve-controller	421,449	Feb. 18	1497	{ 388 389 }	{ 50 }	864
Stout, Robert A., deceased, Smithborough, Ill.; M. E. Floyd, administratrix. Organ-case	420,254	Jan. 28	2445	650	50	510
Stover Bicycle Manufacturing Company. (See Ziegler and Hance, assignors.)						
Stover, Daniel C. (See Held and Stover.)						
Stover, Daniel C., assignor to Stover Manufacturing Company, Freeport, Ill. Grinding-mill	430,890	June 24	2824	693	51	2044
Stover, Joseph W., Brooklyn, N. Y. Municipal signaling apparatus	436,747	Sept. 16	2151	566	52	1798
Stover Manufacturing Company. (See Held, August S., assignor.)						
Stover Manufacturing Company. (See Held and Stover, assignors.)						
Stover Manufacturing Company. (See Stover, Daniel C., assignor.)						
Stow, Enos E., Plantsville, Conn. Tinsmith's machine	434,960	Aug. 26	2375	629	52	1246
Stowe, Aaron F., Worcester, Mass. Heel-stiffener machine	432,647	July 22	2494	{ 641 642 }	{ 52 }	506
Stowe, Benjamin L., Brooklyn, assignor of three-fourths to J. V. Reed, New York, N. Y. Compound fabric for hose, &c.	427,929	May 13	1377	{ 348 349 }	{ 51 }	1089
Stowell, Charles A., Putney, Vt. Scaffold-bracket	431,291	July 1	390	98	52	80
Stowell, Ellery, assignor of one-half to E. W. Johnson, Denver, Colo. Device for holding, dampening, and affixing stamps or labels	427,527	May 6	753	187	51	961
Stowell, Ellery, assignor of one-half to E. W. Johnson, Denver, Colo. Device for holding, dampening, and affixing stamps or labels	427,528	May 6	755	187	51	961
Stowell, Oliver G., Delavan, Wis. Heater for stock-watering tanks	428,702	May 27	2550	647	51	1344
Strachan, David K., Goderich, Ontario, Canada. Flue-scraper	428,538	May 20	2277	578	51	1274
Strachan, Robert P. (See Ainsworth, Strachan, and Henshaw.)						
Stracke, Fredrick E., Newark, N. J. Button-fastener	429,521	June 10	1082	266	51	1690
Strahan, Simon, assignor to Decorator's Supply Company, Chicago, Ill. Car or other dome	428,428	May 20	2133	536	51	1247
Strahan, Thomas, Chelsea, Mass. Coloring or decorating paper for wall-coverings	430,707	June 24	2515	616	51	1985
Strahl, John L., Glouster, Ohio. Gage	438,029	Oct. 7	557	152	53	106
Straight, Asa W. (See Rein and Straight.)						
Straight, Asa W., assignor of one-third to H. W. Wilson, Denver, Colo. Self-closing faucet	440,581	Nov. 11	1498	387	53	905
Straight, George H., Kingston, R. I. Time-alarm	421,530	Feb. 18	1627	420	50	888
Straight, George W. (See Van Osdel, Charles R., assignor.)						
Strait, E. Smith, et al. (See Goodfellow, John H., assignor.)						
Strait, Horatio N. (See Stewart, William H., assignor.)						
Strait, Marcus D., St. Louis, Mo. Cuff-holder	419,376	Jan. 14	1096	290	50	231
Straiton, John, Bottle, county of Lancaster, England. Apparatus for cleaning skins	425,112	Apr. 8	1036	276	51	209
Straley, John A., administrator. (See Geiger, Jacob.)						
Stranahan, Frank F., Cleveland, Ohio. Ice-cream packer	420,473	Feb. 4	75	17	50	578
Strand, Hans O., Montisano, Wash. Shingle cutter and dresser	431,198	July 1	247	63	52	52
Strang, Lew K., assignor of part to H. G. Pratt, G. A. Gorman, and J. F. Howard, Haverhill, Mass. Heel-burnishing machine	421,988	Feb. 25	2268	597	50	1019
Strang, William H., Camden, N. J. Furnace	424,737	Apr. 1	463	124	51	91
Strange, George W. (See Smith, Robert, assignor.)						
Strathmeier, Carl, and W. Gutenbergberger, Sacramento, Cal. Car-coupling	437,634	Sept. 30	3601	942	52	2095
Strattmann, Charles, et al. (See Rabinowicz, Israel, assignor.)						
Stratton, James H. (See Clark, Culver, and Stratton.)						
Stratton, John F., Brooklyn, N. Y. Harmonica	423,642	Mar. 18	1934	509	50	1519
Stratton, John F., Brooklyn, N. Y. Cornet	426,398	Apr. 22	2391	783	51	610
Stratton, John F., Brooklyn, N. Y. Accordion	427,059	Sept. 23	2679	700	52	1909
Stratton, Robert S., Orillia, Ontario, Canada. Pail or tub	419,377	Jan. 14	1097	290	50	231
Stratton, Robert S., Orillia, Ontario, Canada. Machine for hooping pails and tubs	420,474	Feb. 4	76	18	50	578
Stratton, Robert S., Orillia, Ontario, Canada. Infant's toilet-case and bath	420,512	Apr. 1	111	32	51	25
Stratton, William H., Providence, R. I. Automatic valve for dry-pipe fire-extinguishers	420,977	Feb. 11	828	214	50	730
Straub, Frederick, Surprise, Nebr. Storm sash	421,782	Feb. 18	1976	520	50	955
Strauch, Peter D., New York, N. Y. Piano-action	418,769	Jan. 7	169	41	50	37
Straughan, John, New Orleans, La. Postal examination-case	435,254	Aug. 26	2797	742	52	1326
Straus, Alexander. (See Bromley and Straus.)						
Straus, Jacob, St. Louis, Mo. Horse-collar fastening	423,350	Mar. 11	1497	392	50	1428
Strauss & Co., Gustav. (See Swarovski, Daniel, assignor.)						
Strauss, Frank X., Quincy, Ill. Tobacco-moistener	435,255	Aug. 26	2798	742	52	1326
Strauss, Louis C. (See Seinecke, Adolph E., assignor.)						
Straut, Hooper B., and C. B. Shute, assignors of one-third to H. D. McKelvey, Culbertson, Nebr. Welding compound	432,497	July 15	2262	-----	52	454
Straw, Samuel D., Elkhart, Ind. Windmill	419,024	Jan. 7	569	143	50	120
Strawson, George F., Newbury, England. Seed and fertilizer distributor	441,810	Dec. 2	288	78	53	1320
Strayer, George D., East Stroudsburg, Pa. Cover-fastening and hail-ear for pails	432,913	July 22	2912	746	52	587
Stream, Edgar L., New Orleans, La. Portable railway	426,877	Apr. 29	3718	971	51	760
Street, Arthur W., Chicago, Ill. Stock-car	421,087	Feb. 11	990	{ 253 254 }	{ 50 }	760
Street, Frederick F., Hartford, Conn. Dry closet	430,154	June 17	1606	399	51	1802
Street, Willoughby W., Chicopee, Mass., assignor to Minneapolis Electro-Matrix Company, Minneapolis, Minn. Attachment for type-writing machines	427,712	May 13	1036	{ 259 260 }	{ 51 }	1025
Streeter, Herbert A. (See Amet, Edward H., assignor.)						
Streeter, Herbert E. (See Marshall, William H., assignor.)						
Streeter, Nelson R. (See Smith, Edward F., assignor.)						
Streeter, Nelson R., Groton, N. Y. Envelope-opener	423,351	Mar. 11	1498	393	50	1428
Streeter, Nelson R., Groton, assignor to Lalance & Grosjean Manufacturing Company, New York, N. Y. Handle	425,352	Apr. 8	1398	{ 372 373 }	{ 51 }	281
Streeter, Nelson R., Groton, N. Y., assignor of one-half to J. N. Richardson, Jersey City, N. J. Mirror	441,600	Nov. 25	3188	821	53	1243
Strehli, John W., et al. (See Kuehn, Albert J., assignor.)						
Strehli, John W., trustee. (See Mulvauey, John J., Jr., assignor.)						
Streichenberg, George H., Pueblo, Colo. Push-button	435,866	Sept. 2	747	200	52	1520
Stretcher, Howard, assignor to H. Stretcher and H. Varwig, Cincinnati, Ohio. Combined order-plate and paper-roll holder	427,020	Apr. 29	3915	1021	51	797
Strickel, Louis, assignor of one-half to G. C. Wetherbee, Detroit, Mich. Apparatus for the manufacture of brushes	421,531	Feb. 18	1630	420	50	888

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Stricker, Charles J. (See Dunn and Stricker.)						
Strickland, Walter. (See Winby and Strickland.)						
Strickle, Jacob W., and C. J. Mastin, Huntsville, Ala.; said Mastin assignor to said Strickle. Cap for stoves	442,648	Dec. 16	1588	410	53	1590
Strickler, Jacob, Chicago, Ill. Car-coupling link	438,088	Oct. 7	643	175	53	124
Strierner, Alexander, Sleepy Eye, Minn. Electric guest-call	438,653	Oct. 21	1482	401	53	298
Stringer, John H., Humphreys, Mo. Wire-fence-making machine	432,262	Feb. 25	2687	709	50	1097
Stringer, Josiah S. (See Raleigh, John A., assignor.)						
Stringham, Charles W., Brooklyn, N. Y. Car-brake	435,571	Sept. 2	297	83	52	1432
Stringham, Le Roy S., Chicago, Ill. Lifting-jack	437,350	Sept. 30	3160	827	52	2006
Strippel, John, New York, N. Y. Book-support	430,813	June 24	2698	661	51	2020
Strobel, Frederick, assignor to Marion Manufacturing Company, Marion, Ohio. Grain-separator	434,735	Aug. 19	1998	{ 521 522 }	52	1165
Strobel & Sons, Philip. (See Schwencke, Theodor, assignor.)						
Stroh, George, and G. Osius, Detroit, Mich. Ammonia-still	435,464	Sept. 2	121	35	52	1398
Strobbach, Carl H. O., Leipsic, Germany. Rope-holder	421,328	Feb. 11	1336	345	50	825
Strole, James P., San Marcos, Tex. Trace-carrier	421,989	Feb. 25	2269	597	50	1020
Strom, Axel A., Austin, Ill. Switch-signal stand	430,407	June 17	2029	500	51	1884
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Railway-frog	422,097	Feb. 25	2429	641	50	1048
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Discharge apparatus for coal and ore bins	424,938	Apr. 1	775	206	51	151
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Planing railway-rails	430,408	June 17	2030	500	51	1884
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Railway-switch appliance	438,120	Oct. 7	687	187	53	132
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Switch-stand	441,601	Nov. 25	3189	821	53	1243
Strom, Fredrik E., assignor of two-thirds to F. T. Lindman and J. A. Hilliker, Minneapolis, Minn. Subaqueous viaduct	439,610	Oct. 28	3015	{ 799 800 801 }	53	593
Strom, Gilbert S., White Rock, Minn. Saw gummer and setter	438,654	Oct. 21	1484	{ 401 402 }	53	298
Strom, Hans, Chicago, Ill. Automatic gate for swing-bridges	435,106	Aug. 26	2587	683	52	1285
Strom Manufacturing Company. (See Strom, Axel A., assignor.)						
Ström, Nils M., Stockholm, Sweden. Apparatus for filling match-boxes with matches	440,930	Nov. 18	3089	{ 540 541 542 }	53	1026
Strong, Charles E. (See Lange, Henry G., assignor.)						
Strong, Charles E., and H. G. Lange, Chicago, Ill.; said Lange assignor to said Strong. Stereotype-casting machine	443,656	Dec. 30	3308	853	53	1940
Strong, Frederick W., New York, N. Y. Umbrella-holder	434,304	Aug. 12	1305	339	52	1021
Strong, George S., New York, N. Y. Smoke-box	425,267	Apr. 8	1277	342	51	258
Strong, James C. (See Colby and Strong.)						
Strong, Juliette B., Minneapolis, Minn. Cosmetic	427,202	May 6	271	.....	51	865
Strong, Nelson H. (See Lamborn, Lewis, assignor.)						
Strong, Robert H., Creston, Iowa. Bench-clamp	426,341	Apr. 22	2893	762	51	591
Strother, Rolland G., Findlay, Ohio. Fire-escape	443,552	Dec. 30	3145	809	53	1909
Stroud, Edward M., Pittston, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental plunger	420,745	Feb. 4	439	116	50	650
Stroud, J. A. (See McDowell, Albert, assignor.)						
Strouse, Albert B. (See Strouse, James W. and A. B.)						
Strouse, James W., Fostoria, Ohio. Apparatus for truing the periphery of circular saws	422,323	Feb. 25	2785	733	50	1115
Strouse, James W. and A. B., Fostoria, Ohio. Carburetor	422,322	Feb. 25	2784	732	50	1114
Strouse, Leopold. (See Seldner, Jonas J., assignor.)						
Strout, Harvey C., Peabody, Mass. Barrel-closure	436,161	Sept. 9	1215	316	52	1611
Strout, Harvey C., Peabody, Mass. Barrel-closure	438,030	Oct. 7	559	153	53	106
Strout, Harvey C., Peabody, Mass. Barrel-closure	442,923	Dec. 16	2091	537	53	1687
Strowbridge, Clarence S., assignor to Hamilton Wire Cloth Company, Limited, Hamilton, N. Y. Tension-regulating device for wire-winding machines	438,782	Oct. 21	1703	457	53	338
Strowbridge, Clarence S., assignor to Hamilton Wire Cloth Company, Limited, Hamilton, N. Y. Machine for winding bobbins	438,783	Oct. 21	1704	458	53	338
Struble, Jacob, Sioux City, assignor of one-half to B. Harrison, Lincoln Township, Iowa. Grain-meter	421,875	Feb. 18	2117	{ 555 556 }	50	981
Struck, Charles E., Newark, N. J. Car-heater	437,839	Oct. 7	254	78	53	50
Struthers, James W. (See Gillis, Edwin, assignor.)						
Struss, Henry W., New York, N. Y. Door-check	442,759	Dec. 16	1799	465	53	1630
Stuard, Thomas P., assignor to T. B. Wanamaker, Philadelphia, Pa. Purchasing-sheet	437,368	Sept. 30	3205	835	52	2014
Stuart, Bronick. (See Stuart, Isom and B.)						
Stuart, Charles J., Montreal, Canada. Stove-pipe	441,450	Nov. 25	2957	762	53	1199
Stuart, Charles R., Winslow, Me. Shoe-fastener	427,203	May 6	272	70	51	865
Stuart, Herbert A., Bletchley, assignor of one-half to C. R. Binney, London, England. Petroleum engine or motor	439,702	Nov. 4	111	29	53	630
Stuart, Isom and B., Nolanville, Tex. Cultivator	435,867	Sept. 2	748	200	52	1520
Stuart, John E., et al. (See Mitchell, George P., assignor.)						
Stuart, John E., Newark, assignor of one-half to S. B. Stuart, Rochester, N. Y. Device for heating buildings	427,634	May 13	913	{ 229 230 }	51	1001
Stuart, John M., St. Louis, Mo. Steam-trap	430,594	June 17	2309	567	51	1937
Stuart, Levi B., Seymour, Conn. Truss	425,712	Apr. 15	1957	520	51	398
Stuart, Silas B. (See Stuart, John E., assignor.)						
Stuart, Sinclair, Plainfield, N. J. Channel-iron	428,291	May 20	1923	483	51	1205
Stuart, Sinclair, Plainfield, N. J. Construction of ships	429,289	June 3	276	66	51	1523
Stuart, Sinclair, Plainfield, N. J. Construction of ships or other vessels	429,290	June 3	277	66	51	1523
Stuart, Sinclair, Plainfield, N. J. Construction of ships or other vessels	429,291	June 3	278	67	51	1523
Stuart, Willard H., Chicopee Falls, Mass. Calipers and dividers	429,069	May 27	3098	799	51	1451
Stubbs, Joseph, Cincinnati, Ohio. Vapor-burner	422,166	Feb. 25	2535	669	50	1068
Stubbs, Joseph, Cincinnati, Ohio. Vapor-burner	425,639	Apr. 15	1846	493	51	376
Stubbs, Jesse, Mount Pleasant, Iowa. Burning clay for paving materials	419,977	Jan. 21	1993	524	50	417
Stubbs, Joel, Long Lake, assignor of three-fourths to H. Baldrey and J. M. Bennett, Minneapolis, Minn. Liquid-shake	424,438	Mar. 25	3158	838	50	1762
Stubbs, Riley A., Greenville, Ohio. Bolting-reel	427,277	May 6	387	101	51	886
Stubley, Charles H., Kings Roller Mills, Knottingley, county of York, England. Driving sifting apparatus	424,232	Mar. 25	2800	747	50	1693

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Studer, John. (See Sprague and Studer.)						
Studte, Hermann, Dom Trnk, near Inowracław, Prussia, Germany. Electric connector...	431,412	July 1	575	144	52	117
Stuebner, Charles, <i>et al.</i> (See Baumgard, Charles, assignor.)						
Stueler, Rudolph. (See Thomas, Hermann, assignor.)						
Stukenberg, Hermann H., Kansas City, Mo. Brick-machine	443,413	Dec. 23	2916	750	53	1855
Stukes, John M., San Marcus, Tex. Sash-holder	436,549	Sept. 16	1836	484	52	1738
Stukes, John M., Austin, assignor of one-half to R. A. Miles, Luling, Tex. Sash-holder	429,974	June 10	1318	326	51	1736
Stülpnagel, Carl, New York, N. Y. Advertising-vehicle	432,776	July 22	2719	696	52	549
Stults, John V. N., Boston, Mass. Tank-valve	432,579	July 22	2389	616	52	486
Stults, Richard, assignor of one-half to G. T. Cooley, Oronogo, Mo. Jig-tank	434,408	Aug. 12	1468	382	52	1055
Stump, Ira E., assignor of one-half to C. S. Pierce, Cleveland, Ohio. Railway-velocipede	436,811	Sept. 23	2277	600	52	1832
Stunkard, John R., Brazil, assignor to T. L. Bosart, Indianapolis, Ind. Machine for manipulating the nuts of tire-bolts	439,257	Oct. 28	2463	660	53	487
Stupakoff, Simon H. (See Koenig and Stupakoff.)						
Stupakoff, Simon H. (See Nugent and Stupakoff.)						
Stupakoff, Simon H., Pittsburg, Pa. Micrometer-gage	438,504	Oct. 14	1255	340	53	247
Stupp, John H., assignor to C. G. Loos, St. Louis, Mo. Fireman's ladder	439,361	Oct. 28	2636	704	53	520
Sturges, Frank C., Wilkes-Barré, Pa., assignor to Wilkes-Barré Molding Machine Company, of Pennsylvania. Mold	443,686	Dec. 30	3362	864	53	1949
Sturges, Frank C., Wilkes-Barré, Pa., assignor to Wilkes-Barré Molding Machine Company, of Pennsylvania. Forming molds	443,687	Dec. 30	3364	864	53	1950
Sturm, George W., Dana, Ind. Attachment for center-cut mowers	427,378	May 6	389	101	51	887
Sturrock, James, and G. D. Macdonald, Dundee, assignors to M. Carswell, Glasgow, Scotland. Spinning bait	430,491	June 17	2150	528	51	1907
Sturtevant, Henry H., <i>et al.</i> (See Lippitt and Hausdoerfer, assignors.)						
Sturtevant, Orange S., and J. F. Clark, Morenci, Mich. Tool-feeding device for shaping-machines	420,746	Feb. 4	441	117	50	650
Sturtevant, Thomas J. (See Sturtevant, Thomas L. and T. J.)						
Sturtevant, Thomas L., Framingham, Mass. Vapor-burner	422,993	Mar. 11	963	254	50	1327
Sturtevant, Thomas L., Framingham, Mass. Boiler	422,994	Mar. 11	965	254	50	1327
Sturtevant, Thomas L., Framingham, Mass. Steam-generator	430,445	June 17	2077	513	51	1893
Sturtevant, Thomas L., Framingham, Mass. Navigable vessel for steam propulsion	441,202	Nov. 25	2547	658	53	1122
Sturtevant, Thomas L., Framingham, Mass. Navigable vessel	441,203	Nov. 25	2548	658	53	1123
Sturtevant, Thomas L. and T. J., Framingham, Mass. Boiler	422,995	Mar. 11	966	254 255	50	1328
Stut, John C. H., San Francisco, Cal. Automatic cable-lifter for cable railways	424,832	Apr. 1	622	163	51	120
Stut, John C. H., San Francisco, Cal. Automatic tension device for cable railways	424,833	Apr. 1	624	164	51	121
Stut, John C. H., San Francisco, Cal. Turn-table	425,151	Apr. 8	1107	294	51	222
Stut, John C. H., San Francisco, Cal. Telephone	427,204	May 6	273	70	51	865
Stut, John C. H., San Francisco, Cal. Cable-tightener for cable railways	427,205	May 6	275	71	51	865
Stut, John C. H., San Francisco, Cal. Engine	442,835	Dec. 16	1929	495 496	53	1656
Stut, John C. H., San Francisco, Cal., assignor to American Bell Telephone Company, Boston, Mass. Telephone	438,784	Oct. 21	1705	458	53	338
Stutt, Frederick W., assignor of four-fifths to W. A. E. and T. G. H. Stutt, Denver, Colo. Guard for railway-cars	439,985	Nov. 4	550	145	53	715
Stutt, Thomas G. H., <i>et al.</i> (See Stutt, Frederick W., assignor.)						
Stutt, William A. E., <i>et al.</i> (See Stutt, Frederick W., assignor.)						
Styron, John L., Newark, Ohio. Apparatus for vaporizing and burning hydrocarbon oils	425,009	Apr. 8	897	237	51	182
Stuyvesandt, Valentine, Denver, Colo. Water-vessel	419,230	Jan. 14	883	232	50	189
Subers, Thomas N., <i>et al.</i> (See Huston, William J., assignor.)						
Subers, Thomas N., assignor of one-half to J. G. Sharp, Philadelphia, Pa. Anti-friction journal	438,902	Oct. 21	1905	506	53	374
Subers, Zach T. (See Erny, Subers, and Hoos.)						
Suchland, Theodor, Berlin, Germany. Clutch for holding disks	427,930	May 13	1379	349	51	1089
Suddick, Samuel T., Bonne Terre, Mo. Cut-off for rain-water spouts	427,206	May 6	278	71	51	866
Sudler, John E. (See Hodgkins, Edward R., assignor.)						
Suess, Werner, assignor to E. Berliner, Washington, D. C. Gramophone	427,279	May 6	391	102	51	887
Suffecool, Joseph F., Dayton, Mo. Box-fastener	438,756	Oct. 21	1669	448	53	330
Sugar Apparatus Manufacturing Company. (See Lillie, Samuel M., assignor.)						
Sugden, Edmonds J., Pittsburg, Pa. Vehicle-iron	426,878	Apr. 29	3719	971	51	760
Sughrone, Martin, Pleasant Valley, Ill. Wheel-plow	430,046	June 10	1434	356	51	1758
Sughrone, Thomas M., Faulkton, S. D. Two-wheeled vehicle	442,261	Dec. 9	983	259	53	1462
Sullenberger, William H., assignor of one-half to D. R. Knight, Omaha, Nebr. Wagon-wheel	443,125	Dec. 23	2430	690	53	1761
Sullivan, Alonzo T., Malcolm, Nebr. Mouse-trap	421,329	Feb. 11	1337	345	50	825
Sullivan, Alonzo T., Malcolm, Nebr. Animal-trap	433,377	July 29	3626	935	52	732
Sullivan, Charles A., and J. A. Smith, Windsor, Canada. Window-cleaner	439,331	Oct. 28	2592	691	53	512
Sullivan, Cornelius J., Bar Harbor, Me. Vehicle	436,949	Sept. 23	2533	663	52	1880
Sullivan, Daniel F., assignor of one-half to G. F. Blair, Lowell, Mass. Circular spring-needle knitting machine	431,232	July 1	391	98	52	80
Sullivan, James F., Hartford, Conn. Tool-handle	432,338	July 15	2029	522	52	406
Sullivan, James M., Detroit, Mich. Metallic vessel	429,660	June 10	845	205	51	1644
Sullivan, James M., Detroit, Mich. Buttoner	429,661	June 10	846	205	51	1644
Sullivan, Jeremiah J., Ludlow, Ky. Mold for rings	433,879	Aug. 5	654	170	52	885
Sullivan, John. (See Judge and Sullivan.)						
Sullivan, John, Grand Rapids, Mich. Hub-clamp and wrench combined	430,814	June 24	2699	661	51	2020
Sullivan, John D. (See Sutcliffe and Sullivan.)						
Sullivan, John J., assignor of one-half to T. W. Graydon, Cincinnati, Ohio. Book-binding machine	427,931	May 13	1380	349	51	1090
Sullivan, John T., assignor to E. W. Dickerman, Westfield, Mass. Whip	426,419	Apr. 22	3038	795	51	619
Sullivan, Jonathan L., Austin, Tex. Nut and washer for vehicle-axles	423,191	Mar. 11	1262	329	50	1384
Sullivan, Joseph A., <i>et al.</i> (See Cutler, James L., assignor.)						
Sullivan, Lodosa. (See Blodgett, Frank P., assignor.)						
Sullivan Machine Company. (See Ball, Albert, assignor.)						
Sullivan, Michael, Royalton, Wis. Guide-rod for tops of freight-cars	438,031	Oct. 7	560	153	53	106
Sullivan, Otho O., Stonington, Conn. Machine for twisting or spinning silk or other fiber	419,569	Jan. 14	1365	365 366	50	287
Sullivan, Patrick H., <i>et al.</i> (See Holman, William L., assignor.)						
Sullivan, Patrick J., <i>et al.</i> (See Walker, William H., assignor.)						
Sullivan, Thomas P., Chicago, Ill. Liquid-level indicator	421,061	Feb. 11	956	246	50	754
Sullivan, Timothy J., Albany, N. Y. Rod-packing for volatile gases	431,293	July 1	393	99	52	80
Sullovay, Alvah W. (See Appleton, William H., assignor.)						
Sully, Robert M., Petersburg, Va. Seal-lock	426,220	Apr. 22	2733	715	51	556

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Sully, Thomas R. (See Quarrie, George, assignor.)						
Sully, Thomas R. (See Roberts, Edward F., assignor.) (Reissue.)						
Sulzberger, Mayer, trustee. (See Kitsee, Isidor, assignor.)						
Sulzer, Louis, <i>et al.</i> (See McElroy, James, assignor.)						
Sulzer, Marcus R., <i>et al.</i> (See McElroy, James, assignor.)						
Sulzman, Charles A., Waterford, N. Y. Stop-valve	431,082	July 1	79	19	52	18
Summers, Marshall E., Guilford, Mo. Car-coupling	429,662	June 10	847	205	51	1645
Summers, William C., Forrest City, Ark. Liniment	435,984	Sept. 9	936		52	1561
Summerskill, Charles W., Hockley Heath, England. Fire-alarm or fire and heat indicator	439,441	Oct. 28	2759	735	53	543
Sumner, Clarence A., Milford, assignor of one-half to O. A. Miller, Brockton, Mass. Boot or shoe treeing machine	420,501	Feb. 4	106	26	50	584
Sumner, Eben T., Cambridge, assignor of one-half to G. H. Frazier, Chelsea, Mass. Oil-can	434,211	Aug. 12	1160	302	52	992
Sumner, Edward A., Detroit, Mich. Core-support	437,732	Oct. 7	85	28	53	19
Sumner, William A., <i>et al.</i> (See Shannon, Oscar M., assignor.)						
Sumner, William J. (See Coburn and Sumner.)						
Snodback, Carl J., Salt Lake City, Utah Ter. Folding bed	431,825	July 8	1253	{ 313 314 }	52	253
Sundeen, Alfred, and S. B. Molander, Mora, Minn. Self-heating soldering-iron	428,236	May 20	1832	459	51	1189
Sunderlin, Martin J., Watkins, N. Y. Two-wheeled vehicle	439,362	Oct. 28	2638	704	53	520
Superior Drill Company. (See Packham, Frank R., assignor.)						
Superior Machine Company. (See Coffield, Peter T., assignor.)						
Superior Machine Company. (See Paxson, Charles H., assignor.)						
Suppes, Max M., assignor to Johnson Company, Johnstown, Pa. Brace-chair for railway-rails	436,959	Sept. 23	2545	666	52	1882
Suppes, Max M., assignor to Johnson Company, Johnstown, Pa. Roll-pass	436,960	Sept. 23	2546	666	52	1882
Suren, Nathan H., Fort Worth, Tex. Electric time alarm and annunciator	422,654	Mar. 4	435	109	50	1219
Surfleet, Francis R., deceased; J. A. Dutch, Newark, N. J., administratrix. Velocipede	421,068	Feb. 11	964	248	50	755
Surgi, George E., New Orleans, La. Scarf-fastener	437,060	Sept. 23	2680	700	52	1910
Surratt, George, assignor of three-fourths to H. B. Fletcher, S. L. Post, and F. L. Galigher, Gainesville, Tex. Tire-adjuster	424,692	Apr. 1	392	103	51	77
Susemihl, Theodor. (See Hammann and Susemihl.)						
Susemihl, Theodore, assignor to J. L. Mott Iron Works, New York, N. Y. Basin-plug	425,113	Apr. 8	1037	277	51	209
Susini, Paul de, Paris, France. Motor-engine worked by the vapor of ether or other volatile liquids	443,877	Dec. 30	3645	939	53	2006
Sutcliffe, William W. (See Brown, John W., assignor.)						
Sutcliffe, William W., and J. D. Sullivan, New Orleans, La. Heating and filtering apparatus	431,923	July 8	1387	352	52	279
Sutcliffe, William W., and J. D. Sullivan, New Orleans, La. Heating and filtering apparatus	431,924	July 8	1390	{ 352 353 }	52	280
Sutherland, James, Parkville, N. Y. Means for making beech	421,631	Feb. 18	1781	466	50	918
Sutherland, James, Honolulu, Hawaii. Cup-holder	443,949	Dec. 30	3763	961	53	2026
Sutherland, William D., Richmond, Va. Railway or steamship time-table	433,868	Sept. 2	749	201	52	1320
Sutherland, William H., Davenport, Iowa. Weather-strip	422,352	Mar. 11	1499	393	50	1423
Sutley, Melvin B., Rockland, Pa. Clearing attachment for plows	427,932	May 13	1382	350	51	1090
Sutner, Joseph, assignor to J. R. Jones, Philadelphia, Pa. Photograph-album	439,044	Oct. 21	2112	567	53	415
Sutton, George, Lancaster, England. Lid for jugs	424,034	Mar. 25	2527	673	50	1639
Sutton, George L., and H. J. De Voe, assignors of one-third to J. M. Woodward, Creston, Iowa. Wrench	434,409	Aug. 12	1470	383	52	1055
Sutton, John, Ishp, N. Y. Pump	431,220	July 1	889	71, 72	52	59
Sutton, Joshua W., Brooklyn, N. Y. Sirrup jar or bottle	427,635	May 13	915	230	51	1002
Sutton, Le Roy, assignor of one-half to C. Bigelow, Dundee, N. Y. Grass-gathering tray for lawn-mowers	440,518	Nov. 11	1400	362	53	886
Sutton, William D., Grand Rapids, Mich. Counter	419,295	Jan. 14	973	258	50	206
Sutton, William H., assignor of one-half to J. D. Dunn, Fordyce, Ark. Combined knife and burglar-alarm	425,010	Apr. 8	899	237	51	182
Swabel, William, San Francisco, assignor of one-half to W. H. Holmes, Stowe, Cal. Attachment for lathes	437,945	Oct. 7	414	116	53	79
Swaden, John. (See Herron and Swaden.)						
Swain, Calvin L. (See Swain and Worth.)						
Swain, Edgar P., Yazoo City, Miss. Watch-makers' tweezers	420,125	Jan. 28	2228	589	50	472
Swain, Fred F., Chicago, Ill. Lubricant	424,233	Mar. 25	2801	748	50	1693
Swain, Fred F., assignor of one-third to W. S. Bates, Chicago, Ill. Rod-packing	434,736	Aug. 19	2000	322	52	1166
Swain, George F. and C. L., W. O. Worth, Cedar Rapids, and J. D. Worth, Mason City, Iowa. Steam-engine	419,378	Jan. 14	1098	{ 290 291 }	50	232
Swain, Hadwen, San Francisco, Cal. Delivery or fly finger for printing-machines	428,025	May 13	1517	385	51	1118
Swain, Return B., Philadelphia, Pa. Raising and forming machine for metallic plate-work	440,888	Nov. 18	2013	517	53	1012
Swain, Stephen H., Decatur, Ill. Embryotome	439,908	Nov. 4	425	109	53	691
Swaine, Frederic J., St. Louis, and C. S. Moody, Woodland, assignors to M. A. Seed Dry Plate Company, St. Louis, Mo. Photographic dry-plate-coating machine	426,420	Apr. 22	3038	{ 795 796 }	51	619
Swalley, Frederick R., Toledo, Ohio. Vehicle-axle	427,636	May 13	916	230	51	1002
Swalwell, James, Newport, county of Monmouth, England. Machine for making horse-shoe nails	429,975	June 10	1319	{ 326 327 }	51	1736
Swan, Alfred, Orange, N. J., assignor to Insulite Manufacturing Company, New York, N. Y. Electric lamp	439,363	Oct. 28	2640	704	53	520
Swan, Alfred, Orange, N. J., assignor to Insulite Manufacturing Company, New York, N. Y. Incandescent-lamp socket	439,364	Oct. 28	2642	705	53	520
Swan, Alfred, Orange, N. J., assignor to Insulite Manufacturing Company, New York, N. Y. Incandescent-lamp socket	439,365	Oct. 28	2644	705	53	521
Swan, Alfred, Orange, N. J., assignor to Insulite Manufacturing Company, New York, N. Y. Incandescent-electric-lamp socket	439,366	Oct. 28	2647	705	53	521
Swan, Alfred, Orange, N. J., assignor to Insulite Manufacturing Company, New York, N. Y. Incandescent-electric-lamp socket	439,367	Oct. 28	2651	705	53	522
Swan, Charles, Corry, Pa. Machine for molding target-pigeons	422,655	Mar. 4	438	{ 109 110 }	50	1220
Swan, Charles, Corry, Pa. Target-trap	424,834	Apr. 1	626	164	51	121
Swan, Charles, Corry, Pa. Apparatus for springing target-traps	424,835	Apr. 1	628	165	51	121
Swan, George W., assignor of one-fourth to W. B. Ewer, San Francisco, Cal. Mixing apparatus	421,883	Feb. 18	2126	557	50	983
Swan, Henry C., Chicago, Ill. Vehicle-spring	418,770	Jan. 7	170	41	50	38
Swan, Henry R. (See Drees and Swan.)						
Swan, James, Seymour, Conn. Die for making bits	422,546	Mar. 4	263	67	50	1186
Swan, James, Seymour, Conn. Tool-handle	440,795	Nov. 18	1865	480	53	983
Swan, James, Seymour, Conn. Tool-handle	442,670	Dec. 16	1821	418	53	1597

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Swan, James, Chicago, Ill. Bolting-reel.....	430,761	June 24	2611	{ 639 640 672 }	51	2003
Swan, James, Chicago, Ill. Lock-nut for axles.....	435,079	Aug. 26	2549	672	52	1278
Swan, John C. (See Davis, Owen R., assignor.)						
Swanfeldt, Victor, Clarence, Ill. Broadcast seeder.....	432,648	July 22	2497	642	52	506
Swank, Hiram S., Columbus, Ohio. Artificial limb.....	433,497	Aug. 5	82	24	52	773
Swank, Israel M., and A. C. Cosner, assignors of one-third to J. Grossnickle, North Manchester, Ind. Bathing apparatus.....	427,377	May 6	520	133	51	914
Swann, John, <i>et al.</i> (See Ethridge, Martin V. B., assignor.)						
Swann, Robert W., Kirkwood, Ga. Advertising device.....	429,070	May 27	3098	799	51	1451
Swann, Thomas A., Baltimore, Md. Fitting for kitchen or stand boilers.....	426,150	Apr. 22	2629	890	51	535
Swann, Thomas A., Baltimore, Md. Pump-valve.....	441,339	Nov. 25	2779	618	53	1164
Swann & Whitehead. (See D'Arcus, Henry, assignor.)						
Swarbrig, David S., Philadelphia, Pa. Door-latch.....	427,808	May 13	1192	299	51	1055
Swarovski, Daniel, assignor to G. Strauss & Co., Gablonz, Bohemia, Austria-Hungary.						
Apparatus for the manufacture of beads of enamel.....	423,579	Mar. 18	1828	482	50	1498
Swart, Lester D. (See Brinkerhoff, Stevens, and Swart.)						
Swart, Lester D. (See Brinkerhoff, Stevens, Swart, Stevens, and Nye.)						
Swart, William D., Boston, Mass. Electric-railway switch.....	432,095	July 15	1658	426	52	338
Swartley, Isaac C., assignor to J. C. Swartley, North Wales, Pa. Boot.....	439,045	Oct. 21	2113	567	53	416
Swartley, John C. (See Swartley, Isaac C., assignor.)						
Swartout, Melvin, assignor of one-half to G. Bengough, Toronto, Canada. Type-cleaning brush for type-writing machines.....	441,906	Dec. 2	433	115	53	1350
Swartz, Henry N., Milton, Pa. Window-screen.....	442,150	Dec. 9	827	{ 221 222 }	53	1432
Swartzbaugh, J. E. (See Detwiler, Edwin L., assignor.)						
Swearer, John L., <i>et al.</i> (See Leber, Luther H., assignor.)						
Swely, James W. (See Hopkins, Charles E., assignor.)						
Sweeney, Andrew J., Wheeling, W. V. Wire-nail machine.....	435,256	Aug. 26	2799	742	52	1327
Sweeney, Andrew T. (See Myers, Theodore A., assignor.)						
Sweeney, Peter, New York, assignor of one-half to C. H. Boyer, Brooklyn, N. Y. Journal-bearing.....	421,783	Feb. 18	1976	520	50	955
Sweeney, Peter, assignor of one-half to C. H. Boyer, New York, N. Y. Journal-bearing.....	433,378	July 29	3627	935	52	732
Sweet, David C., Chicago, Ill. Feed-roller.....	420,522	Feb. 4	133	33	50	590
Sweet, Edgar A., assignor of one-half to C. W. Shippee, Milford, Mass. Brush-holder for electric motors.....	437,946	Oct. 7	415	116	53	79
Sweet, Frank, Columbus, Ohio. Mechanical counter.....	430,708	June 24	2517	{ 616 617 }	51	1985
Sweet, John M., assignor to Batavia Wheel Company, Batavia, N. Y. Wheel-manufacturing machine.....	427,021	Apr. 29	3916	1021	51	797
Sweet, John M., assignor to Batavia Wheel Company, Batavia, N. Y. Machine for finishing wheel-rims.....	433,054	July 29	3161	812	52	639
Sweet, Stephen, O. C. Hoffmann, Chicago, and F. Sanderson, Prospect Park, Ill.; said Sweet and Hoffmann assignors to said Sanderson. Type-writing machine.....	427,637	May 13	917	230	51	1002
Sweet, William A., Syracuse, N. Y. Rail-joint.....	436,441	Sept. 16	1663	437	52	1707
Sweetland, Alvah, Memphis, N. Y. Coupler.....	423,093	Mar. 11	1114	291	50	1354
Sweetland, Cornelius S. (See Catlin, Charles A., assignor.)						
Sweetland, Jerome B., Pontiac, Mich. Tidy-holder.....	419,481	Jan. 14	1251	332	50	263
Sweetland, Jerome B., Pontiac, Mich. Hoisting apparatus.....	433,752	Aug. 5	465	120	52	846
Sweetland, Jerome B., Pontiac, Mich. Table.....	436,272	Sept. 9	1379	359	52	1645
Sweetland, William W., Edwardsburg, Mich. Hot-air furnace.....	424,035	Mar. 25	2528	{ 673 674 }	50	1639
Swegles, John, Wayne, Mich. Cattle-guard.....	429,393	June 3	448	105	51	1557
Swegles, John, assignor of one-half to D. Zimmerman, W. Hoops, H. Loss, and J. B. Wallace, Wayne, Mich. Railway-crossing.....	433,662	Aug. 5	329	85	52	820
Swigard, Emanuel W., Highspire, Pa. Whip-socket and rein-holder.....	422,656	Mar. 4	440	110	50	1220
Swearing, Rebecca T., Des Moines, Iowa. Transparent water-color paint.....	432,151	July 15	1756		52	357
Swenson, Magnus, Fort Scott, Kans. Cane cutter or disintegrator.....	422,637	Mar. 4	442	111	50	1220
Swenson, Magnus, Fort Scott, Kans. Endless-chain carrier.....	430,651	Nov. 18	2093	543	53	1027
Swenson, Magnus, assignor of one-half to A. W. Walburn, Fort Scott, Kans. Diffusion-battery.....	430,976	June 24	2937	720	51	2064
Swenson, Louis, Racine, Wis. Horse-detacher.....	421,148	Feb. 11	1076	276	50	778
Sweet, Albert L., Medina, N. Y. Door-hanger.....	436,197	Sept. 9	1276	333	52	1623
Sweet, Edward E., and A. Rasmussen, Baltimore, Md. Dredging device.....	434,099	Aug. 12	984	257	52	959
Swezey, Moses C., New Haven, Conn. Cash-carrier apparatus.....	422,460	Mar. 4	147	40	50	1165
Swickard, Jacob R., Gahanna, Ohio. Portable fence.....	420,475	Feb. 4	77	18	50	579
Swiedom, Ernst J., Giddings, Tex. Plow.....	436,273	Sept. 9	1380	360	52	1645
Swiggett, Perry C., <i>et al.</i> (See Trissal, William T., assignor.)						
Swift, Charles N., New York, N. Y. Apparatus for moistening air.....	420,317	Jan. 28	2533	671	50	526
Swift, Charles N., New York, N. Y. Air-moistening apparatus.....	420,318	Jan. 28	2534	671	50	526
Swift, Horace E., Boston, Mass. Pole or curtain ring.....	418,992	Jan. 7	523	131	50	110
Swift, Horace E., Boston, Mass. Socket for incandescent electric lamps.....	436,387	Sept. 16	1575	414	52	1692
Swift, Horace E., assignor to F. F. Corliss, Boston, Mass. Electric railway.....	438,564	Oct. 14	1347	365	53	266
Swift, John P., Wood's Holl, Mass. Apparatus for burning hydrocarbon oil as fuel.....	431,237	July 1	315	77	52	64
Swift, Orrin W., New Haven, Conn. Coach-lamp flange.....	437,947	Oct. 7	416	117	53	79
Swift, Orrin W., New Haven, Conn. Coach-lamp head.....	437,948	Oct. 7	417	117	53	79
Swift-Renshaw Manufacturing Company. (See Renshaw, Morrison, assignor.)						
Swift, William R. (See Gordon and Swift.)						
Swihart, James, Riota, Ohio. Lock.....	441,602	Nov. 25	3191	821	53	1244
Swin, William E., Ansonia, Conn. Automatic block-signal system for railways.....	421,842	Feb. 18	2062	544	50	970
Swinbank, William, Joliet, Ill. Rod-mill.....	443,304	Dec. 23	2755	706	53	1823
Swindells, Arnold W. J., W. S. Peel, and G. F. Freeman, Manchester, England. Ventilator for carriages or moving vehicles.....	442,924	Dec. 16	2092	538	53	1687
Swisher, Ella E., <i>et al.</i> (See Swisher, Frank B., assignor.)						
Swisher, Frank B., assignor to C. H. Pott and E. E. Swisher, Jersey Shore, Pa. Hand-stamp.....	427,638	May 13	919	231	51	1002
Swisher, Elmer E., <i>et al.</i> (See Bobemerith, Lewis E., assignor.)						
Switzer, William H., Utica, N. Y. Furnace.....	420,636	Feb. 4	300	79	50	622
Swogger, William H., New Wilmington, Pa. Churn-power.....	428,158	May 20	1711	434	51	1165
Swope, Martin T., assignor of one-half to T. B. Jennings, Earlinton, Ky. Fence.....	426,904	Sept. 23	2468	644	52	1867
Sword, James B., Philadelphia, Pa. Moistening device.....	425,834	Apr. 15	2130	568	51	432
Sykes, John B., and T. A. Foust, Dawson, Pa. Feed-cutter.....	421,632	Feb. 18	1782	466	50	918
Sykora, Frank, assignor of one-half to H. Koelhel, New York, N. Y. Lock.....	421,205	Feb. 11	1162	298	50	793
Sylvester, Philip L., Auburn, N. Y. Vending-machine.....	431,083	July 1	80	20	52	18

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Sylvester, Philip L., Auburn, N. Y. Vending-machine	441,259	Nov. 25	2656	689	53	1141
Syme, Chapman J., Petersburg, Va. Treating tobacco-leaves	435,952	Sept. 9	891	52	52	1552
Symington, Thomas H., assignor of one-fourth to W. S. Hilles, Baltimore, Md. Dust-guard for axlo-boxes	432,649	July 22	2499	642	52	507
Symonds, Herbert, assignor to Mesker & Bro., St. Louis, Mo. Joint for cornices, gutters, balustrades, &c	435,906	Sept. 2	826	219	52	1535
Syo, Ewald von, Augsburg, Germany, assignor to P. A. Tafel. Magnetic separator for grain	440,070	Nov. 4	667	177	53	738
Sypher, Abraham J., Iron Mountain, Mo. Valve for steam-pumps	431,413	July 1	576	145	52	117
Sypher, Abraham J., Iron Mountain, Mo. Piston-rod packing	426,399	Apr. 22	2992	784	51	610
Syracuse Specialty Manufacturing Company. (See Hisley and Mundy, assignors.)						
Syracuse Specialty Manufacturing Company. (See Nase, John, assignor.)						
Szabel, Moritz von, Vienna, Austria-Hungary. Navigable vessel	435,107	Aug. 26	2589	{ 683 684 }	52	1285
Taber, Albert H. (See Bray, Pope, and Taber.)						
Taber, Orrin, Wilton, assignor to Nashua Saddlery Hardware Company, Nashua, N. H. Harness-saddle	420,420	Jan. 28	2676	709	50	553
Taber, Orrin, East Somerville, Mass., assignor to Nashua Saddlery Hardware Company, Nashua, N. H. Checkrein-hook	424,624	Apr. 1	290	75	51	58
Taber, Orrin, East Somerville, Mass., assignor to Nashua Saddlery Hardware Company, Nashua, N. H. Saddle-tree	424,625	Apr. 1	291	75	51	58
Taber, Orrin, East Somerville, Mass., assignor to Nashua Saddlery Hardware Company, Nashua, N. H. Saddle	424,626	Apr. 1	292	75	51	58
Taber, Orrin, and H. F. Low, Wilton, assignors to Nashua Saddlery Hardware Company, Nashua, N. H. Saddle	424,622	Apr. 1	288	74	51	57
Taber, Orrin, and H. F. Low, Wilton, assignors to Nashua Saddlery Hardware Company, Nashua, N. H. Harness-saddle	424,623	Apr. 1	289	75	51	58
Tabor, Byron D., Wilson, N. Y. Car-coupling	438,717	Oct. 21	1592	427	53	316
Tabor, Thomas H., Ellijay, Ga. Corn-sheller	419,570	Jan. 14	1366	366	50	287
Tacey, John R., and J. Sharkey, Winnipeg, Manitoba, Canada. Straw-burning stove	425,713	Apr. 15	1958	521	51	398
Tafel, Philipp A. (See Syo, Ewald von, assignor.)						
Tafel, Philipp A., Augsburg, Bavaria, Germany. Bolting and separating machine	426,879	Apr. 29	3720	972	51	760
Taft, Cyrus A., assignor to Whittin Machine Works, Whitinsville, Mass. Flat-supporting device for carding-engines	422,849	Mar. 4	712	183	50	1274
Taft, Edward L., Gardner, assignor of one-half to H. M. Rich, Athol, Mass. Rattan furniture	437,462	Sept. 30	3356	878	52	2046
Taft, Floyd A. (See Coulter, Thomas H., assignor.)						
Taft, Harvey C., and L. Day, assignors to H. C. Taft, Grand Rapids, and S. L. Munroe, Grand Haven, Mich. Pump	422,461	Mar. 4	148	40	50	1165
Taft, Jerome C. (See Fenner and Taft.)						
Taft, Jerome C., Providence, R. I. Manufacture of twist-drills	430,792	June 24	2659	651	51	2013
Taft, Jerome C., Providence, R. I. Machine for swaging drill-blanks	431,925	July 8	1391	353	52	280
Taft, Jerome C., Providence, R. I. Grooving drill-blanks	434,139	Aug. 12	1051	272	52	971
Taft, John B., Providence, R. I. Elevator	440,834	Nov. 18	1932	{ 496 497 }	53	995
Taft, Stephen C. (See Clark and Taft.)						
Taft, Walter E., Akron, Ohio. Sulky-cultivator	424,376	Mar. 25	3040	807	50	1738
Taft, Walter E., Providence, R. I. Wheel-cultivator	426,221	Apr. 22	2735	716	51	556
Taft, William E., Dunmore, Pa. Wood-working machine	434,846	Aug. 19	2152	564	52	1197
Taggart, H. R., et al. (See Soper, Philo O., assignor.)						
Taggart, Robert, Terre Haute, Ind. Fan attachment for chairs	421,206	Feb. 11	1163	{ 298 299 }	50	793
Taggart, Robert, Terre Haute, Ind. Fan attachment for chairs, &c	421,330	Feb. 11	1337	346	50	826
Taggart, William P., Pottstown, assignor of two thirds to A. H. Harley and F. R. Lawson, Philadelphia, Pa. Disinfectant	423,883	Mar. 18	2287	50	50	1587
Tagliabue, Charles J., Brooklyn, N. Y. Thermometer-case	426,400	Apr. 22	2993	784	51	610
Tainter, Charles S., Washington, D. C. Graphophone-tablet	421,450	Feb. 18	1501	389	50	865
Tainter, Charles S., Washington, D. C. Machine for the manufacture of wax-coated tablets for graphophones	428,646	May 27	2447	624	51	1325
Taite, John C. (See Panter, Taite, and Carlton.)						
Takaki, Samro, New York, N. Y. Fabric for covering umbrellas	433,202	Oct. 14	807	219	53	162
Takken, Evert, Douglas, Mich. Running-gear for vehicles	430,356	June 17	1959	481	51	1869
Talbert, Franklin D. (See Talbert, John, assignor.)						
Talbert, John, assignor of one-half to F. D. Talbert, Simsborough, La. Apparatus for holding bolts of cloth	425,011	Apr. 8	899	238	51	182
Talbot, Daniel H., Sioux City, Iowa. Machine for stacking hay	419,025	Jan. 7	571	144	50	121
Talbot, Daniel H., Sioux City, Iowa. Goad	423,353	Mar. 11	1500	393	50	1428
Talbot, Daniel H., Sioux City, Iowa. Cupola cooker	437,635	Sept. 30	3602	{ 942 943 }	52	2095
Talbot, Ebenezer, Windsor Locks, Conn. Clamp	419,379	Jan. 14	1101	291	50	232
Talbot, Henry P., Portland, Oreg. Adjustable door-hanger track	424,145	Mar. 25	2682	{ 713 714 }	50	1669
Talbot, Sylvanus J., assignor of one-half to J. McLane, Milford, N. H. Ironing-board	440,972	Nov. 18	2156	558	53	1038
Talbott, John H., et al. (See Saxton, Thomas G., assignor.)						
Talcott, Richard H. L., Boston, Mass. Mount for photographs or other pictures	437,949	Oct. 7	418	117	53	80
Talcott, William A., et al. (See Young, Charles H., assignor.)						
Taliaferro, Eilbeck H., assignor to J. L. C. Kerr and J. L. Dickey, Atlanta, Ga. Swinging churn	425,915	Apr. 15	2247	596	51	452
Taliaferro, John C., Richmond, Va. Machine for forming gibs or flanges on metal bars	432,364	Oct. 14	1059	229	53	209
Tallerday, Franklin G., assignor of one-fourth to G. C. Tallerday, Poplar Grove, Ill. Automatic regulator for windmills	439,611	Oct. 28	3020	801	53	594
Tallerday, Franklin G., Harvard, assignor of one-fourth to G. C. Tallerday, Poplar Grove, Ill. Pawl-and-ratchet mechanism	439,612	Oct. 28	3021	801	53	594
Tallerday, Franklin G., Tryon City, N. C., assignor of one-fourth to G. C. Tallerday, Poplar Grove, Ill. Pawl-and-ratchet mechanism	439,613	Oct. 28	3023	802	53	594
Tallerday, George C. (See Tallerday, Franklin G., assignor.)						
Talley, James, assignor to S. E. Talley, Denver, Colo. Ore-concentrator	435,530	Sept. 2	225	62, 63	52	1418
Talley, Sarah E. (See Talley, James, assignor.)						
Tallmadge, Andrew P., Washington, D. C. Device for drive-wheels of locomotive-engines and railway-rails	424,627	Apr. 1	293	76	51	58
Tallmadge, James W., Boston, Mass. Apparatus for making hydrogen gas	436,812	Sept. 23	2278	600	52	1832
Tallman, Frank G. (See Leiberger, George, assignor.)						
Tallman, Frank G., Beaver Falls, Pa. Coiling wire rods	420,747	Feb. 4	442	117	50	651
Tallman, Frank G., Beaver Falls, Pa. Device for coiling metal rods	428,971	May 27	2947	756	51	1423

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Tallman, Frank G., Beaver Falls, Pa. Device for coiling metal rods.	428,972	May 27	2949	756	51	1424
Tallman, Henry F., <i>et al.</i> (See Flaunt, Jacob R., assignor.)						
Tallman, Mathias, <i>et al.</i> (See Flaunt, Jacob R., assignor.)						
Tallman, Stephen P., Flagtown, N. J. Stock-car	428,973	May 27	2949	757	51	1424
Tallman, William B., Grand Rapids, Mich. Signal-holder	421,784	Feb. 18	1978	520	50	956
Talmage, Charles H., Kansas City, Mo. Electric heater	440,071	Nov. 4	668	178	53	738
Talmage, Charles H., Kansas City, Mo. Electric heater	442,649	Dec. 16	1539	411	53	1590
Talpey, John H., assignor of one-half to C. H. T. J. Southard, Richmond, Me. Car-coupling	429,180	June 3	111	26	51	1493
Tamarack Osceola Copper Manufacturing Company. (See Collins, Reuben G., assignor.)						
Tamplin, John W. (See Howard, Ryker J., assignor.)						
Tanaka, Shohé, Berlin, Germany. Musical instrument	443,305	Dec. 23	2757	707	53	1824
Tanczos, Rudolf, Vienna, Austria-Hungary. Lock and key	418,902	Jan. 7	398	98	50	83
Tangyes. (See Floyd and Morton, assignors.)						
Tannahill, William. (See Gray and Tannahill.)						
Tanner, Charles. (See Tanner, Stanly, assignor.)						
Tanner, Jesse J., assignor of one-half to R. J. Fish and D. C. Burke, Oneida, N. Y. Extension-clamp	420,316	Jan. 28	2383	633	50	498
Tanner, Norman A., New Haven, Conn. Meat-pounder	442,151	Dec. 9	828	222	53	1432
Tanner, Richard W., Albany, N. Y. Hat-stretcher	442,211	Dec. 9	914	242	53	1448
Tanner, Stanly, assignor to himself and C. Tanner, Cheneyville, La. Plow	421,633	Feb. 18	1784	466	50	918
Tanner, Theophilus, Ponts-de-Martel, and E. Lutz, Zurich, Switzerland. Ship's course and position indicator	442,925	Dec. 16	2094	539 540	53	1687
Tanquary, Alfred, Bellmont, Ill. Trace-buckle	425,916	Apr. 15	2248	596	51	453
Tansley, George H., Hartford, Conn. Adjustable head for scratch, surface, or other gages.	438,738	Oct. 21	1633	438	53	324
Tanzer, Sigmund, Cumberland, Md. Show-case	442,836	Dec. 16	1931	496	53	1656
Tapley, Daniel J., Newtown, N. Y. Photographic camera	424,146	Mar. 25	2683	714	50	1669
Tapley, John S., Methuen, Mass. Machine for making wool-felt articles	424,661	Apr. 1	345	91, 92	51	67
Tapley Machine Company. (See Addy, Charles J., assignor.)						
Taplin, Alvin, Forestville, Conn. Lamp	432,339	July 15	2030	522	52	406
Taplin, John L., Circleville, assignor to J. A. Jeffrey, Columbus, Ohio. Chain	425,467	Apr. 15	1584	423 424	51	324
Tappan, Herman, New York, N. Y. Perfume-holder	432,451	July 15	2188	564	52	439
Tarbell, Wendell P., Milford, N. H. Mirror supporting and adjusting device	443,733	Dec. 30	3438	882	53	1964
Tarbox, Charles A. (See Alden, Charles W., assignor.)						
Tarbox, Nelson T., Kansas City, Mo. Hand-motor	435,001	Aug. 26	2432	643	52	1256
Tardent, Charles L., Lausanne, Switzerland. Sawing-machine	420,319	Jan. 28	2535	672	50	527
Tarkington, Matthew S., Tulare, Cal. Wire-fence stay	436,950	Sept. 23	2535	664	52	1880
Tarver, Higdon S., <i>et al.</i> (See Harrison, George W., assignor.)						
Tasker, Fred. E. (See Hunt, Franklin B., assignor.)						
Tate, Henry, Verplanck, N. Y. Indicator for water-closets and bath-rooms	438,505	Oct. 14	1257	340	53	247
Tate, Jesse T., Williamsburg, Mo. Insect-trap	442,650	Dec. 16	1590	411	53	1590
Tatem, Ava, Norfolk, Va. Metal-boring machine	441,204	Nov. 25	2549	659	53	1123
Tatro, Charles P., Spokane Falls, Wash. Mail-bag	440,932	Nov. 18	2093	543	53	1027
Tatro, Charles P., assignor to M. A. Latham, Spokane Falls, Wash. Pessary	443,878	Dec. 30	3647	940	53	2006
Tattersall, William, Bradford, England. Belt-fastener	442,740	Dec. 16	1773	459	53	1624
Tatum, Alonzo J., and C. Cole, Jonesborough, Ark. Car-coupling	441,907	Dec. 2	436	116	53	1350
Tatum, Charles A., assignor to Whitall, Tatum & Co., New York, N. Y. Apparatus for shaking beverages	422,462	Mar. 4	150	40	50	1165
Tatum, Charles A., assignor to Whitall, Tatum & Co., New York, N. Y. Fountain-syringe.	431,084	July 1	82	20	52	18
Tatum, Eleanor, administratrix. (See Mendelland, Walter S., assignor.)						
Tatum, Henry L., <i>et al.</i> (See Wheeler, Henry W., assignor.)						
Tavener, Charles F., Painesville, Ohio. Weather-strip	433,106	July 29	3247	836	52	656
Tavernier, Alphonse E., London, England. Engine or motor operated by explosive mixtures	428,764	May 27	2640	669	51	1362
Tavernier, Alphonse E., assignor of two-thirds to G. C. Fraser and E. Casper, London, England. Pressure-gage	420,287	Jan. 28	2497	662	50	519
Taxis, Gideon R., Morris, assignor, by mesne assignments, to Freeport Hardware Manufacturing Company, Freeport, Ill. Spring-hinge	428,974	May 27	2951	757	51	1424
Taxis, Gideon R., Morris, assignor to Coleman Hardware Company, Chicago, Ill. Spring-hinge	434,212	Aug. 12	1161	302	52	993
Taylor, Benjamin S., Warren, Mass. Toy	430,155	June 17	1607	400	51	1802
Taylor, Brownlee W. (See Berne, Arthur W., assignor.)						
Taylor, Brownlee W., <i>et al.</i> (See Ring, John, assignor.)						
Taylor, Charles. (See Brockway and Taylor.)						
Taylor, Charles F., Holyoke, Mass. Machine for applying adhesive material to strips of paper	439,332	Oct. 28	2593	692	53	512
Taylor, Charles F., assignor of one-half to A. Loughridge, Philadelphia, Pa. Elevator	425,152	Apr. 8	1109	295	51	223
Taylor, Charles F., Springfield, and H. D. Bradburn, assignors to said Taylor, C. H. Heywood, and H. J. Frink, Holyoke, Mass. Rag-duster	428,429	May 20	2134	537	51	1247
Taylor, Charles H., Lincoln, Nebr. Cultivator	432,452	July 15	2189	504	52	439
Taylor, Clarence G. (See Angell and Taylor.)						
Taylor, Clarence G., Ann Arbor, Mich., and W. T. Angell, St. Louis, Mo. Forge-tuyere.	427,933	May 13	1383	350	51	1090
Taylor Company. (See White, Washington, assignor.)						
Taylor, Daniel, Liverpool, county of Lancaster, England. Pillow or bolster for saving life at sea	426,081	Apr. 22	2519	665	51	513
Taylor, Diotician T., Greensburg, La. Machine for distributing fertilizers	435,465	Sept. 2	122	35	52	1399
Taylor, Edward H., <i>et al.</i> (See Trump, John G., assignor.)						
Taylor, Edward H., Paterson, N. J. Apparatus for leveling and marking shafts	423,094	Mar. 11	1116	292	50	1355
Taylor, Edward H., Paterson, N. J., assignor of one-half to R. Adams, New York, N. Y. Warp-beaming machine	423,643	Mar. 18	1935	509 510	50	1519
Taylor, Edwin W., Charlottetown, Prince Edward Island, Canada. Inkstand	443,244	Dec. 23	2653	681	53	1805
Taylor, Eugene H. (See Cushman and Taylor.)						
Taylor, Eugene H. (See Hurley and Taylor.)						
Taylor, Eugene H., Lynn, Mass. Tumbling-box	433,663	Aug. 5	330	85	52	820
Taylor, Eugene H., Lynn, assignor to American Shoe Tip Company, Boston, Mass. Button-setting machine	429,394	June 3	449	106	51	1557
Taylor, Francis C., New York, N. Y., assignor of one-half to R. C. Campbell, Philadelphia, Pa. Printing in several colors by one impression	432,580	July 22	2390		52	487
Taylor, Francis C., Danbury, Conn., and J. R. Hard, assignors of one-half to P. V. Husted, New York, N. Y. Shrinking and fulling felt by electricity	428,026	May 13	1518	385	51	1118
Taylor, Frank, Lewiston, and J. Roderick, assignors of one-third to E. O. Greenleaf, Farmington, Me. Washing-machine	428,975	May 27	2952	758	51	1424
Taylor, Frank R., Mount Vernon, N. Y. Box-fastener	422,850	Mar. 4	713	183	50	1274

Alphabetical list of patentees—Continued.

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Taylor, Fred A., Lowell, Mass. Pencil-sharpener	437,873	Oct. 7	305	91	53	60
Taylor, Frederick, Lowell, Mass. Shutter-fastener	422,463	Mar. 4	151	41	50	1165
Taylor, Frederick A. (See Henry and Taylor.)						
Taylor, Frederick W., Philadelphia, Pa. Turner's work-carrier	420,614	Feb. 4	265	70, 71	50	616
Taylor, Frederick W., Philadelphia, Pa. Power-hammer	424,939	Apr. 1	776	207	51	151
Taylor, Frederick W., Philadelphia, Pa. Boring-bar puppet	428,703	May 27	2551	647	51	1344
Taylor, Frederick W., Philadelphia, Pa. Boring and turning mill	429,162	June 3	80	19, 20	51	1487
Taylor Gas Producer Company. (See Taylor, William J., assignor.)						
Taylor, George. (See Taylor, William M. and G.)						
Taylor, George, <i>et al.</i> (See Taylor, Henry, assignor.)						
Taylor, George, Jersey City, N. J., assignor to J. L. Mott Iron Works, New York, N. Y. Needle-spray and shower bath	430,257	June 17	1768	439	51	1833
Taylor, George, Jersey City, N. J., assignor to J. L. Mott Iron Works, New York, N. Y. Shower-bath	432,712	July 22	2611	668	52	528
Taylor, George, Jersey City, N. J., assignor to J. L. Mott Iron Works, New York, N. Y. Spray-bath	439,793	Nov. 4	246	63	53	656
Taylor, George E., Rochester, N. Y. Mailing-case	432,253	July 15	1893	487	52	383
Taylor, George E., assignor of three-fourths to D. C. Clarke, Newark, and S. M. Long, East Orange, N. J. Sash-balance	424,940	Apr. 1	779	207	51	151
Taylor, George H., Liverpool, county of Lancaster, England. Furnace	424,377	Mar. 25	3042	808 -09	50	1738
Taylor, George H., Liverpool, county of Lancaster, England. Steam-generator	429,976	June 10	1322	327	51	1737
Taylor, George H., New York, N. Y. Reel for winding trimmings, ruchings, &c.	425,392	Apr. 8	1466	392	51	293
Taylor, George M., and C. S. Smith, Riverside, N. J. Manufacturing tips for ferrules	436,388	Sept. 16	1576	415	52	1692
Taylor, George W. (See Harris and Taylor.)						
Taylor, Hal S., and C. B. Jefferson, New York, N. Y. Tank for producing theatrical effects.	420,126	Jan. 28	2229	590	50	472
Taylor, Harrison H., assignor to Detroit Machine Screw Works, Detroit, Mich. Shaft-turning lathe	438,032	Oct. 7	561	153	53	106
Taylor, Harrison H., assignor to Detroit Machine Screw Works, Detroit, Mich. Grinding-machine	439,766	Nov. 4	205	53	53	648
Taylor, Harry. (See Reubel and Taylor.)						
Taylor, Henry, assignor of three-eighths to H., Jr., J. A., and G. Taylor, Baltimore, Md. Pneumatic car-motor	427,809	May 13	1192	300	51	1055
Taylor, Henry C., Homer, La. Grinding-mill	430,222	June 17	1711	425 -26	51	1822
Taylor, Henry W., Chicago, Ill. Lue-holder	422,997	Mar. 11	970	256	50	1328
Taylor, Henry W., and C. W. Welman, Sullivan, Ind. Relief-type	424,147	Mar. 25	2684	714	50	1669
Taylor, Hiram, Northampton, and D. E. Sherman, Springfield, Mass. Metallic railway-tie.	434,213	Aug. 12	1162	302 -303	52	993
Taylor, Horace H., assignor to himself and C. R. Wheelock, Santa Rosa, Cal. Drier for fruit and other materials	430,762	June 24	2612	640	51	2004
Taylor, Isaac F., London, England. Fog signaling apparatus for railways	436,880	Sept. 23	2430	633 -634	52	1860
Taylor, James. (See Goodyear, Robert B., assignor.)						
Taylor, James, West Cowes, Isle of Wight, England. Remedy for liver complaint, &c.	419,802	Jan. 21	1718	.....	50	361
Taylor, James A., <i>et al.</i> (See Taylor, Henry, assignor.)						
Taylor, James H., Philadelphia, Pa. Steam-engine	423,834	Mar. 18	2210	583	50	1572
Taylor, James L., Memphis, Tenn. Pipe-wrench	434,847	Aug. 19	2154	564	52	1197
Taylor, James P. (See Turner and Taylor.)						
Taylor, James P., Fort Worth, Tex. Metal cross-tie for railways	428,869	May 27	2794	710	51	1393
Taylor, James Y., <i>et al.</i> (See Zachary, James F., assignor.)						
Taylor, John, Troy, N. Y. Car-truck	437,167	Sept. 23	2873	747 -748	52	1945
Taylor, John, Nottingham, England. Hoisting or lifting apparatus	442,466	Dec. 9	1298	336	53	1523
Taylor, John, Nottingham, England. Gas-motor engine	443,082	Dec. 16	2333	597	53	1736
Taylor, John D., Piketon, Ohio. Electric signal	420,255	Jan. 28	2446	630	50	510
Taylor, John E., Chester, Pa. Railway-tie and support	434,848	Aug. 19	2155	565	52	1197
Taylor, John H., Chelsea, Mass. Table	419,778	Jan. 21	1995	525	50	417
Taylor, John H., Chelsea, Mass. Calendar	438,033	Oct. 7	562	153	53	107
Taylor, John H., Bloomfield, N. J. Stove-range	424,628	Apr. 1	293	76	51	59
Taylor, John T., and J. Smith, Belleville, Ill. Draw-bar for mining-cars	419,899	Jan. 21	1881	494	50	394
Taylor, Lawrence H., South Norridge, Me. Domestic press	422,263	Feb. 25	2688	709	50	1097
Taylor, Luke W., assignor of one-half to W. H. H. Slack, Springfield, Vt. Fire-extinguisher.	423,334	Mar. 11	1501	393	50	1429
Taylor, Luke W., assignor of one-half to W. H. H. Slack, Springfield, Vt. Fire-extinguisher.	423,355	Mar. 11	1502	394	50	1429
Taylor, Minor W., Waterloo, Iowa. Stanchion	419,296	Jan. 14	974	258	50	206
Taylor, Newton W. (See Kelliher, Frederick H., assignor.)						
Taylor, Newton W., Cleveland, Ohio. Paper-bag machine	439,703	Nov. 4	113	29 -30 -31	53	630
Taylor, Newton W., and F. H. Kelliher, Cleveland, Ohio; said Kelliher assignor to said Taylor. Paper bag	439,849	Nov. 4	329	85	53	672
Taylor, Oliver H., Brooklyn, N. Y. Transom-lifter	423,835	Mar. 18	2211	584	50	1572
Taylor, R. B., <i>et al.</i> (See Pike and Huffman, assignors.)						
Taylor, Robert J., assignor of one-half to W. H. Shattuck, Providence, R. I. Jeweler's blow-pipe	437,317	Sept. 30	3107	814	52	1996
Taylor, Robert P., Gold Hill, Nev. Wagon-brake	433,753	Aug. 5	467	120	52	846
Taylor, Robert W., assignor to G. W. Heartley, Toledo, Ohio. Tire sizing and upsetting machine	423,658	Mar. 4	443	111	50	1221
Taylor, Samuel D. (See Boone and Taylor.)						
Taylor, Samuel W. (See Wilcox, David, assignor.)						
Taylor, Sansom, Pittsburg, Pa. Manufacture of hook-nails	421,019	Feb. 11	890	230 -231	50	741
Taylor, Squire, Seascale, England. Saw	443,553	Dec. 30	3147	809	53	1909
Taylor, Thomas, assignor to Norwalk Lock Company, South Norwalk, Conn. Master-key lock.	420,174	Jan. 28	2314	612	50	486
Taylor, Thomas C., <i>et al.</i> (See Bergendahl, Lewis J., assignor.)						
Taylor, Thomas P., Bridgeport, Conn. Garment-stay	425,895	Apr. 15	2131	568	51	432
Taylor, Thomas P., Bridgeport, Conn. Perforating-machine	431,155	July 1	180	46	52	38
Taylor, Walter A., New Orleans, La. Steam-separator	426,850	Apr. 29	3722	972	51	760
Taylor, Walter A., New Orleans, La. Feed-water heater and cleaner	426,881	Apr. 29	3723	972	51	761
Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock	420,127	Jan. 28	2231	590 -591	50	472
Taylor, William, Allegheny, Pa. Nail or spike	423,535	Mar. 18	1774	466	50	1489
Taylor, William G., assignor of three-eighths to F. M. Ashmead, Hulton, and J. C. Glass, Oakmont, Pa. Fuel-gas mixer	424,738	Apr. 1	464	124	51	92

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Taylor, William H. (See Wistrand, Peter E., assignor.)						
Taylor, William J., Chester, assignor to Taylor Gas Producer Company, Camden, N. J. Gas-producer	428,237	May 20	1834	460	51	1189
Taylor, William J., Chester, assignor to Taylor Gas Producer Company, Camden, N. J. Apparatus for the manufacture of gas	431,535	July 1	774	193	52	154
Taylor, William M., and G. Taylor, Gorleston, England. Fire-escape	421,115	Feb. 11	1029	261	50	768
Taylor, William O., Malden, assignor to J. S. Mason & Co., Boston, Mass. Letter-box	432,254	July 15	1895	487	52	383
Taylor, William O., Melrose, assignor to E. G. Place, Woburn, Mass. Elevator-guard	438,294	Oct. 14	962	261	53	188
Taylor, William W., Mansfield, Mass., assignor of one-half to E. M. Leavens, Providence, R. I. Printing-telegraph	432,453	July 15	2190	564 565	52	439
Taylor, William W., Mansfield, Mass., assignor of one-half to E. M. Leavens, Providence, R. I. Printing-telegraph	442,497	Dec. 9	1351	347 348	53	1534
Teague, Benjamin H., Aiken, S. C. Polishing-strip chuck	437,463	Sept. 30	3358	879	52	2046
Teal, Benjamin F., and E. J. Gross, assignors to Chicago Safe and Lock Company, Chicago, Ill. Safety deposit box	423,095	Mar. 11	1117	292	50	1355
Teal, Daniel E., Oneida Castle, N. Y. Step-ladder	421,843	Feb. 18	2064	544	50	971
Teal, Daniel E., Oneida Castle, assignor of one-half to H. Clark, Norwich, N. Y. Apparatus for the manufacture of oil-gas	436,881	Sept. 23	2433	635	52	1861
Teal, Levi, assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dentist's mixing-slab	434,737	Aug. 19	2001	522	52	1166
Teal, Stebbins A., Missouri Valley, Iowa. Cross-head jack	435,194	Aug. 26	2716	717	52	1310
Teale, Lionel H., Leeds, England. Fire-place	426,477	Apr. 29	3120	820	51	644
Teamer, William, Evansville, Ind. Key-bolt and washer for railway joints	425,468	Apr. 15	1586	424	51	325
Tebbetts, Alvah C. (See Preston, Hiram P., assignor.)						
Tebbetts, Alvah C., Boston, Mass., and H. E. Doggett, Philadelphia, Pa., assignors to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Mechanism for automatically cutting button-holes on sewing-machines	438,655	Oct. 21	1485	402	53	298
Tebel, Louis F., Milwaukee, Wis. Elevator-lock	425,268	Apr. 8	1273	343	51	258
Tebow, Theodore, Nicholasville, Ky. Baling-press	428,976	May 27	2953	758	51	1424
Tecktonius, Emil C., Racine, Wis. Broadcast seed-sower	421,634	Feb. 18	1785	467	50	919
Tecktonius, Emil C., Racine, Wis. Spring for vehicles	437,733	Oct. 7	86	28	53	19
Tecktonius, Emil C., assignor to Racine Malleable and Wrought Iron Company, Racine, Wis. Broadcast seed-sower	443,926	Dec. 30	3726	953	53	2020
Teed, Jesse S., Walton, N. Y. Water-motor	429,487	June 3	592	144	51	1585
Teed, Ralph L., assignor of one-half to A. McGuire, Chicago, Ill. Elevator-operating mechanism	440,412	Nov. 11	1225	317	53	854
Teel, William S., Washington, D. C. Combined sash and belt	435,257	Aug. 26	2803	743	52	1327
Teetzel, John W., Ottawa, Ill. Well-boring machine	435,993	Sept. 2	325	90, 91	52	1438
Teetzel, John W., Ottawa, Ill. Clutch or clamp for raising or lowering tile or pipe	435,594	Sept. 2	328	91	52	1438
Tefft, Henry B., assignor, by mesne assignments, of one-half to Moore Manufacturing and Foundry Company, Milwaukee, Wis. Hoisting-machine	428,430	May 20	2135	537	51	1247
Tefft, James O., Olean, N. Y. Sucker-rod	420,748	Feb. 4	444	117	50	651
Tefft, James O., and C. W. Carpenter, Olean, N. Y. Globe-valve	423,288	Mar. 11	1418	368	50	1412
Teggart, John, San Diego, Cal. Rubber-shoe attachment	439,909	Nov. 4	426	110	53	691
Tehnik, Anton, Ronnow, Bohemia, Austria-Hungary. Wedge-buckle	426,401	Apr. 22	2993	784	51	611
Telfer, James, Jr., Blenheim, Canada. Shovel	440,933	Nov. 18	2095	543	53	1027
Telfer, James M., Minerva, Ohio. Nut-lock	441,990	Dec. 2	560	151	53	1373
Telling, Carl, Benrath, near Dusseldorf, Germany. Machine for rolling seamless hollow bodies	430,977	June 24	2938	721	51	2064
Tellier, Charles, Paris, France. Apparatus for producing motive power	431,677	July 8	1012	253 254 255	52	208
Tellier, Charles, Paris, France. Apparatus for utilizing atmospheric or solar heat for raising water	433,055	July 29	3162	813 814	52	640
Tellier, Charles, Paris, France. Production of motive power and apparatus therefor	439,258	Oct. 28	2465	660 661	53	487
Tellier, Charles, Paris, France. Means and apparatus for utilizing waste heat for producing motive power	439,259	Oct. 28	2466	661 662	53	488
Tempany, John, <i>et al.</i> (See Norton, James W., assignor.)						
Temple, Harry E. (See Parker and Temple.)						
Templeton, Wilbur F. (See Leonard, Charles S., assignor.)						
Templin, Joseph H., Reading, Pa., assignor to Van Wagoner & Williams Company, New York, N. Y. Hook	432,288	July 15	1961	500	52	395
Templin, Joseph H., Reading, Pa., assignor to Van Wagoner & Williams Company, New York, N. Y. Clothes-hook	433,699	Aug. 5	380	97	52	830
Templin, Marian, St. Mary's, Kans. Cultivator-shovel	440,090	Nov. 4	695	184	53	744
Templin, Thomas T., Paris, assignor of one-third to J. C. May, Lexington, Ky. Shingling-bracket	443,467	Dec. 23	3005	772	53	1873
Tenant, George B., Uniontown, Pa. Punch	434,738	Aug. 19	2001	522	52	1166
Tenney, A. P., <i>et al.</i> (See Palmer, John W., assignor.)						
Tenney, Nelson H., Acton, Mass. Steam-generator	424,629	Apr. 1	294	76	51	59
Tennison, William, Mount Vernon, Ind. Mosquito-net frame and sham-pillow holder	442,498	Dec. 9	1356	348	53	1531
Tennison, William F. (See Wolfe, Martin V., assignor.)						
Tenny, Charles K. (See French, Charles A., assignor.)						
Terpel, Christian. (See Schurr, August F., assignor.)						
Terrioth, Bernard. (See Herz and Terrioth.)						
Terman, James W., New Sharon, Iowa. Corn-harvester	432,650	July 22	2500	642 643	52	507
Terman, John C. (See Cox, George M., assignor.)						
Ternes, Peter J., and R. Hohnbach, Jr., Milwaukee, Wis. Rocking meat-cutter	433,056	July 29	3165	814	52	640
Terpening, Clinton W., Bedford, Iowa. Car-coupling	431,627	July 8	914	230	52	190
Terpening, Clinton W., and C. Thomas, Bedford, Iowa. Mail-bag	443,230	Dec. 23	2632	676	53	1801
Terrell, Charles M., and H. M. Chittenden, Omaha, Nebr. Map-case	432,914	July 22	2913	747	52	587
Terrot, Charles, Cannstadt, Germany. Velocipede	435,466	Sept. 2	123	35	52	1399
Terry, Charles A., assignor to Westinghouse Electric Company, Pittsburg, Pa. Core for electrical apparatus	434,164	Aug. 12	1092	281	52	979
Terry, Le Grand, Horseheads, N. Y. Door-hanger	443,638	Dec. 30	3283	846	53	1934
Terry, Samuel H., St. Louis, Mo. Metal pole	433,189	July 29	3368	871	52	680
Terry, Schuyler W. (See Robinson, Walter, assignor.)						
Terstegen, Fred, Elizabeth, N. J. Repeating mechanism for watches or other time-pieces	421,844	Feb. 18	2066	545	50	971
Terstegen, Fred, Elizabeth, N. J. Repeating attachment for watches	436,162	Sept. 9	1216	317	52	1612
Terteling, Bernhard H., <i>et al.</i> (See Terteling, Theodor A., assignor.)						
Terteling, Theodor A., assignor to himself, B. H. Terteling, and R. L. McAlpine, Kansas City, Kans. Furnace	419,380	Jan. 14	1102	291	50	232

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Tesla Electric Company. (See Tesla, Nikola, assignor.)						
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. Electro-magnetic motor.	424,036	Mar. 25	2532	674	50	1640
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. Alternating-current electro-magnetic motor.	433,700	Aug. 5	381	97	52	830
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. Alternating-current motor.	433,701	Aug. 5	383	97	52	830
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. Electrical transformer or induction device.	433,702	Aug. 5	384	98	52	831
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. Electro-magnetic motor.	433,703	Aug. 5	386	98	52	831
Tesla, Nikola, New York, N. Y., assignor of one-half to C. F. Peck, Englewood, N. J. Pyromagneto-electric generator.	428,057	May 13	1567	396	51	1128
Testard, Adrian, Gonzales, Tex. Car-coupling.	437,734	Oct. 7	88	28	53	20
Tetamore, Frank L., Brooklyn, N. Y. Combination cabinet, desk, and physician's operating-table.	422,098	Feb. 25	2430	642	50	1048
Teufel, Julius, Stuttgart, Württemberg, Germany. Catamenial bandage.	420,978	Feb. 11	831	215	50	730
Teufel, Julius, Stuttgart, Württemberg, Germany. Bandage.	421,635	Feb. 18	1787	467	50	919
Tewksbury, Andrew J., Haverhill, Mass. Leather-skiving machine.	439,208	Oct. 28	2384	{ 640 641 139 140 }	{ 53 52 }	473
Tewksbury, George C., New York, N. Y., assignor to O. C. Smith, Bridgeport, Conn. Device for indicating the ages of persons.	435,718	Sept. 2	528	{ 139 140 }	{ 52 }	1477
Thacher, John B. (See Fasoldt, Ernest C., assignor.)						
Thackeray, William T., Chicago, Ill. Carbonating apparatus.	437,318	Sept. 30	3109	814	52	1996
Thain, Richard S., Oak Park, assignor to Wilbur Publishing Company, Chicago, Ill. Knife.	422,547	Mar. 4	265	67	50	1186
Thain, Richard S., Oak Park, assignor to Wilbur Publishing Company, Chicago, Ill. Soap-bubble pipe.	430,095	June 10	1518	377	51	1774
Thaler, Fannie B., Rifle City, Colo. Sad-iron.	436,951	Sept. 23	2536	664	52	1880
Thalmann, Julius H., assignor to F. Martini & Co., Frauenfeld, Switzerland. Stop-motion for looms.	424,908	Apr. 1	732	195	51	141
Thame, Henry, assignor to J. R. Thame, London, and H. Sanguinetti, county of Middlesex, England. Manufacturing articles for containing petroleum.	434,739	Aug. 19	2002	-----	52	1166
Thame, James R., et al. (See Thame, Henry, assignor.)						
Thame, James R., London, assignor of one-half to H. Sanguinetti, county of Middlesex, England. Contractible cylinder for making cylinders from paper pulp.	434,740	Aug. 19	2003	523	52	1166
Thame, James R., Boxmoor, county of Herts, assignor of one-half to H. Sanguinetti, county of Middlesex, England. Drying-frame for pulp barrels.	434,741	Aug. 19	2005	523	52	1166
Thatcher, Duncan, Wilmington, Del., assignor to Cobb Vulcanite Wire Company, of Delaware. Machine for stripping the lead covering from conductors.	429,292	June 3	279	67	51	1524
Thatcher, Hervey D., Potsdam, N. Y. Baking-powder.	422,464	Mar. 4	152	50	50	1165
Thatcher, Thomas, Elizabeth, N. J. Stove-radiator.	424,037	Mar. 25	2534	{ 674 675 }	{ 50 }	1640
Thau, William G. (See Wood, Joseph, assignor.)						
Thayer, Albert F., Maple Hill, Kans. Butter-purifying apparatus.	439,310	Oct. 28	2567	685	53	506
Thayer, Dexter J., Pittsburg, Pa. Sand-reel.	420,476	Feb. 4	78	18	50	579
Thayer, Dexter J., Pittsburg, Pa. Wrench for oil-well tools.	421,020	Feb. 11	894	231	50	742
Thayer, Edward S. (See Griffin, Thayer, and Buffum.)						
Thayer, Eugene B., Palmyra, N. Y. Caster.	419,297	Jan. 14	975	258	50	206
Thayer, Garrison C., Bartlesville, Indian Ter. Wagon-brake.	423,356	Mar. 11	1503	394	50	1429
Thayer, James F., Providence, R. I. Staple-fastener.	427,280	May 6	394	102	51	888
Thayer, Margaret P., et al. (See Jolly, Mathias, assignor.)						
Theis, Rudolf, Solingen, Germany. Button-hole cutter.	427,639	May 13	921	231	51	1002
Theis, Theodore, assignor to Rand, McNally & Company, Chicago, Ill. Ticket-punch.	422,998	Mar. 11	971	256	50	1329
Theis, William, Milwaukee, Wis. Bridge-guard.	436,570	Sept. 16	1863	490	52	1743
Theisen, Eduard, Cologne, Germany. Corrugated condenser-plate.	441,781	Dec. 2	239	{ 61 62 63 }	{ 53 }	1310
Theisen, Eduard, Cologne, Germany. Apparatus for condensing and cooling purposes.	443,015	Dec. 16	2220	{ 571 572 }	{ 53 }	1714
Thelin, Erick J., et al. (See Alston, John, assignor.)						
Theobald, John, Archbold, Ohio. Spring-tooth cultivator.	419,734	Jan. 21	1610	430	50	340
Theophel, Henry, Akron, Ohio. Drum-snare.	436,590	Sept. 16	1899	498	52	1750
Therapeutic Terrestrial Equipose Company. (See Hicks, Thomas H., assignor.)						
Therien, Joseph O., Minneapolis, Minn. Bush-hammer.	425,153	Apr. 8	1110	295	51	223
Thermal Electric Company. (See Favor, Lorenzo B., assignor.)						
Theruer, Jacob F., Milwaukee, Wis. Steeping-tank for breweries, &c.	437,910	Oct. 7	359	103	53	69
Thew, Gilmore, Peru, N. Y. Electric device for preventing accidents on railways.	435,259	Aug. 26	2805	743	52	1328
Thew, Richard, Caledonia, Ohio. Apparatus for handling coal, ore, or other freight.	436,928	Sept. 23	2506	656	52	1874
Thibault, Henry, San Francisco, Cal. Sickle-grinder.	440,337	Nov. 11	1091	280	53	828
Thiele, Felix, assignor of one-half to W. C. Conrad, New York, N. Y. Device for lighting gas-burners.	422,659	Mar. 4	445	111	50	1231
Thielen, Paul, assignor of one-half to J. J. Shea, Kansas City, Kans. Steam-heater.	421,785	Feb. 18	1979	{ 520 521 558 559 }	{ 50 }	956
Thielen, Paul, assignor of one-half to J. J. Shea, Kansas City, Kans. Lawn-mower.	439,026	Oct. 21	2086	{ 558 559 }	{ 53 }	411
Thierry, James, Laramie City, Wyo. Piston.	423,499	Mar. 18	1718	453	50	1479
Thiers, Louis M. (See Jones, Lorenzo D., assignor.)						
Thiunes, Jacob, Brooklyn, N. Y. Caster.	438,506	Oct. 14	1258	340	53	248
Thissell, Arthur P., and G. S. Bradstreet, Beverly, Mass. Wash-boiler.	433,498	Aug. 5	84	24	52	773
Thissell, George W., Pleasant Valley, Cal. Fruit-grader.	431,176	July 1	215	53, 54	52	44
Thoens, Burchard. (See Gerdes and Thoens.)						
Thomas, Albert B. (See Brooder and Thomas.)						
Thomas, Amos W., Philadelphia, Pa. Velocipede.	422,548	Mar. 4	265	68	50	1187
Thomas, Amos W., Philadelphia, Pa. Bicycle.	422,549	Mar. 4	269	68	50	1187
Thomas, Cassious M., Camden, Ohio. Corset-clasp.	425,012	Apr. 8	900	238	51	182
Thomas, Charles H. (See Terpening and Thomas.)						
Thomas, Charles H., Hancock, Wis. Potato-digger.	420,502	Feb. 4	107	26	50	584
Thomas, Charles H., Moncton, New Brunswick, Canada, assignor, by mesne assignments, to American Nut Lock Company, of Maine. Nut-lock.	435,126	Aug. 26	2618	693	52	1291
Thomas, Charles L., Buffalo, N. Y. Vehicle-spring.	420,395	Jan. 28	2645	702	50	547
Thomas, Charles W., Jersey City, N. J., assignor of two-thirds to P. Van Volkenburgh, Jr., New York, N. Y. Sheave.	427,810	May 13	1197	300	51	1055

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Thomas Clock Company, Seth. (See Higginbotham, Charles T., assignor.)						
Thomas Company, L. H. (See Alling, Edward H., assignor.)						
Thomas, David M., Andenreid, Pa. Padlock	430,815	June 24	2700	661	51	2020
Thomas, Edmeston V., Kansas City, Mo. Adjustable valve-plate	426,151	Apr. 22	2630	690	51	536
Thomas, Edmeston V., Kansas City, Mo. Balanced slide-valve	441,782	Dec. 2	241	63	53	1311
Thomas, Enoch S., Starke, Fla. Refrigerator-crate	435,953	Sept. 9	892	234	52	1552
Thomas, Evan. (See Furey and Thomas.)						
Thomas, Frank A., Brooklyn, N. Y. Convertible chair, cradle, and lounge	440,974	Nov. 18	2157	559	53	1039
Thomas, Fred, Rockford, Ill. Treadle for foot-lathes	422,465	Mar. 4	153	41	50	1165
Thomas, Frederick A., Chicago, Ill. Latch for elevator-gates	423,459	Mar. 18	1659	438	50	1468
Thomas, Frederick E., and R. P. Lennox, Cambridge, England. Pneumatic dental plug-ger	419,381	Jan. 14	1103	291	50	232
Thomas, George H., assignor to T. C. Page, Chicopee Falls, Mass., and E. Gaylord. Grater.	429,663	June 10	849	206	51	1645
Thomas, Harrison, Lafayette, N. Y. Binder	426,608	Apr. 29	3308	868	51	686
Thomas, Harry O., Cherry Vale, Kans. Reversing-gear	433,499	Aug. 5	85	24, 25	52	773
Thomas, Henry C. (See Ellison, Alphonso L., assignor.)						
Thomas, Henry G., Portland, Me. Curry-comb	431,490	July 1	764	177	52	141
Thomas, Hermann, assignor of one-fourth to R. Stueler, New York, N. Y. Propeller-screw	438,365	Oct. 14	1060	289	53	209
Thomas, Jacob, et al. (See Stewart, Joseph H., assignor.)						
Thomas, Jacob, Bluff City, Tenn. Kettle-support	429,977	June 10	1323	327	51	1737
Thomas, James B. (See Madden, Horace B., assignor.)						
Thomas, John, Cedar Rapids, Iowa. Horse-collar fastener	425,536	Apr. 15	2132	569	51	432
Thomas, John G., Llangennech, and G. H. White, Llŵy Forge, near Pontardunlais, England. Apparatus for coating metal sheets with tin	443,879	Dec. 30	3648	{ 940 941	{ 53	2006
Thomas, John H., Springfield, Ohio. Convertible pole and thill	421,451	Feb. 18	1502	390	50	865
Thomas, John J., Roxborough, Pa. Apparatus for the manufacture of coal-gas	443,153	Dec. 23	2489	{ 635 636	{ 53	1771
Thomas, John P., Detroit, Mich. Grate	424,234	Mar. 25	2802	748	50	1693
Thomas, John R. (See Woods and Thomas.)						
Thomas, John R., assignor to S. A. Woods Machine Company, Boston, Mass. Pressure-bar for planing-machines	429,395	June 3	452	106	51	1557
Thomas, Lewis E., Nantucket, Mass., assignor of one-half to G. H. Hall, North Kingston, R. I. Clothes-line reel	421,452	Feb. 18	1503	390	50	865
Thomas, Lyndsey P., Cannon, Mich. Bean-puller	431,127	July 1	139	36	52	29
Thomas, Martin E., Batesville, Ark. Back-support and shoulder-brace	437,898	Oct. 7	342	100	53	66
Thomas, Martin E., Batesville, Ark., assignor of one-half to J. H. McHugh, Omaha, Nebr. Hub	441,715	Dec. 2	136	35	53	1288
Thomas, Mary A. L., Springfield, Tenn. Pencil-eraser	428,324	May 20	1972	{ 495 496	{ 51	1215
Thomas, Mary E., Cardington, Ohio. Electro-magnetic abdominal support	420,840	Feb. 4	605	155	50	678
Thomas, Oscar P., Garland, Tex. Movable shelving for stores	432,096	July 15	1659	426	52	339
Thomas, Philip. (See Beals and Thomas.)						
Thomas, Philip, and L. S. Beals, Long Island City, N. Y. Chain	429,978	June 10	1324	328	51	1737
Thomas, R. S., et al. (See Elam, William E., assignor.)						
Thomas, Robert N. (See Cuttell, Joe S., assignor.)						
Thomas, Samuel T. and W. S. Boston, Mass.; said W. S. Thomas administrator of said Samuel T. Thomas, deceased. Loom	435,549	Sept. 2	260	72, 73	52	1425
Thomas, Simeon A., Bingham, Iowa. Center for neck-yokes	433,831	Aug. 5	588	153	52	871
Thomas, Thomas C. J., London, England. Carving-fork	436,024	Sept. 9	992	260	52	1572
Thomas, Walter. (See Snyder, William B., assignor.)						
Thomas, Wilfred A. (See Lehmer, Isaac, assignor.)						
Thomas, William E., Cleveland, Ohio. Metal shield for horse-collars	437,261	Sept. 30	3025	793	52	1981
Thomas, William H., Fulton, Mo. Street delivery apparatus	425,469	Apr. 15	1556	424	51	325
Thomas, William M., Bridgeport, Conn. Bullet	437,262	Sept. 30	3025	793	52	1981
Thomas, William R., et al. (See Brady, Frank, assignor.)						
Thomas, William R., Watertown, Wis. Switch-signal	424,148	Mar. 25	2686	715	50	1669
Thomas, William W., Owego, N. Y. Fence	439,209	Oct. 28	2385	641	53	473
Thomas, Winfield S. (See Thomas, Samuel T. and W. S.)						
Thomason, Gustave, Clifton, Tex. Steam-cooker	429,027	Oct. 21	2088	559	53	411
Thombly, F., et al. (See Graham, Thomas W., assignor.)						
Thome, Joseph, Glandorf, Ohio. Exhibiting device	439,210	Oct. 28	2386	641	53	473
Thome, William B., Milton Grove, and E. E. Risser, Lawn, Pa. Breast-strap conpling	436,442	Sept. 16	1664	437	52	1707
Thompson, Arthur M. (See Webb and Thompson.)						
Thompson, Arthur W., Greenbush, N. Y. Sash lift and lock	427,713	May 13	1038	260	51	1026
Thompson, Asad L. (See Milbolland, John M., assignor.)						
Thompson, Augusta A. (See Hitt, Adrian, assignor.)						
Thompson, Augustus E., and W. Lund, assignors to National Loom Harness Company, Boston, Mass. Heddle or harness for looms	419,382	Jan. 14	1104	292	50	233
Thompson, Charles A., Traverse City, Mich. Axle-cutting device	425,192	Apr. 8	1175	311	51	238
Thompson, Charles A., Irwin, Pa. Nut-lock	439,754	Nov. 4	184	48	53	644
Thompson, Charles H., assignor to Automatic Cigar Seller Company, Detroit, Mich. Coin-controlled vending apparatus	437,527	Sept. 30	3452	902	52	2065
Thompson, Charles W., Tomales, Cal. Automatic wagon-gate	440,853	Nov. 18	1964	{ 505 506	{ 53	1002
Thompson, Colin M. (See Joslin and Thompson.)						
Thompson, Colin M., and J. W. Lane, Brooklyn, N. Y. Door or like paneled article	422,851	Mar. 4	714	183	50	1274
Thompson, Columbus E., Baltimore, Md. Combined packing and lubricant	420,477	Feb. 4	79		50	579
Thompson, Crozier T., Piper City, Ill. Car-coupling	433,664	Aug. 5	331	85	52	820
Thompson, David W., Chicago, Ill. Thermostatic coil	425,114	Apr. 8	1038	277	51	209
Thompson, Edgar, San Francisco, Cal. Dental engine	437,319	Sept. 30	3111	814	52	1996
Thompson, Edward H. (See Thompson, Francis and E. H.)						
Thompson, Elias H., Newark, Cal. Injector oil-burner	430,549	June 17	2235	548	51	1922
Thompson, Emma, assignor to Ferris Brothers, New York, N. Y. Corset	441,077	Nov. 18	2324	602	53	1072
Thompson, Evert M., Indianapolis, Ind. Bran-packer	435,467	Sept. 2	124	36	52	1399
Thompson, Francis and E. H., Allegheny, Pa. Cigar-bunching machine	438,903	Oct. 21	1906	507	53	374
Thompson, Frederick C. (See McGary, James, assignor.)						
Thompson, George A., and D. E. Harris, Brooklyn, N. Y. Sectional coal-truck	431,786	July 8	1186	297	52	240
Thompson, George D., Cincinnati, Ohio. Photographic camera	433,553	Aug. 5	167	45	52	789
Thompson, George L., Chicago, Ill. Curling-iron	432,295	Oct. 14	963	261	53	189
Thompson, George N., Brooklyn, N. Y. Game	429,800	June 10	1043	256	51	1682
Thompson, George R. (See Denison, Sylvester P., assignor.)						
Thompson, Isaac F., assignor of one-half to W. L. Palmer, San Francisco, Cal. Cut-off-valve gear. (Reissue)	11,128	Nov. 25	3240	{ 835 836	{ 53	1254

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Thompson, James A. M., San Antonio, Tex. Car-coupling	420,893	Feb. 4	698	179	50	695
Thompson, James F., Chicago, Ill. Door-lock	427,131	May 6	164	44	51	844
Thompson, James F., Chicago, Ill. Siphon for cans	442,696	Dec. 16	1669	428	53	1605
Thompson, James F., Rockland, assignor to C. F. Baker, Boston, Mass. Sole-brushing machine	423,968	Mar. 25	2434	646	50	1621
Thompson, Jesse, Sexton, Ind. Gate	435,127	Aug. 26	2619	693	52	1291
Thompson, Jesse M. (See Brumwell and Doolittle, assignors.)						
Thompson, John. (See O'Boylan and Thompson.)						
Thompson, John B., Allegheny, assignor to J. H. Curry, Wilkesburg, and R. A. Gillespie, Allegheny, Pa. Door-check	432,958	July 22	2999	770	52	602
Thompson, John K., Arkansas City, Kans. Corn-planter	431,787	July 8	1187	{ 297 298 }	52	240
Thompson, John P., Fall River, assignor of one-half to Whitin Machine Works, Whitinsville, Mass. Machine for carding fibrous materials	443,414	Dec. 23	2918	751	53	1856
Thompson, John P., Fall River, assignor of one-half to Whitin Machine Works, Whitinsville, Mass. Carding-machine	443,415	Dec. 23	2919	751	53	1856
Thompson, John P., Fall River, assignor of one-half to Whitin Machine Works, Whitinsville, Mass. Machine for and method of carding wool, &c.	443,416	Dec. 23	2921	752	53	1856
Thompson, John S., Indianapolis, Ind. Game	439,211	Oct. 28	2387	641	53	473
Thompson, John W., <i>et al.</i> (See Mason, Edward J., assignor.)						
Thompson, Joseph, Decoto, assignor of one-half to F. Cordé, San Francisco, Cal. Knife-cleaner	418,964	Jan. 7	488	122	50	103
Thompson, Joseph H., assignor to himself and F. E. Davis, Wilmington, Ohio. Eraser	435,869	Sept. 2	750	201	52	1520
Thompson, La Marcus A., Philadelphia, Pa. Pleasure-railway	422,466	Mar. 4	154	41, 42	50	1166
Thompson, La Marcus A., Philadelphia, Pa. Pleasure-railway, &c.	428,977	May 27	2935	759	51	1425
Thompson, Lester P., Phelps, N. Y. Plow-jointer	435,617	Sept. 2	379	102	52	1446
Thompson, Louisa M., Atlanta, Ga. Device for preparing green corn	439,582	Oct. 28	2962	786	53	582
Thompson, Milton E., Boston, Mass. Electric meter	425,269	Apr. 8	1279	343	51	259
Thompson, Milton E., Boston, Mass. Electric meter	425,270	Apr. 8	1282	343	51	259
Thompson, Noble E., New Mayville, Pa. Wagon-brake	427,529	May 6	757	188	51	961
Thompson & Norris. (See Shaw, Charles H., assignor.)						
Thompson, Oswald H., and J. E. Kind, Pittsburg, Pa. Locomotive sand-box	435,372	Aug. 26	3001	795	52	1363
Thompson, Otis D., assignor of one-half to H. F. Smith, Elkhart, Ind. Lawn-sweeper	426,882	Apr. 29	3725	973	51	761
Thompson, Peter M., Anaconda, Mont. Meadow-leveler	443,950	Dec. 30	3764	{ 961 962 }	53	2027
Thompson, Pharaoh C., Knoxville, Miss. Nut-lock	494,836	Apr. 1	629	165	51	121
Thompson, Rector M., Crawford, Nebr. Grading and ditching machine	429,368	June 3	407	96, 97	51	1548
Thompson, Robert H. (See Shaw, Charles H., assignor.)						
Thompson, Robert H., Brooklyn, N. Y. Machine for making packing and lining fabrics	430,447	June 17	2079	514	51	1893
Thompson, Robert K., Brownwood, Tex. Wagon-step	440,661	Nov. 18	1631	421	53	940
Thompson, Robert W., assignor of one-eighth to G. W. Tibbitts and J. C. O'Neil, Cleveland, Ohio. Electric engine	426,650	Apr. 29	3374	885	51	693
Thompson, Samuel H., and T. J. Cain, Cleveland, Ohio. Seal	427,714	May 13	1039	260	51	1026
Thompson & Sons, Henry G. (See Mower, Samuel E., assignor.)						
Thompson & Sons, Henry G. (See Mower and Spencer, assignors.)						
Thompson, Stacy B. (See Thompson, William A. and S. B.)						
Thompson, Thomas, Daysville, Conn., and F. Crook, Providence, R. I. Smash-protector mechanism for looms	428,292	May 20	1923	484	51	1206
Thompson, Thomas J., assignor of one-half to M. H. Williams, Leadville, Colo. Cant-hook	436,322	Sept. 9	1459	380	52	1661
Thompson, Walter, Meriden, Conn. Electric railway	424,082	Mar. 25	2594	692	50	1652
Thompson, Walter, and A. Gartner, Newark, N. J. Ocean-signal	420,217	Jan. 28	2384	634	50	499
Thompson, Walter C., New York, N. Y., assignor to Howard Manufacturing Company, Boston, Mass. Combined packing and show card	438,203	Oct. 14	808	220	53	162
Thompson, William A. and S. C., Manistee, Mich. Inking attachment for job printing-presses	443,978	Dec. 30	3813	{ 972 973 }	53	2037
Thompson, William R., assignor of one-half to E. G. Clift, New Castle, Colo. Saddle	419,393	Jan. 14	1107	292	50	233
Thoms, Ernest L., Ashby, Minn. Wagon-dump	431,678	July 8	1019	255	52	208
Thomson, Andrew, assignor to Nichols & Shepard Company, Battle Creek, Mich. Spark-arrester	425,555	Apr. 15	1707	457	51	350
Thomson, Archibald W. (See Williams and Thomson.)						
Thomson, Charles, Montreal, Quebec, Canada. Passenger-gangway and ship's ladder	427,378	May 6	522	133	51	914
Thomson Electric Welding Company. (See Anderson and Tregoning, assignors.)						
Thomson Electric Welding Company. (See Lemp, Hermann, assignor.)						
Thomson Electric Welding Company. (See Lemp and Moody, assignors.)						
Thomson Electric Welding Company. (See Lemp and Tregoning, assignors.)						
Thomson Electric Welding Company. (See Robb, Russell, assignor.)						
Thomson Electric Welding Company. (See Thomson, Elihu, assignor.)						
Thomson Electric Welding Company. (See Wood, William M., assignor.)						
Thomson, Elihu. (See Wightman and Thomson)						
Thomson, Elihu, Lynn, Mass. Electric transformer	420,396	Jan. 28	2646	702	50	547
Thomson, Elihu, Lynn, Mass. Cut-out for incandescent lamps	421,207	Feb. 11	1165	299	50	793
Thomson, Elihu, Lynn, Mass. System of distribution for alternating currents	421,208	Feb. 11	1166	299	50	794
Thomson, Elihu, Lynn, Mass. Compound insulating-layer for electric coils	422,550	Mar. 4	271	69	50	1188
Thomson, Elihu, Lynn, Mass. Electric valve-controller	423,965	Mar. 25	2428	644	50	1620
Thomson, Elihu, Lynn, Mass. Electric soldering, cementing, &c.	423,966	Mar. 25	2430	645	50	1621
Thomson, Elihu, Lynn, Mass. Apparatus for electric soldering and cementing	423,967	Mar. 25	2432	{ 645 646 }	50	1621
Thomson, Elihu, Lynn, Mass. Safety-connection	426,082	Apr. 22	2520	665	51	513
Thomson, Elihu, Lynn, Mass. Electric meter	428,649	May 27	2453	625	51	1327
Thomson, Elihu, Lynn, Mass. Alternating-current magnetic device	428,650	May 27	2454	626	51	1327
Thomson, Elihu, Lynn, Mass. System of electrical distribution	428,651	May 27	2459	626	51	1327
Thomson, Elihu, Lynn, Mass. Guard-wire protector and lightning-arrester for electric railways	428,653	May 27	2462	627	51	1328
Thomson, Elihu, Lynn, Mass. Regulator for dynamo-electric machines	428,705	May 27	2557	648	51	1345
Thomson, Elihu, Lynn, Mass. Regulator for dynamo-electric machines	430,327	June 17	1913	469	51	1861
Thomson, Elihu, Lynn, Mass. Alternating-current motor	430,328	June 17	1915	{ 469 470 }	51	1861
Thomson, Elihu, Lynn, Mass. Electric-railway conductor	431,414	July 1	578	{ 145 146 }	52	117
Thomson, Elihu, Lynn, Mass. Frog for overhead wires	432,581	July 22	2392	616	52	487
Thomson, Elihu, Lynn, Mass. Welding or other dynamo	432,652	July 22	2505	644	52	507
Thomson, Elihu, Lynn, Mass. Electric meter	432,654	July 22	2508	{ 644 645 646 }	52	508

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Thomson, Elihu, Lynn, Mass. Dynamo-electric machine	432,655	July 22	2513	646	52	509
Thomson, Elihu, Lynn, Mass. Electric-power transmission	434,488	Aug. 19	1599	419	52	1089
Thomson, Elihu, Lynn, Mass. Electric-power system	434,489	Aug. 19	1600	419	52	1089
Thomson, Elihu, Lynn, Mass. Suspending device for overhead electric conductors	433,870	Sept. 2	751	201	52	1521
Thomson, Elihu, Lynn, Mass. Trolley-arm for electric railways	440,665	Nov. 18	1640	423	53	942
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Distribution of electric currents	425,470	Apr. 15	1587	{ 424 425 }	51	325
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Guard for electric-railway trolleys	425,640	Apr. 15	1849	494	51	377
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Turn-off for alternating-current circuits	428,647	May 27	2449	625	51	1326
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Casing for induction-coils	428,648	May 27	2451	625	51	1326
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric switch	428,704	May 27	2556	648	51	1345
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	430,357	June 17	1960	482	51	1869
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Section-insulator for overhead electric conductors	434,961	Aug. 26	2376	629	52	1246
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric motor	438,204	Oct. 14	809	220	53	162
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric motor	438,656	Oct. 21	1489	403	53	299
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Working metals by electricity	432,651	July 22	2502	643	52	507
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Welding pipes by electricity	432,653	July 22	2507	644	52	508
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Manufacture of bands, rings, &c., by electricity	432,656	July 22	2518	647	52	510
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Process of and apparatus for forming and welding metals by electricity	434,530	Aug. 19	1661	435	52	1101
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Induction-discharge protector for welding apparatus	434,531	Aug. 19	1663	435	52	1101
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding	434,532	Aug. 19	1665	{ 435 436 }	52	1102
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding	440,664	Nov. 18	1639	423	53	942
Thomson, Elihu, Swampscott, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding	438,657	Oct. 21	1491	403	53	299
Thomson, Elihu, Swampscott, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding of pipes	438,658	Oct. 21	1494	403	53	299
Thomson, Elihu, and A. L. Rohrer, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Field-magnet for dynamos	422,999	Mar. 11	972	256	50	1329
Thomson, Elihu, and G. H. Alton, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Incandescent-lamp socket	428,652	May 27	2460	{ 626 627 }	51	1327
Thomson, Elihu, and E. W. Rice, Jr., Lynn, Mass. Cut-out	425,588	Apr. 15	1756	471	51	359
Thomson, Elihu, and E. W. Rice, Jr., Lynn, Mass. Electro-magnetic cut-out for electric lamps	430,326	June 17	1911	{ 468 469 }	51	1860
Thomson, Elihu, and E. W. Rice, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	440,662	Nov. 18	1632	{ 421 422 }	53	941
Thomson, Elihu, and E. W. Rice, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp	440,663	Nov. 18	1636	422	53	941
Thomson, Frederick W. (See Whitley, Thomson and Hoyle.)						
Thomson, Henry C., Boston, Mass. Adjustable pen-rest for inkstands	430,446	June 17	2078	513	51	1893
Thomson, Henry C., Boston, Mass. Adjustable pen rest for inkstands. (Reissue)	11,112	Sept. 23	2889	752	52	1948
Thomson-Houston Electric Company. (See Alton, George H., assignor.)						
Thomson-Houston Electric Company. (See Alton and Rice, assignors.)						
Thomson-Houston Electric Company. (See Alton and Wakefield, assignors.)						
Thomson-Houston Electric Company. (See Baker, Isaac F., assignor.)						
Thomson-Houston Electric Company. (See Bassett, Norman C., assignor.)						
Thomson-Houston Electric Company. (See Bentley, Edward M., assignor.)						
Thomson-Houston Electric Company. (See Blackwell, Francis O., assignor.)						
Thomson-Houston Electric Company. (See Hunter, Rudolph M., assignor.)						
Thomson-Houston Electric Company. (See Lemp, Hermann, assignor.)						
Thomson-Houston Electric Company. (See Macloskie, Charles H., assignor.)						
Thomson-Houston Electric Company. (See Thomson, Elihu, assignor.)						
Thomson-Houston Electric Company. (See Thomson and Alton, assignors.)						
Thomson-Houston Electric Company. (See Thomson and Rice, assignors.)						
Thomson-Houston Electric Company. (See Thomson and Rohrer, assignors.)						
Thomson-Houston Electric Company. (See Veeder, Curtis H., assignor.)						
Thomson-Houston Electric Company. (See Wightman, Merle J., assignor.)						
Thomson-Houston Electric Company. (See Wightman and Thomson, assignors.)						
Thomson, James, Jr., Willimantic, Conn. Stripping mechanism for carding-machines	430,200	June 17	1663	414	51	1812
Thomson, John, Brooklyn, N. Y. Apparatus for applying strainers within service-pipes in circuit with water-meters	427,447	May 6	641	160	51	938
Thomson, John, Brooklyn, N. Y. Mechanical movement	427,448	May 6	642	161	51	939
Thomson, John, Brooklyn, N. Y. Combined belt-shifting and brake apparatus	427,449	May 6	644	161	51	939
Thomson, John, Brooklyn, N. Y. Inking apparatus for printing-presses	427,450	May 6	645	161	51	939
Thomson, John, Brooklyn, N. Y. Disk water-meter	427,485	May 6	687	{ 172 173 }	51	948
Thomson, John, Brooklyn, N. Y. Angle-connection for disk water-meters	427,486	May 6	690	173	51	948
Thomson, John, Brooklyn, N. Y., assignor to Colt's Patent Fire Arms Manufacturing Company, Hartford, Conn. Printing-press	428,182	May 20	1743	441	51	1171
Thomson, Judson L., assignor to J. L. Thomson Manufacturing Company, Syracuse, N. Y. Making rivets	423,884	Mar. 18	2288	604	50	1587
Thomson, Judson L., assignor to J. L. Thomson Manufacturing Company, Syracuse, N. Y. Receiver for rivet-setting machines	434,214	Aug. 12	1163	303	52	993
Thomson, Judson L., Syracuse, N. Y., assignor to J. L. Thomson Manufacturing Company, Portland, Me. Rivet	432,498	July 15	2263	585	52	454
Thomson, Judson L., and J. J. Unbehend, Syracuse, N. Y., assignors to J. L. Thomson Manufacturing Company, Portland, Me. Rivet-slotting machine	434,894	Aug. 19	2244	{ 589 590 }	52	1214
Thomson, Judson L., and J. J. Unbehend, Syracuse, N. Y., assignors to J. L. Thomson Manufacturing Company, Portland, Me. Lacing-hook	434,895	Aug. 19	2248	590	52	1215

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Thomson, Judson L., and J. J. Unbehend, Syracuse, N. Y. Making lacing-studs.	435,907	Sept. 2	827	219	52	1535
Thomson Manufacturing Company, Judson L. (See Thomson, Judson L., assignor.)						
Thomson Manufacturing Company, Judson L. (See Thomson and Unbehend, assignors.)						
Thomson Manufacturing Company, Judson L. (See Unbehend, Jacob J., assignor.)						
Thomson, Waddy C., Lancaster, S. C. Rubber-stamp rack.	442,553	Dec. 9	1449	371	53	1553
Thomson, Wallace G., Halifax, England. Pattern-bar or lag for looms.	436,274	Sept. 9	1381	360	52	1645
Thomson, William, Glasgow, county of Lanark, Scotland. Rheostat.	420,894	Feb. 4	699	179	50	695
				180		
Thomson, William H., New York, N. Y. Fence-post.	426,745	Apr. 29	3523	921	51	722
Thone, Frank, Oskaloosa, assignor to Hawkeye Electric Manufacturing Company, Davenport, Iowa. Rheostat.	435,985	Sept. 9	936	246	52	1561
Thorington, Charles C., <i>et al.</i> (See Hall, William H., assignor.)						
Thorkelson, Mathias. (See Baker and Thorkelson.)						
Thorkelson, Mathias, Moline, Ill., assignor of one-half to C. S. Beebe, Racine, Wis. Vehicle-seat.	422,660	Mar. 4	446	112	50	1221
Thorn, Frank M., Orchard Park, N. Y. Potato-digger.	437,538	Sept. 30	3454	902	52	2065
Thorn, Joseph W., Iuka, Miss. Cotton-picker.	442,405	Dec. 9	1210	312	53	1504
				313		
Thornburg, Charles B. (See Polk, Caleb C., assignor.)						
Thorne, James, London, England. Safety-lamp.	437,061	Sept. 23	2681	700	52	1910
				701		
Thorne, James, and E. B. Burr, London, England. Speed-indicator and ship's log.	439,442	Oct. 28	2761	735	53	543
				736		
Thorne, James, and E. B. Burr, London, England; said Burr assignor to said Thorne. Electrical head-light.	436,677	Sept. 16	2038	532	52	1777
				533		
Thorne, Thomas F., <i>et al.</i> (See Wheat, John J., assignor.)						
Thornor, Bernhard, assignor of one-half to Müller & Holzweissig, Leipsic, Saxony, Germany. Shoe-last.	432,454	July 15	2194	565	52	440
				566		
Thornton, Isaac, Nevada, Mo. Pump.	428,238	May 20	1836	460	51	1190
Thornton, Norbury W., Geneseo, Ill. Game.	438,962	Oct. 21	1989	531	53	391
Thornton, Stephen. (See Williamson, George H., assignor.)						
Thornton, William C., Jefferson City, Mo. Milk-can.	419,735	Jan. 21	1613	430	50	340
				431		
Thornycroft, John I., Chiswick, England. Speed-indicator for rotating shafts.	442,554	Dec. 9	1450	371	53	1553
Thorp, Arthur E. (See Thorp, Edward, assignor.)						
Thorp, Edward, assignor to A. E. Thorp, London, England. Friction-hinge.	425,714	Apr. 15	1960	521	51	399
Thorp, Elliott G., Boston, Mass. Scrap-book.	423,836	Mar. 18	2212	584	50	1572
Thorp, James M., Santa Rosa, Cal. Adjustable axle-nut.	431,788	July 8	1189	298	52	240
Thorp, Thomas J., Chicago, Ill. Post-driver.	442,555	Dec. 9	1453	372	53	1554
Thorp, Thomas J., Chicago, Ill. Machine for forming tubular metal posts.	442,556	Dec. 9	1454	372	53	1554
				373		
Thorp, Thomas J., assignor of one-half to D. J. Brannen, Flagstaff, Ariz. Ter. Horse-collar.	432,001	July 8	1508	382	52	303
Thorp, Thomas J., assignor of one-half to D. J. Brannen, Flagstaff, Ariz. Ter. Running-gear for wagons.	432,002	July 8	1509	382	52	303
				383		
Thorp, Thomas J., Chicago, Ill., assignor of three-fourths to D. J. Brannen, Flagstaff, Ariz., and G. M. Lockwood, Washington, D. C. Wheel.	433,704	Aug. 5	387	98, 99	52	831
Thorp, Thomas J., Chicago, Ill., assignor of one-half to L. H. Crary, Cleveland, Ohio. Bicycle.	436,844	Sept. 23	2333	614	52	1842
Thorp, Thomas J., Chicago, Ill., assignor of one-half to G. P. Goodale, Detroit, Mich. Metal post.	438,121	Oct. 7	6-8	187	53	133
Thorp, Thomas J., Chicago, Ill., assignor of one-half to G. P. Goodale, Detroit, Mich. Metal fence-post.	438,122	Oct. 7	6-8	187	53	133
Thorp, James S., Waterbury, Conn. Piano tuning-pin.	436,163	Sept. 9	1219	318	52	1612
Thorp, Philip, New York, N. Y. Preparing egg-sirup.	433,832	Sept. 5	5-8	...	52	871
Thorp, Robert H., London, England. Apparatus for regulating hydraulic power.	429,614	June 10	850	206	51	1645
Thorsen, Thor A., Chicago, Ill. Stereotype-casting box.	441,340	Nov. 25	2780	719	53	1164
Thrall, Mary E., Riverside, Cal. Clothes-pin.	429,550	June 3	679	166	51	1602
Thrall, William A., Chicago, Ill. Device for separating railway-tickets from their stubs.	433,253	July 29	3464	894	52	700
Thramer, Jacob P., Two Rivers, Minn. Spring-tooth for seeders, &c.	434,100	Aug. 12	984	257	52	959
Thresher, William H., Amboy, Ill. Car and air-brake coupling.	439,260	Oct. 28	2468	662	53	488
Thring, Fredrick S., New York, N. Y. Wrench.	419,371	Jan. 14	1367	366	50	287
Thring, Fredrick S., New York, N. Y. Water-gage.	436,616	Sept. 16	1927	506	52	1755
Throckmorton, John A., Sidney, Ohio. Artificial denture.	421,116	Feb. 11	1080	264	50	768
Thronsen, Harald T. J., Finspong, Sweden. Gun carriage and support.	422,324	Feb. 25	2787	733	50	1115
Thrower, James G., Atlanta, Ga. Sick-room appliance.	427,281	May 6	385	102	51	888
Thum, Otto, Grand Rapids, Mich. Hose-clamp.	429,979	June 10	1324	328	51	1737
Thurber, Francis B. (See Baumgartner, Joseph, assignor.)						
Thurber, Nathan T., <i>et al.</i> (See Harris, Thomas, assignor.)						
Thurell, John, Zylonite, Mass. Dumping-grate.	437,529	Sept. 30	3455	903	52	2066
Thurmond Car Coupling Company. (See McKeen, Thomas L., assignor.)						
Thurmond Car Coupling Company. (See Thurmond, William D., assignor.)						
Thurmond, Charles A., Perry, Ga. Back-band buckle.	439,443	Oct. 28	2763	736	53	543
Thurmond, William D., Forsyth, Ga., assignor to Thurmond Car Coupling Company, of West Virginia. Car-coupling.	430,709	June 24	2518	617	51	1985
Thurmond, William D., Forsyth, Ga., assignor to Thurmond Car Coupling Company, of West Virginia. Car-coupling.	431,415	July 1	580	146	52	118
				147		
Thurston, George W., San Francisco, Cal. Fruit-drier.	426,478	Apr. 29	3121	820	51	644
Thurston, Henry W., assignor of one-half to E. N. Downs, Brooklyn, N. Y. Combined hand-truck and weighing-scales.	425,271	Apr. 8	1284	343	51	239
Thurston, Henry W., assignor to E. N. Downs, Brooklyn, N. Y. Weighing-truck.	441,451	Nov. 25	2953	762	53	1199
Thurston, Horace, assignor of one-half to J. C. Schott, Providence, R. I. Machine for cutting dies.	432,959	July 22	3000	770	52	602
				771		
Thurston, Horace, assignor to Schott Brothers, Providence, R. I. Bufton-machine.	443,417	Dec. 23	2922	752	53	1857
Thurston, John H. (See Luce, William B., assignor.)						
Thurston, Louis, and G. Stanton, Hardin, Mo. Ice-cutting machine.	421,209	Feb. 11	1168	299	50	794
Thurston, Maurice, Worcester, Mass. Heat-screen.	432,340	July 15	2031	522	52	407
				777		
Thury, René, assignor to C. Sautter & Co., Geneva, Switzerland. Automatic current-regulator.	435,332	Aug. 26	2929	778	52	1349
				779		
Thwaite, James P., Kansas City, Mo. Rein-support.	421,210	Feb. 11	1168	300	50	794
Tibbets, Jonathan S., Jeffersonville, Ind. Carburetor.	427,487	May 6	691	173	51	948
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Tibbitts, John B. (See Bottome, Turner D., assignor.)						
Tibbitts, George W., <i>et al.</i> (See Thompson, Robert W., assignor.)						
Tibbitts, Matthias E., Brunswick, Ohio. Plow point and share	429,980	June 10	1325	328	51	1737
Tickle, Robert P., West Hampstead, county of Middlesex, England. Stereo-mount	434,812	Aug. 19	2106	552	52	1188
Tidhall, Walton C., Brooklyn, N. Y. Picture-frame	435,161	Aug. 26	2667	705	52	1301
Tideman, Sven, assignor of one-third to L. J. Wohnlich, Detroit, Mich. Die and die-stock	441,603	Nov. 25	3193	822	53	1244
Tiedemann, Matthias W., Brooklyn, N. Y. Electric clock-alarm	441,908	Dec. 2	435	116	53	1350
Tidmarsh, Harry E., Sandy Hill, N. Y. Paper-slitter	430,492	June 17	2151	529	51	1907
Tidwell, James P., Ewing, Ind. Single-acting engine	426,421	Apr. 22	3042	796	51	619
Tiefel, Charles G. and L., assignors of one-third to E. H. Warren, Rochester, N. Y. Extension-ladder	431,014	June 24	2995	736	51	2076
Tiefel, Leonard. (See Tiefel, Charles G. and L.)						
Tierney, Catharine A., Chicago, Ill. Corset	427,934	May 13	1385	350	51	1090
Tiers, Cornelius. (See Bryson and Tiers.)						
Tiers, Cornelius. (See Pendleton, Bryson, and Tiers.)						
Tiers, Cornelius. (See Pendleton, Tiers, and Bryson.)						
Tietz, August T., Toledo, Ohio. Clamp	434,487	Aug. 19	1597	419	52	1069
Tiffany, Eli, Bennington, Vt. Falling bar for straight-knitting machines	430,201	June 17	1664	414	51	1812
Tiffany, Joel, Hinsdale, Ill. Seat-pad for water-closets	443,170	Dec. 23	2514	643	53	1776
Tiffany, Leverett W., Winsted, Conn. Time-register	425,193	Apr. 8	1177	311	51	238
Tift, Alanson H., Brooklyn, N. Y. Scrap-book and advertising medium	438,744	Oct. 21	1651	442	53	327
Tilden, Burt E., Cleveland, Ohio. Nut-lock	428,789	May 27	2650	679	51	1369
Tilden, James A., Hyde Park, Mass. Rotary water-meter	423,289	Mar. 11	1419	368	50	1412
Tilford, Robert J., Louisville, Ky. Uniting metals	424,739	Mar. 25	3047		50	1740
Tilghman, Merrill H., Norfolk, Va. Basket	440,446	Nov. 11	1285	332	53	864
Tilley, Charles L., <i>et al.</i> (See Burpee, Charles, assignor.)						
Tilley, James C., Newark, N. J. Nail or tack attachment	429,071	May 27	3100	800	51	1451
Tilson, John P., Pembroke, Mass. Harness-buckle	431,085	July 1	82	20	52	19
Tilton, Joseph, assignor of one-half to R. M. Stivers, New York, N. Y. Vehicle-axle	437,263	Sept. 30	3026	794	52	1981
Tilton, Nathaniel B., Savannah, Ga. Mill boot or pestle	422,661	Mar. 4	447	112	50	1221
Timberman, William A., Delphi, Ind. Machine for filing and setting saws	432,455	July 15	2196	566 567 568	52	440
Timlin, David J., assignor to Timlin-Heidinger Car Heater and Illuminator Company, Belleville, Ill. Car-heating apparatus	423,837	Mar. 18	2213	584	50	1572
Timlin, David J., assignor to Timlin-Heidinger Car Heater and Illuminator Company, Belleville, Ill. Car-heating apparatus	423,838	Mar. 18	2215	585	50	1573
Timlin-Heidinger Car Heater and Illuminator Company. (See Timlin, David J., assignor.)						
Timm, Charles, Washington Heights, assignor to Union Special Sewing Machine Company, Chicago, Ill. Presser-foot for sewing-machines. (Reissue)	11,081	June 3	742	178	51	1615
Timmis, Illius A., London, county of Middlesex, England. Coiled steel spring	432,341	July 15	2031	523	52	407
Timmis, Illius A., London, England. Coiled steel spring	432,342	July 15	2033	523	52	407
Timmis, Illius A., London, England. Electric lighting of railway-trains	432,657	July 22	2520	647	52	510
Timmons, Hermon W., Groveland, Ind. Buggy-top	429,822	June 10	1083	266	51	1690
Timpe, Adolf, Manchester, England. Snap-catch	434,006	Aug. 12	834	219	52	928
Tindall, Charles, Utica, assignor of one-half to N. Mootz, Otis, Kans. Violin tail-piece	441,716	Dec. 2	136	36	53	1288
Tindell, Henry, Harrison, N. J. Feeding mechanism for picking and carding machines	439,311	Oct. 28	2568	685	53	507
Tindell, Henry, Harrison, and L. F. Dickerson, Newark, assignors to E. R. Parkhurst, Montclair, N. J. Machine for opening and mixing wool, cotton, &c.	425,715	Apr. 15	1961	521	51	399
Tingley, A. D., <i>et al.</i> (See Mellett, Lemuel, assignor.)						
Tingley, Alfred D., <i>et al.</i> (See Elkins, William H., assignor.)						
Tiuker, James M., <i>et al.</i> (See Durand, Arthur, assignor.)						
Tinkham, Henry I., Taunton, assignor of one-half to W. A. Harvey, Boston, Mass. Pedal-protector	424,038	Mar. 25	2535	675	50	1640
Tinning, Frank T. and W. K. S., assignors of one-fifth to C. W. Irwin, Toronto, Canada. Holder for telephone-receivers	440,091	Nov. 4	695	185	53	744
Tinning, William K. S. (See Tinning, Frank T. and W. K. S.)						
Tinsman, Samuel H., Morris, Ill. Draft-equalizer	436,443	Sept. 16	1665	437	52	1707
Tirmann, Hugo, Cleveland, Ohio, assignor to United States Mine Supplies Company. Static electrical machine	423,708	Mar. 18	2035	537	50	1538
Tirmann, Hugo, Cleveland, Ohio, assignor to United States Mine Supplies Company. Electrical fuse	426,971	Apr. 29	3839	1003	51	783
Tischer, Frederick, Newark, N. J. Lifting jack	439,735	Nov. 4	160	41	53	639
Tischler, Jacob L., M. Gaebl, and M. Lengyel, Cleveland, Ohio. Nursery-chair	436,444	Sept. 16	1666	438	52	1707
Tisdale, Charles D., Boston, Mass. Nut-lock	439,212	Oct. 28	2388	642	53	474
Tisdale, Robert H., Sumter, S. C. Stalk-chopper	440,973	Nov. 18	2156	558 559	53	1039
Titus & Co., J. A. (See Barrett, Lucius O., assignor.)						
Titus, Erastus C., assignor of one-half to H. M. C. Vedder, Catskill, N. Y. Telephone-switch	421,636	Feb. 18	1788	467	50	920
Titus, George, Pomeroy, Ohio. Butter-mold	434,813	Aug. 19	2108	552	52	1188
Titus, John W., Eckerty, Ind. Combined roller, barrow, and marker	418,828	Jan. 7	261	64	50	55
Tivy, William H., assignor to American Roll Paper Company, St. Louis, Mo. Roll-paper holder and cutter	441,383	Nov. 25	2846	734	53	1176
Tixidre, Claudius, Paris, France. Automatic distributor	422,551	Mar. 4	273	69	50	1188
Toberer, John C., New Ulm, Minn. Car-coupling	422,264	Feb. 25	2690	710	50	1097
Tobey, Charles W. (See Farlow and Tobey.)						
Tobey, Frederick W. (See Atwood and Tobey.)						
Tobey, Frederick W., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Wick-raising device for Argand lamps	430,258	June 17	1769	440	51	1833
Tobey, Le Roy, assignor to himself and G. S. Sheppard, Penn Yan, N. Y. Engine	438,034	Oct. 7	563	154	53	107
Toboy, Levi, Morris, N. Y. Combined folding table and step-ladder	427,935	May 13	1386	350 351	51	1091
Tobias, Victor, and H. Fischer, Berlin, Germany. Preparing chocolate	443,979	Dec. 30	3816		53	2037
Tobias, William R., Perth Amboy, N. J. Camera	435,080	Aug. 26	2549	672 673	52	1278
Tobie, Walter S., Augusta, Ill. Cartridge-indenter	427,282	May 6	396	103	51	888
Tobiu, Edwin J. (See Vécsey and Davidson, assignors.)						
Tobin, John, Kansas City, Mo. Air-feeding device for furnaces	421,990	Feb. 25	2270	597	50	1020
Tobin, John R., Charleston, S. C. Grinding-mill	440,072	Nov. 4	669	178	53	739
Todd, Archibald E., Providence, R. I. Magneto-electric transmitter	438,870	Oct. 21	1860	494	53	365
Todd, Benjamin F., Allegheny, assignor of one-half to H. F. Ames, Pittsburg, Pa. Mar-line-pin	431,416	July 1	584	147	52	118
Todd, Charles B., Logan, Ohio. Game	443,604	Dec. 30	3228	830	53	1925

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Todd Cotton Harvester Company. (See Todd, George N., assignor.)						
Todd, Edmund N., Newark, N. J., assignor to Celluloid Varnish Company, of New Jersey.	428,654	May 27	2465	627	51	1328
Todd, Elihu, Manchester, Iowa. Gang hay-rake.	422,167	Feb. 25	2536	670	50	1069
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois.						
Cotton-picking device	423,536	Mar. 18	1775	466	50	1489
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois.						
Cotton-picking device	423,537	Mar. 18	1777	466	50	1489
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois.						
Picker-stem and cleaner	423,538	Mar. 18	1778	466	50	1489
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois.						
Combined picker-stem and cleaner	423,539	Mar. 18	1779	467	50	1489
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois.						
Making picker-stems and cleaners	423,540	Mar. 18	1780	467	50	1489
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois.						
Cotton-harvester	423,541	Mar. 18	1781	468	50	1490
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois.						
Cleaner device for cotton-harvesters	423,542	Mar. 18	1782	468	50	1490
Todd, George N., New York, N. Y., assignor to Todd Cotton Harvester Company, of Illinois.	423,885	Mar. 18	2289	604 605	50	1587
Todd, George N., assignor to Todd Cotton Harvester Company, Chicago, Ill. Manufacture of picker-stems for cotton-harvesters	439,794	Nov. 4	247	63	53	657
Todd, George N., assignor to Todd Cotton Harvester Company, Chicago, Ill. Cotton-harvester						
	441,717	Dec. 2	137	36, 37	53	1289
Todd, Marquis J., Corning, N. Y. Spring-tooth harrow						
	436,445	Sept. 16	1668	438	52	1708
Todd, Marquis J., Corning, N. Y. Spring-tooth harrow	438,123	Oct. 7	690	187	53	133
Todd, William, New York, N. Y. Air-valve for steam-radiators.	430,448	June 17	2081	514	51	1894
Toense, Carl G., Cleveland, Ohio. Velocipede.	425,471	Apr. 15	1591	425	51	326
Toeffer, Peter G., Milwaukee, Wis. Apparatus for germinating grain	437,950	Oct. 7	420	118	53	80
Tolbert, Martin L. (See Watson and Tolbert.)						
Toler, John, trustee. (See Livingstone, William, assignor.)						
Toler John, Newark, N. J. Cassier	422,552	Mar. 4	274	69	50	1188
Toler, Robert A., Ladoga, Iowa. Device for cutting potatoes	419,231	Jan. 14	883	232	50	189
Toles, Freeman H., Syracuse, N. Y. Pianissimo device	421,845	Feb. 18	2074	545 546	50	973
Toles, Silas, St. Thomas, Ontario, Canada. Device for setting and jointing saws.	422,467	Mar. 4	156	42	50	1166
Tolfeson, Thomas B., Brownstown, Wis. Coupling-bar for wire-fence rails	438,205	Oct. 14	814	221	53	163
Tollner, Hugo, Brooklyn, N. Y. Metal-bordered glass sign and plate	433,107	July 29	3249	836	52	656
Tolman, Adams K., et al. (See Howe, Patrick, assignor.)						
Tomkins, Alfred S., Holmwood, Caterham, county of Surrey, England. Portable bed or stretcher	419,572	Jan. 14	1368	366 367	50	287
Tomlinson, Frederick C. (See Pessenger, John S., assignor.)						
Tomlinson, James G., Birmingham, Ala. Dumping-car	420,175	Jan. 23	2316	612	50	486
Tomlinson, Joseph, Sr., Folsom, Cal. Wrench	422,662	Mar. 4	447	112	50	1222
Tomlinson, Victor H., Hudson, Colo. Apparatus for distributing motive agents	423,197	Mar. 11	1263	329	50	1384
Tomlinson, William L., et al. (See Hincley, Henry D., assignor.)						
Tommins, Vincent P., New York, N. Y. Dish-cover	423,543	Mar. 18	1784	468	50	1490
Tompkins, Daniel A. (See Vaile, John H., assignor.)						
Tompkins, Daniel A., Charlotte, N. C. Ceiling-block	440,934	Nov. 18	2035	544	53	1027
Tompkins, Daniel A., Charlotte, N. C. Seed-feeding machine	440,935	Nov. 18	2097	544	53	1028
Tompkins, Daniel D., Rochester, N. Y., assignor of one-half to C. B. Rogers & Co., Norwich, Conn. Self-oiling pulley	425,272	Apr. 8	1286	344	51	260
Tompkins, Frank, Penn Yan, N. Y. Combined whip-socket and rein-holder	419,087	Jan. 7	658	170	50	138
Tompkins, John D., Nassau, N. Y. Apparatus for making paper-stock	430,595	June 17	2310	568	51	1937
Tompkins, Myron, Attica, Ohio. Fifth-wheel	419,736	Jan. 21	1615	451	50	341
Toms, Alonzo P., Stamford, Conn. Valve-gear	440,796	Nov. 18	1866	480	53	983
Tomson, William H., London, England. Ice-cream freezer	435,333	Aug. 26	2932	779 780	52	1349
Toner Thomas, and J. E. Carroll, Philadelphia, Pa. Ridge and hip covering for roofs	420,707	Feb. 4	387	103	50	640
Toner Thomas, and J. E. Carroll, Philadelphia, Pa. Metallic shingle	420,708	Feb. 4	388	103	50	641
Toner Thomas, and J. E. Carroll, Philadelphia, Pa. Metallic shingle	424,149	Mar. 25	2687	715	50	1669
Tonks, Joseph, Malden, Mass. Breech-loading gun	435,334	Aug. 26	2935	780	52	1350
Tonnaire, Stéphane, Paris, France. Cuff or collar button	434,683	Aug. 19	1921	501	52	1151
Tonnet, Louis A. A. (See Plumtree and Tonnet.)						
Tonsager, Carl, Moorhead, Minn. Potato-digger	438,963	Oct. 21	1990	531 532	53	391
Tontz, John, Girard, Kans. Grate	436,813	Sept. 23	2279	600	52	1832
Toof, Edwin J., New Haven, Conn. Hem-stitching attachment for sewing-machines	422,553	Mar. 4	275	69, 70	50	1188
Toof, Edwin J., New Haven, Conn. Attachment-holder for sewing-machines	422,554	Mar. 4	276	70	50	1189
Toof, Edwin J., New Haven, Conn. Button-hole cutter	427,245	May 6	346	88	51	878
Toohy, James, Kansas City, Kans. Dirt conveyer and grader	432,915	July 22	2916	747 748	52	588
Toole, Charles O., Dubuque, Iowa. Boiler	432,456	July 15	2202	568	52	442
Toomey, Daniel F., Dunkirk, N. Y. Hose-clamp	427,132	May 6	169	44	51	845
Toomey, Frederick, Baltimore, Md. Well-bucket-rope holder	430,409	June 17	2031	500	51	1884
Toothe, William. (See Maher, William E., assignor.)						
Topham, Charles. (See Armitage and Topham.)						
Topham, George, Washington, D. C. Purse	443,880	Dec. 30	3652	941	53	2007
Topliff, Isaac N., Cleveland, Ohio. Carriage-how	423,460	Mar. 18	1660	438	50	1468
Toquet, Benjamin H., Westport, Conn. Calipers and dividers	434,742	Aug. 19	2006	523	52	1167
Toquet, Benjamin L., Westport, Conn. Velocipede	425,837	Apr. 15	2133	569	51	432
Torkelson, Reinhard T., Hatfield, Mass. Ball-bearing	428,577	May 20	2341	593	51	1286
Torkelson, Reinhard T., Hatfield, assignor to J. B. McCune and J. L. Yost, Everett, Mass. Bicycle	426,402	Apr. 22	2994	785	51	611
Tormey, Bernard, New York, N. Y. Cork-extractor	441,604	Nov. 25	3194	822	53	1244
Tormey, Patrick. (See Marshall, Ianthus E., assignor.)						
Torney, James H. (See Reynolds, Humphrey H., assignor.)						
Torrance, Charles E., Holyoke, Mass. Elevator	441,718	Dec. 2	139	38	53	1289
Torrance, George J., Kearney, N. J. Machine for balling slivers	430,900	June 24	2825	693 694	51	2044
Torrey, Augustus, Detroit, assignor of two-thirds to C. Moore and D. J. Casey, Bay City, Mich. Passenger-recorder	432,003	July 8	1510	383 384	52	304
Torrey, Emerson W., et al. (See Dés Lauries, Charles H., assignor.)						
Torrey, Francis B., Bath, Me. Sheave	437,530	Sept. 30	3457	903	52	2066

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Torrey, Francis B., Bath, Me. Side-light for vessels	439,312	Oct. 28	2570	686	53	507
Torrey, Frank H., <i>et al.</i> (See Dés Lauries, Charles H., assignor.)						
Torrey, James W. (See Hollar and Holmes, assignors.)						
Torrey, Joseph R., Worcester, Mass. Razor-strop	429,293	June 3	281	67	51	1524
Torreyson, F. W., <i>et al.</i> (See Ordner, Joseph F., assignor.)						
Tortora, Eugenio, Florence, Italy. Electric conductor	425,917	Apr. 15	2249	596	51	453
Tostenson, Christian, <i>et al.</i> (See Abrams, Gustav, assignor.)						
Totten, Robert C., Allegheny, Pa. Casting	420,646	Feb. 4	316	82	50	626
Totzauer, Richard, Kansas City, Mo. Mangle	438,206	Oct. 14	815	221	53	163
Toucey, Ferris D., Minneapolis, Minn. Piston-rod packing	424,909	Apr. 1	733	196	51	141
Toucey, Ferris D., assignor of two-thirds to G. S. Grimes and C. Cutler, Minneapolis, Minn. Piston-rod packing	424,662	Apr. 1	349	92	51	67
Toucey, Ferris D., assignor of two-thirds to F. Dunham and F. C. Johnson, Minneapolis, Minn. Piston-rod packing	441,452	Nov. 25	2960	763	53	1199
Touchstone, Jonas C., and J. M. Worthington, Lovelady, Tex. Quilting-frame for sewing-machines	436,508	Sept. 16	1757	464	52	1725
Toulmin, Morton, Baltimore, Md. Electric railway-gate	423,886	Mar. 18	2291	605	50	1587
Toulmin, Morton, Baltimore, Md., assignor of one-half to W. P. Leonard and G. W. Warren, Evansville, Ind. Pneumatic street-car propulsion	440,666	Nov. 18	1643	{ 423 424 }	53	942
Toulouse, Bernard, and J. Deloroux, San Francisco, Cal. Welding and upsetting machine	430,710	June 24	2521	617	51	1986
Toussangu, Ernest, La Forest Saint Florente, France, assignor to L. Durand, New York, F. A. Reid and J. H. Colyer, Brooklyn, N. Y. Hot-blast oven	423,357	Mar. 11	1504	{ 394 395 }	50	1429
Towar, George W., Jr., Detroit, Mich. Machine for testing milk and cream	431,123	July 1	140	36	52	30
Tower, Adelbert A., Detroit, Mich. Bench-dog	418,771	Jan. 7	171	41	50	38
Tower, Caleb E., assignor to Economist Plow Company, South Bend, Ind. Plow	442,671	Dec. 16	1622	418	53	1597
Tower, Caleb E., assignor to Economist Plow Company, South Bend, Ind. Sulky-plow	442,672	Dec. 16	1623	{ 418 419 }	53	1597
Tower, Caleb E., assignor to Economist Plow Company, South Bend, Ind. Sulky-plow	442,673	Dec. 16	1626	{ 419 420 }	53	1598
Tower, George A., Richmond, Va. Electric railway-signal	426,222	Apr. 22	2736	717	51	556
Tower, George A., Richmond, Va. Electric signal for railways	436,025	Sept. 9	993	260	52	1572
Tower, John J. (See Krauter, August, assignor.)						
Tower, Oscar, Wilson, N. Y. Harrow	434,962	Aug. 26	2377	630	52	1246
Towle, Charles B., Vallejo, Cal. School-desk	436,642	Sept. 16	1977	518	52	1764
Towle, George C., Hyde Park, Mass. Forming smooth surfaces on wood pulp	424,513	Apr. 1	112	32	51	25
Towle, George C., Hyde Park, Mass., assignor to Pope Manufacturing Company, Portland, Me. Stand for bicycles	418,829	Jan. 7	262	64	50	56
Towler, Edward T., Chicago, Ill. Case for preserving whalebone	438,296	Oct. 14	964	261	53	189
Towne, Charles D. (See Keith, Ethan B., assignor.)						
Towne, Charles D., Galesburg, Mich. Elevator for harvesters	423,290	Mar. 11	1420	368	50	1412
Towne, Henry R., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock	419,384	Jan. 14	1107	292	50	233
Towne, Nathan P., Washington, D. C. Steam-generator	424,514	Apr. 1	113	32	51	25
Townsend, Arthur, Philadelphia, Pa., assignor to Nye & Tredick. Knitting-machine	431,417	July 1	585	{ 147 148 }	52	118
Townsend, Charles D., Windham, N. Y. Convertible wagon-jack or shaft-holder	420,478	Feb. 4	80	18	50	579
Townsend, Clark P. (See Montgomery and Townseud.)						
Townsend, Eli C., New York, assignor of one-half to E. W. Vanderbilt, Brooklyn, N. Y. Cuff-holder	421,637	Feb. 18	1789	468	50	920
Townsend, Frederick E. (See Townsend, Andrews, and Townsend.)						
Townsend, George G., Frostburg, Md. Pin-pulling machine for coal-cars	423,500	Mar. 18	1718	453	50	1479
Townsend, Harry S., and G. A. Schneebeli, Nazareth, Pa. Stopping mechanism for knitting-machines	436,010	Sept. 9	970	{ 254 255 }	52	1568
Townsend, Henry E., trustee. (See MacDonald, Archibald J., assignor.)						
Townsend, Joseph H. (See McDonald, Neil, assignor.)						
Townsend, Nina H., executrix, <i>et al.</i> (See Purdy, Ormond E., assignor.)						
Townsend, Samuel, A. Andrews, and F. E. Townsend, Luton, England. Railway-signal	442,152	Dec. 9	830	222	53	1432
Townsend, Samuel L., Ohio, Colo. Amalgamator	431,294	July 1	394	99	52	81
Townsend, William W., Sr., Minneapolis, Minn. Car-coupling	420,923	Feb. 4	745	191	50	705
Townsend, Wisner H., New York, N. Y. Oil-cloth-printing machine	433,306	Dec. 23	2762	708	53	1824
Tozer, Maria E., Brooklyn, N. Y. Glove-adjuster	427,133	May 6	170	45	51	845
Tozer, Emma L., Canandaigua, N. Y. Invalid's under-garment	429,665	June 10	852	207	51	1646
Tozer, James H. and W., London, England. Child's carriage	432,097	July 15	1661	{ 426 427 }	52	339
Tozer, William. (See Tozer, James H. and W.)						
Traber, Shoon, assignor of two-thirds to G. T. Matthews and H. Flachman, St. Louis, Mo. Machine for making lead pipe	419,573	Jan. 14	1369	367	50	288
Träbert, Friedrich, Rathenow, Germany. Centering	431,628	July 8	915	230	52	190
Tracey, George S., <i>et al.</i> (See Hill, Andrew G., assignor.)						
Tracey, John F., New York, N. Y. Pipe-covering	438,507	Oct. 14	1259	341	53	248
Trackler, George F. (See Aurand and Trackler.)						
Tracy, Christopher C., Brooklyn, N. Y. Die for lead-presses	431,225	July 1	396	100	52	81
Tracy, Christopher C., Brooklyn, N. Y. Lead-press	439,986	Nov. 4	551	145	53	715
Tracy, George S. (See Galt, Thomas A., assignor.)						
Tracy, George S. (See Galt and Tracy.)						
Tracy, Harriet R., New Brighton, N. Y. Elevator	434,849	Aug. 19	2156	565	52	1197
Tracy, John H., Parma, N. Y. Machine for making wire fence	438,450	Oct. 14	1186	{ 321 322 }	53	233
Tracy, John M. (See Hodges and Tracy.)						
Tracy, Lewis W. (See Adams and Tracy.)						
Tracy, Lewis W., assignor of two-thirds to J. E. Granniss, New York, N. Y. Evaporating apparatus	420,749	Feb. 4	444	118	50	651
Tracy, Lewis W., assignor of one-half to J. E. Granniss, New York, N. Y. Machine for covering insulated conducting-wire with lead	434,007	Aug. 12	836	220	52	928
Tracy, Lewis W., assignor of one-half to J. E. Granniss, New York, N. Y. Machine for covering insulated conducting-wire with lead	434,008	Aug. 12	837	220	52	928
Tracy, William P., Grand Rapids, Mich., assignor to G. N. Davis and A. Meigs. Cabinet-bedstead	422,555	Mar. 4	277	70	50	1189
Tracy, William P., Grand Rapids, Mich., assignor to A. Meigs and G. N. Davis. Cabinet or folding bedstead	439,444	Oct. 28	2764	736	53	543
Tracy, William P., assignor of two-thirds to W. R. Shelby and A. M. Amberg, Grand Rapids, Mich. Extension car-step	430,449	June 17	2083	514	51	1894
Trafton, Charles, Yankee Jim's, Cal. Gold-saving device	430,305	June 17	1875	461	51	1854
Trammell, John W., Lakeland, Fla. Railway cattle-guard	427,936	May 13	1388	351	51	1091

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Trapp, Charles C., Port Washington, Wis. Revolving chair.....	424,083	Mar. 25	2599	692	50	1653
Trapp, Charles C., Port Washington, Wis. Chair or seat iron.....	431,536	July 1	777	193	52	155
Trapp, Charles C., assignor, by mesne assignments, to J. Trapp, Port Washington, Wis. Revolving chair.....	434,743	Aug. 19	2007	524	52	1167
Trapp, Edward A., Brooklyn, N. Y. Coaling device for railway-trains.....	457,735	Oct. 7	88	29	53	20
Trapp, Johanna. (See Trapp, Charles C., assignor.)						
Trapp, Ludwig, Göttingen, Germany. Head or cover for cylinders.....	423,291	Mar. 11	1421	369	50	1412
Trask, Ambrose. (See Donnelly, McLaren, and Trask.)						
Trask, Charles H., Lynn, Mass. Milling-tool.....	436,323	Sept. 9	1460	380	52	1661
Trask, Charles H., Lynn, Mass. Gear.....	436,324	Sept. 9	1460	381	52	1662
Trask, Charles H., Lynn, Mass., assignor to Trask Milling Machine Company, Portland, Me. Milling-machine.....	422,663	Mar. 4	448	{ 113 114 }	{ 50 50 }	{ 1222 1222 }
Trask Milling Machine Company. (See Trask, Charles H., assignor.)						
Trask, Newton B. (See Heine and Trask.)						
Trask, Wilher C., assignor of three-fourths to Chickasaw Saddlery Company, Memphis, Tenn. Attachment for sewing-machines for sewing loops to fabrics.....	436,026	Sept. 9	994	260	52	1572
Traub, Emil, and F. Peters, Newark, N. J. Button.....	430,306	June 17	1876	461	51	1854
Traut & Hine Company. (See Pilkington, George B., assignor.)						
Traut & Hine Company. (See Richards, Francis H., assignor.)						
Traut & Hine Manufacturing Company. (See Richards, Francis H., assignor.)						
Trant, Justus A., New Britain, Conn. Bottle-opener.....	431,086	July 1	83	21	52	19
Trant, Justus A., New Britain, Conn. Key-chain.....	431,859	July 8	1307	327	52	264
Trant, Justus A., New Britain, Conn. Button.....	437,874	Oct. 7	308	92	53	60
Trant, Justus A., New Britain, Conn. Buckle.....	442,153	Dec. 9	831	222	53	1432
Trant, Justus A., New Britain, Conn. Trousers-stretcher.....	442,926	Dec. 16	2097	540	53	1688
Trant, Justus A., New Britain, Conn. Buckle.....	443,245	Dec. 23	2654	681	53	1805
Trant, Justus A., assignor to Stanley Rule and Level Company, New Britain, Conn. Spirit-level.....	421,786	Feb. 18	1981	521	50	956
Trant, Justus A., assignor to Stanley Rule and Level Company, New Britain, Conn. Bevel.....	422,852	Mar. 4	715	183	50	1274
Trant, Justus A., assignor to Stanley Rule and Level Company, New Britain, Conn. Spirit-level.....	423,969	Mar. 25	2435	647	50	1621
Trant, William, <i>et al.</i> (See Kntz, John A., assignor.)						
Traver, Adelbert L., Philmont, N. Y. Stitch breaking and raveling attachment for machines for sewing looped fabrics.....	431,957	July 8	1442	365	52	290
Traver, Adelbert L., Philmont, N. Y. Machine for sewing looped fabrics.....	433,880	Aug. 5	655	170	52	885
Travers, Vincent P. (See Boyum, John S., assignor.)						
Travis, Albertus, Gloversville, N. Y. Machine for coloring skins.....	441,991	Dec. 2	561	{ 151 152 }	{ 53 53 }	{ 1373 1373 }
Travis, Charles L. (See Goodson, Capehart, and Travis.)						
Travis, Charles L., assignor to Minneapolis Electro-Matrix Company, Minneapolis, Minn. Attachment for type-writing machines.....	427,715	May 13	1040	261	51	1026
Travis, Charles L., assignor to Minneapolis Electro-Matrix Company, Minneapolis, Minn. Producing type-dies.....	427,716	May 13	1042	261	51	1026
Travis, Charles L., assignor to Minneapolis Electro-Matrix Company, Minneapolis, Minn. Matrix-machine.....	427,717	May 13	1043	{ 261 262 }	{ 51 51 }	{ 1027 1027 }
Travis, Edward J., Paris, Tenn. Harrow.....	440,854	Nov. 18	1966	506	53	1002
Travis, Owen J., Marshalltown, Iowa. Railway cattle-guard.....	443,554	Dec. 30	3148	810	53	1909
Travis, Samuel G., Leavenworth, Kans. Station-indicator.....	441,719	Dec. 2	144	39	53	1290
Travous, Charles N. (See Scott, John W. L., assignor.)						
Traxler, Charles, <i>et al.</i> (See Guinter, Ferdinand, assignor.)						
Traynor, John J., Louisville, Ky. Harness-saddle.....	428,655	May 27	2467	628	51	1328
Treadwell, George H. (See Anable, Henry B., assignor.)						
Treat, James E., Boston, Mass. Key-desk for organs.....	419,737	Jan. 21	1617	431	50	341
Treat, James E., Boston, Mass. Pneumatic action for organs.....	428,706	May 27	2558	648	51	1345
Treat, Orion, Manchester, Conn. Latch-needle for knitting-machines.....	427,134	May 6	171	45	51	845
Treber, John M., Louisville, Ky. Telegraphic relay.....	432,098	July 15	1662	427	52	339
Trecy, Laurence J., assignor to Smoke Consuming Furnace Company, St. Louis, Mo. Smoke-consuming furnace and ventilator.....	441,605	Nov. 25	3195	{ 822 823 }	{ 53 53 }	{ 1244 1244 }
Tredick, Edward, <i>et al.</i> (See Nye, Frank A., assignor.)						
Trego, Albert, Washington, D. C. Combined pencil tip and sharpener.....	441,384	Nov. 25	2847	735	53	1177
Trego, Joseph R., assignor of one-half to H. C. Owens, San Francisco, Cal. Photographic shutter.....	422,664	Mar. 4	451	114	50	1222
Tregoning, Charles D., <i>et al.</i> (See Tregoning, Thomas H., assignor.)						
Tregoning, John. (See Anderson and Tregoning.)						
Tregoning, John. (See Lemp and Tregoning.)						
Tregoning, John, <i>et al.</i> (See Tregoning, Thomas H., assignor.)						
Tregoning, John, Lynn, Mass. Self-oiling box or journal.....	421,991	Feb. 25	2271	598	50	1020
Tregoning, Thomas H., Cambrone, county of Cornwall, England, assignor to J. and C. D. Tregoning, Lynn, Mass. Ore-pulverizer.....	424,515	Apr. 1	114	33	51	25
Tregurtha, Alfred T., Everett, assignor of one-half to H. A. Clark, Boston, Mass. Ceiling-block for incandescent-electric lamps.....	433,915	Aug. 5	701	182	52	893
Tregurtha, George E., Malden, Mass. Sectional steam-boiler.....	425,013	Apr. 8	901	238	51	183
Tregurtha, George E., Malden, Mass. Steam-boiler.....	429,252	June 3	212	53	51	1513
Tregurtha, James, Malden, Mass. Letter-box.....	433,665	Aug. 5	333	85	52	821
Treiber, Christian C. (See Reichard, J. G. Ernst, assignor.)						
Tremain, Charles W., Portland, Ore. Steam ore-stamp.....	436,027	Sept. 9	996	261	52	1572
Tremain, Charles W., Portland, Ore. Ore-concentrator.....	437,875	Oct. 7	309	92	53	60
Tremain, Charles W., Portland, Ore., assignor to Prospective Mining and Machinery Company, of Oregon. Automatic cut-off valve.....	421,453	Feb. 18	1504	390	50	865
Tremain, Charles W., Portland, Ore., assignor to Prospective Mining and Machinery Company, of Oregon. Amalgamator.....	429,823	June 10	1084	266	51	1690
Tremain, Henry A., assignor to Standard Carbon Company, Cleveland, Ohio. Apparatus for manufacturing electric-light carbons.....	426,479	Apr. 29	3122	820	51	644
Trembath, Humphrey, Ewart, Mich. Sand-band.....	428,870	May 27	2796	711	51	1393
Tremblay, Eucher. (See Gale and Tremblay.)						
Tremble, Hiram S., Moab, Utah Ter. Washing-machine.....	441,606	Nov. 25	3196	823	53	1245
Tremper, Frank E., <i>et al.</i> (See Nichols, Emory I., assignor.)						
Trench, Ira J., assignor of one-half to C. A. Boardman, Middletown, Conn. Potato-digger.....	434,263	Aug. 12	1245	{ 322 323 }	{ 52 52 }	{ 1009 1009 }
Trenner, Alfred B., assignor to National Fly Paper Company, Cincinnati, Ohio. Sticky fly-paper.....	431,537	July 1	779	{ 193 194 }	{ 52 52 }	{ 155 155 }
Trent, Eugene F., Jersey City, N. J. Lamp-burner.....	420,584	Feb. 4	220	57	50	607
Trent, Eugene F., Jersey City, N. J. Gas-burner.....	427,379	May 6	524	133	51	915
Trent, Eugene F., Jersey City, N. J. Heater.....	433,705	Aug. 5	389	99	52	831

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Trenton Watch Company. (See Byam, Sowell T. J., assignor.)						
Trenton Watch Company. (See Potter, Albert H., assignor.)						
Treon, Harry H., <i>et al.</i> (See Musick, William, assignor.)						
Trethewey, Samuel, Pittsburg, Pa. Machine for cutting circular plates	429,072	May 27	3101	800	51	1451
Trice, Tandy H., St. Joseph, Mo. Line-check	440,667	Nov. 18	1644	424	53	943
Trickett, Edward, Kansas City, Mo. Brake for vehicles	431,418	July 1	587	148	52	119
Trickett, Edward, Kansas City, Mo. Brake for vehicles	431,419	July 1	591	149	52	119
Trickett, Edward, Kansas City, Mo. Brake for vehicles	431,420	July 1	593	149	52	120
Tricycle Manufacturing Company. (See Grant, Arthur W., assignor.)						
Trimble, Ada M., Greensburg, Ind. Table and ironing-board	437,264	Sept. 30	3027	794	52	1981
Trimble, John S., and W. M. Kirkpatrick, Shelby, Ohio; said Kirkpatrick assignor to said Trimble. Nut-lock	428,183	May 20	1745	441	51	1171
Trimble, William P., Covington, Ky. Brake for railway-vehicles	437,531	Sept. 30	3457	903	52	2066
Trimont Manufacturing Company. (See Ely, Edward O., assignor.)						
Tripp, Chester L., New Bedford, Mass. Straining-pin for piano-fortes	442,557	Dec. 9	1456	373	53	1554
Tripp, George E., Chelsea, Mass. Twine-cutter	425,194	Apr. 8	1178	312	51	239
Tripp, Henry A. (See Barber and Tripp.)						
Tripp, Henry A. and W., Sodus, N. Y. Apple-parer	440,338	Nov. 11	1093	{ 280 281 }	53	829
Tripp, James M., <i>et al.</i> (See Hastings, John B., assignor.)						
Tripp, John W., assignor of one-half to R. N. Marrow, Sedalia, Mo. Toy	441,720	Dec. 2	145	39	53	1290
Tripp, Jonathan, assignor of two-thirds to W. M. Tripp and A. D. Miller, Stockholm Depot, N. Y. Bench-vise	435,954	Sept. 9	893	235	52	1552
Tripp Manufacturing Company. (See Tripp, Thomas, assignor.)						
Tripp, Milton, R., <i>et al.</i> (See Tripp, Sidney R., assignor.)						
Tripp, Sidney R., assignor to V. L. and M. R. Tripp, Hammondsport, N. Y. Pole and yoke coupling for vehicles	435,871	Sept. 2	753	202	52	1521
Tripp, Thomas, Avon, assignor to Tripp Manufacturing Company, Boston, Mass. Anti-friction bearing	439,283	Oct. 28	2512	673	53	496
Tripp, Thomas, Avon, assignor to Tripp Manufacturing Company, Boston, Mass. Anti-friction journal-box	439,284	Oct. 28	2513	674	53	496
Tripp, Vincent L., <i>et al.</i> (See Tripp, Sidney R., assignor.)						
Tripp, Walter. (See Tripp, Henry A. and W.)						
Tripp, William M., <i>et al.</i> (See Tripp, Jonathan, assignor.)						
Trissal, William T., assignor of two-thirds to M. F. Cox, Indianapolis, and P. C. Swiggett, Lebanon, Ind. Car-axle boxing	427,640	May 13	921	231	51	1003
Triumph Compound Engine Company. (See Eickershoff, John H., assignor.)						
Triumph Heat and Light Company. (See Carsley, Robert B., assignor.)						
Trivick, Sidney, Clapham, England. Furnace for roasting ores	434,744	Aug. 19	2008	{ 524 525 }	52	1167
Trivick, Sidney, London, England. Apparatus for treating ores to obtain precious metals therefrom	442,262	Dec. 9	984	{ 259 260 }	53	1462
Troemner, Henry. (See Schmidt, Joseph G., assignor.)						
Troendle, Theodore R., Batavia, Ill. Striping attachment for paper-bag machines	428,184	May 20	1746	442	51	1171
Troendle, Theodore R., Batavia, Ill. Printing attachment for paper-bag machines	440,380	Nov. 11	1156	298	53	841
Trogon, Samuel L., Greensborough, N. C. Inkstand	430,711	June 24	2523	618	51	1986
Troné, Pierre G., New Orleans, La. Adding-machine	422,853	Mar. 4	716	194	50	1275
Trost, Philipp, assignor of one-half to J. Graef, New York, N. Y. Apparatus for cutting and trimming spiles	418,993	Jan. 7	524	131	50	110
Trott, John R., Morrisonville, Ill. Vaginal syringe	442,558	Dec. 9	1457	{ 373 374 }	53	1555
Trott, Samuel, Halifax, Canada. Electric railway	440,906	Nov. 18	2045	529	53	1018
Trotter, Charles W., Rochester, N. Y. Latch	420,365	Jan. 28	2604	692	50	539
Trotter, Charles W., Rochester, N. Y. Refrigerator	433,606	Aug. 5	246	66	52	804
Trouard, Alcide P. (See Soniat and Trouard.)						
Trowbridge, Charles E., assignor to Whitinsville Spinning Ring Company, Whitinsville, Mass. Traveler-clearer	438,659	Oct. 21	1496	404	53	300
Trowbridge, Charles E., assignor to Whitinsville Spinning Ring Company, Whitinsville, Mass. Spinning-ring	438,660	Oct. 21	1496	404	53	300
Trowbridge, Frank C., assignor of one-half to M. J. Mara, Syracuse, N. Y. Carpet-stretcher	419,979	Jan. 21	1996	525	50	417
Trowbridge, John H., assignor of one-half to E. R. Parsil, Newark, N. J. Ruffler for sewing-machines	423,399	Mar. 11	1566	412	50	1442
Troxel, Daniel C., Nankin, Ohio. Reversible harrow-tooth holder	428,185	May 20	1747	442	51	1171
Troxler, Gustavus, Jr., assignor of one-half to H. W. Gedicke, Newark, N. J. Lacting-stud	442,277	Dec. 9	1007	266	53	1466
Troy Button Hole Company. (See Randel, William and C. D., assignors.)						
Troy, Daniel S. (See Davis, John S., assignor.)						
Troy Laundry Machinery Company. (See Downs, George N., assignor.)						
Troy Laundry Machinery Company. (See Roberts, George C., assignor.)						
Truax, Charles H. (See Allen, Eugene E., assignor.)						
Truax, Charles H., Chicago, Ill. Surgeon's case	435,108	Aug. 26	2591	684	52	1286
Truax, Charles H., Chicago, Ill. Amputating-saw	437,876	Oct. 7	310	92	53	60
Truax, Charles H., Chicago, Ill. Clamp for bedding	437,877	Oct. 7	311	92	53	61
Truax, Charles H., Chicago, Ill. Tongue-depressor	438,330	Oct. 14	1010	274	53	199
Truax, Charles H., Chicago, Ill. Surgical-needle holder	439,910	Nov. 4	427	110	53	698
Truax, Jacob W., Essex Junction, Vt. Millstone-pick	431,789	July 8	1191	298	52	241
Trudeau, Sefrois. (See Diamond and Trudeau.)						
True, Harold H., assignor of one-half to D. S. Shellabarger, Sioux City, Iowa. Screw-driver	430,901	June 24	2828	694	51	2045
True, Lorenzo L., Bismarck, N. D. Electric release for target-traps	433,554	Aug. 5	168	45	52	789
True, Moses E., Batavia, N. Y. Crosscut saw handle	420,479	Feb. 4	80	19	50	579
True, Moses E., Batavia, N. Y. Crosscut-saw handle	420,480	Feb. 4	81	19	50	579
True, Moses E., Batavia, N. Y. Saw-handle	422,468	Mar. 4	157	42	50	1166
Trueheart, Powhatan P., and M. S. Kimball, Sterling, Kans. Apparatus for heating and settling brine, &c.	432,457	July 15	2203	568	52	442
Trueman, William H., Philadelphia, Pa. Lens-tube for photographic apparatus	435,335	Aug. 26	2937	780	52	1350
Trullender, Frederick, Salem, assignor to I. H. Cox & Co., Bridgeton, N. J. Can-soldering machine	421,331	Feb. 11	1339	{ 346 347 }	50	826
Trulsen, William F., assignor of one-half to V. Brickell, New York, N. Y. Labyrinth-puzzle	427,283	May 6	397	103	51	889
Truman, Edgar H., Wilmington, Del. Toy	431,421	July 1	596	149	52	120
Truman, John A., Grand View, Mo. Reel for wire	438,718	Oct. 21	1595	428	53	317

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Trumble, Chauncey B., Groton, N. Y. Jaw-trap.....	418,772	Jan. 7	172	42	50	38
Trumble, Henry E., Kalamazoo, Mich. Water-motor.....	431,156	July 1	183	47	52	38
Trumble, Henry E., Kalamazoo, Mich., assignor of one-half to V. H. Higgins, Chicago, Ill. Steam-engine.....	424,439	Mar. 25	3159	838	50	1762
Trumbore, George S., Pennsburg, Pa. Cuspidor-lifter.....	441,721	Dec. 2	146	39	53	1290
Trumbore, George S., Pennsburg, Pa. Spittoon-lifter.....	443,706	Dec. 30	3393	871	53	1955
Trumbull, John, Valparaiso, Chili. Puzzle.....	438,661	Oct. 21	1497	404	53	300
Trump, Charles N., Wilmington, Del. Apparatus for making coke and gas.....	436,882	Sept. 23	2436	636	52	1862
Trump, Edward N., and D. W. Pock, Syracuse, N. Y. Establishing units of measure in compounding Portland cement.....	427,380	May 6	525	.....	51	915
Trump, John G., assignor of twelve-thirteenths to E. H. Taylor, R. V. Bray, R. Preston, J. C. Loss, R. Morris, Vassar, P. J. Trump, J. Jordan, C. Hildner, Richville, M. Reichle, G. Reid, Reese, W. Hoover, Tuscola, and S. M. Haight, Demuark, Mich. Two-wheeled vehicle.....	433,833	Aug. 5	590	153	52	871
Trump, Paul J., <i>et al.</i> (See Trump, John G., assignor.)						
Trumper, Oliver. (See Doubrain and Trumper.)						
Trunkay, Ida J., administratrix. (See McLachlan, John, assignor.)						
Truss, Esau, assignor of one-half to B. F. Butler, Osceola, Ark. Cotton-planter.....	429,102	May 27	3153	813	51	1462
Tryon, Ira B., Hebron, Ill. Bag-holder.....	440,073	Nov. 4	670	178	53	739
Tryon, James E., Detroit, Mich. Apparatus for opening shutters.....	422,665	Mar. 4	452	115	50	1223
Tryon, Philo N. (See Adams and Tryon.)						
Tryon, Philo N., San Francisco, Cal. Hat-fastener.....	437,878	Oct. 7	312	93	53	61
Tschira, Arnold, Freiburg, Germany. Electric alarm.....	437,369	Sept. 30	3208	835	52	2014
Tubach, Emil F., Dushore, Pa. Curtain-fixture.....	433,057	July 29	3167	815	52	640
Tubb, James E., <i>et al.</i> (See Sperry, Fred. W., assignor.)						
Tubbs, Nelson J., Philadelphia, Pa. Brick-press.....	420,128	Jan. 28	2234	591	50	472
Tubbs, Nelson J., assignor of one-half to D. Scull, Philadelphia, Pa. Steam-engine.....	428,656	May 27	2468	592	51	1329
Tubular Rivet Company. (See Bray and Van Horne, assignors.)						
Tuchfarber, Frank. (See Du Bois, Adolph, assignor.)						
Tuck, Josiah H. L., San Francisco, Cal. Subsoil irrigator and fertilizer.....	434,814	Aug. 19	2109	552	52	1188
Tuck, Nelson L., Philadelphia, Pa. Railway-switch.....	419,980	Jan. 21	1997	525	50	417
Tucker, Arthur M., and C. W. Smith, Kinsey, Ohio. Bundle-tie.....	418,994	Jan. 7	525	131	50	111
Tucker, Charles A., Islip, N. Y. Arc lamp.....	436,465	Sept. 16	1695	446	52	1714
Tucker, Francis M., Oxford, Ohio. Coal vase or holder.....	421,787	Feb. 18	1982	521	50	956
Tucker, Frank. (See Gilman, Charles A., assignor.)						
Tucker, George H., San Francisco, Cal. Die for making lathing.....	435,986	Sept. 9	939	247	52	1562
Tucker, George W. (See Roorbach and Tucker.)						
Tucker, George W., Waterville, Conn. Wardrobe-hook.....	425,918	Apr. 15	2250	596	51	453
Tucker, James A., Leominster, Mass. Shuttle operating mechanism for looms.....	434,533	Aug. 19	1667	436	52	1102
Tucker, Joseph, near Elysian Fields, Tex., assignor to Tucker Poison Distributor, Cotton Worm and Insect Destroying Machine Company, (Limited,) Shreveport, La. Paris-green distributor.....	433,426	July 29	3697	955	52	748
Tucker, Joseph E., <i>et al.</i> (See Newhall, John F., assignor.) (Reissue.)						
Tucker Poison Distributor, Cotton Worm and Insect Destroying Machine Company. (See Tucker, Joseph, assignor.)						
Tucker, Rollin D., Boston, Mass. Clasp or locking mechanism for travelers bags.....	427,641	May 13	922	231	51	1003
Tucker, Stephen D., New York, N. Y. Stereotype-plate holder.....	436,028	Sept. 9	996	261	52	1573
Tucker, Stephen D., New York, N. Y. Delivery apparatus for printing-machines.....	441,453	Nov. 25	2963	763	53	1200
Tucker, Stephen D., New York, N. Y. Delivery mechanism for web-printing machines.....	441,811	Dec. 2	289	78, 79	53	1320
Tucker, William E., Jackson, Ga. Planter and fertilizer distributor.....	442,499	Dec. 9	1358	348	53	1535
Tucker, William L., Syracuse, N. Y. Apparatus for applying irritants.....	426,609	Apr. 29	3310	898	51	681
Tuckwell, William T. (See Richards, George C., assignor.)						
Tudor, James H., Lexington, Ky. Gate.....	425,273	Apr. 8	1287	344	51	260
Tuerk, Frederick W., Jr., Syracuse, assignor of two-thirds to J. C. and J. Hunter, Sterling Valley, N. Y. Fan.....	420,024	Jan. 21	2065	544	50	430
Tuerk, Frederick W., Jr., assignor of two-thirds to J. C. Hunter, Syracuse, and J. Hunter, Sterling Valley, N. Y. Fan.....	423,839	Mar. 18	2217	585	50	1573
Tuerk, Samuel O., Syracuse, assignor to Acme Burnishing Company, Fulton, N. Y. Burnisher.....	427,937	May 13	1389	351	51	1091
Tufts, Arthur W., <i>et al.</i> (See Brennen, George J., assignor.)						
Tufts, James W. (See Adam, Conrad, assignor.)						
Tufts, James W. (See Marshall, William H., assignor.)						
Tufts, James W. (See White, James E., assignor.)						
Tufts, James W., Medford, and J. Ramsey, Boston, Mass.; said Ramsey assignor to said Tufts. Soda-water-dispensing apparatus.....	431,491	July 1	705	177	52	141
Tufts, William H., Washington, D. C. Fish-line sinker.....	418,995	Jan. 7	525	131	50	111
Tull, Robert M. and T. E., Windsor, Ill. Punch.....	422,666	Mar. 4	454	115	50	1223
Tull, Thomas E. (See Tull, Robert M. and T. E.)						
Tulloch, Alexander E., assignor to himself and L. Greenwald, Leadville, Colo.* Whips-socket support.....	440,447	Nov. 11	1286	333	53	865
Tulloch, James, Angel's Camp, Cal. Ore-concentrator.....	443,171	Dec. 23	2515	643	53	1776
Tully, Andrew R., assignor of one-half to J. H. Eggers, New York, N. Y. Canopy-top-curtain fastening.....	440,074	Nov. 4	671	178	53	739
Tully, Milton C., Louisville, Ky. Sash-fastener.....	425,528	Apr. 15	1670	445	51	342
Tunny, Patrick J., Wheaton, Ill. Potato-digger.....	441,783	Dec. 2	241	63, 64	53	1311
Tunte, Henry, Cleveland, Ohio. Manufacturing flour.....	440,975	Nov. 18	2158	559	53	1039
Tuquet, Marcel, M. Boudard, and C. H. Crawley, Nottingham, England. Driving-belt fastener.....	436,678	Sept. 16	2040	533	52	1777
Turbeville, De Kalb, <i>et al.</i> (See Mays, James F., assignor.)						
Turck, Fred M., Chicago, Ill. Stand for tablets or calendars.....	433,635	Aug. 5	282	76	52	811
Turck, Robert I., assignor of one-half to G. A. Fitton, Geneva, N. Y. Sash-fastener.....	432,004	July 8	1513	384	52	304
Türcke, Otto, Dresden, Saxony, Germany. Gearing for spring-vehicles, especially for street-watering carts.....	424,235	Mar. 25	2803	748	50	1693
Turley, Marshall, G. W. Chamberlin, and P. M. Pomeroy, Council Bluffs, Iowa. Composition of matter for mortar.....	434,490	Aug. 19	1602	.....	52	1090
Turnbull, Brisbane M., East Pascagoula, Miss. Ventilator.....	426,883	Apr. 29	3727	973	51	761
Turnbull, George A., and W. Walters, Chicago, Ill. Furnace.....	424,039	Mar. 25	2536	676	50	1641
Turnbull, James A., Essex County, N. J. Fastening or clasp device.....	423,000	Mar. 11	973	256	50	1329
Turnbull, James A., Essex County, N. J. Clasp.....	424,516	Apr. 1	115	33	51	26
Turnbull, James A., Essex County, N. J. Fastening device.....	425,115	Apr. 8	1040	277	51	210

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Turnbull, James A., Newark, N. J. Washer	440,870	Nov. 18 1986	512	53	53	1006
Turnbull, Joseph, and E. W. Farwell, Minneapolis, Minn. Snow-road machine	434,963	Aug. 26 2378	630	52	52	1247
Turnbull, William F., assignor of one-half to G. B. West, Newport News, Va. Cocoonut-grater	425,472	Apr. 15 1592	425	51	51	327
Turner, Albert. (See Turner and Jenkins.)						
Turner, Allen and F. E., Kansas City, Mo. Duplex valve	440,448	Nov. 11 1287	333	53	53	865
Turner, Allen and F. E., assignors to Kansas City Elevator Manufacturing Company, Kansas City, Mo. Controlling device for water supply and discharge to and from cylinders	443,468	Dec. 23 3007	772	53	53	1873
Turner, Clayton A., Milwaukee, Wis. Garment-supporter	440,449	Nov. 11 1288	333	53	53	865
Turner, David S. (See Sheppard, Elisha T., assignor.)						
Turner, Edmund H., Fergus Falls, Minn. Clothes-pin	422,168	Feb. 25 2537	670	50	50	1069
Turner, Edwin B., Elmira, N. Y. Coffee-pot	425,473	Apr. 15 1593	426	51	51	327
Turner, Ephraim M. (See West and Turner.)						
Turner, Ephraim M., Fort Worth, Tex. Clothes-pin	435,195	Aug. 26 2716	718	52	52	1310
Turner, Ephraim M., assignor to Turner Self-Lighting Cigar Company, Fort Worth, Tex. Combination roller and protector	430,902	June 24 2829	694	51	51	2045
Turner, Ephraim M., and J. P. Taylor, assignors of one-third to R. E. Maddox, Fort Worth, Tex. Elevated railway, &c.	424,693	Apr. 1 393	104	51	51	77
Turner, Frank C. (See Raughtigan, Michael, assignor.)						
Turner, Frederick E. (See Turner, Allen and F. E.)						
Turner, George W., Brooklyn, N. Y. Color-printing	433,967	Aug. 12 789	206	52	52	919
Turner, Henry H., Whitehall, Mich. Toe-weight	435,671	Sept. 2 458	121	52	52	1463
Turner, Henry H., Whitehall, Mich. Toe-weight for horses	442,154	Dec. 9 832	223	53	53	1433
Turner, Henry H. and A. Denton, county of Lancaster, and J. Jenkins, Cardiff, county of Glamorgan, England. Apparatus for heating and softening the brims of hats	423,539	May 20 2278	579	51	51	1275
Turner, Howard A. (See Paul, Amasa C., assignor.)						
Turner, Howard C., May, Mich. Road-cart	429,784	June 10 1024	251	51	51	1679
Turner, Isaac B. (See Royal and Turner.)						
Turner, Isaac J., Princeton, N. J. Dice-shaker	434,613	Aug. 19 1789	467	52	52	1127
Turner, Isaac P., New York, assignor to A. L. Crawford, deceased, Troy, N. Y.; W. J. Crawford, administrator. Shirt	436,446	Sept. 16 1671	439	52	52	1708
Turner, James E., Oxford, Idaho Ter. Pipe	419,893	Jan. 21 1719	456	50	50	361
Turner, James H., Cambridge, Md. Dredge-chuck	443,805	Dec. 30 3551	910	53	53	1987
Turner, James J., Pittsburg, Pa., assignor to himself, J. A. Fogg, Boston, Mass., and W. C. Arp, Logansport, Ind. Shoe	433,154	July 29 3318	857	52	52	670
Turner, James P., Davenport, Iowa. Cultivator	429,824	June 10 1085	267	51	51	1691
Turner, John T., Sing Sing, N. Y. Automatic fire-alarm	436,617	Sept. 16 1928	506	52	52	1755
Turner, John T., Sing Sing, N. Y. Cotton-gin saw	438,035	Oct. 7 564	154	53	53	107
Turner, John W., et al. (See Bradley, Jay L., assignor.)						
Turner, Joseph E., Kansas City, Mo. Plaster	424,517	Apr. 1 116	51	51	51	26
Turner, Joseph S., Rockland, Mass. Last	421,992	Feb. 25 2272	508	50	50	1020
Turner, Joseph S., San Fernando, Cal. Sash-fastener	423,001	Mar. 11 974	257	50	50	1329
Turner, Julius A., Southfield, Mass. Racer adapted to the braiding of whip-lashes and the like	432,582	July 22 2393	616	52	52	487
Turner, Lewis A., assignor of one-half to W. D. Babcock, Los Angeles, Cal. Rail-climber for vehicle-wheels	424,584	Apr. 1 228	62	51	51	47
Turner Manufacturing Company. (See Turner, Melzar G., assignor.)						
Turner, Melzar G., Westborough, Mass., assignor to Turner Manufacturing Company, of New Hampshire. Ruffing device for sewing-machines	440,668	Nov. 18 1645	425	53	53	943
Turner, Richard, assignor of two-thirds to M. W. Snailham and F. Langhorn, New Bedford, Mass. Shuttle-motion for looms	423,096	Mar. 11 1121	292	50	50	1355
Turner, Samuel, Cincinnati, Ohio. Hydrocarbon-burner	419,738	Jan. 21 1617	431	50	50	341
Turner Self-Lighting Cigar Company. (See Turner, Ephraim M., assignor.)						
Turner Self-Lighting Cigar Company. (See West and Turner, assignors.)						
Turner, Vaughn & Taylor Company. (See Vaughn, Calvin W., assignor.)						
Turner, William, Viola, Idaho. Drag-saw	437,532	Sept. 30 3462	903	52	52	2067
Turner, William A., assignor to E. Converse, Worcester, Mass. Sheet-metal knob	432,583	July 22 2395	617	52	52	487
Turner, William A., assignor to E. Converse, Worcester, Mass. Knob	433,108	July 29 3250	856	52	52	656
Turner, William A., assignor to E. Converse, Worcester, Mass. Pipe-thimble	435,987	Sept. 9 940	247	52	52	1562
Turner, William H. (See Simmons and Turner.)						
Turpin, William J., Oakdale Station, assignor of one-half to J. P. Gilmour, McDonald, Pa. Stove door and shelf	426,083	Apr. 22 2523	665	51	51	513
Turner, William P. H., et al. (See Paridy and Brown, assignors.)						
Turney, Clara, Saucelito, Cal. Horse-controlling device	433,555	Aug. 5 170	45	52	52	789
Turre, Joseph. (See Rothenberg, William F., assignor.)						
Turton, Mordecai, Lima, Ohio. Apparatus for removing paraffine from the pipes of oil-wells	424,837	Apr. 1 630	165	51	51	122
Tush, Elwood, Manchester, Iowa. Hay-rake	438,565	Oct. 14 1349	366	53	53	266
Tushingham, Frank G., and H. Dubois, Toronto, Canada. Engine-stop	438,445	Oct. 28 2765	736	53	53	543
Tussaud, John T., London, England. Applying furs, &c., to woven fabrics &c.	436,389	Sept. 16 1578	415	52	52	1692
Tussaud, John T., London, England. Apparatus for applying furs, &c., to woven fabrics, &c.	436,390	Sept. 16 1581	417	52	52	1693
Tuten, William G., Bonnet, S. C. Circular-saw guide	440,675	Nov. 4 672	179	53	53	739
Tuthill, Daniel S., assignor of one-half to H. B. Odell, Newburg, N. Y. Wagon-pole	430,493	June 17 2151	529	51	51	1907
Tuthill, Daniel S., assignor of one-half to H. B. Odell, Newburg, N. Y. Wagon-truck	430,494	June 17 2153	529	51	51	1907
Tuthill, Daniel S., assignor of one-half to H. B. Odell, Newburg, N. Y. Wagon-frame	432,343	July 15 2033	523	52	52	407
Tuttle, Hosmer, Cedar Rapids, Iowa. Grain-binder frame	432,807	July 22 2771	709	52	52	558
Tuttle, Lucius R. (See Rockwell, Albert F., assignor.)						
Tuttle, William B. (See Beers and Tuttle.)						
Twedell, Joseph, Civil Bend, Mo. Gate	434,850	Aug. 19 2157	565	52	52	1198
Twisden, John H. (See Gale, Herbert N., assignor.)						
Twiss, Freeman L., Groton, N. Y. Copy-holder	442,927	Dec. 16 2098	540	53	53	1688
Twist Pipe Company. (See White, James, assignor.)						
Twyman, Aaron, Pullman, and H. G. Bird, Chicago, Ill. Dust-guard	437,370	Sept. 30 3209	835	52	52	2015
Tyberg, Oluf, New York, N. Y. Mechanical movement	441,260	Nov. 25 2657	690	53	53	1141
Tylee, Felix, Cleveland, Ohio. Window washer and wiper	430,047	June 10 1436	357	51	51	1758
Taylor, Charles C., Cheshire, Conn. Milling-cutter	435,572	Sept. 2 298	83	52	52	1433
Tyler, Charles C., Cheshire, Conn. Machine for making milling-cutters	435,573	Sept. 2 299	83	52	52	1433

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Tyler, Charles C., Cheshire, Conn. Machine for making milling-cutters	435,574	Sept. 2	300	83	52	1433
Tyler, Vernon A., Morris Park, N. Y. Frog-switch	437,464	Sept. 30	3359	879	52	2046
Tyler, Vernon A., Morris Park, N. Y. Metallic railway-tie	441,784	Dec. 2	245	64, 65	53	1311
Tyler, Wallace, assignor to L. M. Mitchell, Chicago, Ill. Bell-cord attachment	437,062	Sept. 23	2685	702	52	1910
Tyler, Washington S. (See White, Joseph W., assignor.)						
Tyler, William P., Boston, Mass. Conduit for electric cables	421,088	Feb. 11	993	254	50	761
Tyler, William S., Pawtucket, R. I. Machine for shaping rotary cutters	434,815	Aug. 19	2110	553 554	52	1188
Tymeson, Eugene. (See Ducros and Tymeson.)						
Tymeson, Eugene, and L. Ducros, assignors to A. Smith & Sons Carpet Company, Yonkers, N. Y. Scouring-machine	441,205	Nov. 25	2551	659 660	53	1123
Tyuan, Joseph E., Paterson, N. J. Doubling and winding machine	422,667	Mar. 4	454	115 116	50	1223
Tynes, Jefferson D. (See Wade, Edwin T., assignor.)						
Tynes, Minor E., Dallas, Tex. Attachment for sewing-machines	440,855	Nov. 18	1967	506	53	1002
Tynon, William J., Dunkirk, N. Y. Lubricator	439,795	Nov. 4	248	63	53	657
Type Writing Machine Company. (See Dart, Lewis, assignor.)						
Type Writing Machine Company. (See Hurlbut, Samuel C., assignor.)						
Typograph Company. (See Cash, Arthur W., assignor.)						
Tyrell, Alvin D., South Hadley Falls, assignor of one-half to E. J. Brown, Springfield, Mass. Envelope-machine	436,618	Sept. 16	1929	507	52	1756
Tyrell, Edward, Brooklyn, N. Y. Fountain-pen holder	443,016	Dec. 16	2221	572	53	1715
Tyrell, Edward, Brooklyn, N. Y. Fountain-pen	443,017	Dec. 16	2221	572	53	1715
Tyson, Thomas, Mound City, Mo. Wagon-body	419,804	Jan. 21	1720	457	50	361
Tyson, William W., Erie, Pa. Fruit-knife	438,331	Oct. 14	1011	274	53	199
Tyzick, James, and J. F. Lawton, St. John, New Brunswick, Canada. Fish-plate bolt	428,431	May 20	2137	537	51	1248
Uckotter, Herman H., assignor to Anchor Buggy Company, Cincinnati, Ohio. Fifth-wheel for vehicles	435,988	Sept. 9	941	247	52	1562
Udell, Alva, Toronto, Ontario, Canada. Postal cabinet	431,679	July 8	1021	255 256	52	208
Uebelacker, Leonhard, Nuremberg, Germany. Swimming toy	439,313	Oct. 28	2571	686	53	507
Ueltzen, Rudolph, New York, N. Y. Clock-key	424,630	Apr. 1	297	77	51	59
Ueltzen, Rudolph, New York, N. Y. Watch-key	432,584	July 22	2396	617	52	487
Ugland, Andrew A. (See Gulowson and Ugland.)						
Uhler, Clarence H., Lebanon, Pa. Heating feed-water	436,845	Sept. 23	2334	614 615	52	1842
Uhlig Cash Register Company. (See Uhlig, Richard W., assignor.)						
Uhlig, Richard W., College Point, N. Y., assignor to Uhlig Cash Register Company, Jersey City, N. J. Cash indicator and register	432,099	July 15	1663	427 428 429	52	339
Uhlinger, William P., Philadelphia, Pa. Jacquard-card-repeating machine	438,508	Oct. 14	1261	341 342	53	248
Uhlinger, William P., Philadelphia, Pa. Governing device for numbering-machines	439,446	Oct. 28	2766	737	53	544
Ulbricht, George E., assignor to E. F. Beck & Son, Newark, N. J. Display rack or stand	437,824	Oct. 7	234	72	53	46
Ulery, William, Briscoe, Mo. Car-coupling	422,854	Mar. 4	717	184	50	1275
Ulfig, Charles, Martin's Ferry, Ohio. Manufacture of glassware	439,447	Oct. 28	2768	737	53	544
Ulmán, Victor B. (See Baum and Ulman.)						
Ulmer, Amos M. (See Fowler and Ulmer.)						
Ulmer, Amos M., and F. Fowler, Philadelphia, Pa. Weather-strip	423,292	Mar. 11	1422	369	50	1413
Ulmer, Wilbert C., and T. E. McNamara, Rockland, Me. Artificial arm	423,840	Mar. 18	2219	585	50	1573
Ulrich, Edwin H. (See Ulrich, William and E. H.)						
Ulrich, Franz, Paterson, N. J. Heddle-machine	430,223	June 17	1712	426 427	51	1822
Ulrich, Frederick, Peru, Ind. Vehicle-axle	424,585	Apr. 1	229	62	51	47
Ulrich, Jacob. (See Hershberger, Daniel, assignor.)						
Ulrich, Jacob B., et al. (See Paridy and Brown, assignors.)						
Ulrich, Jean, Chicago, Ill. Riding-habit	443,587	Dec. 30	3203	823	53	1920
Ulrich, John, Columbus, Ohio. Automatic drill-feed	429,073	May 27	3102	800	51	1451
Ulrich, Moritz, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Prussia, Germany. Blue carbon dye	423,970	Mar. 25	2436		50	1622
Ulrich, William and E. H., Manhattan, Kans. Clamp for stone-saws	421,846	Feb. 18	2075	546	50	973
Ulsh, John L., Wabash, Ind. Machine for stretching screen-wire	437,951	Oct. 7	421	118	53	80
Umbach, Fred G., Athens, Ga. Combined harrow and cultivator	440,450	Nov. 11	1289	334	53	865
Umbehnd, Jacob. (See Berenberg and Umbehnd.)						
Umbehnd, Jacob J. (See Thomson and Umbehnd.)						
Umbehnd, Jacob J., Syracuse, N. Y. Making rivets	435,908	Sept. 2	828	219	52	1535
Umbehnd, Jacob J., Syracuse, N. Y., assignor to J. L. Thomson Manufacturing Company, Portland, Me. Making rivets	432,499	July 15	2264	585	52	454
Umbehnd, Jacob J., Syracuse, N. Y., assignor to J. L. Thomson Manufacturing Company, Portland, Me. Riveting-machine	434,745	Aug. 19	2010	525	52	1167
Umbehnd, Jacob J., Syracuse, N. Y., assignor to J. L. Thomson Manufacturing Company, Portland, Me. Riveting-machine	436,447	Sept. 16	1673	440 441	52	1709
Umbehnd, Jacob J., assignor to J. L. Thomson Manufacturing Company, Syracuse, N. Y. Rivet-setting machine	434,215	Aug. 12	1165	303	52	993
Underhill, Hazen R., Derry, N. H. Reversible plow	430,307	June 17	1877	461	51	1854
Underwood, Frank, New York, N. Y., assignor to J. Collinson, East Orange, N. J. Fence-post anchor	443,018	Dec. 16	2222	572	53	1715
Underwood, Henry M., Waukegan, Ill. Press-plate for copying-hooks	441,261	Nov. 25	2659	691	53	1142
Underwood, John K., Geneva, N. Y., assignor to American Optical Company, Southbridge, Mass. Frame for sight-testing spectacles	430,763	June 24	2613	640	51	2004
Underwood, Walter H., assignor of one-half to N. P. Otis, Yonkers, N. Y. Spreading-tip for liquid-receptacles	421,362	Feb. 11	1378	356	50	833
Underwood, Walter H., assignor of one-half to N. P. Otis, Yonkers, N. Y. Tip for mucilage-bottles	421,363	Feb. 11	1379	357	50	833
Underwood, Walter I., and H. Frese, St. Louis, Mo. Policeman's club	441,042	Nov. 18	2259	585	53	1059
Unge, Wilhelm T., Stockholm, Sweden. Distance-instrument	425,838	Apr. 15	2135	569 570	51	432
Unger, Herrman, New York, N. Y. Ornamental cloth	426,152	Apr. 22	2631	690	51	536
Union Button Sewing Machine Company. (See Cummings, Henry H., assignor.)						
Union Button Sewing Machine Company. (See Strickler, John D., assignor.)						
Union Button Sewing Machine Company. (See Wing, Ligan C., assignor.)						
Union Cash Register Company. (See Fuller and Griswold, assignors.)						
Union Desk Company. (See Smith, William F., assignor.)						
Union, Frank L., Boston, Mass. Cesspool	424,838	Apr. 1	631	166	51	122

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Union Hardware Company. (See Chantrell, Felix, assignor.)						
Union Hardware Company. (See Weston, Ephraim F., assignor.)						
Union Machine Company. (See Bu long, William G., assignor.)						
Union Manufacturing Company. (See Frost, Richard L., assignor.)						
Union Paper Bag Machine Company. (See Claussen, Edward E., assignor.)						
Union Paper Bag Machine Company. (See Fiala, Andrew H., assignor.)						
Union Paper Bag Machine Company. (See Mortonson, George, assignor.)						
Union Paper Bag Machine Company. (See Patterson, William H., assignor.)						
Union Paper Bag Machine Company. (See Porter, Edward E., assignor.)						
Union Special Sewing Machine Company. (See Muther, Lorenz, assignor.)						
Union Special Sewing Machine Company. (See Sawtell, Albert H., assignor.)						
Union Special Sewing Machine Company. (See Timm, Charles, assignor.) (Reissue.)						
Union Special Sewing Machine Company. (See Woodward, Russel G., assignor.)						
Union Switch and Signal Company. (See Hambay, James T., assignor.)						
Union Water Meter Company. (See Conroy, James C., assignor.)						
United Electric Improvement Company. (See Bremer, William G., assignor.)						
United Electric Improvement Company. (See Currie, Stanley C. C., assignor.)						
United Electric Improvement Company. (See Smith, Walter F., assignor.)						
United Gas Improvement Company. (See Currie, Stanley C. C., assignor.)						
United Gas Improvement Company. (See Granger, Arthur O., assignor.)						
United Gas Improvement Company. (See Heisler, Charles, assignor.)						
United Gas Improvement Company. (See Knapp, Isaac N., assignor.)						
United Gas Improvement Company. (See Leisner, George, assignor.)						
United Gas Lamp Company. (See Clark, Frank W., assignor.)						
United Indurated Fibre Company. (See Deering, Mark L., assignor.)						
United Indurated Fibre Company. (See Keyes, Frank E., assignor.)						
United Indurated Fibre Company. (See Keyes, Martin L., assignor.)						
United Patent Company. (See Boxley, George, assignor.)						
United States Automatic Perfuming Company. (See Busenbenz, Jacob J., assignor.)						
United States Chemical Company. (See Shepard, Henry W., assignor.)						
United States Electric Railway Signal Company. (See Conly, Mahlon S., assignor.)						
United States Envelope Machine Company. (See Grant, Sidney A., assignor.)						
United States Fuel Gas Company. (See Gearing, Charles M., assignor.)						
United States Fuel Gas Company. (See Hadley, Charles F., assignor.)						
United States Harness and Manufacturing Company. (See Latham, Ephraim, assignor.)						
United States Indicator Company. (See Alley, Rufus P., assignor.)						
United States Mine Supplies Company. (See Tirmann, Hugo, assignor.)						
United States Roll Paper Company. (See Zerr, John, assignor.)						
United States Rolling Stock Company. (See Kennedy, Martin, assignor.)						
United States Spring Company. (See Glover, George T., assignor.)						
United States Store Service Co. (See Busenbenz, Jacob J., assignor.)						
United States Store Company. (See Laube, Godfried, assignor.) (Reissue.)						
United States Twist Drill Company. (See Fenner and Taft, assignors.)						
United States Twist Drill Company. (See Moore, Samuel, assignor.)						
United States Wind Engine and Pump Company. (See Burnham and Miller, assignors.)						
United Zylonite Company. (See Ward, Joseph D., assignor.)						
Universal Lock Company. (See Smith, Eugene C., assignor.) (Reissue.)						
Universal Lock Company of New York. (See Smith, Eugene C., assignor.)						
Universal Water Power Company. (See Simpson, Hortensius C., assignor.)						
Unsoeld, John G., Detroit, Mich. Tongue-support	426,480	Apr. 29	3124	821	51	644
Unterbrink, Joseph, Ottawa, Ohio. Hay-sling	422,668	Mar. 4	457	116	50	1221
Unterkoefler, John T., et al. (See Künzel, Charles A., assignor.)						
Unwin, Howard, assignor to Shrewsbury & Talbot Cab and Noiseless Tyre Company, (limited), Westminster, county of Middlesex, England. Apparatus for inserting rubber, &c., into grooved tires	424,084	Mar. 25	2600	692	50	1653
Unzieker, Herman, Chicago, Ill. Shaft and wheel coupling	433,968	Aug. 12	792	207	52	919
Updale, John, London, England. Traverse-warp machine	435,002	Aug. 26	2433	{ 643 644 }	{ 52 52 }	1256
Upson Nut Company. (See Frisbie, Samuel, assignor.)						
Upson Nut Company. (See Root, Watson R., assignor.)						
Upson, Waldo L., Meriden, assignor to Peck, Stow & Wilcox Company, Southington, Conn. Door-bell	432,344	July 15	2035	534	52	408
Upthegrove, Hudson J., Valparaiso, Ind. Coat or like garment	422,669	Mar. 4	458	116	50	1224
Upton, Charles S. (See Henkle, Leonard, assignor.)						
Upton, Charles S. (See Knight, Herbert, assignor.)						
Upton, Charles S. (See Rhind, Frank, assignor.)						
Upton, Charles S., New York, N. Y. Argand lamp	427,207	May 6	280	72	51	866
Upton, Emory, Battle Creek, Mich. Surface-gage	441,812	Dec. 2	293	79	53	1321
Upton, Francis R. (See Wirt, Charles, assignor.)						
Upton, Francis R., Orange, N. J., and F. J. Dibble, Peabody, Mass. Portable electric fire-alarm	436,961	Sept. 23	2547	667	52	1882
Upton, King. (See Stickney, Randolph L., assignor.)						
Upton, King, Salem, Mass. Railway-car	440,729	Nov. 18	1747	448	53	963
Upward, Alfred R., London, assignor to S. J. Coxeter, County of Middlesex, England. Disinfecting device	441,078	Nov. 18	2325	602	53	1072
Urban, George, Jr. (See Wall, Charles W., assignor.)						
Urban, John, and W. W. King, Belton, Tex. Quilting-frame for sewing-machines	438,662	Oct. 21	1498	{ 404 405 }	{ 53 53 }	300
Urban, Joseph S. (See Biel and Urban.)						
Urban, Otto, assignor to I. Scheinberger, Nagy Kikinda, Austria-Hungary. Automatic clock-winding mechanism	427,381	May 6	526	134	51	915
Uren, Stephen, Sacramento, Cal. Spike-making mechanism	428,733	May 27	2597	{ 658 659 }	{ 51 51 }	1352
Urie, David, Kansas City, Mo. Bearing for rollers of dredging-machines	440,076	Nov. 4	673	179	53	739
Urwick, Henry, St. Dunstan's, Malvern, England. Glove	421,993	Feb. 25	2273	{ 598 599 }	{ 50 50 }	1021
Utter, Horace B., Rockford, Ill. Water-wheel-controlling device	437,825	Oct. 7	235	72	53	46
Vaag, Anton B., Hillsborough, N. D. Combined fork and shovel	421,364	Feb. 11	1381	357	50	833
Vaeth, John, et al. (See Eldridge, Andrew H., assignor.)						
Vagnier, Edward D., Clearport, Ohio. Car-coupling	439,448	Oct. 28	2769	737	53	544
Vail, Allen, assignor of one-half to J. Cumming, Buffalo, N. Y. Machine for cutting, expanding, and beading boiler-flues	440,797	Nov. 18	1867	481	53	984
Vail, William T., assignor of one-half to M. Stern and A. B. Mouck, Fargo, N. D. Harvester	433,969	Aug. 12	793	207	52	920

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Vaile, John H., Dayton, Ohio. Apparatus for actuating hydrostatic presses.....	424,040	Mar. 25	2537	{ 676 677 390 391	50	1641
Vaile, John H., Dayton, Ohio, and D. A. Tompkins, Charlotte, N. C. Combined cooker and cake-former for oil-meal.....	421,454	Feb. 18	1505	{ 676 677 390 391	50	865
Va'entine, George, assignor of one-half to F. L. Farra, Monticello, Ill. Stirrup.....	420,585	Feb. 4	222	58	50	608
Valentine, George, assignor of one-half to F. L. Farra, Monticello, Ill. Gato.....	421,788	Feb. 18	1983	522	50	956
Valentine, Joseph J., Philadelphia, Pa. Shaft-coupling.....	432,916	July 22	2917	748	52	588
Valentine, Joseph R., and A. T. Grigg, Pueblo, Colo. Gas-engine.....	425,116	Apr. 8	1040	278	51	210
Valentine, Richard, Janesville, Wis. Fountain-pen.....	440,077	Nov. 4	674	179	53	740
Valère, James, Paris, France, assignor to W. Lutwyche, London, England. Manufacture of translucent enamel.....	441,514	Nov. 25	3050	.....	53	1216
Valiant, George, Toronto, Canada. Machine for cutting out shoe-flies.....	441,262	Nov. 25	2660	{ 691 692	53	1142
Valiant, George, Toronto, Canada, and C. Dancel, New York, N. Y. Embossing-machine.....	441,263	Nov. 25	2666	692	53	1143
Valiquet, Ephrem F., assignor of one-half to N. Mayotte, Norwich, Conn. Screw-cutting lathe.....	432,585	July 22	2397	617	52	487
Valiquet, Louis P., assignor to L. Lawrence, New York, N. Y. Perforator.....	436,048	Sept. 9	1039	270	52	1581
Valley, John N., Jersey City, N. J. Single-rail elevated railway.....	419,739	Jan. 21	1619	432	50	342
Valley, John N., Jersey City, N. J. Elevated railway.....	428,871	May 27	2796	711	51	1393
Valon, William A. M., Ramsgate, England. Stop-motion register for gas-meters.....	438,451	Oct. 14	1189	{ 322 323	53	233
Van Alstine, Cornelius C. E. (See Buschmann and Van Alstine.)						
Van Alstine, Cornelius C. E., and H. Munzer, Paterson, N. J. Faucet attachment.....	432,152	July 15	1756	451	52	357
Van Antwerp, Linford E., Susquehanna, Pa. Automatic vehicle-brake.....	425,195	Apr. 8	1179	312	51	239
Van Arsdale, Henry, Racine, Wis. Bridle-bit.....	422,469	Mar. 4	158	42	50	1166
Vau Atta, Francis E. (See Edds, William T., assignor.)						
Van Auker, Charles. (See Lisk and Van Auker.)						
Van Auker, Clarence E., Denver, Colo. Valve for steam-radiators.....	438,332	Oct. 14	1011	274	53	199
Van Auker, Clarence E., Denver, Colo. Valve.....	442,595	Dec. 9	1509	388	53	1565
Van Benthuyzen, Frank, Albany, N. Y. Machine for attaching covers to pamphlets.....	426,629	Apr. 29	3343	{ 876 877	51	687
Van Berkel, Adrian, Berlin, Germany. Manufacture of plates and slabs for building purposes.....	431,429	July 1	608	.....	52	123
Van Brakle, Alfred, New York, N. Y. Game.....	435,260	Aug. 26	2810	744	52	1328
Van Brown, Lewis, assignor of one-half to W. H. Inloes, Asheville, N. C. Commutator-brush for dynamos.....	428,073	May 20	1588	403	51	1141
Van Brunt & Davis Company. (See Van Brunt, Willard A., assignor.)						
Van Brunt, Willard A., assignor to Van Brunt & Davis Company, Horicon, Wis. Seed-ing-machine.....	425,274	Apr. 8	1288	{ 344 345	51	260
Van Buren, Edmund R., Jacksonville, Fla. Machine for decorticating fibrous plants.....	420,481	Feb. 4	82	19	50	579
Van Buskirk, Samuel A. (See Land and Van Buskirk.)						
Van Curen, James, Ferndale, Cal. Sand-band.....	432,217	July 15	1849	475	52	374
Van De Walle, Jacob J., Rochester, N. Y. Sink-trap.....	425,641	Apr. 15	1851	494	51	377
Van Demark, William, Phelps, N. Y. Fountain-pen.....	433,109	July 29	3251	837	52	657
Van Depoele, Charles J., Lynn, Mass. Carbon commutator brush and holder.....	422,265	Feb. 25	2691	710	50	1098
Van Depoele, Charles J., Lynn, Mass. Electric-railway motor car.....	422,266	Feb. 25	2694	{ 710 711	50	1098
Van Depoele, Charles J., Lynn, Mass. Pulsating electric generator.....	422,855	Mar. 4	719	{ 184 185	50	1275
Van Depoele, Charles J., Lynn, Mass. Pulsatory-current motor.....	422,856	Mar. 4	725	{ 186 187	50	1276
Van Depoele, Charles J., Lynn, Mass. Alternate-current pulsating system.....	422,857	Mar. 4	729	187	50	1276
Van Depoele, Charles J., Lynn, Mass. Converting continuous into pulsating electric currents.....	422,858	Mar. 4	732	187	50	1277
Van Depoele, Charles J., Lynn, Mass. Pulsating-current system.....	422,859	Mar. 4	734	187	50	1278
Van Depoele, Charles J., Lynn, Mass. Multiple-current pulsating generator.....	422,860	Mar. 4	737	188	50	1278
Van Depoele, Charles J., Lynn, Mass. Trolley-arm for electric-railway cars.....	424,381	Mar. 25	3055	811	50	1741
Van Depoele, Charles J., Lynn, Mass. Suspended switch and traveling contact for electric railways.....	424,695	Apr. 1	398	105	51	78
Van Depoele, Charles J., Lynn, Mass. Contact device and switch for electric railways.....	424,910	Apr. 1	736	{ 196 197	51	142
Van Depoele, Charles J., Lynn, Mass. Electric-railway motor.....	424,911	Apr. 1	738	197	51	143
Van Depoele, Charles J., Lynn, Mass. Electric connection.....	429,745	June 10	964	237	51	1668
Van Depoele, Charles J., Lynn, Mass. Electric-railway-motor truck.....	429,746	June 10	965	237	51	1669
Van Depoele, Charles J., Lynn, Mass. Electric-railway-conductor system.....	429,981	June 10	1326	{ 338 339	51	1738
Van Depoele, Charles J., Lynn, Mass. Reciprocating electric engine.....	431,492	July 1	707	177	52	142
Van Depoele, Charles J., Lynn, Mass. Reciprocating electric engine.....	431,493	July 1	709	178	52	142
Van Depoele, Charles J., Lynn, Mass. Reciprocating electric-engine system.....	431,494	July 1	713	178	52	143
Van Depoele, Charles J., Lynn, Mass. Reciprocating electric engine.....	431,495	July 1	716	179	52	143
Van Depoele, Charles J., Lynn, Mass. Reciprocating electric-engine system.....	431,496	July 1	717	179	52	143
Van Depoele, Charles J., Lynn, Mass. Multiplex electric locomotive.....	432,345	July 15	2036	524	52	408
Van Depoele, Charles J., Lynn, Mass. Induction-motor.....	433,834	Aug. 5	591	{ 153 154	52	872
Van Depoele, Charles J., Lynn, Mass. Closed conduit for electric conductors.....	434,410	Aug. 12	1471	{ 383 384	52	1056
Van Depoele, Charles J., Lynn, Mass. Electric-railway system.....	434,684	Aug. 19	1922	{ 501 502	52	1161
Van Depoele, Charles J., Lynn, Mass. Alternate-current electric-railway-train system.....	434,685	Aug. 19	1927	502	52	1161
Van Depoele, Charles J., Lynn, Mass. Electric-railway-train system.....	434,686	Aug. 19	1931	502	52	1152
Van Depoele, Charles J., Lynn, Mass. Electric-railway system.....	434,687	Aug. 19	1934	503	52	1153
Van Depoele, Charles J., Lynn, Mass. Multiple-circuit electric motor.....	434,816	Aug. 19	2113	554	52	1189
Van Depoele, Charles J., Lynn, Mass. Generator for electric-engine circuits.....	435,261	Aug. 26	2811	744	52	1328
Van Depoele, Charles J., Lynn, Mass. Structure for supporting and insulating suspended bare conductors.....	435,262	Aug. 26	2813	745	52	1329
Van Depoele, Charles J., Lynn, Mass. Electric-railway conduit with tubular conductor.....	435,263	Aug. 26	2815	{ 745 746	52	1329
Van Depoele, Charles J., Lynn, Mass. Reciprocating electric hammer.....	435,264	Aug. 26	2819	746	52	1330
Van Depoele, Charles J., Lynn, Mass. Pulsating-current-battery system.....	436,275	Sept. 9	1381	360	52	1645
Van Depoele, Charles J., Lynn, Mass. Adjustable-current reciprocating-engine system.....	436,276	Sept. 9	1383	360	52	1646
Van Depoele, Charles J., Lynn, Mass. Electric power-hammer.....	436,277	Sept. 9	1385	361	52	1646
Van Depoele, Charles J., Lynn, Mass. Support and insulator for suspended conductors.....	437,533	Sept. 30	3463	904	52	2067

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Van Depoele, Charles J., Lynn, Mass. Upward-pressure contact device for electric railways	437,534	Sept. 30	3466	{ 904 905	52	2068
Van Depoele, Charles J., Lynn, Mass. Motor-truck for electric-railway cars	437,535	Sept. 30	3469	905	52	2068
Van Depoele, Charles J., Lynn, Mass. Electric railway-brake	438,452	Oct. 14	1191	323	53	234
Van Depoele, Charles J., Lynn, Mass. Generator for pulsating currents	440,977	Nov. 18	2161	560	53	1040
Van Depoele, Charles J., Lynn, Mass. Electric motor	443,980	Dec. 30	3817	{ 973 974	53	2037
Van Depoele, Charles J., Chicago, Ill. Combined conduit and overhead system for electric railways	424,380	Mar. 25	3049	{ 810 811	50	1740
Van Depoele, Charles J., Chicago, Ill. Telpher system	429,747	June 10	967	{ 237 238	51	1669
Van Depoele, Charles J., Chicago, Ill. System of electrical transmission of power	440,976	Nov. 18	2159	560	53	1039
Van Depoele, Charles J., Chicago, Ill. Magnetic shield for electric motors	443,019	Dec. 16	2253	573	53	1715
Van Deusen, John B., Saratoga, N. Y. Telegraph-key	433,835	Aug. 5	594	154	52	872
Van Develde, John, Cleveland, Ohio, assignor to Standard Oil Company of Ohio. Grease-box	436,679	Sept. 16	2041	{ 533 534	52	1777
Vau Doorn, Frank M. (See Leiter, William, assignor.)						
Van Doren, Chester C., et al. (See Bond, George W., assignor.)						
Van Doren, Frederick C., Newark, N. J. Library-shelf	425,117	Apr. 8	1043	278	51	211
Vau Doren, Frederick C., Newark, N. J. Revolving shelf	425,354	Apr. 8	1402	373	51	282
Van Dorn, James H., Cleveland, Ohio. Sectional metal pole	421,532	Feb. 18	1631	421	50	889
Van Dorn, James H., Cleveland, Ohio. Case-hardened bar or plate	440,978	Nov. 18	2163		53	1040
Van Dorn, James H., Cleveland, Ohio. Prison-door mechanism	441,079	Nov. 18	2167	{ 602 603	53	1072
Van Dusen, George W., Norwood, N. Y. Stringed musical instrument	440,979	Nov. 18	2323	560	53	1040
Van Dusen, Harlan P. (See Hunt and Rappleye, assignors.)						
Van Duzee, William D., Minneapolis, Minn. Automatic sewer-flushing device	426,481	Apr. 29	3125	821	51	645
Van Duzer, Elizabeth F. (See Van Duzer, La Fayette C., assignor.)						
Van Duzer, La Fayette C., assignor to E. F. Van Duzer, Lilley, Ark. Lumber-drier	440,451	Nov. 11	1290	334	53	866
Van Dyke, William B., Philadelphia, Pa. Making rolls for ornamental forms	423,002	Mar. 11	975	257	50	1329
Van Eman, David L. Ottumwa, Kans. Hoisting and loading apparatus	432,680	July 22	2558	{ 655 656	52	519
Van Epps, Charles H., Scott, Ind. Fence-wrench	424,912	Apr. 1	740	197	51	143
Van Eften, Cornelius W., Williamston, Mich. Toe-weight	425,474	Apr. 15	1594	426	51	327
Van Fleet, Fred, and G. E. Graff, Williamsport, Pa. Type-writer	425,589	Apr. 15	1758	{ 471 473	51	359
Van Gilder, Samuel G., assignor to American Prepared-Food Company, Philadelphia, Pa. Desiccating shell-fish	440,519	Nov. 11	1401		53	887
Van Graafeiland, Charles, St. Louis, Mo. Advertising device	433,222	July 29	3414	881	52	690
Van Gysling, Walter F., assignor of one-half to J. W. Hallenbek, Albany, N. Y. Sight-feed lubricator	425,590	Apr. 15	1760	472	51	360
Van Haagen, Claus, assignor to Chester Twist Drill and Tool Company, Chester, Pa. Hammer die for drill-forging machines	437,840	Oct. 7	255	78	53	50
Van Haagen, Claus, assignor to Chester Twist Drill and Tool Company, Chester, Pa. Machine for forging drills or reamers	437,841	Oct. 7	256	78	53	50
Van Haagen, Claus, assignor to Chester Twist Drill and Tool Company, Chester, Pa. Die for forging drills or reamers	437,842	Oct. 7	259	79	53	51
Van Haften, Frank. (See Corbin, Charles B., assignor.)						
Van Hoesen, Charles, Coeymans, N. Y. Ice-plow	424,382	Mar. 25	3058	811	50	1742
Van Hoesen, Edgar H. (See Burgess and Munz, assignors.)						
Van Holland, John, New York, N. Y. Pocket-knife	431,584	July 8	855	212	52	178
Van Horn, Charles, Bethlehem, Pa. Eaves-trough hanger	420,366	Jan. 28	2605	693	50	539
Van Horne, George. (See Bray and Van Horne.)						
Van Horne, George. (See Hazelton, Charles C., assignor.)						
Van Houten, Frank H., Matteawan, N. Y., assignor, by mesne assignments, to C. L. Goehring, Allegheny, Pa. Wood-working machine	435,265	Aug. 26	2820	747	52	1330
Van Houten, Frank H., Matteawan, N. Y., assignor to C. L. Goehring, Allegheny, Pa. Molding-machine	435,336	Aug. 26	2939	781	52	1350
Van Inwegen, Charles, Mongaup, N. Y. Mail-bag	426,746	Apr. 29	3529	921	51	723
Van Kannel, Theophilus, Philadelphia, Pa., assignor to Canner's Supply Company, Camden, N. J. Paring-hin structure for canning establishments	434,411	Aug. 12	1477	{ 384 385	52	1056
Van Kleek, David A., Pardee, Kans. Water wheel	434,306	Aug. 12	1306	340	52	1021
Van Laun, Henry T. (See Fullford, Edwui, assignor.)						
Van Leer, Bernard. (See O'Brien and Cooper, assignors.)						
Van Meter, James M., assignor of one-half to W. I. Langford, Cambridge City, Ind. Can-labeling machine	441,341	Nov. 25	2781	719	53	1164
Van Ness, Joseph F., Gloversville, N. Y. Veterinary surgical device	435,468	Sept. 2	128	36	52	1400
Van Norman, Charles E., Waltham, Mass. Needle-threader	424,518	Apr. 1	116	33	51	26
Van Nostrand, William, Swain, N. Y. Gate	441,342	Nov. 25	2784	720	53	1165
Van Nuis, Charles S., New Brunswick, N. J. Electric switch	424,739	Apr. 1	465	124	51	92
Van Ossel, Charles R., assignor to himself and G. W. Straight, Chicago, Ill. Lumber-drier	418,773	Jan. 7	173	42	50	38
Van Orton, Lee. (See Wilkoshesky and Van Orton.)						
Van Peirson, Ernest, et al. (See Randall, Robert, assignor.)						
Van Pelt, Ada H., Oakland, Cal. Permutation-lock	420,841	Feb. 4	606	156	50	678
Van Riper, Thomas. (See Martineau, Edmund N., assignor.)						
Van Rymbeke, Joseph, assignor of one-half to W. F. Jobbins, Chicago, Ill. Obtaining meat extracts	431,730	July 8	1105		52	225
Van Rymbeke, Joseph, assignor of one-half to W. F. Jobbins, Chicago, Ill. Obtaining meat extracts	438,333	Oct. 14	1012		53	200
Van Ryzin, Martin, O. W. Dodge, and T. Patten, Appleton, Wis. Suction apparatus for paper-making machines	419,900	Jan. 21	1881	494	50	394
Van Sant, William S., and E. C. Eames, Dixon, Cal. Coin-actuated liquid-vending machine	411,861	Dec. 2	367	96, 97	53	1336
Van Schaack, Robert H., Chicago, Ill. Show-case	429,488	June 3	593	144	51	1585
Van Schaick, John E., Darien, Wis. Automatic windmill-regulator	435,595	Sept. 2	329	92	52	1438
Van Schaick, William H., Walworth, Wis. Windmill-regulating device	419,232	Jan. 14	885	232	50	189
Van Seoy, Harrison, Addison, N. Y. Fire-escape	425,716	Apr. 15	1962	522	51	399
Van Slyke, Alexander, assignor to E. Ehle, Fort Plain, and W. Lipe, New York, N. Y. Chair	433,836	Aug. 5	595	154	52	872
Van Tuijl, B. S. (See Kleinstiver, Abel, assignor.)						
Vau Tuijl, Henry J. (See Wilson and Van Tuijl.)						
Van Valkenburg, Ellis M., Union Grove, Wis. Vehicle-spring	438,207	Oct. 14	816	221	53	163
Van Valkenburg, Randall T., assignor to Muskegon Chemical Fire Engine Company, Muskegon, Mich. Fire-extinguishing compound	432,777	July 22	2720		52	549

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Van Valkenburg, Randall T., assignor to Muskegon Chemical Fire Engine Company, Muskegon, Mich. Chemical fire-engine.	432,778	July 22	2721	696	52	549
Van Vestraut, Ludovic, Southall, county of Middlesex, assignor of one-half to J. Husband, Brentwood, England. Apparatus for charging inclined gas-retorts.	426,483	Apr. 29	3129	822	51	646
Van Vestraut, Ludovico, Southall, county of Middlesex, England. Apparatus for charging inclined gas-retorts.	436,029	Sept. 9	998	261	52	1573
Van Vorce, Elizabeth B., McLeansborough, Ill. Stove-pipe cleaner.	425,057	Apr. 8	962	257	51	194
Van Volkenburgh, Philip, Jr. (See Thomas, Charles W., assignor.)						
Van Wagenen Company, George. (See Graves, John, assignor.)						
Van Wagenen Company, George. (See Graves, Katharine A., assignor.)						
Van Wagenen Company, George. (See Van Wagenen, George, assignor.)						
Van Wagenen Company, George. (See Van Wagenen and Graves, assignors.)						
Van Wagenen, George, New York, N. Y. Sugar-wagon.	441,264	Nov. 25	2668	{ 692 693 }	53	1144
Van Wagenen, George, New York, N. Y. Machine for manufacturing wrought-metal swivels.	443,807	Dec. 30	3553	{ 911 912 }	53	1987
Van Wagenen, George, New York, assignor to G. Van Wagenen Company, Brooklyn, N. Y. Support for sheet-metal wagon-bodies while being riveted.	431,826	July 8	1255	{ 314 315 }	52	254
Van Wagenen, George, New York, and J. Graves, assignors to G. Van Wagenen Company, Brooklyn, N. Y. Sugar-wagon.	428,790	May 27	2681	679	51	1369
Van Wagoner & Williams Company. (See Hart, Henry C., assignor.)						
Van Wagoner & Williams Company. (See Templin, Joseph H., assignor.)						
Van Wie, Avery, assignor of one-half to B. B. Booth, Indianapolis, Ind. Gate-latch.	440,092	Nov. 4	696	185	53	744
Van Wie, Peter G., Cleveland, Ohio. Volumetric gas-governor.	435,469	Sept. 2	129	37	52	1400
Van Wie, Peter G., assignor to J. V. Kennedy, Cleveland, Ohio. Dope-cup.	432,100	July 15	1669	429	52	340
Van Winkle, A. (See King, William H., assignor.)						
Van Winkle, Edward, Atlanta, Ga. Oil-press.	435,760	Sept. 2	621	164	52	1494
Van Woert, Frank T., Brooklyn, N. Y. Dental tool.	438,566	Oct. 14	1350	366	53	267
Van Woert, Frank T., Brooklyn, N. Y. Artificial tooth.	441,265	Nov. 25	2670	693	53	1144
Van Wordragen, John, Crowley, La. Harvester-wheel.	443,126	Dec. 23	2431	{ 620 621 }	53	1761
Van Wyck, Cornelius S. (See Purdy, James H., assignor.)						
Van Zandt, George, Chicago, Ill. Banjo tail-piece.	433,970	Aug. 12	794	207	52	920
Van Zandt, George, Chicago, Ill. Tambourine.	436,091	Sept. 9	1104	226	52	1592
Van Zant, Ralph E., Noblesville, Ind. Lock.	442,559	Dec. 9	1458	374	53	1555
Van Zile, Harry L. (See Patterson, MacCormack, and Van Zile.)						
Vanalstine, Lynus, Rochester, N. Y. Boot or shoe.	425,353	Apr. 8	1400	373	51	281
Vanaman, David, Birdsborough, Pa. Railway cross-tie and rail-fastening.	435,162	Aug. 26	2668	705	52	1301
Vanaman, David, assignor of one-half to V. Vanaman, Birdsborough, Pa. Rail-tie.	434,305	Aug. 12	1305	340	52	1031
Vanaman, William. (See Vanaman, David, assignor.)						
Vance, Daniel B., and J. W. Brevard, Woodbury, Tenn. Adding-machine.	421,455	Feb. 18	1507	391	50	866
Vance, John M., Eureka, Cal. Machine for pointing fence-pickets.	443,806	Dec. 30	3552	910	53	1987
Vance, Samuel J., Mound City, Mo. Door-check.	434,534	Aug. 19	1668	436	52	1102
Vance, William H., Little Britain, N. Y. Stove-caster.	424,694	Apr. 1	397	105	51	78
Vandegrift, John C. (See Booz and Vandegrift.)						
Vanderbilt, Edward W. (See Townsend, Eli C., assignor.)						
Vanderbilt, Keziah A. (See Eaton, Asahel K., assignor.)						
Vanderbilt, William H. (See Cary, Spencer C., assignor.)						
Vandergrift, T. J., et al. (See Colin, Theodore F., assignor.)						
Vanderheyden, Charles W., Grand Haven, Mich., assignor of one-half to M. H. Cowles, Englewood, Ill. Steam-engine.	439,704	Nov. 4	116	31, 32	53	630
Vanderhoef, George N., Bayonne, N. J., assignor to Invention Company, New York, N. Y. Station-indicator for railway-cars.	440,208	Nov. 11	884	{ 227 228 }	53	792
Vanderhoof, Orson G., et al. (See Saxton, Thomas G., assignor.)						
Vanderhoof, Orson G., Lexington, Ky. Machine for printing paper bags.	424,150	Mar. 25	2688	715	50	1670
Vanderman, William, Willimantic, Conn. Pipe bender and former.	423,544	Mar. 18	1785	469	50	1490
Vanderman, William, Willimantic, Conn. Faucet.	430,712	June 24	2524	618	51	1986
Vanderman, William, Willimantic, Conn. Lead-joint runner.	430,713	June 24	2526	618	51	1987
Vandermeer, John. (See Spoelstra, Vandermeer, and Stevens.)						
Vangorden, John M. (See Carpenter, Clarence E., assignor.)						
Vanleer, John R., et al. (See Showalter, Curtis H., assignor.)						
Vanleer, William N., et al. (See Showalter, Curtis H., assignor.)						
Vansickle, John A., Edina, Mo. Watch-fastener.	441,515	Nov. 25	3050	785	53	1216
Vanstone, Samuel, Providence, R. I. Railway-tie.	441,385	Nov. 25	2848	735	53	1177
Vare, Thomas W., Trenton, N. J. Anvil-mold.	419,088	Jan. 7	659	{ 170 171 }	50	139
Vare, Thomas W., Trenton, N. J. Anvil-mold.	441,080	Nov. 18	2330	603	53	1073
Varick, John B. (See St. Clair, Frank, assignor.)						
Varney, George L., Central Valley, N. Y. Jointed fishing-rod.	422,470	Mar. 4	159	43	50	1167
Varney, Nathan E., Denver, Colo. Bouquet-holder.	425,967	Apr. 15	2343	622	51	472
Varwig, George C., Philadelphia, Pa. Traveling toilet, or other case.	424,740	Apr. 1	467	125	51	92
Varwig, Henry. (See La Boiteaux, Frank M., assignor.)						
Varwig, Henry, et al. (See Stretcher, Howard, assignor.)						
Vary, William E., Chicago, Ill. Truss.	424,741	Apr. 1	467	125	51	92
Vassall, Thomas, De Witt, Iowa. Extension scaffold-bracket.	441,722	Dec. 2	147	39, 40	53	1290
Vassar Burglar Alarm Company. (See Vassar, Robert G., assignor.)						
Vassar Burglar Alarm Manufacturing Company. (See Vassar, Robert G., assignor.)						
Vassar, Robert G., New York, N. Y., assignor to Vassar Burglar Alarm Company. Alarm-lock.	420,397	Jan. 28	2647	702	50	547
Vassar, Robert G., New York, N. Y., assignor, by mesne assignments, to Vassar Burglar Alarm Manufacturing Company, of New Jersey. Alarm-lock.	420,256	Jan. 28	2450	650	50	510
Vasseur, Joseph, Ontonagon, Mich. Sinkers, float, and handle.	419,574	Jan. 14	1372	367	50	288
Vauclein, Samuel M., Philadelphia, Pa. Counterbalanced forged wheel.	420,842	Feb. 4	607	156	50	678
Vauclein, Samuel M., Philadelphia, Pa. Compound engine.	431,660	July 8	1308	327	52	264
Vaughan, Aaron C., Shane's Crossing, Ohio. Lock-nut.	419,385	Jan. 14	1110	293	50	234
Vaughan, Aaron C., Shane's Crossing, Ohio. Nut-lock.	423,193	Mar. 11	1265	329	50	1385
Vaughan, Aaron C., Shane's Crossing, Ohio. Nut-lock.	431,296	July 1	397	100	52	81
Vaughan, Alden R., Pawtucket, R. I. Mainspring-winder.	443,881	Dec. 30	3653	941	53	2007
Vaughan, David F., Haddonfield, N. J. Spring air-gun.	440,381	Nov. 11	1157	299	53	841
Vaughan, Robert F., Sailor Springs, Ill. Running-gear for vehicles.	440,819	Nov. 18	1907	489	53	991
Vaughn Automatic Machine Company. (See Vaughn, John W., assignor.)						
Vaughn, Benjamin E., assignor of one-half to F. L. Harris, Hill's Grove, R. I. Bell.	439,614	Oct. 28	3025	802	53	595
Vaughn, Calvin W., assignor to Turner, Vaughn & Taylor Company, Cuyahoga Falls, Ohio. Machine for making Bessemer-converter nozzles.	426,084	Apr. 22	2525	666	51	513

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Vaughn, Calvin W., assignor to Turner, Vaughn & Taylor Company, Cuyahoga Falls, Ohio. } Brick-machine.	430,978	June 24	2939	{ 721 722 }	51	2065
Vaughn, James M., Water Valley, Ky. Car-coupling.	425,275	Apr. 8	1291	345	51	261
Vaughn, James W., Greenville, Pa. Vehicle-gear.	431,129	July 1	141	37	52	30
Vaughn, John W., Syracuse, N. Y. Car-coupling.	435,081	Aug. 26	2551	673	52	1279
Vaughn, John W., Jersey City, N. J., assignor to Vaughn Automatic Machine Company, of New York. Telephone toll-station.	442,342	Dec. 9	1111	290	53	1484
Vaughn, John W., Syracuse, N. Y., assignor of one-third to W. X. Stovens, Washington, D. C. Spike.	442,560	Dec. 9	1460	374	53	1555
Vaughn, Robert F., Everton, Mo. Folding coop.	433,596	Sept. 2	331	92	52	1439
Vauselle, Pierre, New York, N. Y. Cigarette-machine.	439,615	Oct. 28	3026	{ 802 803 }	53	595
Vautin, Claude T. J. (See Newbery and Vautin.)						
Vawters, Edward, <i>et al.</i> (See Gaffield, William Z., assignor.)						
Vecchio, Stefano di, San José, and J. Mignola, San Francisco, Cal. Refrigerator	436,278	Sept. 9	1388	361	52	1647
Vécsey, Gideon, and T. Davidson, assignors to said Davidson and E. J. Tobin, Sydney, New South Wales. Filter.	443,246	Dec. 23	2655	681	53	1805
Vedder, Harry M. C. (See Titus, Erastus C., assignor.)						
Vedöe, August, Stockholm, Sweden, assignor to T. Olsen, Philadelphia, Pa. Implement for rotating tools.	423,971	Mar. 25	2437	647	50	1622
Veeder, Curtis H., Calumet, Mich., assignor, by mesne assignments, to Pope Manufactur- ing Company, Portland, Me. Seat for velocipedes.	420,421	Jan. 28	2677	{ 709 710 }	50	553
Veeder, Curtis H., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Con- necticut. Electro-magnetic clutch.	439,213	Oct. 28	2389	642	53	474
Veit, Henry B., New York, N. Y. Interchangeable die for the manufacture of jewelry.	443,383	Dec. 23	2877	740	53	1848
Veitch, David, London, England. Attachment for banjos.	434,535	Aug. 19	1669	436	52	1102
Veley, Willis L., Rochelle, Ill. Bake-pan.	434,688	Aug. 19	1938	502	52	1153
Vellacott, James R. (See Brady and Vellacott.)						
Venable, George W., <i>et al.</i> (See Enholm, Oscar A., assignor.)						
Venard, William F. (See McCandless and Venard.)						
Venn, Isaac H., Yonkers, assignor to Otis Brothers & Company, New York, N. Y. Stop for hydraulic motors.	431,087	July 1	84	21	52	19
Ventress, Joseph S., Idaho Springs, Colo. Car-coupling.	441,992	Dec. 2	564	152	53	1374
Verdam, Jacob, Alkmaar, Holland. Device for use in boiling eggs.	440,980	Nov. 18	2166	561	53	1041
Vering, Hermann, Hamburg, Germany. Flexible pipe-connection.	428,186	May 20	1748	442	51	1172
Vering, Johann H., Hamburg, Germany. Apparatus for driving tunnels in water-bearing soil.	438,509	Oct. 14	1264	342	53	248
Verliff, Peter, La Veta, Colo. Combined land roller and ditcher.	428,187	May 20	1748	443	51	1172
Vermeulen, John, New York, N. Y. Knife-polisher.	434,365	Aug. 12	1394	366	52	1040
Vermeulen, John, New York, N. Y. Knife-sharpener.	434,366	Aug. 12	1396	366	52	1040
Vermont Farm Machine Company. (See Kimball, Perley L., assignor.)						
Verniand, Claudius, Quincy, Ill. Grease lubricator.	428,657	May 27	2469	628	51	1329
Vernier, Samuel W. (See Starkey and Vernier.)						
Vernier, William F., Philadelphia, Pa. Ice-planer.	437,465	Sept. 30	3361	{ 879 880 }	52	2047
Vernon, Richard R., Woodbridge, N. J. Combined book and index.	433,259	July 29	3466	895	52	701
Vernon, William E., Sipe Springs, Tex. Water-motor.	420,257	Jan. 28	2451	{ 650 651 }	50	510
Vernon, William G., Philadelphia, Pa., assignor to Modern Tobacco Barn Company. To- bacco-hanger.	442,082	Dec. 2	714	192	53	1402
Verny, Etienne, Reaumont, France. Journal-box.	423,461	Mar. 18	1662	439	50	1468
Verplanck, Robert I., assignor of one-third to W. T. Mayer, Albany, N. Y. Railway-rail joint.	421,456	Feb. 18	1508	391	50	866
Verplanck, Robert I., assignor of one-third to W. T. Mayer, Albany, N. Y. Railway-rail joint.	441,723	Dec. 2	148	40	53	1291
Verrall, George M. (See Johnston, David J., assignor.)						
Verrell, Charles F., assignor of one-half to F. A. Rickard and G. Barstow, Grand Rapids, Mich. Dust-arrester.	434,216	Aug. 12	1167	303	52	994
Verrill, Sullivan W., assignor of two-thirds to W. H. Preble, Chicago, and A. B. Spurling, Elgin, Ill. Splicing ropes and cables.	439,583	Oct. 28	2963	{ 786 787 }	53	582
Verstraete, Edmond, St. Louis, Mo. Motor-car.	438,719	Oct. 21	1595	428	53	317
Verstraete, Edmond, assignor of one-half to P. M. Kling and G. J. Kobusch, St. Louis, Mo. Pole for electric wires, &c.	435,872	Sept. 2	754	202	52	1521
Verstraete, Edmond, assignor of one-half to P. M. Kling and G. J. Kobusch, St. Louis, Mo. Pole for electric wires, &c.	438,036	Oct. 7	565	154	53	107
Verstraete, Edmond, assignor of one-half to P. M. Kling and G. J. Kobusch, St. Louis, Mo. Underground conductor.	440,780	Nov. 18	1841	{ 473 474 }	53	979
Verstraete, Edmond, assignor of one-half to P. M. Kling and G. J. Kobusch, St. Louis, Mo. Trolley or plover for electric railways.	440,781	Nov. 18	1842	474	53	979
Verstraete, Edmond, assignor of one-half to P. M. Kling and G. J. Kobusch, St. Louis, Mo. Underground-wire system.	441,043	Nov. 18	2259	585	53	1059
Vertrees, Joseph H., La Prairie, Ill. Fence-machine.	422,267	Feb. 25	2698	711	50	1089
Vertrees, William J., La Prairie, Ill. Flood-fence.	438,266	Oct. 14	1062	289	53	209
Very, Alpha O., Boston, Mass. Feeding mechanism for sewing-machines.	423,358	Mar. 11	1505	395	50	1430
Very, Alpha O., Boston, Mass. Sewing-machine.	434,851	Aug. 19	2158	{ 565 566 }	52	1198
Very, Edward W., Paris, France, assignor to Hotchkiss Ordnance Company, (limited,) Lon- don, England. Jointed gun-mount.	426,482	Apr. 29	3127	821	51	645
Vest, Americus D. C., St. Louis, Mo. Hinged lamp-collar.	423,359	Mar. 11	1507	395	50	1430
Vetter, Fredrick W. (See Brock and Vetter.)						
Vetter, Joseph C., New York, N. Y. Rheostat.	438,037	Oct. 7	566	155	53	107
Vey, John A. (See Aschenbach, Bruno, assignor.)						
Vian, Benjamin, Newark, N. J. Corset.	432,171	July 15	1783	436	52	362
Vickers, Frank C., Pueblo, Colo. Horse-detacher.	420,523	Feb. 4	134	33	50	590
Victor Safe and Lock Company. (See Hard, John W., assignor.)						
Victorin, Anthony, Troy, N. Y. Breech-loading ordnance.	426,403	Apr. 22	2999	{ 785 786 787 788 }	51	611
Videto, Nathaniel C., South Framingham, Mass. Rubber-stripping device.	428,188	May 20	1749	443	51	1172
Videto, Theodore H., Hudson, Mass. Making gossamer water-proof fabrics.	431,712	July 8	1078	.....	52	220
Videto, Theodore H., South Framingham, Mass. Water-proof gossamer fabric.	432,005	July 8	1514	.....	52	304
Vielhaber, Walter, Paterson, N. J. Valve.	423,003	Mar. 11	977	257	50	1329
Vielhaber, Walter, Paterson, N. J. Valve.	423,097	Mar. 11	1122	293	50	1356

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Vieregg, Henry, Grand Island, Nebr. Fire-escape.....	435,266	Aug. 26	2823	747	52	1330
Viges, John W., Laingsburg, Mich. Straight portable fence.....	427,135	May 6	172	45	51	845
Viggers, William. (See Lee and Viggers.)						
Vignos, Augustus, Canton, Ohio. Attachment for photographic cameras.....	443,555	Dec. 30	3149	810	53	1909
Viland, R. P., <i>et al.</i> (See Samuelson, Andrew G., assignor.)						
Vileyn, August, Detroit, Mich. Twine-holder.....	441,454	Nov. 25	2974	765	53	1201
Villeneuve, George, Pittsfield, Mass. Machine for washing hose.....	425,642	Apr. 15	1852	494	51	377
Villiers-Stead, Frank, and E. R. Hedgman, London, county of Middlesex, England. Automatic vending apparatus.....	422,326	Feb. 25	2791	{ 734 735 }	{ 50	1116
Vincent, Charles H., assignor to F. W. A. Bergengren, Lynn, and J. V. Spalding, Boston, Mass. Individual call devices for telephones.....	431,088	July 1	86	21	52	19
Vincent, John W., W. C. Knox, and W. M. Rynerson, Topeka, Kans. Wind-wheel.....	440,609	Nov. 18	1646	425	53	943
Vincent, Linneas O., assignor of one-half to F. Nielsen, Pentwater, Mich. Producing line-drawings.....	437,063	Sept. 23	2686	702	52	1910
Vincent, Mitchell, <i>et al.</i> (See Hicks, Lewis C., assignor.)						
Vineyard, Huber, Florence, Mont. Reversing-valve for engines.....	423,194	Mar. 11	1366	329	50	1385
Viney, Frederick C., and J. M. Dalton, Philadelphia, Pa. Fire-hydrant.....	428,578	May 20	2342	594	51	1287
Vining, Charles J., assignor to L. C. Merrifield and H. J. Farwell, Cleveland, Ohio. Electric fire-alarm and night-call.....	433,584	Aug. 5	214	57, 58	52	798
Vining, George, Hartford, Conn. Valve.....	429,294	June 3	281	68	51	1524
Vining, Robert W. (See Owen, Joseph, assignor.)						
Vinke, Theodore, <i>et al.</i> (See Bohn, Emil, assignor.)						
Violet, William H., Grand Junction, Colo. Pool-table.....	432,458	July 15	2305	569	52	442
Virgien, Friedrich, Yonkers, N. Y. Pipe-wrench.....	426,223	Apr. 22	2738	717	51	557
Virgin, Uriah J. (See Adams and Virgin.)						
Virnoche, Maxime, Woonsocket, R. I. Sad-iron.....	430,714	June 24	2527	618	51	1987
Virtue, George F., Boston, Mass. Insulating-covering for pincher-handles.....	442,155	Dec. 9	834	223	53	1433
Virtue, James S., Leadville, Colo. Brace for chairs.....	435,531	Sept. 2	230	64	52	1419
Visanska, Barrett, New York, N. Y. Collar or cuff button.....	423,841	Mar. 18	2220	586	50	1574
Visscher, Frederick, assignor to himself and F. F. Visscher, Montgomery, Ala. Automatic scissors-grinder.....	442,788	Dec. 16	1840	476	53	1639
Visscher, Frederick F. (See Visscher, Frederick, assignor.)						
Visual Synchronism Company. (See Rogers, James H., assignor.)						
Vitalis, Baptiste. (See Noonan, Patrick, assignor.)						
Vitt, William J., Brooklyn, N. Y. Fastener for shoe-strings.....	421,638	Feb. 18	1789	468	50	920
Vives, Edward, Sr., <i>et al.</i> (See Lemmon, William W., assignor.)						
Vivian, George G., Idaho Springs, Colo. Steam-boiler furnace.....	433,837	Aug. 5	597	155	52	872
Vivian, Henry H., Swansea, England. Manufacturing copper.....	437,265	Sept. 30	3028	52	52	1981
Vivian, Simon, Brooklyn, N. Y. Hot-air engine.....	437,320	Sept. 30	3112	815	52	1997
Voelker, George W., Woonsocket, R. I. Cloth-pressing machine.....	437,700	Dec. 30	3385	869	53	1953
Voelker, William L., assignor to J. H. Irwin, trustee, Morton, Pa. Manufacturer of incandescent lamps.....	430,156	June 17	1608	400	51	1802
Voelkerding, August B., and T. A. and G. C. Siem, Augusta, Mo. Gang-plow.....	424,151	Mar. 25	2690	716	50	1670
Voelkerding, Theodor A. (See Voelkerding and Siem.)						
Vogel, August, and H. Neuerburg, Trier, Prussia, Germany. Cigar-rolling machine.....	422,861	Mar. 4	739	{ 188 189 }	{ 50	1278
Vogel & Brothers, William, <i>et al.</i> (See Frey, John A., assignor.)						
Vogel Electric Insulating and Manufacturing Company. (See Vogel, Kasimir, assignor.)						
Vogel, Henry A., assignor to Fort Wayne Organ Company, Fort Wayne, Ind. Organ-action.....	439,616	Oct. 28	3034	803	53	597
Vogel, Hermann W., Berlin, Germany. Manufacturing highly-sensitive isochromatic gelatine plates.....	442,741	Dec. 16	1774	.....	53	1624
Vogel, Julius, New York, N. Y. Burglar-alarm.....	423,195	Mar. 11	1267	330	50	1385
Vogel, Julius, and J. Brooks, New York, N. Y. Toy detonator.....	433,427	July 29	3698	955	52	748
Vogel, Julius O. (See Haselhorst and Vogel.)						
Vogel, Kasimir, Chelsea, Mass., assignor to Vogel Electric Insulating and Manufacturing Company, Portland, Me. Machine for covering wire, cord, &c.....	437,266	Sept. 30	3029	794	52	1982
Vogel, William, assignor of three-fourths to G. G. Calkins and A. Gray, Chicago, Ill. Telephone.....	429,801	June 10	1045	257	51	1683
Vogel, William H., Milwaukee, Wis. Dandelion digger and puller.....	437,460	Sept. 30	3362	830	52	2047
Vogelins, Peter C., Philadelphia, Pa. Combined drier and digester.....	428,978	May 27	2957	759	51	1425
Vogellus, Peter C., Philadelphia, Pa. Extracting oil from fish.....	432,808	July 22	2772	.....	52	559
Vogelsang, Otto, Planen, near Dresden, Saxony, assignor to M. Hille, Dresden, Germany. Valve-gear for gas-engines or petroleum-engines.....	438,785	Oct. 21	1706	458	53	338
Vogler, William, Somerville, Mass. Overhead electric system.....	423,004	Mar. 11	979	257	50	1330
Vogler, William, Somerville, Mass. Trolley-wire-supporting apparatus.....	423,005	Mar. 11	980	258	50	1330
Vogt, De Friste. (See Koenen, William, assignor.)						
Vogt, Henry. (See Poschinger and Vogt.)						
Vogt, John H. (See Robertson, Archibald J., assignor.)						
Voight, Henry G., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Latch-hub.....	421,994	Feb. 25	2275	599	50	1021
Voight, Henry G., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock or latch bolt.....	434,491	Aug. 19	1603	419	52	1090
Voigt, Ferdinand F., Chicago, Ill. Pipe-elbow holder for screw-threading machines.....	424,519	Apr. 1	117	34	51	26
Vogt, John H. (See Robertson, Archibald J., assignor.)						
Vogt, Louis J. (See Brown, Klippert, and Vogt.)						
Volk, Henry W., Gothenburg, Nebr. Picket fence.....	431,759	July 8	1145	285	52	232
Volk, Adam, Lockport, N. Y. Blind-stop.....	433,058	July 29	3168	815	52	640
Volk Cable Crossing Grip and Car Brake Company. (See Volk, Jacob, assignor.)						
Volk, Jacob, St. Louis, Mo., assignor to Volk Cable Crossing Grip and Car Brake Company, Chicago, Ill. Hand cable-lifter.....	423,293	Mar. 11	1423	369	50	1413
Volk, Jacob, St. Louis, Mo., assignor to Volk Cable Crossing Grip and Car Brake Company, Chicago, Ill. Track-brake.....	423,294	Mar. 11	1424	{ 369 370 }	{ 50	1413
Volk, Jacob, St. Louis, Mo., assignor to Volk Cable Crossing Grip and Car Brake Company, Chicago, Ill. Cable-lifting device.....	424,520	Apr. 1	119	34	51	26
Volk, Jacob, St. Louis, Mo., assignor to Volk Cable Crossing Grip and Car Brake Company, Chicago, Ill. Grip carrier or hanger.....	424,521	Apr. 1	120	34, 35	51	26
Voll, George. (See Morris and Voll.)						
Voll, Henry. (See Rogers, Timothy, assignor.)						
Voltz, William, Chicago, Ill. Hoe or rake.....	421,117	Feb. 11	1031	264	50	768
Volz, John A., assignor of one-half to S. W. Anderson, La Crosse, Wis. Brush or broom support.....	441,266	Nov. 25	2671	693	53	1144
Von Brandis, Adolph, Milwaukee, Wis. Type-writing machine.....	420,843	Feb. 4	608	{ 156 157 }	{ 50	678
Von der Heyden, August. (See Paul, Albert, assignor.)						
Von Nerta, Oehlmann, Washington, D. C. Dry-dock.....	427,382	May 6	527	134	51	915

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Voorhees, John W. (See Barber, Harvey P., assignor.)						
Voorhies, Henry D., Harnellsville, N. Y. Wagon-jack	419,298	Jan. 14	976	259	50	207
Voorhis, Calvin. (See Brooks, John S., assignor.)						
Voorhis, Calvin, and W. E. Start, Cranford, N. J. Ice-creeper	418,830	Jan. 7	263	64	50	56
Vernbrock, Otto H. (See Williams, Leonard A., assignor.)						
Vortmann, Georg. (See Messinger and Vortmann.)						
Voshurgh, Jacob, assignor to N. O. Nelson Manufacturing Company, St. Louis, Mo. Floor and partition thimble	431,538	July 1	781	194	52	155
Vosburgh, William H., Jr., Troy, N. Y. Colored-fire torch	431,827	July 8	1257	315	52	254
Voss, Detlef C., Medford, assignor of one-half to E. A. Clark, Boston, Mass. Electric-motor car	423,400	Mar. 11	1568	412	50	1442
Voss, William, assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Truck	431,089	July 1	88	22	52	20
Voss, William, assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Center-bearing plate for vehicles	442,561	Dec. 9	1460	374 375	53	1555
Votey, Edwin S., Detroit, Mich. Organ-action	422,100	Feb. 25	2433	643	50	1049
Vowles, Joseph, Milford, Mich. Potato-scoop	421,021	Feb. 11	895	231	50	742
Vraalstad, Edward J., Hillsborough, N. D. Combined band-cutter and feeder	420,129	Jan. 28	2236	592	50	473
Vrátil, Jan, Douleib, Austria-Hungary. Slicing or chopping machine	441,081	Nov. 18	2332	604	53	1073
Vulcan Company. (See Leavitt, Frank M., assignor.)						
Vulcan Company. (See White, James, assignor.)						
Vulcan Company. (See White and Kittredge, assignors.)						
Vulcan Iron Works. (See McIntire, Bartlett, assignor.)						
Vulcan Iron Works. (See Nevin, Robert E., assignor.)						
Vulcan Iron Works. (See Roe, Alpheus E., assignor.)						
Wach, Joseph, Höchst-on-the-Main, Prussia, Germany. Thermostat	423,842	Mar. 18	2321	586	50	1547
Wachendorff, Carl, Oestrich-on-the-Rhine, Germany. Mordant	421,847	Feb. 18	2076		50	973
Wachtel, Philip B. (See Schofield, James, assignor.)						
Wachtershauser, George F., Wilkes-Barre, Pa. Sewing-machine	431,238	July 1	316	78	52	64
Wack, Staats V. D., Point Pleasant, N. J. Clothes-line prop	427,642	May 13	923	232	51	1003
Waddell, John M., Greenfield, Ohio. Animal-trap	432,743	July 22	2059	680	52	538
Waddell, Alexander P., Union City, Tenn., assignor of one-half to W. H. Miller, Little Rock, Ark. Trace-carrier	429,369	June 3	409	97	51	1549
Waddell-Entz Electric Company. (See Entz and Phillips, assignors.)						
Waddell-Entz Electric Company. (See Waddell, Montgomery, assignor.)						
Waddell, Montgomery. (See Entz and Phillips, assignors.)						
Waddell, Montgomery, assignor to Waddell-Entz Electric Company, New York, N. Y. Automatic electric cut-out	430,096	June 10	1520	377 378	51	1775
Waddell, W. H., et al. (See House, John, assignor.)						
Waddell, William H. (See Ettinger, Joseph H., assignor.)						
Waddell, William H. (See Smith, William J., assignor.)						
Waddell, William H., Lexington, Va. Electric railway-signal	441,044	Nov. 18	2260	586	53	1059
Wade, Edwin T., Wesson, assignor of one-third to J. D. Tynes, Brookhaven, Miss. Vehicle-hub	423,360	Mar. 11	1508	336	50	1430
Wade, George H., assignor of one-half to W. B. Palmer, Atlanta, Ga. Electric meter	430,551	June 17	2337	549	51	1922
Wade, George W., Cadillac, Mich. Galloping rocking-horse	420,844	Feb. 4	611	157	50	679
Wade, James E., Millfield, Ohio. Wagon-brake	434,027	Aug. 12	861	227	52	933
Wade, James F., Effingham, Ill. Washing-machine	419,482	Jan. 14	1252	332	50	263
Wade, James J., Chicago, Ill. Basin, waste, overflow, and trap fitting	418,831	Jan. 7	264	65	50	56
Wade, James J., Chicago, Ill. Waste and overflow trap	434,689	Aug. 19	1939	504	52	1153
Wade, John, Waupun, Wis. Cutter for corn-harvesters	424,522	Apr. 1	121	35	51	27
Wade, W. E., et al. (See Fleming, Peter F., assignor.)						
Wade, William H., et al. (See Mathewson, James K., assignor.)						
Wadleigh, Andrew S., San Francisco, Cal. Can-head cutter	429,489	June 3	595	144	51	1585
Wadleigh, Merian, assignor to C. S. Gilbert, Kansas City, Mo. Electric belt	421,457	Feb. 18	1510	392	50	866
Wadsworth, Alfred. (See Dougherty, John B., assignor.)						
Wadsworth, Charles W., et al. (See Peters, Charles C., assignor.)						
Wadsworth, Chester J., Cleveland, Ohio. Throat-damper	419,233	Jan. 14	886	233	50	189
Wadsworth, Chester J., Cleveland, Ohio. Parlor-grate	422,471	Mar. 4	161	43	50	1167
Wadsworth, Chester J., Cleveland, Ohio. Parlor-grate	422,472	Mar. 4	162	43, 44	50	1167
Wadsworth, Herbert, Avon, N. Y. Carriage	430,450	June 17	2055	515	51	1894
Wadsworth, Robert. (See Cox, Samuel A., assignor.)						
Waerber, Gustavus A., New York, N. Y. Metal can, box, &c.	435,618	Sept. 2	380	102	52	1446
Waerber, Gustavus A., New York, N. Y., assignor to Franco American Patent Can Opening Company. Metal can, box, or other receptacle. (Reissue.)	11,076	May 13	1568	397	51	1128
Waffenfabrik Mauser. (See Mauser, Paul, assignor.)						
Wagandt, Charles L., assignor of one-half to Keen & Hagerty, Baltimore, Md. Soldering-tool	418,934	Jan. 7	449	110	50	94
Wagandt, Charles L., assignor of one-half to Keen & Hagerty, Baltimore, Md. Making muffin or bake pans	436,883	Sept. 23	2437	636	52	1862
Wagandt, Charles L., assignor to Keen & Hagerty, Baltimore, Md. Lip for coffee-boilers and making the same	443,154	Dec. 23	2490	637	53	1771
Wagemann, Edmund, assignor of six-sevenths to J. D. and D. Adams, O. and J. W. Davis, H. G. Allis, and J. B. Jones, Little Rock, Ark. Converter	426,153	Apr. 22	2631	691	51	536
Wagemann, Edmund, assignor of six-sevenths to J. D. and D. Adams, O. and J. W. Davis, H. G. Allis, and J. B. Jones, Little Rock, Ark. Field-magnet for dynamos	429,490	June 3	595	145 146	51	1585
Wagemann, Edmund, assignor of six-sevenths to J. D. and D. Adams, O. and J. W. Davis, H. G. Allis, and J. B. Jones, Little Rock, Ark. Electric regulator	429,825	June 10	1087	267 268	51	1691
Wagemann, Edmund, assignor of six-sevenths to J. D. and D. Adams, O. and J. W. Davis, H. G. Allis, and J. B. Jones, Little Rock, Ark. Armature	432,500	July 15	2265	585 586	52	455
Wagemann, Edmund, assignor of six-sevenths to J. D. and D. Adams, O. and J. W. Davis, H. G. Allis, and J. B. Jones, Little Rock, Ark. Electric car	432,501	July 15	2266	586 587	52	455
Wagemann, Edmund, assignor of six-sevenths to J. D. and D. Adams, O. and J. W. Davis, H. G. Allis, and J. B. Jones, Little Rock, Ark. Motor-armature car-wheel	436,728	Sept. 16	2105	554 555	52	1791
Wagemann, Edmund, assignor of six-sevenths to J. D. and D. Adams, O. and J. W. Davis, H. G. Allis, and J. B. Jones, Little Rock, Ark. Electric-railway motor-car	439,584	Oct. 28	2965	787	53	582
Wages, Edgar, and S. H. Armstrong, Canton, Ill. Grip coal-drilling machine	433,556	Aug. 5	171	46	52	790
Wagg, Charles H., Brunswick, assignor of one-half to W. J. Curitt, Lewiston, Me. Picker for lemons	443,307	Dec. 23	2765	708	53	1825
Wagg, Solomon R., Appleton, Wis. Pulp-digester	440,242	Nov. 11	940	242	53	803
Waggner, Albert and H. C., and L. H. Elliott, Columbus, Ohio. Cash-carrier	421,458	Feb. 18	1511	392	50	867
Waggner, Harry C. (See Waggner and Elliott.)						
Wagner, Bernard P., assignor of two-thirds to W. H. and M. M. Wagner, Sidney, Ohio. Cash-recorder	434,217	Aug. 12	1168	304	52	994
Wagner, Caspar M., Chicago, Ill. Folding cot	440,730	Nov. 18	1748	448	53	963

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Wagner, Caspar M., Chicago, Ill. Folding crib	440,731	Nov. 18	1749	{ 448 449	53	963
Wagner, Caspar M., Chicago, Ill. Folding cot	440,732	Nov. 18	1750	{ 449 450	53	964
Wagner, Caspar M., Chicago, Ill. Folding cot	440,733	Nov. 18	1752	{ 450 451	53	964
Wagner, Charles, New York, N. Y. Benzine-can	420,320	Jan. 28	2536	672	50	527
Wagner, Charles T., Brooklyn, N. Y. Manufacture of quilted linings	425,717	Apr. 15	1964	522	51	400
Wagner, Daniel. (See Eversman and Wagner.)						
Wagner, Ernst, Jr., assignor of one-half to W. Rathsack, Manitowoc, Wis. Whey-faucet	418,774	Jan. 7	174	42	50	39
Wagner, Frank C., Ann Arbor, Mich. Electro-thermal current-regulator	419,740	Jan. 21	1620	432	50	342
Wagner, Gustav, Metzingen, Württemberg, Germany. Machine for centering and counter-sinking	427,811	May 13	1198	301	51	1056
Wagner, Ira, New Castle, Pa. Attachment for lawn-mowers	422,473	Mar. 4	163	44	50	1167
Wagner, John L., and J. Seath, Terre Haute, assignors to American Car Door Company, Indianapolis, Ind. Car-door	441,724	Dec. 2	150	40	53	1291
Wagner, John L., and J. Seath, Terre Haute; said Seath assignor to C. S. Lewis, Indianapolis, Ind. Car-door	442,406	Dec. 9	1212	313	53	1505
Wagner, John L., and J. Seath, Terre Haute; said Seath assignor to C. S. Lewis, Indianapolis, Ind. Car-door	442,728	Dec. 16	1755	454	53	1621
Wagner, John R., Luzerne, assignor to E. B. Cox, Drifton, Pa. Mechanical movement	419,089	Jan. 7	660	173	50	139
Wagner, Louis, assignor of one-half to J. Marr, Baltimore, Md. Safety device for grain-mills	419,162	Jan. 7	769	204	50	159
Wagner, Ludwig, San Francisco, Cal. Wine-schoener	439,755	Nov. 4	185	48	53	644
Wagner, Milton M., et al. (See Wagner, Bernard P., assignor.)						
Wagner, Oscar, Dayton, Ohio. Window-sash	431,629	July 8	916	231	52	190
Wagner, Richard H., Naperville, Ill. Fly-net	419,901	Jan. 21	1883	495	50	395
Wagner, William H., et al. (See Wagner, Bernard P., assignor.)						
Wagniere, Auguste, Los Angeles, Cal. Electric-arc lamp	436,814	Sept. 23	2280	601	52	1832
Wagon, Andrew A., Whitewater, Tex. Ironing-table	438,663	Oct. 21	1499	405	53	300
Wagoner, Lafayette H., et al. (See Blair, Barton L., assignor.)						
Wagoner, Luther, San Francisco, Cal. Apparatus for aging wines	429,826	June 10	1089	268	51	1691
Wahl, Charles, Dayton, Ohio. Safety-valve for fuel gas pipes	420,750	Feb. 4	446	118	50	651
Wahlin, Adolph, C. J. Lundstrom, Stockholm, Sweden, and T. Collins, Winchester, N. H., assignors to R. D. Harris, New York, N. Y. Extractor-churn	432,714	July 22	2612	668	52	529
Wahra, Adolph, assignor of one-half to V. D. Fischbeck, Milwaukee, Wis. Fly-net	439,911	Nov. 4	428	110	53	691
Wailles, John W., Bescott, county of Stafford, England. Machine for cutting and shaping heated metal	435,955	Sept. 9	894	235	52	1553
Wainwright, William, Winchester, Ill. Bake-pan	429,551	June 3	680	166	51	1602
Wainwright, Charles D. (See Hansen and Wainwright.)						
Wainwright, Henry H., Philadelphia, Pa. Street-curb	428,432	May 20	2138	538	51	1248
Wainwright, Jonathan, Wanakegan, Ill. Medical bandage	430,048	June 10	1437		51	1758
Wainwright Manufacturing Company. (See Fife, John F., assignor.)						
Wainwright Manufacturing Company of Massachusetts. (See Fife, John F., assignor.)						
Wainwright Manufacturing Company of Massachusetts. (See Hansen and Wainwright, assignors.)						
Wainwright, William, San Francisco, Cal. Vaporizing spray-nozzle	442,762	Dec. 16	1801	467	53	1630
Wait, Gilbert D., Portsmouth, Ohio. Drawer for furniture	426,972	Apr. 29	3641	1003	51	783
Wait, Howard S., Rahway, N. J. Blotter	441,516	Nov. 25	3051	{ 785 786	53	1216
Waite & Bartlett Manufacturing Company. (See Bartlett and Waite, assignors.)						
Waite & Bartlett Manufacturing Company. (See Waite, Henry E., assignor.)						
Waite, Charles D., Providence, R. I. Eyeglass-holder	434,964	Aug. 26	2380	630	52	1247
Waite, Gilman. (See Clift, John W., assignor.)						
Waite, Gilman. (See Stevens, Asher B., assignor.)						
Waite, Gilman. (See Washburn, Theodore W., assignor.)						
Waite, Hamilton D., assignor to Gifford Manufacturing Company, Watertown, N. Y. Camera-stand	432,255	July 15	1896	488	52	383
Waite, Henry E. (See Bartlett and Waite.)						
Waite, Henry E., et al. (See Ethridge, Martin V. B., assignor.)						
Waite, Henry E., assignor to Waite & Bartlett Manufacturing Company, New York, N. Y. Battery-cell	432,681	July 22	2561	656	52	519
Waite, Willis C., Minneapolis, Minn. Sleeping-car	428,258	May 20	1869	469	51	1195
Wakefield, William O. (See Alton and Wakefield.)						
Wakeley, William S., Harvard, Ill. Eaves trough hanger	420,176	Jan. 28	2318	612	50	486
Wakeman, Charles E., Pontiac, Mich. Boiler	435,989	Sept. 9	946	248	52	1563
Walbridge, George J., Colby, Wis. Halter	431,828	July 8	1258	315	52	254
Walbridge, Henry B., Brooklyn, N. Y. Construction of buildings	433,500	Aug. 5	86	25	52	774
Walbridge, John H., and J. P. Stepp, Brooklyn, assignors to Hoff & Walbridge, New York, N. Y. Hair curler and frizzer	423,972	Mar. 25	2438	647	50	1622
Walbrunn, Anton, Menasha, Wis. Wood-bending form	424,523	Apr. 1	122	35	51	27
Walburn, Albert W. (See Swenson, Magnus, assignor.)						
Wald, Richard N., Earlville, Ill. Rail-joint	432,101	July 15	1670	429	52	341
Walda, William C., Fort Wayne, Ind. Safety-valve	432,459	July 15	2208	569	52	443
Waldauer, Jacob M., et al. (See Merrill, William E. T., assignor.)						
Walden, Frank D., Jeffersonville, Ind., assignor to F. A. Watson, Chicago, Ill. Shoe-upper-turning machine	433,916	Aug. 5	702	182	52	894
Walden, George, Millersburg, Ind. Box-fastener	435,597	Sept. 2	332	92	52	1439
Waldner, Markus, Gyöngyös, Austria-Hungary. Stationary life-saving apparatus	441,082	Nov. 18	2333	604	53	1073
Waldron, Cornelius J. (See Brush, Charles M., assignor.)						
Waldron, Edward, Philadelphia, Pa. Pulley-clutch	432,102	July 15	1671	430	52	341
Waldron, James H., Urbana, Ohio. Fire-escape	425,644	Apr. 15	1855	495	51	378
Wales, Sigourney, Terre Haute, Ind., assignor to Whittemore Brothers & Co., Boston, Mass. Safety-package	427,643	May 13	924	232	51	1003
Wales, Simeon W., North Abington, Mass. Spring-washer	425,476	Apr. 15	1596	426	51	327
Walker, Arthur W. (See Walker, George W. and A. W.)						
Walker, C. P., et al. (See Henshaw, Fred M., assignor.)						
Walker, David, Newark, and W. G. Collins, East Orange, N. J. Stair-rod securer	418,996	Jan. 7	527	132	50	111
Walker, Douglas, Liberty, Ill. Farm-gate	441,518	Nov. 25	3056	786	53	1217
Walker, Edward H. and W. F., Somerset, Pa. Railway-tie	439,333	Oct. 28	2597	693	53	512
Walker, Edward W., et al. (See Gore, Henry A., assignor.)						
Walker Electric Company. (See Walker, George W., assignor.)						
Walker, Eugene F., Athens, La. Attachment for bedsteads	434,307	Aug. 12	1308	340	52	1022
Walker, Francis M., assignor of one-half to J. H. Smith, Newark, Ohio. Gearing for traction-engines	424,383	Mar. 25	3059	812	50	1742

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Walker, George D., Cleveland, Ohio. Car-seal.....	440,782	Nov. 18	1843	474	53	979
Walker, George W., Malden, Mass. Portable oven.....	426,085	Apr. 22	2526	666	51	514
Walker, George W., Malden, Mass. Portable oven.....	433,501	Aug. 5	87	25	52	774
Walker, George W., assignor to Walker Electric Company, New York, N. Y. Electrical measuring-instrument.....	435,550	Sept. 2	264	74	52	1426
Walker, George W. and A. W., Malden, Mass. Hot-water heater.....	442,651	Dec. 16	1591	{ 411 412 }	{ 53 53 }	1590
Walker, Henry, Brunswick Square, county of Middlesex, assignor to H. Munday, 23 Oakley Square, England. Flap-valve for sewers or drains.....	420,367	Jan. 23	2606	693	50	540
Walker, Hugh R., Chicago, Ill. Smoke-preventing furnace.....	435,532	Sept. 2	231	64	52	1419
Walker, James. (See Barclay and Walker.)						
Walker, John, Cleveland, Ohio. Friction-clutch.....	421,332	Feb. 11	1340	347	50	826
Walker, John, Cleveland, Ohio. Friction-clutch.....	421,333	Feb. 11	1341	347	50	826
Walker, John, Cleveland, Ohio. Friction-clutch.....	424,631	Apr. 1	297	77	51	59
Walker, John, Cleveland, Ohio. Friction-clutch.....	434,122	Aug. 12	1026	266	52	966
Walker, John, Cleveland, Ohio. Step-box frame for cable railways.....	441,455	Nov. 25	2974	765	53	1201
Walker, John, Cleveland, Ohio. Removable roller-support for cable railways.....	441,456	Nov. 25	2976	766	53	1201
Walker, John, Cleveland, Ohio. Cable-winding mechanism for cable railways.....	441,457	Nov. 25	2977	766	53	1202
Walker, John, Cleveland, Ohio. Friction-clutch.....	441,726	Dec. 2	153	41	53	1292
Walker, John S., Claremont, N. H. Shoe-spring.....	427,136	May 6	173	45	51	845
Walker, John S., Claremont, N. H. Sand-band for vehicles.....	427,137	May 6	173	46	51	845
Walker, John S., Claremont, N. H. Grooming device.....	431,497	July 1	719	179	52	144
Walker, Joseph, Clark's Green, Pa. Universal-joint coupling for pipes.....	427,736	Oct. 7	91	29	53	20
Walker, Louis C., Dayton, Ohio. Ball-court.....	437,267	Sept. 30	3030	794	52	1982
Walker, Micah, Port Huron, Mich. Tubular well.....	426,884	Apr. 29	3728	973	51	762
Walker, Oakley S., assignor to Worcester Polytechnic Institute, Worcester, Mass. Twist-drill-grinding machine.....	425,839	Apr. 15	2138	571	51	433
Walker, Richard, Oulton, near Leeds, England. Holder for retaining sleeves in position.....	442,263	Dec. 9	987	260	53	1462
Walker, Robert L., Boston, Mass. Furnace.....	439,705	Nov. 4	117	32	53	631
Walker, Robert L., Boston, Mass. Furnace.....	439,706	Nov. 4	117	32	53	631
Walker, Thomas, Warren, Me. Take-up device for spindle-hands of spinning-machines.....	434,852	Aug. 19	2159	566	52	1198
Walker, Thomas F. (See Pett, Frank S., assignor.)						
Walker, Thomas H., et al. (See Gilmer, Thomas W., assignor.)						
Walker, Warren S., Manchac, La. Steam-boiler furnace.....	426,694	Apr. 29	3445	903	51	706
Walker, Warren S., Manchac, La. Corn-planter.....	430,451	June 17	2087	515	51	1895
Walker, Warren S., Manchac, La. Furnace fuel-feeding apparatus.....	441,725	Dec. 2	152	41	53	1291
Walker, William, Salthurn-by-the-Sea, county of York, England. Apparatus for getting coal and other like minerals.....	425,718	Apr. 15	1965	522	51	400
Walker, William B., assignor to R. M. and B. T. Whitehouse, Dover, N. H. Thill-coupling.....	428,734	May 27	2601	659	51	1353
Walker, William B. B., Springfield, Ohio. Fruit-gatherer.....	442,928	Dec. 16	2100	541	53	1689
Walker, William H., Martinez, assignor of one-half to P. J. Sullivan, Augusta, Ga., and E. Everett, Wilmington, N. C. Air-brake.....	438,038	Oct. 7	567	155	53	108
Walker, William H., De Graff, assignor of one-half to J. W. Miller, Bellefontaine, Ohio. Gambrel-stick.....	441,517	Nov. 25	3055	786	53	1217
Walker, William H., and G. Eastman, assignors, by mesne assignments, to Eastman Dry Plate and Film Company, Rochester, N. Y. Flexible photographic film.....	420,130	Jan. 28	2238	593	50	473
Walker, William J., St. Louis, Mo. Car-coupling.....	430,202	June 17	1666	414	51	1813
Walker, William J., assignor of one-half to L. Hammerschmidt, St. Louis, Mo. Car-coupling.....	429,103	May 27	3155	813	51	1463
Walker, William J., assignor of one-half to L. Hammerschmidt, St. Louis, Mo. Car-door.....	431,926	July 8	1393	353	52	281
Walker, William J., assignor to L. Hammerschmidt, St. Louis, Mo. Car-coupling.....	435,196	Aug. 26	2717	718	52	1310
Walker, William T., Bishopwood Road, Highgate, county of Middlesex, England. Gas-washer.....	420,751	Feb. 4	447	{ 118 119 }	{ 50 50 }	652
Walker, William V., Moravia, N. Y. Harrow-tooth fastener.....	421,789	Feb. 18	1984	522	50	957
Walker, William V., Moravia, N. Y. Harrow.....	426,695	Apr. 29	3446	903	51	706
Walker, Willis F. (See Walker, Edward H. and W. F.)						
Walker, Willis F., Somerset, Pa., assignor of one-half to E. A. Perkins, Groton, N. Y. Pick.....	434,896	Aug. 19	2249	590	52	1215
Walkup, Liberty, Rockford, Ill. Pantograph.....	441,909	Dec. 2	436	{ 116 117 }	{ 53 53 }	1350
Wall, Charles W., Buffalo, assignor of one-half to G. Urban, Jr., Cheektowago, N. Y. Belt-gearing.....	418,775	Jan. 7	176	42	50	39
Wall, Franklin J. (See Clouser, Samuel R., assignor.)						
Wall, George H., Lambeth, county of Surrey, England. Safety water-gage.....	426,154	Apr. 22	2632	691	51	536
Wall, Robert C., Philadelphia, Pa. Luggage-carrier for bicycles.....	438,720	Oct. 21	1596	{ 428 429 }	{ 53 53 }	317
Wall, Thomas, assignor to himself and R. Sealy, Brooklyn, N. Y. Burner.....	427,383	May 6	529	134	51	916
Wall, Thomas, assignor to himself and R. Sealy, Brooklyn, N. Y. Lamp-burner.....	440,078	Nov. 4	675	179	53	740
Wall, Thomas, assignor to himself and R. Sealy, Brooklyn, N. Y. Burner for street-car lamps.....	440,079	Nov. 4	676	180	53	740
Wallace, Aaron W. (See Parmelee, John H., assignor.)						
Wallace, Amos, Little Rock, Iowa. Windmill.....	441,519	Nov. 25	3057	{ 786 787 }	{ 53 53 }	1217
Wallace, Arthur H., Houghton, Mich. Shears.....	422,670	Mar. 4	459	116	50	1224
Wallace, Edward O. and S. M., Clay Center, Nebr. Dye for leather.....	425,919	Apr. 15	2251	.....	51	453
Wallace, Francisco D., Clymer, N. Y. Lifting-jack.....	428,027	May 13	1519	346	51	1118
Wallace, Frank E., Mounmouth, Ill. Display-stand.....	420,668	Feb. 4	340	89	50	630
Wallace, Frank W., assignor of one-half to Z. Wardlaw, Utica, Miss. Bolt.....	443,418	Dec. 23	2923	752	53	1857
Wallace, Jacob B., assignor to Metric Metal Company, Beaver Falls, Pa. Registering apparatus for gas-meters.....	438,208	Oct. 14	817	232	53	163
Wallace, James, Philadelphia, Pa. Toy.....	426,709	Feb. 4	390	104	50	641
Wallace, James A., Alexis, Ill. Type-writing machine.....	423,644	Mar. 18	1937	{ 510 511 }	{ 50 50 }	1520
Wallace, James T., and W. D. Holloman, Gould, Tex. Spring-motor.....	421,334	Feb. 11	1342	347	50	827
Wallace, John, Troy, N. Y. Man-hole for sewers or cesspools.....	423,501	Mar. 18	1720	453	50	1480
Wallace, John B., et al. (See Swegles, John, assignor.)						
Wallace, John S., Belfast, Ireland. Coin-operated electric apparatus.....	423,361	Mar. 11	1509	{ 396 397 }	{ 50 50 }	1431
Wallace, John S., Belfast, Ireland. Vending apparatus.....	443,340	Dec. 23	2811	{ 722 723 }	{ 53 53 }	1835
Wallace, Joseph D. (See Maltby and Wallace.)						
Wallace, Lewis, Crawfordsville, Ind. Railway-tie.....	427,384	May 6	530	135	51	916
Wallace, Lewis, Crawfordsville, Ind. Combined joint-bar and railway-tie.....	427,812	May 13	1199	301	51	1056
Wallace, Lewis, Crawfordsville, Ind. Railway cross-tie.....	427,813	May 13	1200	302	51	1056
Wallace, Lewis, Crawfordsville, Ind. Metal pad for metal railway-ties.....	427,814	May 13	1200	302	51	1056

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Wallace, Mahlon B. (See Ross, Augustus, assignor.)						
Wallace, Marshal, Little Rock, Ark. Separator for cotton-seed-oil mills	440,981	Nov. 18	2167	561	53	1041
Wallace, Richard, Fort Scott, Kans. Sectional boiler	436,680	Sept. 16	2042	534	52	1778
Wallace, Richard M. (See Spencer, Allen D., assignor.)						
Wallace, Robert A. (See Phillips, Ambrose A., assignor.)						
Wallace, Samuel M. (See Wallace, Edward O. and S. M.)						
Wallace & Sons. (See Bryant, Edson L., assignor.)						
Wallace, Thomas, New York, N. Y. Conduit	431,630	July 8	916	231	52	190
Wallace, Thomas P. (See Harris, Joshua W., assignor.)						
Wallace, Thomas R. (See Brown, Thomas J., assignor.)						
Wallace, William H., Jr., Philadelphia, Pa. Poison-indicator	426,342	Apr. 22	2894	762	51	591
Wallace, William V., Pittsfield, Mass. Air-moistening apparatus	443,155	Dec. 23	2491	637	53	1771
Wallace, William V., Pittsfield, assignor of one-half to J. D. Gilman, Boston, Mass. Air-moistening apparatus	436,762	Sept. 16	2172	571	52	1803
Wallace, William W., Willoughby, Ohio. Die for brick or tile machines	436,929	Sept. 23	2510	657	52	1875
Wallach, Henry, <i>et al.</i> , trustees. (See McGregor, John A. K., assignor.)						
Wallach, Leopold. (See Endemann, Hermann, assignor.)						
Wallach, Solomon J., <i>et al.</i> , trustees. (See McGregor, John A. K., assignor.)						
Wallbillich, Robert. (See Conner and Wallbillich.)						
Waller, David M. W., Fortress Monroe, Va. Toy	434,817	Aug. 19	2115	554	52	1189
Waller, Elijah F., Hanson, Ky. Furniture-drawer	423,196	Mar. 11	1268	330	50	1385
Wallerich, Nicholas, Fort Worth, Tex. Automatic cut-off for rotary engines	429,204	June 3	149	36	51	1500
Walling, William P., Santa Monica, Cal. Elevated carrier	421,211	Feb. 11	1169	300	50	794
Walling, William P., Santa Monica, Cal. Elevated cable road	426,885	Apr. 29	3729	973	51	762
Wallingford, George W., Mount Gilead, Ky. Car-coupling	433,956	Sept. 9	895	235	52	1553
Wallis, Arthur H., Basingstoke, England. Engine-starter	439,449	Oct. 28	2771	738	53	544
Wallis, James W., Birmingham, Ala. Tricycle cotton-picker	422,671	Mar. 4	460	117	50	1224
Wallis, William T. (See Ellis, John, assignor.)						
Wallwork, Roughsedge, Manchester, county of Lancaster, England. Apparatus for supplying combustible liquids to burners	422,101	Feb. 25	2435	643	50	1049
Wallwork Roughsedge and A. C. Wells, Manchester, county of Lancaster, England. Illuminating apparatus	425,154	Apr. 8	1111	295	51	223
Wallwork, Roughsedge, and A. C. Wells, Manchester, England. Vapor-burner	437,268	Sept. 30	3031	795	52	1982
Wallwork, Roughsedge, and A. C. Wells, Manchester, England. Illuminating apparatus	440,520	Nov. 11	1402	362	53	887
Walmer, Ross B., Millbank, S. D. Steering attachment for harvesters	436,198	Sept. 9	1277	333	52	1623
Walrath, Jesse, Racine, Wis. Elevator for thrashing machines	420,131	Jan. 28	2239	503	50	474
Walscheid, Otto, Jersey City, N. J. Extension-clamp for clothes-wringers	419,483	Jan. 14	1253	332	50	264
Walsh, Benjamin M., Bridgeport, Conn. Pouncing-roller	438,786	Oct. 21	1708	458	53	338
Walsh, Dormer, assignor of one-half to F. H. Manker, San Francisco, Cal. Game	433,110	July 29	3252	837	52	657
Walsh, Francis A., Milwaukee, Wis. Flanging sheet-metal vessels	421,212	Feb. 11	1170	300	50	794
Walsh, Francis A., Milwaukee, Wis. Sheet-metal vessel	421,213	F. b. 11	1171	300	50	795
Walsh, Francis A., Milwaukee, Wis. Sheet-metal vessel	421,335	Feb. 11	1343	348	50	827
Walsh, Francis A., Milwaukee, Wis. Manufacturing sheet-metal vessels	423,295	Mar. 11	1425	370	50	1413
Walsh, Francis A., Milwaukee, Wis. Sheet-metal vessel	423,887	Mar. 18	2294	605	50	1587
Walsh, James T., Red Fork, Ark. Breech-loading safety-gun	433,260	July 29	3467	895	52	701
Walsh, Martin J., Parsons, Pa. Household furniture	421,118	Feb. 11	1032	265	50	769
Walsh, Michael, assignor of one-half to F. C. Weir, Cincinnati, Ohio. Pile-driver	431,539	July 1	783	194	52	155
Walsh, Phillip B., assignor to C. M. Rhodes, Philadelphia, Pa. Electric motor	421,790	Feb. 18	1985	522	50	957
Walsh, Richard, Philadelphia, Pa. Stuffing-box packing	437,737	Oct. 7	92	30	53	21
Walsh, William E., Lowell, Mass. Thread cut-off for spinning and twisting machines	431,177	July 1	216	54	52	45
Walsh, William E., Lowell, Mass. Thread-breaking mechanism for doubling-machines	436,064	Sept. 9	1060	275	52	1585
Walter, Anton W., Canton, Ohio. Adjustable saw-tooth	433,657	Sept. 2	440	117	52	1458
Walter, Bernhard M. C., Kansas City, Mo. Removable privy-vault	423,006	Mar. 11	981	258	50	1330
Walter, David C., assignor of two-thirds to J. C. Otis and S. P. Bowies, Toledo, Ohio. Feed-water regulator	420,979	Feb. 11	832	215	50	739
Walter, Edward, Keytesville, Mo. Sash fastener	437,536	Sept. 30	3472	906	52	2069
Walter, Edward, assignor of one-half to E. W. Price, Keytesville, Mo. Wheel	422,169	Feb. 25	2538	670	50	1069
Walter, Edward, assignor of one-half to E. W. Price, Keytesville, Mo. Corn-planter	435,909	Sept. 2	830	220	52	1535
Walter, George, Grand Forks, N. D. Middlings-purifier	442,212	Dec. 9	915	243	53	1448
Walter, Henry E., Schenectady, N. Y. Electric motor	422,556	Mar. 4	278	71	50	1189
Walter, Henry E., Schenectady, N. Y. System of electrical distribution	434,614	Aug. 19	1790	467	52	1127
Walter, Johannes, assignor to J. R. Geigy & Co., Basle, Switzerland. Azo color	431,297	July 1	398	.....	52	82
Walter, Johannes, assignor to J. R. Geigy & Co., Basle, Switzerland. Brown dye	440,288	Nov. 11	1019	.....	53	816
Walter, John, Winter Haven, assignor of one-half to R. R. Foote, Auburndale, Fla. Fertilizer distributor and mixer	423,645	Mar. 18	1939	511	50	1520
Walter, John M., Peoria, Ill. Mining-machine	431,239	July 1	317	78	52	64
Walter, Lloyd S., <i>et al.</i> (See Smith, Gary B., assignor.)						
Walter, Parker L., Allegheny, Pa. Paper-fastener	434,101	Aug. 12	985	257	52	959
Walter, Sebastian, assignor to Kieckhefer Brothers & Co., Milwaukee, Wis. Jacketed can	432,346	July 15	2038	525	52	408
Walter, Will P., assignor of one-fourth to W. L. Benham, Bay City, Mich. Crozing and chamfering machine	437,467	Sept. 30	3363	880	52	2047
Walter, William, Saltsburg, Pa. Churn	437,537	Sept. 30	3472	906	52	2069
Walter, William, assignor of one-half to G. C. Olinger, Beecher City, Ill. End guard for cars	443,882	Dec. 30	3654	941	53	2007
Walter, Willie C., assignor of one-half to G. B. McAdams, Richmond, Va. Electric railway-signal	421,791	Feb. 18	1986	523	50	957
Walters, Charles F., and P. Shellenback, Richmond, Ind. Roller-mill	421,996	Feb. 25	2276	599	50	1021
Walters, Charles F., and P. Shellenback, Richmond, Ind. Roller-mill	434,028	Aug. 12	861	227	52	933
Walters, Charles W., Sumner, Ga. Fire-kindler	436,509	Sept. 16	1758	464	52	1726
Walters, George W. (See Dirnutt and Walters.)						
Walters, George W., Chatham, Ill. Gate	434,536	Aug. 19	1670	437	52	1103
Walters, John F. (See Dunn and Walters.)						
Walters, W. L., Sr., <i>et al.</i> (See House, John, assignor.)						
Walters, W. L., Jr., <i>et al.</i> (See House, John, assignor.)						
Walters, William. (See Turnbull and Walters.)						
Walters, William, assignor of one-half to W. H. Walters, Findlay, Ohio. Ironing-stand	438,039	Oct. 7	569	155	53	108
Walters, Willie H. (See Walters, William, assignor.)						
Walther, Charles F., assignor to S. S. Jewett & Co., Buffalo, N. Y. Stove	435,781	Sept. 2	622	164	52	1494

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Walther, John S., <i>et al.</i> (See Walther, Peter, assignor.)						
Walther, Paul J., <i>et al.</i> (See Walther, Peter, assignor.)						
Walther, Peter, Kokomo, Ind., assignor of two-thirds to P. J. and J. S. Walther, Cleveland, Ohio. Flood and stock gate	437,406	Sept. 30	3256	849	52	2024
Waltman, Henry M., Lomira, Wis. Railway-spike	419,234	Jan. 14	887	233	50	190
Walton, Benjamin, Compton, Cal. Bird-trap	418,965	Jan. 7	489	122	50	103
Walton, Charles. (See Wilson, Joseph B., assignor.)						
Walton, George E., <i>et al.</i> (See Clark, Joseph V., assignor.)						
Walton, George W., Sparta, Tex. Wagon-brake	434,573	Aug. 19	1722	450	52	1113
Walton, Jacob G., Davilla, Tex. Combination-plow	439,214	Oct. 28	2391	642	53	474
Walton, James B., Dayton, Ohio. Curtain-fastener	443,127	Dec. 23	2432	621	53	1761
Walton, Joseph J., Newark, N. J. Thimble for ship's rigging	438,904	Oct. 21	1909	507	53	375
Walton, Lucius B. (See Peters and Walton.)						
Walton, Robert T., Philadelphia, Pa. Electric gas-lighter	428,433	May 20	2139	538	51	1248
Walton, Sam H., Belton, Tex. Plow	421,336	Feb. 11	1344	348	50	827
Walton, Sam H., Belton, Tex. Plow	432,103	July 15	1674	430	52	342
Walton, William T., Mayville, Oreg. Barbed wire	437,805	Oct. 7	206	63	53	41
Waltzberg, August F. (See Everitt, William L., Jr., assignor.)						
Walworth, Arthur C., Newton, Mass., and C. W. Nason, New York, N. Y. Steam-boiler	439,261	Oct. 28	2471	663	53	488
Walzer, Justin. (See Friess and Walzer.)						
Wamsley, William F., and T. McIntosh, Walla Walla, Wash. Electric connector for brake-hose	427,138	May 6	174	46	51	845
Wanamaker Car Scale Company. (See Wanamaker, Charles B., assignor.)						
Wanamaker, Charles B., assignor of one-half to A. G. Cox, Indianapolis, Ind. Pencil-sharpen	418,997	Jan. 7	528	132	50	111
Wanamaker, Charles B., assignor to Wanamaker Car Scale Company, Indianapolis, Ind. Weighing attachment for cars	439,215	Oct. 28	2392	643	53	474
Wanamaker, Charles B., assignor to Wanamaker Car Scale Company, Indianapolis, Ind. Weighing-scales	439,216	Oct. 28	2394	644	53	475
Wanamaker, Charles B., assignor to Wanamaker Car Scale Company, Indianapolis, Ind. Weighing attachment for cars	439,217	Oct. 28	2397	644	53	475
Wanamaker, Thomas B. (See Birgé, Isidore, assignor.)						
Wanamaker, Thomas B. (See Stuard, Thomas P., assignor.)						
Wands, John C., St. Louis, Mo. Car-door	424,384	Mar. 25	3060	812	50	1742
Wands, John C., St. Louis, Mo. Door-hanger	438,510	Oct. 14	1266	342	53	249
Wands, John C., St. Louis, Mo. Door-hanger	441,910	Dec. 2	437	117	53	1351
Wangler, Joseph F., <i>et al.</i> (See Bradley, Jay L., assignor.)						
Wantling, Isaac, and J. T. Johnson, Peoria, Ill. Coal or rock drill	436,815	Sept. 23	2281	601	52	1833
Ward, Alexander F., assignor of one-half to J. G. Dietz, Detroit, Mich. Shutter-worker	439,912	Nov. 4	429	110	53	691
Ward, Charles A., Waterbury, Conn. Electrical clock-winding mechanism	429,396	June 3	453	106	51	1557
Ward, Charles A., Waterbury, Conn. Advertising-clock	429,552	June 3	680	165	51	1603
Ward, Charles C., and C. W. Warren, Mount Vernon, Ohio. Fencing	434,965	Aug. 26	2380	630	52	1247
Ward, Charles P., Guilford, Ind. Crate	437,538	Sept. 30	3473	906	52	2069
Ward, Frank F., Kalamazoo, assignor to M. Holland, Diamond Lake, Mich. Hanging-lamp support	419,575	Jan. 14	1373	368	50	289
Ward, Frank F., assignor of two-thirds to E. E. Brownson and E. S. Rankin, Kalamazoo, Mich. Umbrella-holder	424,041	Mar. 25	2540	677	50	1641
Ward, Frank K., Washington D. C. Milk-preserving jar and sealed stopple for the same	437,952	Oct. 7	423	118	53	81
Ward, Frank K., Washington, D. C. Adjustable croquet-wicket	438,392	Oct. 14	1099	299	53	216
Ward, Frank K., Washington, D. C. Seal-stopper for milk-preserving jars	441,993	Dec. 2	565	152	53	1374
Ward, Frank K., Washington, D. C. Adjustable copy-holder for type-writers	442,467	Dec. 9	1299	336	53	1523
Ward, Henry B., San Diego, Cal. Pipe-coupling	442,837	Dec. 16	1932	496	53	1657
Ward, Henry C., <i>et al.</i> (See Barnes, Amos, assignor.)						
Ward, Joseph D., assignor to United Zylonite Company, Zylonite, Mass. Game-counter	439,450	Oct. 28	2772	738	53	545
Ward, Joseph D., assignor to United Zylonite Company, Zylonite, Mass. Manufacturing hollow articles from pyroxyline compounds	439,451	Oct. 28	2773	739	53	545
Ward, Kirby S., Birmingham, Ala. Warehouse-truck	441,206	Nov. 25	2556	660	53	1125
Ward, Marzy J., Sidney, N. Y. Fastening for shoe-laces	428,434	May 20	2140	538	51	1249
Ward, Oscar L., Eagle, Nebr. Slide-valve for engines	434,367	Aug. 12	1397	366	52	1040
Ward, Randolph G., Baltimore, Md. Water-heater	421,792	Feb. 18	1989	523	50	958
Ward, Randolph G., Baltimore, Md. Envelope-machine	423,646	Mar. 18	1942	511	50	1521
Ward, Randolph G., Baltimore, Md. Machine for scraping the pulp, &c., from fibrous plants	428,325	May 20	1974	496	51	1215
Ward, Randolph G., Baltimore, Md. Machine for producing artificial freezing and refrigeration	443,020	Dec. 16	2224	573	53	1715
Ward, Randolph G., Baltimore, assignor of one-half to S. D. Kennedy, Annapolis, Md. Letter-box	423,007	Mar. 11	982	259	50	1330
Ward, Randolph G., Baltimore, assignor of one-half to S. D. Kennedy, Annapolis, Md. Registering-padlock	427,284	May 6	398	103	51	889
Ward, Thomas B., Prairie du Chien, Wis. Clothes-drier	425,355	Apr. 8	1403	374	51	282
Ward, Thomas B., Prairie du Chien, Wis. Stove-pipe shelf	438,664	Oct. 21	1500	405	53	300
Ward, William J., Pittsburg, Pa. Gas-burner	434,492	Aug. 19	1604	429	52	1090
Ward, William M., Grand Blanc, assignor to J. D. Hubbell, Clyde, Mich. Road-cart	439,218	Oct. 28	2399	645	53	476
Ward, William P. (See Goodenough, Thomas, assignor.)						
Ward, William P. (See Root, Charles A., assignor.)						
Wardell, Charles F. (See Knickerbocker, Robert, assignor.)						
Wardell, Isaac S., Victoria Harbour, Ontario, Canada. Log-canter	424,385	Mar. 25	3062	813	50	1743
Warden, Henry, Philadelphia, Pa. Safety check-valve for hydraulic machinery	425,276	Apr. 8	1292	346	51	261
Warden, Henry, Philadelphia, Pa. Tubular boiler	442,156	Dec. 9	834	223	53	1433
Warden, John T., Philadelphia, Pa. Drawing-board	434,690	Aug. 19	1941	503	52	1154
Warder, Bushnell & Glessner Company. (See Bauer, Charles A., assignor.)						
Wardlaw, Zack. (See Wallace, Frank W., assignor.)						
Wardman, Palmer, and W. Hollister, Sault Ste. Marie, Mich. Street-car sleigh	437,269	Sept. 30	3037	796	52	1983
Wardwell, Harry H., Lake Village, N. H. Secondary battery	424,152	Mar. 25	2694	716	50	1671
Wardwell, Harry H., Lake Village, N. H. Secondary battery	443,556	Dec. 30	3150	810	53	1910

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Wardwell Sewing Machine Company. (See Peirce, Edwin J., Jr., assignor.)						
Wardwell, Theodore E., Stamford, Conn. Pulley-block	420,177	Jan. 28	2319	613	50	487
Ware, Ezra J., <i>et al.</i> (See Madison, Frank S., assignor.)						
Ware, George O. (See Sibley and Ware.)						
Ware, George T., Pleasant Hill, Mo. Can-opener	433,379	July 29	3628	936	52	733
Ware, James B., <i>et al.</i> (See Madison, Frank S., assignor.)						
Ware, Joseph B., <i>et al.</i> (See Madison, Frank S., assignor.)						
Ware, Lemuel S., Camden, N. J. Mustache-guard for drinking-vessels	441,911	Dec. 2	438	117	53	1351
Ware, Morris E., Philadelphia, Pa. Bush-hammer	439,219	Oct. 28	2401	645	53	476
Ware, Walter F., Camden, N. J. Medicine-dropper and eye-pipette	424,632	Apr. 1	299	77	51	60
Ware, William D., and M. I. Simpson, Lathrop, Mo. Motive power for pumps, &c.	434,537	Aug. 19	1670	437	52	1103
Wareham, Albert, West Charlton, N. Y. Odometer	441,520	Nov. 25	3059	787	53	1218
Wareham, Ethelbert, and W. F. Doll, Winnipeg, Canada. Ring-gage	438,453	Oct. 14	1193	324	53	234
Waring, Fred E., Saratoga, N. Y. Desk	420,321	Jan. 28	2537	{ 672 673 }	{ 50	527
Waring, George E., Jr., Newport, R. I., assignor to Drainage Construction Company, Boston, Mass. Sewer-plug	433,155	July 29	3319	858	52	670
Waring, George E., Jr., Newport, R. I., assignor to Drainage Construction Company, Boston, Mass. Sewer-siphon	437,738	Oct. 7	93	30	53	21
Waring, George E., Jr., Newport, R. I., assignor to Drainage Construction Company, Boston, Mass. Sewer construction	437,739	Oct. 7	94	30	53	21
Waring, John L., Manchester, Conn. Galvanometer	422,672	Mar. 4	462	118	50	1224
Waring, John T., Yonkers, N. Y. Hat-poucing machine	439,314	Oct. 28	2572	686	53	507
Wark, Alexander F. (See English, Shirley M., assignor.)						
Warland, Charles A., administrator. (See Lindsley, Isaac.)						
Warman, Thomas E., <i>et al.</i> (See Fielder, John T., assignor.)						
Warmuth, Oscar, Nuremberg, Bavaria, Germany. Capsule note-roll	418,998	Jan. 7	530	132	50	112
Warneford, Richard H., Covington, Ky. Stove-center	420,268	Jan. 28	2607	693	50	540
Warner, Archelaus G. (See Barnum, William E., assignor.)						
Warner, Edgar E., Milwaukee, Wis. Passenger-guard and ticket-collecting gate	443,883	Dec. 50	3655	942	53	2007
Warner, Effingham H., Storm Lake, Iowa. Steam heating and cooking apparatus	411,130	July 1	142	37	52	30
Warner, Effingham H., Storm Lake, Iowa. Food steamer	442,264	Dec. 9	988	{ 260 261 }	{ 53	1463
Warner, Ernest P., Chicago, Ill. Electric switch	425,963	Apr. 15	2337	619	51	470
Warner, Ernest P., Chicago, Ill. Electric-current regulator	427,530	May 6	760	188	51	962
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Current-direction indicator	420,422	Jan. 28	2680	710	50	553
Warner, Ernest P., assignor of one-half to Western Electric Company, Chicago, Ill. Telephone-switch	425,058	Apr. 8	963	258	51	194
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Three-wire multiple-switch-board system	428,189	May 20	1751	443	51	1172
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Multiple-switch-board system	433,636	Aug. 5	283	76	52	811
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Manufacturing electric conductors	433,917	Aug. 5	704	182	52	894
Warner, Ernest P., Chicago, Ill., assignor to Western Electric Company, of Illinois. Electric-lamp hood and support	426,155	Apr. 22	2633	691	51	536
Warner, George P. (See Quain and Warner.)						
Warner, George W., Freeport, Ill. Door-hanger	429,295	June 3	282	68	51	1524
Warner, George W., Freeport, Ill. Handle for pokers or other implements	441,343	Nov. 25	2786	720	53	1165
Warner, Gottlieb, Glassborough, N. J. Glory-hole furnace	424,386	Mar. 25	3063	813	50	1743
Warner, Harvey, Three Mile Bay, N. Y. Table	437,539	Sept. 30	3475	906	52	2069
Warner, Hugh L. (See Clifford and Warner.)						
Warner, James. (See Britten, Henry, assignor.)						
Warner, Joel S. (See Brownlow and Warner.)						
Warner, Loring, <i>et al.</i> (See Schermerhorn, Clarence M., assignor.)						
Warner Manufacturing Company. (See Hance, William A., assignor.)						
Warner Manufacturing Company. (See Painter, Robert F., assignor.)						
Warner, Marcellus K., assignor of one-half to F. S. Oakes and S. F. Burger, Cattaraugus, N. Y. Folding table	423,973	Mar. 25	2439	647	50	1622
Warner, Robert L. (See Chamberlain, Smith, and Warner.)						
Warner, Samuel C. (See Williams and Warner.)						
Warner, Vespasian, <i>et al.</i> (See Platt, Albert L., assignor.)						
Warner, Wade J., North Amherst, and I. Grace, Berea, Ohio. Reamer-guide mechanism	434,035	Aug. 12	872	230	52	936
Warner, Walter E., Brooklyn, N. Y. Vent-box	442,789	Dec. 16	1842	476	53	1640
Warnick, William D. (See Cunningham and Warnick.)						
Warnick, William D., and C. E. Cunningham, assignors of one-third to T. E. Johnson, Baltimore, Md. Percolator	436,199	Sept. 9	1278	333	52	1623
Warnke, John. (See Montgomery and Warnke.)						
Warrell, Frederick G., Philadelphia, Pa. Fuse-block	426,156	Apr. 22	2635	692	51	537
Warren, Albert R., <i>et al.</i> (See Day, Albert H., assignor.)						
Warren, Alfred D., Worcester, Mass., assignor to Warren Fire Bucket Company, Portland, Me. Fire-pail	420,980	Feb. 11	834	{ 215 216 }	{ 50	731
Warren, Andrew. (See Crecelius, Louis J., assignor.)						
Warren, Chadbourne H., and C. A. Jordan, Auburn, Me. Floor-clamp	420,288	Jan. 28	2498	663	50	519
Warren, Charles. (See Goodman, Henry M., assignor.)						
Warren, Charles S., Toronto, Ontario, Canada. Tube attachment for reed-organs	421,997	Feb. 25	2278	600	50	1021
Warren, Charles S., Toronto, Ontario, Canada. Reed-organ	425,155	Apr. 8	1113	296	51	224
Warren, Charles S., Toronto, Ontario, Canada. Stop-action for reed-organs	425,156	Apr. 8	1115	296	51	224
Warren, Charles T., Boston, assignor to E. B. Welch, Cambridge, Mass. Thread-feeding mechanism for sewing-machines	421,876	Feb. 18	2118	556	50	981
Warren, Charles W. (See Ward and Warren.)						
Warren, Christopher C., assignor of one-half to N. Warren, Chunkey's Station, Miss. Bolt-extractor	433,380	July 29	3629	936	52	733
Warren, Christopher C., assignor of one-half to J. F. Wedgeworth, Ellisville Depot, Miss. Cultivator	438,040	Oct. 7	570	155	53	108
Warren & Co., J. F. & C. G. (See Ingalls, Horace S., assignor.)						
Warren & Co., S. S. (See Bloom, Charles J., assignor.)						
Warren, Edgar H. (See Tiefel, Charles G. and L., assignors.)						
Warren, Edmond A. (See Moore and Warren.)						
Warren Fire Bucket Company. (See Warren, Alfred D., assignor.)						
Warren, Frank S., Concord, N. H. Touch-regulator	421,149	Feb. 11	1077	277	50	778
Warren, Frank S., Concord, N. H. Piano attachment	443,156	Dec. 23	2494	638	53	1772

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Warren, George E. (See Fowler, Warren, and Evans.)					
Warren, George H., West Superior, Wis. Hoisting apparatus.	430,241	June 17	1741	{ 434 435 }	51 1828
Warren, George W. (See Nehring, William, assignor.)					
Warren, George W., et al. (See Toulmin, Morton, assignor.)					
Warren, Henry C., Boston, Mass. Flying target.	429,491	June 3	597	146	51 1586
Warren, Henry F., Anna, Ill. Cutlery-scourer.	440,080	Nov. 4	677	180	53 740
Warren, Henry H. (See Laundry and Warren.)					
Warren, James J., et al. (See Chamberlin, John V., assignor.)					
Warren, James P., Chicago, Ill. Extensible stove-pipe joint.	428,359	May 20	2026	509	51 1227
Warren, John K., et al. (See Hartley, Charles J., assignor.)					
Warren, John M., et al. (See Chamberlin, John V., assignor.)					
Warren, Joseph, Brooklyn, N. Y. Pipe or flue cutter.	440,982	Nov. 18	2169	561	53 1041
Warren, Marion, Rochester, N. Y., assignor to Eureka Spund Apparatus Company, of New York. Check-valve and racking-off cock.	441,727	Dec. 2	154	41	53 1292
Warren, Melvin F. (See Romer, Jesse F., assignor.)					
Warren, Nancy. (See Warren, Christopher C., assignor.)					
Warren, Rolan N. (See Dow, Alonzo, assignor.)					
Warren, Rolan N. (See Dow and Warren.)					
Warren, Rolan N., and A. Dow, Wooster, Ohio; said Warren assignor to said Dow. Inhaler.	439,707	Nov. 4	118	32	53 631
Warren, Samuel E., Pittsburg, Pa. Cigar or tobacco box.	427,285	May 6	399	103	51 889
Warrington, George, Chicago, Ill. Lubricator.	423,580	Mar. 18	1829	482	50 1498
Warrington, Jesse, assignor of one-half to Nordyke & Marmou Company, Indianapolis, Ind. Honiny-mill.	427,644	May 13	925	{ 232 233 }	51 1003
Warrington, Jesse, assignor of one-half to Nordyke & Marmou Company, Indianapolis, Ind. Honiny-mill.	431,631	July 8	918	{ 231 232 }	52 190
Warwick Cycle Manufacturing Company. (See Warwick, George T., assignor.)					
Warwick, George T., Springfield, Mass. Velocipede-saddle.	427,488	May 6	693	174	51 949
Warwick, George T., Springfield, Mass. Elastic wheel-tire.	441,521	Nov. 25	3060	787	53 1218
Warwick, George T., assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Velocipede.	424,941	Apr. 1	780	208	51 152
Warwick, George T., assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Saddle for velocipedes.	429,587	June 3	733	177	51 1613
Warwick, George T., assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Velocipede.	434,615	Aug. 19	1794	{ 468 469 }	52 1128
Warwick, George T., assignor to Warwick Cycle Manufacturing Company, Springfield, Mass. Velocipede.	438,124	Oct. 7	691	188	53 133
Washburn, Albert L. (See Smith and Washburn.)					
Washburn, Albert L., Aiken, S. C. Machine for working vegetable fiber.	418,832	Jan. 7	269	65	50 57
Washburn, Albion K., Bridgewater, Mass. Sole-leveling machine.	435,882	Sept. 2	785	{ 208 209 }	52 1526
Washburn, Albion K., Bridgewater, Mass. Sole-leveling machine.	435,883	Sept. 2	786	209	52 1526
Washburn, Charles G., assignor to I. F. Washburn, Sing Sing, N. Y. Cotton-gin rib.	441,344	Nov. 25	2787	739	53 1165
Washburn, David B., Atkinson, Me. Ironing-board.	439,452	Oct. 28	2775	739	53 545
Washburn, George A., assignor to Ford & Washburn, Cleveland, Ohio. Regulating electric motors.	422,862	Mar. 4	741	189	50 1279
Washburn, George A., assignor to Ford & Washburn, Cleveland, Ohio. Armature for dynamos, &c.	422,863	Mar. 4	742	189	50 1279
Washburn, George W., West New Brighton, N. Y. Jewelry-pendant.	436,729	Sept. 16	2106	555	52 1792
Washburn, Isaac F. (See Washburn, Charles G., assignor.)					
Washburn, McClellan, Washington, N. J. Organ stop-action.	442,343	Dec. 9	1114	{ 290 291 }	53 1485
Washburn & Moen Manufacturing Company. (See Hentz, Jacob, assignor.)					
Washburn, Nathan, Boston, Mass. Apparatus for rolling car-wheels, tires, &c.	437,270	Sept. 30	3038	796	52 1983
Washburn, Oscar F., Springfield, Mass. Boiler-wagon for tar, &c.	440,209	Nov. 11	887	228	53 792
Washburn, Theodore A., Gold Hill, Nev. Adjusting-collar for pan-drivers.	420,752	Feb. 4	449	119	50 652
Washburn, Theodore W., assignor to G. Waite, Baldwinville, Mass. Convertible chair.	443,128	Dec. 23	2433	621	53 1761
Washburn, William M., Ghsland, La. Farmer's level.	426,696	Apr. 29	3447	903	51 706
Washington, John N., Cook County, Ill. Speculum-holder.	439,028	Oct. 21	2089	559	53 412
Washington, Samuel, Manchester, England. Mold for making glass bottles or like articles.	424,524	Apr. 1	124	35, 36	51 27
Wass, Alfred G., Greenwich, assignor to Carbonizing Syndicate, (limited.) London, England. Black pigment.	419,163	Jan. 7	770		50 160
Wass, Allen S., Bloomfield, N. J., assignor to Domestic Sewing Machine Company, of Ohio. Cabinet for sewing-machines.	443,061	Dec. 16	2290	587	53 1728
Wassell, Edwin D., assignor to I. Wassell, Pittsburg, Pa. Metallic wheel.	429,253	June 3	212	53	51 1513
Wassell, Isabella. (See Wassell, Edwin D., assignor.)					
Wassenius, Thorsten M., East Watertown, Mass. Table-leaf.	435,337	Aug. 26	2943	781	52 1351
Waterbury Brass Company. (See Hill, Gilman C., assignor.)					
Waterbury Button Company. (See Smith, Joseph R., assignor.)					
Waterbury Clock Company. (See Bannatyne, Archibald, assignor.)					
Waterbury Manufacturing Company. (See Ashworth, Richard J., assignor.)					
Waterbury Rubber Company. (See Conltaus, Joseph A., assignor.)					
Waterfill, William J., et al. (See Carr, William M., assignor.)					
Waterhouse, Addison G., Hartford, Conn., assignor by mesne assignments, to Schuyler Electric Light Company, of Connecticut. Governor for dynamos or motors.	420,398	Jan. 28	2649	702	50 548
Waterhouse, Addison G., Hartford, Conn., assignor to Westinghouse Electric Company, Pittsburg, Pa. System of generators.	420,924	Feb. 4	746	192	50 705
Waterhouse, Charles N., St. Louis, Mo. Neck-yoke attachment.	430,495	June 17	2155	530	51 1908
Waterhouse, Eugene R., assignor of one-half to H. A. Fisher, St. Louis, Mo. Mechanical telegraph-instrument.	429,982	June 10	1329	330	51 1738
Waterhouse, Frank G., Pittsburg, Pa. Hydraulic propulsion.	431,090	July 1	88	22	52 20
Waterman & Lehmann. (See Lehmann, Emil A., assignor.)					
Waterman, Sarah, Milwaukee, Wis. Plate-lifter.	424,913	Apr. 1	741	198	51 143
Waters, Abel T., Marinette, Wis. Spring-holt.	429,748	June 10	970	238	51 1670
Waters, Benjamin E., assignor of two-thirds to W. F. Jones, Brockton, and M. E. Hatch, New Bedford, Mass. Apparatus for testing electric lines.	427,208	May 6	281	72	51 867
Waters, John, Glasgow, Scotland. Furnace-door.	441,083	Nov. 18	2334	604	53 1074
Waters, Louis A. (See Evens and Waters.)					
Waters Wrapping and Mailing Machine Company. (See Woodward, Erastus, assignor.)					
Watertown Machine Company. (See Bennett, Joseph B., assignor.)					
Watertown Spring Wagon Company. (See Bush, William L., assignor.)					
Watkin, Benjamin M., assignor of one-half to G. Wright, Goodview, Ind. Machine for making twine from straw.	438,745	Oct. 21	1652	443	53 327

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Watkins, Isaac, Philadelphia, Pa. Scrubbing-frame.	437,849	Oct. 7	269	81	53	53
Watkins, John, assignor of one-half to J. Weldon, Bridgeport, Conn. Jaw-trap.	421,639	Feb. 18	1790	468	50	920
Watkins, John W. and J. S. Cochran, Philadelphia, Pa.; said Watkins assignor to said Cochran. Machine for delinting cotton-seed.	430,496	June 17	2157	531	51	1908
Watkins, Orla H., Eldora, Iowa. Twine for binding grain, &c.	431,298	July 1	399	100	52	82
Watkins, Robert L., New York, N. Y. Metal and circuit detector.	438,041	Oct. 7	570	156	53	108
Watkins, Thomas, Coal Bluff, assignor of one-half to W. J. Scully, Pittsburg, Pa. Gondola-car.	427,938	May 13	1392	352	51	1092
Watkins, William D., assignor of one-half to J. H. Lucas, Osceola, Mo. Cultivator.	420,551	Feb. 4	171	43	50	597
Watriss, George C. (See Clement, Watriss, and Heynemann.)						
Watriss, George C., and L. Heynemann, San Francisco, Cal. Construction of road-beds for street-railways.	442,652	Dec. 16	1593	412	53	1591
Watrous, Earl G., assignor to W. A. Wood Mowing and Reaping Machine Company, Hoo-sick Falls, N. Y. Harvester.	425,529	Apr. 15	1671	446	51	342
Watrous, Henry N., assignor of two-thirds to W. I. Brotherton and C. J. Pickett, Bay City, Mich. Spice-mill.	426,484	Apr. 29	3130	822	51	646
Watrous, James J. (See Kirk, Robert, assignor.)						
Watrous, James J. (See Nowotny, John S., assignor.)						
Watrous, John L., East Hampton, Conn. Bell.	436,448	Sept. 16	1676	441	52	1709
Watrous, Joseph, Foxborough, Mass. Pencil-sharpener.	431,422	July 1	596	150	52	120
Watrous, Thomas A., Elmira, N. Y. Thill-coupling.	434,966	Aug. 26	2381	631	52	1247
Watrous, Thomas A., Elmira, N. Y. Thill-coupling.	443,021	Dec. 16	2327	574	53	1716
Watrous, Thomas S., Penn Yan, N. Y. Road-cart.	427,939	May 13	1393	352	51	1092
Watrous, Thomas S., Penn Yan, N. Y. Road-cart.	441,345	Nov. 25	2787	720	53	1165
Watrous, Thomas S., Penn Yan, N. Y. Road-cart.	441,346	Nov. 25	2788	721	53	1165
Watson, Alexander, Brookline, Mass. Threshold-gage.	441,522	Nov. 25	3061	787	53	1218
Watson, Arthur C., et al. (See Chainey, Amédé, assignor.)						
Watson, Benjamin, Glen Hazel, Pa., assignor to R. J. Watson, Limestone, N. Y. Gun-rack for tents.	429,370	June 3	410	97	51	1549
Watson, David S., Asheville, N. C. Fender for open fire-grates.	423,843	Mar. 18	2322	587	50	1574
Watson & Denny Gold and Silver Extracting Company. (See Watson and Denny, assignors.)						
Watson, Elwin F., and M. L. Tolbert, Fort Shaw, Mont. Shears.	423,008	Mar. 11	983	259	50	1331
Watson, Fred. A. (See Ross, Simon, Jr., assignor.)						
Watson, Fred. A. (See Walden, Frank D., assignor.)						
Watson, Frederick C., Gloucester, Mass. Music-leaf holder.	439,987	Nov. 4	553	146	53	716
Watson, Frederick W. (See Estes, William A., assignor.)						
Watson, George B., assignor to Gould & Watson Company, Boston, Mass. Electric insulator.	428,979	May 27	2958	759	51	1425
Watson, George W. (See Bean and Watson.)						
Watson, Irving A., Concord, N. H. Coin-controlled strength-testing and advertising machine.	428,821	May 27	2727	692 693	51	1378
Watson, James. (See McDaniel, John S., assignor.)						
Watson, James, Marinette, Wis. Cant-hook.	439,315	Oct. 28	2573	626	53	508
Watson, James A., Washington, D. C. Mechanical movement.	426,343	Apr. 22	2395	762	51	592
Watson, James A., Washington, D. C. Feeding and justifying mechanism.	435,338	Aug. 26	2944	782	52	1351
Watson, James W., and W. L. Gelston, assignors of one-third to C. A. Weed, Chester, Pa. Machine for cutting right and left screw-threads.	419,981	Jan. 21	1998	526	50	418
Watson, James W., and R. F. Randolph, Achor, Ohio. Nut-lock.	430,715	June 24	2527	619	51	1087
Watson, Jeremiah M., Boston, Mass. Wash-boiler.	420,753	Feb. 4	449	119	50	652
Watson, John, Cleveland, Ohio. Safety attachment for boilers.	423,098	Mar. 11	1124	293	50	1356
Watson, John, Cleveland, Ohio. Safety apparatus for steam-boilers.	436,449	Sept. 16	1677	442	52	1709
Watson, John H., Selma, Cal. Hame-hook.	437,064	Sept. 23	2687	702	52	1911
Watson, Joseph, Cincinnati, Ohio. Spoke-socket.	436,681	Sept. 16	2043	532	52	1778
Watson, Lewis F., et al. (See Burnley, William, assignor.)						
Watson, Lewis H., Chicago, Ill. Friction-clutch.	430,097	June 10	1522	378	51	1775
Watson, Lewis H., Chicago, Ill. Ironing-machine.	439,453	Oct. 28	2776	739 740	53	545
Watson, Lewis H., Chicago, Ill. Ironing-machine.	439,454	Oct. 28	2778	740 741	53	546
Watson, Montgomery H., Dayton, Ohio. Envelope-sealer.	431,091	July 1	90	22	52	20
Watson, Nelson M., Ecorse, assignor of two-thirds to J. B. Goudry and W. A. Chamberlain, Denton, Mich. Burglar-alarm.	424,387	Mar. 25	3065	814	50	1743
Watson, Olivia N. M., New York, N. Y. Toy musical block.	430,157	June 17	1609	400	51	1802
Watson, Oneall, Crawfordsville, Ind. Corn-popper.	431,200	July 1	250	63	52	52
Watson, Oneall, assignor of one-half to W. A. Fowler, Crawfordsville, Ind. Box-opening hatchet.	431,199	July 1	249	63	52	52
Watson, Robert J. (See Watson, Benjamin, assignor.)						
Watson, Thomas H., Itasca, Tex. Fastener for bedsteads.	427,645	May 13	930	233	51	1004
Watson, Thomas W., St. Arnaud, and T. Denny, South Yarra, assignors to Watson & Denny Gold and Silver Extracting Company, (limited,) Melbourne, Victoria. Grinding and amalgamating machine.	423,502	Mar. 18	1721	453	50	1480
Watson, William, Washington, D. C. Milk-cooler.	425,920	Apr. 15	2251	597	51	453
Watson, William C., Paterson, and J. N. Mileham, Rutherford, N. J. Car-coupling.	441,267	Nov. 25	2672	693 694	53	1144
Watson, William H., Isla de Naos, United States of Colombia. Flue-cleaner.	438,964	Oct. 21	1993	532	53	391
Watson, William W., Lewisville, Ind. Farm-gate.	420,482	Feb. 4	84	19	50	580
Watson, William W., assignor of one-half to G. B. Morris, Lewisville, Ind. Plow-fender.	431,015	June 24	2997	736	51	2077
Watt, Robert, Brooklyn, N. Y. Means for preventing dead-centering.	435,267	Aug. 26	2824	748	52	1331
Watt, Sern P., Columbus, Ohio. Friction-clutch.	427,646	May 13	930	233	51	1004
Watt, Sern P., Columbus, Ohio, assignor to Columbus Cash Register Company, of Ohio. Cash register and indicator.	434,897	Aug. 19	2250	590 591 592	52	1215
Watt, Sern P., assignor to Columbus Machine Company, Columbus, Ohio. Rolls.	437,540	Sept. 30	3475	907 908	52	2070
Watt, Sern P., assignor to Columbus Machine Company, Columbus, Ohio. Piston.	442,729	Dec. 16	1756	455	53	1621
Watt, William Y., Brooklyn, N. Y. Thill-support.	436,510	Sept. 16	1759	464	52	1726
Watters, John, Springfield, Ohio. Vehicle-curtain fastener.	436,962	Sept. 23	2518	667	52	1883
Watters, Rama K., Akron, Ohio. Machine for separating solid particles from air.	424,042	Mar. 25	2540	678	50	1581
Watters, Rama K., Akron, Ohio. Screening device.	436,049	Sept. 9	1040	270	52	1641
Wattie, William, Worcester, Mass. Machine for turning and drilling metal.	425,556	Apr. 15	1708	457	51	350
Wattles, Joseph W., Canton, Mass. Support for spinning-spindles.	431,731	July 8	1106	275	52	225
Watton, Fealdon E., assignor of one-half to G. C. Goetting, Altamont, Ill. Window-sash.	438,042	Oct. 7	572	156	53	109

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Watts, Alfred, and R. Henry, Brantford, Ontario, Canada. Machine for applying wax to paper.	428,190	May 20	1753	443	51	1173
Watts, Robert J., assignor of one-half to J. Metzler, Shelbyville, Ind. Device for hanging maps or curtains.	441,994	Dec. 2	566	153	53	1374
Watts, Robert N. (See Schmalz and Watts.)						
Watts, Samuel, Bath, England, assignor to A. H. Overman, Boston, Mass. Bicycle.	441,728	Dec. 2	155	42	53	1292
Watts, Thomas H. (See Roberts and Watts.)						
Waugh, Daniel S., Denver, Colo. Horse-power for hay-presses.	421,035	Feb. 11	915	236	50	746
Waugh, John, et al. (See Wynn, Arthur E., assignor.)						
Waugh, John E., Chicago, Ill. Display-stand.	418,857	Jan. 7	311	75	50	65
Waukenhose Company, (See Howard, William H., assignor.)						
Wavra, Andrew, Grand Rapids, Mich. Foot attachment for boring-machines.	443,701	Dec. 30	3387	869	53	1954
Way, Abel T., Burlington, Vt. Screen for windows, doors, &c.	435,782	Sept. 2	623	164	52	1494
Way, George P., assignor of one-half to T. S. Cline, Detroit, Mich. Oil-burner.	436,816	Sept. 23	2824	602	52	1833
Way, John F., Waterbury, Conn. Palette-brush holder.	428,239	May 20	1837	460	51	1190
Way, John F., Waterbury, Conn. Photographic-print washer.	430,242	June 17	1745	435	51	1828
Way, William, Wilfrid, Ontario, Canada. Anvil-clamp.	428,980	May 27	2959	759	51	1425
Waycott, Hedley W., Peoria, Ill. Slatted floor-covering.	420,369	Jan. 28	2608	693	50	540
Wayland, Eli, Monroe City, Mo. Flower-stand.	419,484	Jan. 14	1254	333	50	264
Wayland, James, and J. S. Baldwin, Newark, N. J.; said Baldwin assignor to said Wayland. Automatic system for operating signals, &c.	428,579	May 20	2343	594 595	51	1287
Wayland, James, and J. S. Baldwin, assignors to Railway Appliance Company, Newark, N. J. Pneumatic system for operating railway-gates.	431,732	July 8	1108	275 276	52	226
Wayne, Alfred. (See Ivory and Wayne.)						
Wayte, Charles, Epsom, county of Surrey, England. Automatic vent-peg.	425,530	Apr. 15	1674	446	51	343
Weakley, Albert S., Edwards, Fla. Car-coupling.	431,240	July 1	319	78	52	65
Weare, John F., et al. (See Conly, Mahlon S., assignor.)						
Weatherford, Samuel H. (See Hutton, Milton C., assignor.)						
Weatherhead, Alson L., Miller's Falls, Mass. Wagon-jack.	440,339	Nov. 11	1096	281	53	829
Weatherhead, Edward H., Cleveland, Ohio. Valve.	437,806	Oct. 7	207	64	53	41
Weatherhead, James L., Philadelphia, Pa. Tool for use in clothing cylinders and conical bodies with card-cloth.	426,575	Apr. 29	3262	855	51	671
Weathers, James, Indianapolis, Ind. Sash-holder.	443,884	Dec. 30	3656	942	53	2008
Weathers, Samuel J., Houstonia, Mo. Combined barrel rack and truck.	436,619	Sept. 16	1931	507	52	1736
Weatherway, Jay G. (See Nelson, Nels, assignor.)						
Weaver, Frank S., Mount Washington, Mass. Clothes-pin.	432,809	July 22	2773	709	52	559
Weaver, George W., Ithaca, N. Y. Air-gun.	421,793	Feb. 18	1991	524	50	958
Weaver, George W., Ithaca, N. Y. Stereotype plate and base.	439,334	Oct. 28	2599	693	53	513
Weaver, Henry M., Mansfield, Ohio. Basin-waste.	432,658	July 22	2522	647	52	511
Weaver, Isaac D., assignor of one-half to C. M. Bowman, Lebanon, Pa. Hose-coupling.	421,036	Feb. 11	917	236 237	50	746
Weaver, Isaac D., assignor of three-fourths to C. M. Bowman, J. M. Shenk, and T. Evans, Lebanon, Pa. Rolls for rolling switch-points.	428,580	May 20	2347	595 596	51	1288
Weaver, James C., administrator. (See Amiss, Joseph M.)						
Weaver, Oscar B., Williamsport, Pa. Tray for holding caramels, &c.	442,500	Dec. 9	1359	348	53	1535
Weaver, Thomas J., Cincinnati, Ohio. Door-hanger.	425,477	Apr. 15	1597	427	51	328
Weaver, Thomas J., Columbiana, Ala. Self-lubricating axle.	427,451	May 6	646	162	51	939
Webb, Almon D., et al. (See Phipps, Edward L., assignor.)						
Webb, Francis W., and A. M. Thompson, Crewe, county of Chester, England. Staff apparatus for controlling traffic on single-line railways.	429,074	May 27	3104	801 802	51	1452
Webb, George B., assignor to Wyckoff, Seamans & Benedict, New York, N. Y. Type-writing machine.	443,707	Dec. 30	3394	871 872	53	1955
Webb, George H., Pawtucket, R. I. Machine for chamfering nuts.	433,666	Aug. 5	334	86	52	821
Webb, George L., Stewart, Ky. Corn or cotton thinner.	429,328	June 3	345	82	51	1537
Webb, Harriette J., Lockport, N. Y. Mattress.	433,261	July 29	349	896	52	701
Webb, Henry, et al. (See Gilmer, Thomas W., assignor.)						
Webb, Henry J., Sumter, Ga. Car-coupling.	429,983	June 10	1330	330	51	1738
Webb, James H. (See Melton and Webb.)						
Webb, Jesse G., Boston, Mass. Clothes-drier.	426,697	Apr. 29	3449	904	51	706
Webb, Levi W., Centre, Ala. Gate.	427,647	May 13	932	233	51	1005
Webb, Samuel D., assignor to C. A. Shields, trustee, Washington, D. C. Thill-coupling.	434,308	Aug. 12	1308	341	52	1022
Webb, Samuel J., Minden, La. Hydraulic press.	429,666	June 10	853	207	51	1646
Webb, Samuel J., Minden, La. Hydraulic press.	429,667	June 10	855	207	51	1646
Webb, Scott A., Columbus, assignor of one-half to F. A. Ray, Buchtel, Ohio. Street-curb-ing block.	427,648	May 13	933	234	51	1007
Webb, Stephen D., and L. R. Haag, assignors to J. S. Boggess, agent, Middleport, Ohio. Iron bridge.	438,511	Oct. 14	1267	343	53	249
Webbe, Samuel E., Chicago, Ill. Centrifugal pump.	440,798	Nov. 18	1869	481	53	984
Webber, Charlotte C., Sea Cliff, N. Y. Bib.	439,736	Nov. 4	161	41	53	639
Webber, Levi H. (See Emery, Louis N., assignor.)						
Webber, Wesley, Pittsburg, Pa. Apparatus for drilling wells.	431,131	July 1	143	37, 38	52	30
Weber, Albert, Le Locle, Switzerland. Music-desk, &c.	423,844	Mar. 18	2223	587	50	1574
Weber, Albert A., Sacramento, Cal. Self-rolling car-axle.	426,886	Apr. 29	3730	974	51	762
Weber, August. (See Schütz and Weber.)						
Weber, Caroline C. (See Weber, George A., assignor.)						
Weber, Charles, Thann, Germany. Apparatus for treating cops, &c.	436,070	Sept. 9	1072	278	52	1587
Weber, Friedrich A., Flöha, near Chemnitz, Germany. Apparatus for warming and ventilating.	443,022	Dec. 16	2228	574	53	1716
Weber, George A., assignor to C. C. Weber, New York, N. Y. Combined fish-plate and chair for railways.	427,452	May 6	647	162	51	939
Weber, Hermon, Colorado Springs, Colo. Window-bracket.	435,533	Sept. 2	233	64	52	1419
Weber, Jacob, Cleveland, Ohio. Corn-cutter.	426,344	Apr. 22	2896	762	51	592
Weber, John, Chicago, Ill. Furnace.	425,393	Apr. 8	1467	393	51	293
Weber, Oscar T., et al. (See Weber, William, assignor.)						
Weber, Peter, Brooklyn, assignor to Sohmer & Co., New York, N. Y. Stringing pianos.	438,393	Oct. 14	1100	299	53	216
Weber, William, Maplewood, assignor to O. T. Weber, Chicago, Ill., and S. C. Simpson, Boston, Mass. Sewing-machine.	425,277	Apr. 8	1293	346 347 348	51	261
Webley, Henry, et al. (See Carter and Whiting, assignors.)						
Webley, Henry, et al. (See Southgate, Thomas assignor.)						
Webley, Thomas W., et al. (See Carter and Whiting, assignors.)						
Webley, Thomas W., et al. (See Southgate, Thomas assignor.)						
Webster, Albert B., Manchester, assignor of one-half to Low & Rewell Manufacturing Company, Wilton, N. H. Draft device for vehicles.	428,981	May 27	2960	760	51	1426

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Webster, Arthur, Gobleville, Mich. Cash-recorder	440,670	Nov. 18	1648	{ 425 426 }	53	944
Webster, Camp & Lane Machine Company. (See Jones, Hugh F., assignor.)						
Webster & Comstock Manufacturing Company. (See Macdonald, James, assignor.)						
Webster, E. L. (See Dice, Peter M., assignor.)						
Webster, Ebenezer P. C., Marysville, Kans. Dehorning apparatus	425,478	Apr. 15	1598	427	51	328
Webster, Frederick H., Brooklyn, N. Y. Ornamenting metal hollow ware	430,816	June 24	2701	662	51	2021
Webster, George E., and W. H. Kimball, Stratford, N. H. Buckboard-wagon	421,794	Feb. 18	1993	525	50	959
Webster, George L., North Attleborough, Mass. Breastpin	440,081	Nov. 4	677	180	53	740
Webster, George L., Russellville, Ark., assignor to Home Novelty Manufacturing Company, E. E. Lacey, and J. N. Denny, St. Louis, Mo., W. S. Newton and W. Beauvais, Forney, Tex. Freight-car-door cleat	431,632	July 8	922	233	52	161
Webster, George P., Lipscomb, Tenn. Seed-potato cutter for planters	440,521	Nov. 11	1404	363	53	887
Webster, George P., Lipscomb, Tenn. Feeder for seed-potato cutters	440,522	Nov. 11	1406	364	53	888
Webster, George W., Columbus, Ohio. Adjustable fruit-jar holder	438,043	Oct. 7	573	156	53	109
Webster, James G., assignor to himself and H. R. Smith, St. Johns, Canada. Printer's composing-stick	442,790	Dec. 16	1844	476	53	1640
Webster, Jerome J., Somerville, Mass., assignor to Boston Cash Indicator and Recorder Company, Bangor, Me. Cash register and indicator	434,616	Aug. 19	1798	469	52	1128
Webster, Jerome J., Somerville, Mass., assignor to Boston Cash Indicator and Recorder Company, Bangor, Me. Cash register and indicator	436,325	Sept. 9	1461	{ 381 382 }	52	1662
Webster, Thomas. (See Goodall and Webster.)						
Webster, Wilbur, Jaffrey, N. H. Shoe-knife	431,424	July 1	601	150	52	121
Webster, William S., Newark, N. J. Harness-saddle	442,157	Dec. 9	835	224	53	1433
Weddell, Oliver S., et al. (See Michales, Moses A., assignor.)						
Weddendorf, John F. (See Jarvis, Oscar F., assignor.)						
Weddendorf, John F., assignor of one-half to A. Mueller, St. Louis, Mo. Motor	436,930	Sept. 23	2511	657	52	1875
Wedel, George A., et al. (See Fielder, John S., assignor.)						
Wedgeworth, John F. (See Warren, Christopher C., assignor.)						
Wedlake, James. (See Jones and Wedlake.)						
Wed, Charles A. (See Watson and Gelston, assignors.)						
Weed, Edward B., assignor to J. E. Wiles, Detroit, Mich. Electrode for secondary batteries	440,210	Nov. 11	888	228	53	793
Weed, William A., Chicago, Ill. Clamp or holder and box for soap	423,296	Mar. 11	1425	370	50	1414
Weeden, Henry C., Boston, Mass. Wash-basin	440,211	Nov. 11	889	229	53	793
Weeden, Henry C., Quincy, Mass. Siphon closet-bowl	441,268	Nov. 25	2673	694	53	1144
Weeden, Henry C., Quincy, Mass. Water-closet bowl	443,341	Dec. 23	2815	724	53	1836
Weeden Sanitary Manufacturing Company. (See Carley, William H., assignor.)						
Week, Edmund R., Stevens Point, Wis. Track-cutter for logging-roads	428,658	May 27	2470	629	51	1329
Weeks, Calvin H., Haverhill, Mass. Pulley-block	438,454	Oct. 14	1194	324	53	234
Weeks, Charles E. (See Soggs, Henry and C., assignors.)						
Weeks, Frank S. (See Congdon, Joseph T., assignor.)						
Weeks, Henry A., et al. (See Crawford, John, assignor.)						
Weeks, Joseph D., administrator. (See Hadfield, Robert.)						
Weems, David G., assignor to Electro-Automatic Transit Company, Baltimore, Md. Electric-railway system	425,964	Apr. 15	2338	{ 619 620 }	51	470
Weems, David G., assignor to Electro-Automatic Transit Company, Baltimore, Md. Electric railway	425,965	Apr. 15	2339	620	51	471
Weems, David G., assignor to Electro-Automatic Transit Company, Baltimore, Md. Electric railway	425,966	Apr. 15	2340	621	51	471
Wegefath, Louis C., New York, N. Y. Hair-crimper	429,984	June 10	1332	330	51	1739
Wegener, Carl, assignor of one-half to P. Rosenthal, Moscow, Russia. Providing metallic mirrors with images	421,119	Feb. 11	1033		50	769
Wegener, Otto F., Seattle, Wash. Lamp-shade support	438,455	Oct. 14	1196	324	53	234
Wegener, Otto F., Seattle, Wash. Globe and lamp-shade	440,212	Nov. 11	890	229	53	793
Wegener, Otto F., Seattle, Wash. Shelf-support	442,468	Dec. 9	1301	336	53	1523
Wegener, Otto F., Seattle, Wash. Ornamental nail-head	442,838	Dec. 16	1933	497	53	1657
Wegg, Robert, Richmond, Ill. Scaffold-bracket	424,236	Mar. 25	2804	749	50	1693
Wegman, John W., et al. (See Rothlisberger, Ernesto, assignor.)						
Wegner, Frederick A., Three Rivers, Mich. Carriage-wrench	420,981	Feb. 11	835	216	50	731
Wegner, Frederick A., Three Rivers, Mich. Carriage-wrench	426,294	Apr. 22	2739	717	51	557
Wegner, Frederick A., Three Rivers, Mich. Thill-coupling	433,502	Aug. 5	90	25	52	774
Whele, John. (See Latz, Charles J., assignor.)						
Wehrle, Joseph H., Newark, N. J. Conduit for electric railways	431,633	July 8	923	233	52	192
Wehrle, Joseph H., Newark, N. J. Electric railway	431,634	July 8	926	233	52	192
Wehrle, Joseph H., Newark, N. J. Trolley for electric railways	434,036	Aug. 12	873	230	52	936
Wehrle, Joseph H., Newark, N. J. Conduit and electric conducting-rail therefor	437,953	Oct. 7	424	119	53	81
Wehrli, Andrew H., and F. J. Sanchez, Monee, Ill. Grain-dump	422,102	Feb. 25	2437	{ 643 644 }	50	1050
Wehrli, Emil, Aarau, Switzerland. Pencil-holder	439,220	Oct. 28	2402	646	53	476
Wehrman, August. (See Foster, Marshal T., assignor.)						
Wehrmeyer, William. (See Scott and Wehrmeyer.)						
Wehrstedt, Alfred v., Vienna, Austria-Hungary. Repeating fire-arm	437,541	Sept. 30	3479	908	52	2071
Weibel, Emil, College Point, N. Y. Shedding mechanism for looms	432,460	July 15	2209	570	52	443
Weicher, John J., Chicago, Ill. Machine for extracting fiber from fibrous plants	439,913	Nov. 4	430	111	53	692
Weidaw, Frank T. (See Kane and Weidaw.)						
Weidaw, Frank T., and W. E. Kane, Syracuse, assignors of one-third to W. F. Morris, Baldwinsville, N. Y. Filter	422,357	Feb. 25	2845	750	50	1126
Weidenbusch, Adolf, Darmstadt, Hesse, Germany. Machine for making paper sacks	424,742	Apr. 1	468	{ 123 126 127 128 129 }	51	93
Weidenfeld, Leopold, Broken Bow, Nehr. Combined curtain-pole ring and pin	433,838	Aug. 5	597	155	52	873
Weidlich, Otto E., Cincinnati, Ohio. Fountain-pen	422,474	Mar. 4	163	44	50	1167
Weidman, Grant, et al. (See Colvin, Robert J., assignor.)						
Weidman, Henry. (See Renz, Robert L., assignor.)						
Weidman, Richard A., Geneva, N. Y. Oiler	431,829	July 8	1259	315	52	254
Weidner, Phillip, Sailor Springs, Ill. Road-cart	421,337	Feb. 11	1345	348	50	827
Weigel, Joel, San Francisco, Cal. Rope-clamp	424,388	Mar. 25	3068	814	50	1744
Weigel, Robert, assignor of three-fourths to L. Carlé, New York, N. Y., L. Deutsch, and H. S. Mack. Locomotive and train brake	425,356	Apr. 8	1404	374	51	282
Weigle, Albert, Horn-am-Bodensee, Switzerland. Lathing	438,456	Oct. 14	1196	324	53	235
Weigle, Gotthilf F., assignor, by mesne assignments, to G. R. Lund, New York, N. Y. De-tonating toy	443,927	Dec. 30	3727	953	53	2021

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Weikel & Smith Spice Company (See Smyser, Henry E., assignor.)						
Weil, Joseph, New York, N. Y. Pin	430,903	June 24	2830	694	51	2045
Weil, Leopold, New York, N. Y. Valve-lock	443,885	Dec. 30	3657	{ 942 943 }	{ 53 53 }	{ 2008 2008 }
Weil, Leopold, New York, N. Y. Combined valve-locking and store-closing mechanism	443,886	Dec. 30	3659	943	53	2008
Weil, Max, <i>et al.</i> (See Wolf, Julius J., assignor.)						
Weil, Naham J., Chicago, Ill. Stove	427,940	May 13	1394	353	51	1092
Weinberg, Arthur. (See Hoffmann and Weinberg.)						
Weinberg, Arthur, assignor to L. Cassella & Co., Frankfort-on-the-Main, Prussia, Germany. Blue azo dye	421,640	Feb. 18	1791	-----	50	930
Weinberg, Arthur, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Red dye	426,345	Apr. 22	2897	-----	51	592
Weinberg, Arthur, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Blue dye	434,493	Aug. 19	1606	-----	52	1090
Weinberg, Samuel S., Baltimore, Md. Fire-extinguisher for car-stoves	424,743	Apr. 1	475	130	51	94
Weinedel, Charles. (See Stitzel and Weinedel.)						
Weinholt, Paul P., assignor to G. H. Engelman, St. Louis, Mo. Combined skirt-lifter and bustle	436,748	Sept. 16	2154	566	52	1799
Weinholt, Paul P., assignor to G. H. Engelman, St. Louis, Mo. Combined skirt-lifter and bustle	436,749	Sept. 16	2156	566	52	1800
Weinman, Christian J., and E. E. Euchenhofer, Dayton, Ohio. Writing-tablet for roll-paper	438,871	Oct. 21	1861	494	53	366
Weinmann, Lawrence, Columbus, Ohio. Pipe-cutter	430,552	June 17	2238	549	51	1923
Weinmann, John J. (See Weinholts and Weinmann.)						
Weir, Duncan, Wilkes-Barre, Pa. Car-axle box	442,562	Dec. 9	1461	375	53	1555
Weir, Frederic C. (See Harker, Henry K., assignor.)						
Weir, Frederic C. (See Ramsey, Joseph, Jr., assignor.)						
Weir, Frederic C. (See Ramsey and Weir.)						
Weir, Frederic C. (See Walsh, Michael, assignor.)						
Weir, Frederic C., Cincinnati, Ohio. Stiffener for shirt-collars	443,023	Dec. 16	2229	575	53	1716
Weir, Frederic C., and N. O. Goldsmith, assignors to Weir Frog Company, Cincinnati, Ohio. Cable and railway crossing	428,028	May 13	1520	386	51	1118
Weir, Frederic C., and N. O. Goldsmith, assignors to Weir Frog Company, Cincinnati, Ohio. Automatic switch-stand	428,029	May 13	1522	386	51	1118
Weir, Frederick G. C., Bristol, county of Gloucester, England. Life-preserver	431,830	July 8	1260	316	52	255
Weir Frog Company. (See Goldsmith, Nathaniel O., assignor.)						
Weir Frog Company. (See Weir and Goldsmith, assignors.)						
Weir, George. (See Weir, James and G.)						
Weir, James and G., Cathcart, county of Renfrew, Scotland. Heat-exchanger for water and steam	433,190	July 29	3370	871	52	681
Weiretre, George, assignor to Eagle Pencil Company, New York, N. Y. Combined pencil-eraser and twine-cutter	421,795	Feb. 18	1994	525	50	959
Weirich, Thomas H., Monroe, Wis. Refrigerator	424,744	Apr. 1	476	130	51	98
Weisbrod, Charles and E., Hartwell, Ohio. Gasoline-stove	426,973	Apr. 29	3432	1004	51	783
Weisbrod, Edward. (See Weisbrod, Charles and E.)						
Weisel, Peter, Milwaukee, Wis. Disk for refrigerating and heating pipes	440,671	Nov. 18	1649	426	53	944
Weisell, David D., Fort Wayne, Ind. Foot-power	424,369	Mar. 25	3069	814	50	1744
Weisell, David D., Fort Wayne, Ind. Washing-machine	441,523	Nov. 25	3063	788	53	1218
Weisenborn, August, Helena, Mont. Vehicle-brake	443,449	Dec. 23	2974	765	53	1866
Weiser, David W., Dupont, Ohio. Wire fence	436,279	Sept. 9	1389	361	52	1647
Weisert, John, St. Louis, Mo. Cigarette-machine	436,682	Sept. 16	2044	{ 534 535 }	{ 52 52 }	{ 1778 1778 }
Weiskittel, Henry C., Baltimore, Md. Burner for gas-stoves	440,452	Nov. 11	1292	334	53	866
Weiskopf, Samuel. (See Blake, Charles W., assignor.)						
Weiskoff, Samuel, <i>et al.</i> (See Phillips, Edwin G., assignor.)						
Weiss, Carl W., Brooklyn, assignor of one-half to C. Kruse, New York, N. Y. Thermodynamic motor	419,805	Jan. 21	1721	457	50	362
Weiss, Carl W., Brooklyn, assignor of one-half to C. Kruse, New York, N. Y. Gas-engine	419,806	Jan. 21	1726	457	50	363
Weiss, Carl W., Brooklyn, N. Y., assignor to Kruse Cash Register Company, of New York. Cash register and indicator	443,025	Dec. 16	2234	576	53	1717
Weiss, Carl W., New York, N. Y., assignor to Kruse Cash Register Company, of New York. Cash register and indicator	443,024	Dec. 16	2229	{ 575 576 }	{ 53 53 }	{ 1716 1716 }
Weiss, Charles W., Brooklyn, assignor of one-half to C. Kruse, New York, N. Y. Sewing-machine	442,083	Dec. 2	714	192	53	1403
Weiss, Franz C., Ottakring, near Vienna, assignor of one-half to K. E. Klimosch, Vienna, Austria-Hungary. Dye	443,026	Dec. 16	2239	-----	53	1718
Weiss, George W., Brooklyn, N. Y. Machine for perforating paper patterns	440,799	Nov. 18	1870	481	53	984
Weiss, Louis T., Brooklyn, N. Y. Type-writing machine	438,665	Oct. 21	1501	405	53	301
Weiss, Louis T., Brooklyn, assignor to T. Murtha and F. Burns, New York, N. Y. Cash indicator and register	428,259	May 20	1870	{ 469 470 }	{ 51 51 }	{ 1196 1196 }
Weiss, Louis T., Brooklyn, assignor to T. Murtha and F. Burns, New York, N. Y. Cash register and indicator	440,382	Nov. 11	1859	299	53	842
Weiss, Morris, Brooklyn, N. Y. Hollow mill	418,903	Jan. 7	399	98	50	83
Weiss, Rudolph. (See Wilcox and Weiss.)						
Weisse, Hermann, Karlsruhe, Germany. Puzzle-joint	442,653	Dec. 16	1594	412	53	1591
Weissenborn, Rudolph W., Jersey City, N. J. Harmonica	435,163	Aug. 26	2669	705	52	1801
Weitmyer, John H., assignor to J. Greenawalt, Harrisburg, Pa. Hydrant	434,218	Aug. 12	1170	304	52	994
Weitmyer, William F. (See Doehe, George L., assignor.)						
Welander, Peter, assignor of one-half to M. A. Brown, San Francisco, Cal. Ventilator for boots or shoes	418,966	Jan. 7	490	122	50	103
Welch, Alonzo T. (See Lawson, Samuel, assignor.)						
Welch, Charles G. (See Wyman, Horace B., assignor.)						
Welch, E. B. (See Angell, Edwin E., assignor.)						
Welch, E. B. (See Davis, Edward, assignor.)						
Welch, E. B. (See Littlejohn, Charles F., assignor.)						
Welch, E. B. (See Robinson, Thomas C., assignor.)						
Welch, E. B. (See Warren, Charles T., assignor.)						
Welch, E. Baker. (See Robinson, Edward W., assignor.)						
Welch, Ebenezer B., Cambridge, Mass. Thread-feeding mechanism for sewing-machines	434,009	Aug. 12	838	220	52	928
Welch, Everett C., <i>et al.</i> (See Dickey, Aaron F., assignor.)						
Welch, George A., Baltimore, Md. Newspaper-vending machine	437,407	Sept. 30	3257	849	52	2025
Welch, Henry J., Carthage, assignor of one-half to C. V. Graves, Natural Bridge, N. Y. Fishing-rod support for boats	441,207	Nov. 25	2557	661	53	1125
Welch, Horace G., near Downey, Iowa. Machine for holding cattle while being dehorned	434,309	Aug. 12	1309	{ 341 342 }	{ 52 52 }	{ 1022 1022 }

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Welch, Isaac C., <i>et al.</i> (See Kimball, Frank W., assignor.)						
Welch, James E., deceased, (S. T. Welch, executrix,) assignor of one-half to T. W. McNeely, Petersburg, Ill. Feeder for flour-mills	421,796	Feb. 18	1995	{ 525 536 }	50	959
Welch, Michael I., Sparks, Ga. Variable feed for saw-mills	441,623	Nov. 25	3227	832	53	1251
Welch, Orrin T., Topeka, Kans. Propeller	424,663	Apr. 1	351	93	51	68
Welch, Owen O. (See Hogan, John B., assignor.)	436,817	Sept. 23	2286	603	52	1833
Welch, Roy W., Lexington, Nebr. Brake for baby-carriages	437,826	Oct. 7	236	72	53	47
Welch, S. Augustus. (See Larkin, Ferdinand P., assignor.)						
Welch, Sarah T., executrix. (See Welch, James E.)						
Welcker, James H., Kingston, Tenn. Transferring-car	424,390	Mar. 25	3070	815	50	1744
Welde, Carl R., Königstein-on-the-Elbe, Germany. Belt-fastener	432,104	July 15	1675	430	52	342
Weldon, Charles D., Mica, Wash. Tobacco-pipe	423,197	Mar. 11	1269	330	50	1385
Weldon, John. (See Watkins, John, assignor.)						
Weldon, Leonard, Amsterdam, N. Y. Yarn-dyeing machine	439,708	Nov. 4	121	33	53	631
Welke, William R., Oak Cliff, assignor of one-half to W. J. and C. L. Betterton, Dallas, Tex. Well-drill	443,688	Dec. 30	3365	865	53	1950
Welke, William R., Oak Cliff, assignor of one-half to W. J. and C. L. Betterton, Dallas, Tex. Tongs	443,689	Dec. 30	3367	865	53	1950
Welke, William R., assignor of one-half to W. J. and C. L. Betterton, Dallas, Tex. Reamer	443,690	Dec. 30	3368	865	53	1950
Weller, Franklin A., Lynn, Mass. Brush-holder for dynamo-electric machines	428,735	May 27	2601	659	51	1353
Weller, Giles W., Baker City, Oreg. Ore-crusher	430,049	June 10	1438	357	51	1758
Weller, Giles W., Baker City, Oreg. Car-coupling	430,904	June 24	2431	695	51	2046
Welles, Fred A., and T. H. Harrison, Milwaukee, Wis. Beam-compass	428,191	May 20	1755	444	51	1173
Welling, William M., New York, N. Y. Manufacture of backs and handles for brushes, &c.	426,630	Apr. 29	3348	877	51	688
Wellinger, John C. (See Cull, Peter J., assignor.)						
Wellington, Gertrude G., St. Paul, Minn. Topical remedy	428,982	May 27	2961		51	1426
Wellman, Alexander R. (See Stone and Wellman.)						
Wellman, Alexander R., assignor to O. A. Miller, Brockton, Mass. Boot-tree	441,116	Nov. 18	2387	619	53	1083
Wellman, Alexander R., assignor to O. A. Miller, Brockton, Mass. Boot-tree	441,117	Nov. 18	2388	619	53	1084
Wellman, Samuel T., Cleveland, Ohio. Ingot-pusher	418,999	Jan. 7	531	133	50	112
Wellman, Samuel T., Cleveland, Ohio. Charging furnaces	421,797	Feb. 18	1996	526	50	959
Wellman, Samuel T., Cleveland, Ohio. Apparatus for forging car-axes	422,557	Mar. 4	279	71	50	1189
Wellman, Samuel T., and H. Hyatt, Cleveland, Ohio. Mechanism for operating valves	442,929	Dec. 16	2103	541	53	1683
Wellman Sole Cutting Machine Company. (See Stickney, Allison M., assignor.)						
Wells, Arthur C. (See Wallwork and Wells.)						
Wells, Arthur J., Syracuse, N. Y. Bill-file	423,647	Mar. 18	1947	513	50	1522
Wells, Arthur J., Syracuse, N. Y. Index	433,223	July 29	3415	881	52	690
Wells, Burton H., and E. B. French, Oneida, N. Y. Pump-valve	436,450	Sept. 16	1678	442	52	1710
Wells, Edward W., Oskaloosa, Iowa. Hot-air radiator	420,845	Feb. 4	612	157	50	679
Wells, Edward W., Oskaloosa, Iowa. Furnace-chamber	421,998	Feb. 25	2280	600	50	1022
Wells, Frank A., Allegheny, Pa. Combined supply, overflow, &c., for bath-tubs	418,776	Jan. 7	177	43	50	39
Wells, Frank R., assignor of one-half to E. S. Kelly, Springfield, Ohio. Blank book	440,783	Nov. 18	1844	475	53	979
Wells, Frederick B. (See Benjamin, Henry, assignor.)						
Wells, George, assignor to J. H. Wells, Montreal, Quebec, Canada. Water-heater	426,157	Apr. 22	2636	692	51	537
Wells, George S., and H. P. Ewell, Rochester, Mich.; said Wells assignor to said Ewell.						
Wells, J. Henry, Fall River, Mass. Spinning-hobbin	435,910	Sept. 2	832	220	52	1536
Wells, John H. (See Wells, George, assignor.)	426,346	Apr. 22	2898	763	51	592
Wells, John H., London, England. Button	438,428	Oct. 14	1151	311	53	226
Wells, John L., New York, N. Y. Range	442,563	Dec. 9	1462	375	53	1556
Wells, John P. B., Athol, Mass. Protractor	432,779	July 22	2723	{ 696 697 }	52	549
Wells, Philip R., Detroit, Mich. Spring-tooth for harrows	431,241	July 1	320	79	52	65
Wells, Thomas F., Winchester, Mass., assignor to Mechanical Manufacturing Company, Nashua, N. H. Nut-lock	429,785	June 10	1025	251	51	1679
Wells, Webster, Boston, Mass., assignor, by mesne assignments, to Mechanical Manufacturing Company, Nashua, N. H. Wrench	429,075	May 27	3114	802	51	1454
Wells, Webster, Boston, Mass., assignor to Mechanical Manufacturing Company, Nashua, N. H. Nut-lock	434,574	Aug. 19	1723	451	52	1113
Wells, William C., Chicago, Ill. Rotary measure	437,065	Sept. 23	2687	702	52	1911
Wells, William H., Evershot, county of Dorset, England. Churn	423,362	Mar. 11	1514	398	50	1431
Welman, Charles W. (See Taylor and Welman.)						
Welsbach, Carl A. von, Vienna, Austria-Hungary, assignor to Welsbach Incandescent Gas Light Company, of New Jersey. Manufacture of incandescent devices for gas-burners	438,125	Oct. 7	694	189	53	134
Welsbach Incandescent Gas Light Company. (See Welsbach, Carl A. von, assignor.)						
Welsch, Artemas, B. S. Richardson, and E. Welsh, Scottsdale, Pa. Spike-machine	424,586	Apr. 1	230	62	51	47
Welsh, Elmer. (See Welsh, Richardson, and Welsh.)						
Welsh, Forbes C., and W. H. Gates, Windsor, Ontario, Canada. Brush	439,914	Nov. 4	432	111	53	692
Welsh, Harvey H., Kilbuck, assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Locomotive-driver brake	432,960	July 22	3001	771	52	602
Welsh, Patrick C., Olean, N. Y. Rein-support	441,208	Nov. 25	2558	661	53	1125
Welsh, Pierre W. W., New York, N. Y. Coin-operated photographing-machine	438,261	Oct. 14	898	{ 244 245 }	53	177
Welsh, Thomas W., Pittsburg, F. L. Clark, Leet, and F. Moore, assignors to Westinghouse Air Brake Company, Pittsburg, Pa. Fluid-pressure signaling-valve	435,783	Sept. 2	624	165	52	1495
Welsh, William. (See Clyde and Welsh.)						
Welteroth, Henry J., assignor of one-half to G. B. Breon and F. M. Allen, Williamsport, Pa. Hinge	430,596	June 17	2311	568	51	1937
Weltner, Conrad, New York, N. Y. Book-binding machine	437,066	Sept. 23	2689	703	52	1911
Welton, Edwin D., assignor to Scovill Manufacturing Company, Waterbury, Conn. Eye-let-setting machine	424,745	Apr. 1	477	130	51	94
Welton, Frank R., assignor, by mesne assignments, of one-half to G. S. Pearson, Waterbury, Conn. Lacing-hook and making the same	419,982	Jan. 21	2000	526	50	418
Welton, Frank R., assignor to Scovill Manufacturing Company, Waterbury, Conn. Curtain-ring	422,170	Feb. 25	2539	670	50	1069
Wetty, John A. (See Poole and Wetty.)						
Wemple, Andrew, and G. W. Smith, Chicago, Ill. Thrashing-machine	423,581	Mar. 18	1830	483	50	1499
Wemple, Andrew, and G. W. Smith, Chicago, Ill. Band-cutter and feeder	423,582	Mar. 18	1833	483	50	1499
Wendinger, Arthur, Richmond, Va. Producing configurations on vulcanite	425,357	Apr. 8	1406	374	51	282
Wendnagel, Charles M. E., Chicago, Ill. Alarm for use on cable railways	433,667	Aug. 5	336	86	52	821

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Wendt, Albert C. (See Wendt, Fred and A. C.)						
Wendt, Fred and A. C., Marshfield, Wis. Car-coupling	421,459	Feb. 18	1514	392	50	867
Wendt, Henry D., New York, N. Y. Ash-lifter	436,280	Sept. 9	1391	362	52	1648
Wengrowsky, Morris. (See Siff, Isaac, assignor.)						
Wening, Christoph, Neuendettelsau, Bavaria, Germany. Automatic brake for vehicles	422,475	Mar. 4	165	44 45 46	50	1168
Wenk, Theodore, Brooklyn, assignor to E. J. Brooks & Company, New York, N. Y. Shackle-wire for seals	434,219	Aug. 12	1172	304	52	995
Wenninger, John G., Lancaster, Pa. Nut-lock	427,718	May 13	1046	262	51	1027
Wenström, Jonas, Örebro, Sweden. Dynamo-electric machine	426,576	Apr. 29	3263	856	51	672
Wentling, Absalom, Neosho Falls, Kans. Vehicle	435,598	Sept. 2	333	93	52	1439
Wentworth, Addison T., Conway, Iowa. Securing device	425,719	Apr. 15	1966	523	51	400
Wentworth, Charles W., and S. M. Manchester, Windham, Me. Creaming-can	422,476	Mar. 4	167	47	50	1168
Wentz, John E. (See Botsford, William B., assignor.)						
Wenz, Philip P., Meadville, Pa. Type-writing machine	438,965	Oct. 21	1994	533 534 535	53	392
Wenzel, Adam, Dakota City, Nebr. Corn-planter	419,807	Jan. 21	1728	457 458	50	363
Wenzin, John, Minneapolis, Minn. Reciprocating gearing	421,533	Feb. 18	1632	421	50	889
Werle, John F. (See Black and Werle.)						
Werline, Elmer H. (See Wollin and Werline.)						
Werner, Charles J., New York, N. Y. Fishing-reel	437,542	Sept. 30	3482	909	52	2071
Werner, Emil, Philadelphia, Pa. Easel	422,673	Mar. 4	463	118	50	1225
Werner, Johannes, Mannheim, Baden, Germany. Writing apparatus	424,633	Apr. 1	300	77	51	60
Werner, Louis. (See Hedbavny, Anton, assignor.) (Reissue.)						
Wernitz, George M., Peru, Ill. Riding attachment for harrows	435,619	Sept. 2	381	102	52	1447
Wernitz, Oliver W., Auburn Junction, Ind. Culvert	437,954	Oct. 7	427	119	53	82
Wertz, Charles. (See Stevenson and Wertz.)						
Wescott, Edwin J. (See Stevens and Wescott.)						
Wescott, James, Kansas City, Mo. Safety switch mechanism	425,557	Apr. 15	1711	458	51	350
Wesser, Calvin L., New York, N. Y. Pedal-action for piano-fortes	422,477	Mar. 4	168	47	50	1168
Wessel, Ferdinand A., Brooklyn, assignor to Excelsior Electric Company, New York, N. Y. Contact-box	434,853	Aug. 19	2160	566	52	1198
Wessell, Charles, assignor of one-half to C. A. Wessell, New York, N. Y. Melting the ores of copper or other metals	428,659	May 27	2473		51	1329
Wessell, Charles A. (See Wessell, Charles, assignor.)						
Wessell, Nickel & Gross. (See Wessell, Otto, assignor.)						
Wessell, Otto, assignor to Wessell, Nickel & Gross, New York, N. Y. Piano-action	436,511	Sept. 16	1761	465	52	1726
Wesselmann, Bruno, Hamburg, assignor of one-half to W. Lucht, Altona, Germany. Pencil-sharpener	423,845	Mar. 18	2225	587	50	1575
Wesson, Daniel B., Springfield, Mass. Barrel-catch mechanism for fire-arms	421,798	Feb. 18	1997	526	50	960
Wesson, Daniel B., Springfield, Mass. Revolving fire-arm	429,397	June 3	455	107	51	1558
Wesson, Daniel B., Springfield, Mass. Vehicle-wheel	438,334	Oct. 14	1014	275	53	200
Wesson, Daniel B., Springfield, Mass. Projectile for fire-arms and ordnance	440,672	Nov. 18	1650	426	53	944
West, Adoniram J., Chicago, Ill. Check-valve for water-filters	442,158	Dec. 9	836	224	53	1433
West, Andrew E., and M. O. Sampson, Madison, Minn. Hay and straw burner or attachment for stoves	435,873	Sept. 2	755	202	52	1521
West, Augustine C., Somerville, assignor to Smith & Anthony Stove Company, Boston, Mass. Lamp	422,864	Mar. 4	744	190	50	1279
West, Charles G., North Star, Mich. Car-wheel	431,635	July 8	930	233	52	194
West, Derrick S., Great Falls, Mont. Truck	420,322	Jan. 28	2539	673	50	527
West, Derrick S., Great Falls, Mont. Gun-sight	426,887	Apr. 29	3731	974	51	762
West, Frederick B., San Francisco, Cal. Cable-sheave	431,680	July 8	1023	256	52	209
West, George, Syracuse, N. Y. Composition of matter for architectural purposes	423,171	Feb. 25	2540	50	1069	
West, George, Syracuse, N. Y. Plastering compound	423,269	Feb. 25	2700	50	1099	
West, George, Syracuse, N. Y. Composition of matter for architectural purposes	422,270	Feb. 25	2701	50	1099	
West, George B. (See Turnbull, William F., assignor.)						
West, Harley E., assignor to A. Kirk and S. Kohn, Toledo, Ohio. Vehicle-wheel	418,904	Jan. 7	400	98	50	84
West Haven Buckle Company. (See Hyde, Alphonso M., assignor.)						
West, Henry F., Gloucester City, N. J., and G. P. Wood, Olneyville, R. I. Loom	428,436	May 20	2142	539	51	1249
West, James, assignor of one-half to S. Cupples, St. Louis, Mo. Envelope-machine	442,839	Dec. 16	1934	497 498	53	1657
West, James, assignor of one-half to S. Cupples, St. Louis, Mo. Envelope	442,840	Dec. 16	1939	499	53	1658
West, James, assignor of one-half to S. Cupples, St. Louis, Mo. Making envelopes	442,841	Dec. 16	1940	499	53	1658
West, James, assignor of one-half to S. Cupples, St. Louis, Mo. Envelope	442,842	Dec. 16	1941	499	53	1658
West, John E. (See Kennedy, Thomas A., assignor.)						
West, Jonathan B., Rochester, N. Y. Damper-regulator	419,090	Jan. 7	661	173	50	139
West, Jonathan B., Rochester, N. Y. Grating	424,525	Apr. 1	126	36	51	28
West, Lewis, Marionville, Mo. Dental plugger	443,691	Dec. 30	3369	865	53	1951
West, Marshall O., Port Chester, N. Y. Shirt	422,271	Feb. 25	2702	712	50	1099
West, Marshall O., Port Chester, N. Y. Shirt	424,391	Mar. 25	3071	815	50	1745
West & Melchers. (See Burger, Clarence L., assignor.)						
West, Philip L., Lyndon, Kans. Flue-stop	425,479	Apr. 15	1601	427	51	322
West, Stillman A., and C. Sinning, St. Louis, Mo. Leather-stretching machine	423,846	Mar. 18	2226	588	50	1375
West, Thomas, Decatur, Ala., and E. M. Turner, assignors to Turner Self-Lighting Cigar Company, Fort Worth, Tex. Self cigar-lighter	429,329	June 3	346	82	51	1537
West, Walter S., Brooklyn, N. Y. Sewerage apparatus	428,736	May 27	2602	660	51	1353
West, William M. (See Wood, Jerome I., assignor.)						
Westaway, Walter C., and L. W. Beard, Decorah, Iowa. Mechanical movement	432,566	July 22	2398	618 617 616	52	488
Westbrook, Carington L., Reynolds, Ind. Mop and wringer	419,387	Jan. 14	1112	293 294 295	50	294
Westbrook, Frank A., Port Jervis, and W. S. Cook, Middletown, N. Y. Car-coupling	427,385	May 6	531	135	51	916
Westbrook, Henry, and R. Burns, Woodstock, Ontario, Canada. Screw-cutting device	430,358	June 17	1963	482	51	1870
Westcott, Lou P., Pierce City, Mo. Stove-pipe coupling	435,589	Oct. 14	1380	374	53	272
Westenhaver, Edward, assignor of one-half to H. B. Smith, Shelbyville, Ill. Thill-coupling	420,846	Feb. 4	613	158	50	679
Westerland, Laurence, deceased, Atlanta, Ga., M. C. G. Westerland administratrix. Elec- tric railway	439,262	Oct. 28	2473	663 664	53	489
Westerland, Mary C. G., administratrix. (See Westerland, Laurence.)						
Westerlin, John M. (See Skinkle and Westerlin.)						
Westerman, Charles H. (See Smith and Westerman.)						
Westerman, Frederick, Chicago, Ill. Machine for forming loaves of dough	425,278	Apr. 8	1300	348	51	262

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Western Electric Company. (See Barton, Enos M., assignor.)						
Western Electric Company. (See Bishop, James D., assignor.)						
Western Electric Company. (See Carty, John J., assignor.)						
Western Electric Company. (See Clark, Martin M., assignor.)						
Western Electric Company. (See Hanagin, Joseph A., assignor.)						
Western Electric Company. (See Patterson, William R., assignor.)						
Western Electric Company. (See Scribner, Charles E., assignor.)						
Western Electric Company. (See Seely, John A., assignor.)						
Western Electric Company. (See Shubert, Harold C., assignor.)						
Western Electric Company. (See Warner, Ernest P., assignor.)						
Western Electric Company. (See Young, John, assignor.)						
Western Union Telegraph Company. (See Dickerson, Edward N., Jr., assignor.)						
Western Union Telegraph Company. (See Edison, Thomas A., assignor.)						
Western Ventilating and Chimney Cap Company. (See Kayser, William J., assignor.)						
Westervelt, Edmund C., South Bend, Ind. Pulp-molding machine	430,905	June 24	2832	695	51	2046
Westervelt, George C. (See Harrison and Westervelt.)						
Westervelt, George C., Marseilles, Ill. Printing attachment for paper-roll holders	427,649	May 13	934	234	51	1005
Westervelt, George C., Marseilles, Ill. Signal attachment for lanterns	435,082	Aug. 26	2552	673	52	1279
Westervelt, George C., Marseilles, Ill. Printing attachment for paper-roll holders	439,221	Oct. 28	2404	646	53	477
Westgate, Joseph D., assignor to A. P. Butler and S. Mawhinney, Worcester, Mass. Stop-motion for looms	430,452	June 17	2089	516	51	1895
Westgate, Joseph D., Worcester, Mass., assignor, by mesne assignments, to Eccentric Pulley and Stop-Motion Company, Portland, Me. Clutch	442,296	Dec. 9	1038	273	53	1471
Westheimer, Leopold. (See Livingston, Blum, Vollenweber, Westheimer, and Cohn.)						
Westinghouse Air Brake Company. (See Bayley, Richard W., assignor.)						
Westinghouse Air Brake Company. (See Grabler, Peter, assignor.)						
Westinghouse Air Brake Company. (See Guels, Herman, assignor.) (Reissue.)						
Westinghouse Air Brake Company. (See Hogan, Thomas J., assignor.)						
Westinghouse Air Brake Company. (See Lewis, Ellsworth J., assignor.)						
Westinghouse Air Brake Company. (See Moore, Frank, assignor.)						
Westinghouse Air Brake Company. (See Park, Harvey S., assignor.)						
Westinghouse Air Brake Company. (See Welsh, Harvey H., assignor.)						
Westinghouse Air Brake Company. (See Welsh, Clark, and Moore, assignors.)						
Westinghouse Air Brake Company. (See Westinghouse, Henry H., assignor.)						
Westinghouse Air Brake Company. (See Widdifield and Bowman, assignors.)						
Westinghouse, Church, Kerr & Company. (See Roney, William R., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Stanley, William, Jr., assignor.)						
Westinghouse Electric Company. (See Lange, Philip, assignor.)						
Westinghouse Electric Company. (See Lange and Shallenberger, assignors.)						
Westinghouse Electric Company. (See Packard, James W., assignor.)						
Westinghouse Electric Company. (See Reimann, Albert L., assignor.)						
Westinghouse Electric Company. (See Schmid, Albert, assignor.)						
Westinghouse Electric Company. (See Schmid and Means, assignors.)						
Westinghouse Electric Company. (See Shallenberger, Oliver B., assignor.)						
Westinghouse Electric Company. (See Shallenberger and Bylesby, assignors.)						
Westinghouse Electric Company. (See Stillwell, Lewis B., assignor.)						
Westinghouse Electric Company. (See Terry, Charles A., assignor.)						
Westinghouse Electric Company. (See Waterhouse, Addison G., assignor.)						
Westinghouse Electric Company. (See Wurts, Alexander, assignor.)						
Westinghouse Electric Company. (See Wurts and Baldwin, assignors.)						
Westinghouse, George, Jr. (See Stanley, William, Jr., assignor.)						
Westinghouse, George, Jr., Pittsburg, Pa. Steam-heating apparatus for railway-cars	420,132	Jan. 28	2241	593 594	50	474
Westinghouse, George, Jr., Pittsburg, Pa. Fluid-pressure automatic brake mechanism	425,059	Apr. 8	964	258 259	51	194
Westinghouse, George, Jr., Pittsburg, Pa. Alternating-current electric meter	427,489	May 6	696	174 175	51	949
Westinghouse, George, Jr., Pittsburg, Pa. Alternating-current arc lamp	428,435	May 20	2141	538	51	1249
Westinghouse, George, Jr., Pittsburg, Pa. Brake-cylinder head	432,715	July 22	2613	669	52	529
Westinghouse, George, Jr., Pittsburg, Pa. Subway for electric conductors	434,165	Aug. 12	1093	281 282	52	979
Westinghouse, George, Jr., Pittsburg, Pa. Electric converter	436,200	Sept. 9	1280	334	52	1624
Westinghouse, George, Jr., Pittsburg, Pa. Fluid-pressure automatic brake	437,740	Oct. 7	96	30, 31	53	21
Westinghouse, George, Jr., Pittsburg, Pa. Automatic brake-regulator	440,082	Nov. 4	678	180 181	53	740
Westinghouse, George, Jr., Pittsburg, Pa. Compound pumping-engine	441,209	Nov. 25	2558	661	53	1125
Westinghouse, Henry H., Pittsburg, Pa. Pressure-indicator for air-brake apparatus	421,641	Feb. 18	1792	464	50	920
Westinghouse, Henry H., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Car-brake	435,373	Aug. 26	3002	795	52	1363
Westlake, Charles E. (See Moulton and Boyle, assignors.)						
Westlake, Charles E., et al. (See Fairchild, Frank J., assignor.)						
Westmoreland, Benjamin F., Osyka, Miss. Cultivator and harrow	426,888	Apr. 29	3732	974	51	762
Weston, Alden M. and M. S. Warren, Me. Lobster-car	428,943	May 27	2962	760	51	1426
Weston, Alfred J., Toronto, Ontario, Canada. Portable curtained hammock-stand	427,490	May 6	697	175	51	949
Weston, Clinton H., La Crosse, Wis. Saw-knockdown device	423,503	Mar. 18	1723	454	50	1480
Weston, Clinton H., Mount Clemens, Mich. Device for side dressing saw-teeth	426,889	Apr. 29	3733	975	51	762
Weston, Edward, Newark, N. J. Electrical measuring instrument	427,022	Apr. 29	3918	1022	51	798
Weston, Edward, Newark, N. J. Electrical measuring instrument	433,637	Aug. 5	246	76	52	812
Weston, Edward, Newark, N. J. Standard galvanic cell	439,737	Nov. 4	161	42	53	639
Weston, Edward, Newark, N. J. Dead-beat mechanism for electrical measuring-instruments	440,289	Nov. 11	1020	262	53	816
Weston, Edward, Newark, N. J. Temperature-regulator for electrical measuring-instruments	440,290	Nov. 11	1022	262	53	816
Weston, Edward, Newark, N. J. Index-controlling device for electrical measuring-instruments	440,291	Nov. 11	1023	263	53	816
Weston, Edward, Newark, N. J. Electrical measuring-instrument	442,843	Dec. 16	1942	500	53	1658
Weston, Edward B., Dayton, Ohio. Roll-paper holder and cutter	428,192	May 20	1756	444	51	1174
Weston, Emile R., Bangor, assignor to J. M. Chase, Orono, Me. Smoke-burning stove	420,503	Feb. 4	109	27	50	585
Weston, Ephraim F., assignor to Union Hardware Company, Torrington, Conn. Making pulley-blocks	438,666	Oct. 21	1503	406	53	301
Weston, George H., Boston, Mass. Rotary steam-engine	426,533	Apr. 29	3227	846	51	664
Weston, Irving A., Syracuse, N. Y. Tricycle	439,915	Nov. 4	433	112	53	692

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Weston, Miles S. (See Weston, Alden M. and M. S.)						
Weston, Milton, trustee. (See Mills, Mortimer B., assignor.)						
Weston, Thomas A., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Hoisting mechanism	442,469	Dec. 9	1302	337	53	1523
Weston, Thomas B., Winona, Ill. Flower-stand	435,470	Sept. 2	130	37	52	1400
Westover, Louis N., Manchester, N. H. Universal shaft-coupling	430,597	June 17	2312	563	51	1937
Westphal, Christian, assignor of one-half to J. Quaglio, Berlin, Germany. Gas-lamp	419,741	Jan. 21	1622	432	50	342
Westphal, Christian, assignor to himself and J. Quaglio, Berlin, Germany. Regenerative gas-burner	429,398	June 3	456	108	51	1558
Westphal, Heinrich, Berlin, Germany. Mattress	428,791	May 27	2682	680	51	1370
Westphal, Henry, Chicago, Ill. Traveling display-stand	426,890	Apr. 29	3734	975	51	763
Westphal, Henry, Chicago, Ill. Churn	429,707	June 10	917	225	51	1659
Westwood, Benjamin. (See Wood, Elgin E., assignor.)						
Westwood, John T., assignor of one-half to B. Fisher, Wheeling, W. Va. Vehicle-spring gear	421,365	Feb. 11	1381	357	50	833
Wetherbee, George C. (See Ettig, John, assignor.)						
Wetherbee, George C. (See Strickel, Louis, assignor.)						
Wetherbee, William B., et al. (See Ricker, Elbridge G. S., assignor.)						
Wetherell, Ansel, Kendall Station, N. Y. Car-coupling	429,399	June 3	457	108	51	1558
Wetherell, George F., assignor of two-thirds to R. Richards and R. B. Jones, Chicago, Ill. Planing-machine	433,428	July 29	3698	955	52	748
Wetherell, Herman O. (See Dyson, John H., assignor.)						
Wetherell, Winford C., Fall River, Mass. Boot and shoe fitter's stool	436,092	Sept. 9	1105	286	52	1593
Wettengel, Albert C. (See Laffey, Thomas, assignor.)						
Wetter, Joseph. (See Reinhardt, James H., assignor.)						
Wetzler, Louis. (See Wetzler, Max and L.)						
Wetzler, Max and L., Hurley, Wis. Freight-car	440,907	Nov. 18	2047	529	53	1018
Wever, Charles A., Clayton, Ill. Grain-measuring device	432,347	July 15	2039	525	52	408
Wex, Henry, et al. (See McFarlane, John, assignor.)						
Weyandt, Fred, Jr., Dunmore, Pa. Two-wheeled vehicle	435,374	Aug. 26	3004	796	52	1363
Weyburn Company, L. A. (See Briggs, George S., assignor.)						
Weyburn, Elbert D., assignor to Weyburn Special Machine Company, Chicago, Ill. Portable electric motor and cloth-cutting machine	442,654	Dec. 16	1595	413	53	1591
Weyburn Special Machine Company. (See Weyburn, Elbert D., assignor.)						
Weyer, August, Atlanta, Ga. Glass-furnace	439,029	Oct. 21	2090	559 } 560 }	53	412
Weyforth, Robert, Baltimore, Md. Salve	421,799	Feb. 18	1999		50	960
Whalen, Mary A. (See Whalen, Mary E., assignor.)						
Whalen, Mary E., assignor to M. A. Whalen, New York, N. Y. Dress-steel	425,558	Apr. 15	1712	458	51	351
Whaley, Kensel C., Pomeroy, Ohio. Dental polishing-pencil	431,713	July 8	1079	269	52	220
Wharry, James A. (See Rogers and Wharry.)						
Wharton and Company, William, Jr. (See Angerer, Victor, assignor.)						
Wharton and Company, William, Jr. (See Angerer and Brett, assignors.)						
Wharton and Company, William, Jr. (See Angerer and Psilander, assignors.)						
Wharton and Company, William, Jr. (See Angerer and Samuel, assignors.)						
Wharton and Company, William, Jr. (See Quinn and Angerer, assignors.)						
Wharton and Company, William, Jr. (See Samuel, Edward, assignor.)						
Wharton, John C., Nashville, Tenn. Test-tube	431,132	July 1	144	38	52	31
Wharton, William, Jr., Philadelphia, Pa. Motor-support for railway-cars	433,754	Aug. 5	468	120	52	846
Wharton, William J., Washington, D. C., and J. T. Nalls, Alexandria, Va. Privy	432,461	July 15	2210	570	52	444
Whately, Richard I., Bartlett, Tex. Car-coupling	438,066	Oct. 21	1997	534	53	393
Whealton, Charles J., near Morrison, Va. Anchor	430,793	June 24	2657	651	51	2013
Wheat, Harrison L. (See Lillpop, Jesse M., assignor.)						
Wheat, James H., Dayton, Ohio. Automatic cut-off for steam-engines	439,709	Nov. 4	122	33	53	632
Wheat, John J., Indianapolis, Ind., assignor of three-fourths to N. M. Neeld, T. F. Thorne, and F. H. Kilbourn, Chicago, Ill. Track-cleaner	443,247	Dec. 23	2656	682	53	1805
Wheat, Van Buren, Orleans, N. Y. Grate	421,534	Feb. 18	1633	421	50	889
Wheatley, Samuel E., Washington, D. C., assignor to Wheelless Electric Railway Company, Alexandria, Va. Trolley for underground electric railways	441,220	Nov. 25	2571	666	53	1128
Wheatley, Samuel E., Washington, D. C., assignor to Wheelless Electric Railway Company, Alexandria, Va. Conduit for electric railways	441,221	Nov. 25	2572	666	53	1128
Wheaton, Frank, New York, N. Y., assignor to M. D. Lagan, New Orleans, La. Padlock	432,587	July 22	2400	618	52	488
Wheeland, Charles G., Brush Creek, Iowa. Car-coupling	428,872	May 27	2799	711	51	1394
Wheeland, Charles G., Brush Creek, Iowa. Fire-escape	435,874	Sept. 2	757	202	52	1522
Wheeler, Benjamin F., Detroit, assignor to Flint Road Cart Company, Flint, Mich. Carriage-pole	422,478	Mar. 4	170	47	50	1168
Wheeler, Charles G., assignor of one-half to W. H. Ault and S. E. Hill, Ionia, Kans. Car-coupling	427,023	Apr. 29	3923	1022	51	799
Wheeler, Clara H., administratrix. (See Wheeler, Norman W.)						
Wheeler, Cyrenus, Jr. (See Miller, Charles, assignor.)						
Wheeler, Dwight, assignor to Acme Shear Company, Bridgeport, Conn. Finishing metallic surfaces	437,468	Sept. 30	3364	880	52	2048
Wheeler, Enoch S., Albany, Mo. Latch	420,586	Feb. 4	224	58	50	608
Wheeler, Francis T. (See Sharpneck, William S., assignor.)						
Wheeler, Frank, Meriden, Conn. Switch for systems of electric locomotion	421,535	Feb. 18	1634	421	50	889
Wheeler, Frank, Meriden, Conn. System of electric locomotion	431,092	July 1	91	23	52	20
Wheeler, Frank, Meriden, Conn. System of electric locomotion	431,093	July 1	93	23	52	21
Wheeler, Frank, Meriden, Conn. Switch for electric-railway systems	431,094	July 1	94	23, 24	52	21
Wheeler, Frank, Meriden, Conn. System of electrical locomotion	431,095	July 1	96	24	52	21
Wheeler, Franklin C., assignor to H. Corbett, St. Joseph, Mo. Safety attachment for electric-railway trolleys	425,720	Apr. 15	1967	523	51	400
Wheeler, Franklin C., assignor of one-half to H. Corbett, St. Joseph, Mo. Trolley for electric street-cars	433,839	Aug. 5	598	155	52	873
Wheeler, Frederick M., Montclair, N. J. Condenser	426,891	Apr. 29	3737	976	51	764
Wheeler, George E., Chazy, N. Y. Evaporating maple-sap or other fluids	438,787	Oct. 21	1709	459	53	339
Wheeler, George K. (See Stearns and Wheeler.)						
Wheeler, Henry F. (See Fox and Wheeler.)						
Wheeler, Henry F., Boston, Mass. Fire-arm	430,243	June 17	1746	435	51	1828
Wheeler, Henry W., Mott, assignor of one-half to H. L. Tatum and J. J. Bowen, San Francisco, Cal. Saw-tooth	429,400	June 3	458	108	51	1559
Wheeler, Homer W. (See Burdick, John, assignor.)						
Wheeler, Jesse. (See Berry and Wheeler.)						
Wheeler, John, Walker, assignor to Grand Rapids Hand Screw Company, Grand Rapids, Mich. Cutting-tool for cutting screws	427,386	May 6	533	135	51	917

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Wheeler, Madden & Clemson Manufacturing Company. (See Clemson, Richard W., assignor.)						
Wheeler, Marshal, San Francisco, Cal. Mounting terrestrial globes.	438,126	Oct. 7	696	189	53	134
Wheeler, Nathan A., Alpowa, Wash. Wagon-brake.	430,050	June 10	1439	357	51	1759
Wheeler, Nathaniel, Bridgeport, Conn. Revolving hook for sewing-machines.	420,847	Feb. 4	614	158	50	679
Wheeler, Nathaniel, Bridgeport, Conn. Sewing-machine.	424,237	Mar. 25	2805	749	50	1694
Wheeler, Nathaniel, Bridgeport, Conn. Tension-releasing device for sewing-machines.	433,971	Aug. 12	796	208	52	920
Wheeler, Nathaniel, assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Thread-tension releaser for sewing-machines.	434,037	Aug. 12	876	{ 230 231 }	52	936
Wheeler, Nels H., and N. M. Newhouse, Corvallis, Oreg. Device for swaging insertible saw-teeth.	425,196	Apr. 8	1180	312	51	239
Wheeler, Nelson B., Meriden, Conn. Ruler.	421,338	Feb. 11	1346	348	50	827
Wheeler, Norman W., deceased; C. H. Wheeler, New York, N. Y., administratrix. Machine for artificial refrigeration.	441,995	Dec. 2	567	{ 153 154 }	53	1374
Wheeler, Norman W., deceased; C. H. Wheeler, New York, N. Y., administratrix. Gas-compressor for refrigerating apparatus.	441,996	Dec. 2	570	154	53	1375
Wheeler, Orlin S., Troy, N. Y. Snow-scraping machine.	422,674	Mar. 4	464	118	50	1225
Wheeler, Orrin A., Springfield, Mo. Wheeled toboggan.	430,098	June 10	1524	378	51	1775
Wheeler, Roscoe B., Detroit, Mich. Casing for garment-stays.	431,299	July 1	399	100	52	82
Wheeler, Samuel R., Detroit, Mich. Grain tally and register.	441,912	Dec. 2	439	117	53	1351
Wheeler, Seth, Albany, N. Y. Machine for cutting paper into geometrical forms.	420,524	Feb. 4	136	34	50	590
Wheeler, Seth, Albany, N. Y. Rolled envelope.	422,865	Mar. 4	745	190	50	1279
Wheeler, Seth, Albany, N. Y. Toilet-paper roll.	422,866	Mar. 4	746	190	50	1279
Wheeler, Seth, Albany, N. Y. Paper-roll holder.	438,457	Oct. 14	1197	325	53	235
Wheeler, Seth, Albany, N. Y. Toilet-paper fixture.	438,567	Oct. 14	1351	366	53	267
Wheeler, Seth, Albany, N. Y. Paper-cutting mechanism.	443,708	Dec. 30	3395	872	53	1955
Wheeler, Theodore A., assignor of one-half to W. F. Wright, San José, Cal. Carriage-axle nut.	430,598	June 17	2313	568	51	1937
Wheeler, Thomas M., et al. (See Dart, Albert E., assignor.)						
Wheeler, William, Mount Carmel, Mo. Thill-coupling.	442,930	Dec. 16	2104	541	53	1689
Wheeler, William B. (See Scott and Wheeler.)						
Wheeler, William B., Lansingburg, N. Y. Potato-digger.	440,673	Nov. 18	1652	426	53	944
Wheeler, William H., Mohawk Village, Ohio. Halter.	423,974	Mar. 25	2440	642	50	1622
Wheeler, William R., M., Pinkhampton, Colo. Bridle-bit.	431,760	July 8	1145	286	52	233
Wheeler & Wilson Manufacturing Company. (See Coombs, Abraham L., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Dial, Wilbur F., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Dial and Ostrom, assignors.)						
Wheeler & Wilson Manufacturing Company. (See Fletcher, James H., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Leilich, Francis T., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Neely, William A., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Ostrom, Freeland W., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Tebbetts and Doggett, assignors.)						
Wheeler & Wilson Manufacturing Company. (See Wheeler, Nathaniel, assignor.)						
Wheelock, Charles R. (See Taylor, Horace H., assignor.)						
Wheelock, Jerome, Worcester, Mass. Valve system for engines.	440,523	Nov. 11	1408	364	53	888
Wheelwright, Thomas S., et al. (See Simpson, James H., assignor.)						
Whelan, Dennis J., et al. (See Cairns, Samuel D., assignor.)						
Wheless Electric Railway Company. (See Wheatley, Samuel E., assignor.)						
Wheless Electric Railway Company. (See Wheless, Malone, assignor.)						
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric-railway-conduit system.	433,918	Aug. 5	704	183	52	894
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric-railway closed-circuit system.	435,471	Sept. 2	131	37, 38	52	1400
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electrical-railway-conduit system.	438,262	Oct. 14	902	{ 245 246 }	53	178
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric switch.	440,213	Nov. 11	892	229	53	793
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric street-railway system.	441,210	Nov. 25	2561	662	53	1126
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric street-railway system.	441,211	Nov. 25	2563	662	53	1126
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Conduit for electric railways.	441,212	Nov. 25	2564	663	53	1126
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Auxiliary contact for electric railways.	441,213	Nov. 25	2565	663	53	1126
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric railway cut-out.	441,214	Nov. 25	2566	{ 663 664 }	53	1127
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Insulated brake.	441,215	Nov. 25	2567	664	53	1127
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric-railway system.	441,216	Nov. 25	2567	664	53	1127
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric-railway system.	441,217	Nov. 25	2568	665	53	1127
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electro-magnetic switch for electric railways.	441,218	Nov. 25	2569	665	53	1127
Wheless, Malone, Nashville, Tenn., assignor to Wheless Electric Railway Company, Alexandria, Va. Electric-railway system.	441,219	Nov. 25	2570	665	53	1128
Wheless, Susan I., administratrix. (See Wirz, Henry M., assignor.)						
Whetstone Cultivator Company. (See Whetstone, William H., assignor.)						
Whetstone, William H., Lowndesborough, assignor to Whetstone Cultivator Company, Anniston, Ala. Cultivator.	431,016	June 24	2998	736	51	2077
Whidden, Renton. (See White, Reynolds T., assignor.)						
Whiffen-Lake Lasting Machine Company. (See Lake, Vincent F., assignor.)						
Whilden, John T., Stockton, Ga. Stamp-package.	438,770	Oct. 21	1686	453	53	334
Whiles, John W., Nevada, Mo. Harrow.	443,840	Dec. 30	3604	927	53	1997
Whiles, Marian, assignor of one-half to J. H. Ruede, Woodville, Mo. Quilting-frame.	441,222	Nov. 25	2572	666	53	1128
Whilldin, John G., assignor to Whilldin Pottery Company, Philadelphia, Pa. Pottery-machine.	442,084	Dec. 2	716	192	53	1403
Whilldin Pottery Company. (See Whilldin, John G., assignor.)						
Whipple, Eugene D., Creston, Iowa. Embalming and cooling apparatus.	434,368	Aug. 12	1398	367	52	1040
Whipple, John D., assignor of one-half to A. P. Campbell and W. E. Ford, Excelsior Springs, Mo. Vehicle-spring.	440,093	Nov. 4	697	{ 185 186 }	53	745
Whipple, Nathan F., Pawtucket, R. I., assignor of one-half to J. E. Judson, New Haven, Conn. Coffee or tea strainer.	421,460	Feb. 18	1515	393	50	867

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Whitaker, Henry B., assignor of one-third to J. A. Matteson, River Point, R. I. Circuit-closer.	427,024	Apr. 29	3924	1022	51	799
Whitaker, Richard, New Brunswick, N. J., assignor to Consolidated Fruit Jar Company, New York, N. Y. Bottle-cap.	433,840	Aug. 5	599	155	52	873
Whitall, Tatum & Co. (See Tatum, Charles A., assignor.)						
Whitbeck, John B., Cossackie, N. Y. Blanket-holder.	439,988	Nov. 4	554	146	53	716
Whitbread, Samuel J., Syracuse, N. Y., assignor to C. B. Cottrell, Westerly, R. I. Proof-press.	427,650	May 13	935	234	51	1005
Whitcher, Carrie A., Boston, Mass. Garment-supporting hook.	431,361	July 8	1309	328	52	265
Whitcher & Emery. (See Stetson, Charles T., assignor.)						
Whitcher, Frank W., Boston, Mass. Lasting-pinchers.	442,844	Dec. 16	1943	500	53	1659
Whitcomb, Alonzo W., Worcester, Mass. Arc lamp.	443,557	Dec. 30	3154	811	53	1910
Whitcomb, Daniel C. D., assignor to Holdrege Manufacturing Company, Holdrege, Nebr. Windmill.	435,575	Sept. 2	302	84	52	1433
Whitcomb, Daniel C. D., assignor to Holdrege Manufacturing Company, Holdrege, Nebr. Face-wheel or crank-disk.	435,576	Sept. 2	303	84	52	1433
Whitcomb, Harry W., Barre, Vt. Stone-polishing wheel.	441,524	Nov. 25	3066	788	53	1219
Whitcomb, Henry. (See Jackson and Whitcomb.)						
Whitcomb, James A., Lyons, Nebr. Wagon-brake.	426,974	Apr. 29	3843	1004	51	783
Whitcomb, John B., Beloit, Wis. Vehicle-spring.	423,099	Mar. 11	1125	293	50	1357
White, Albert C., Afton, Iowa. Railway-signal.	431,300	July 1	401	101	52	82
White, Albert E., and M. W. Wragg, Brooklyn, N. Y. Ceiling-block.	419,388	Jan. 14	1113	294	50	234
White, Albert M., Waterbury, Conn. Composing-stick.	418,858	Jan. 7	311	75	50	65
White, Albert M., Waterbury, assignor of three-fourths to N. S. Perkins, New London, Conn. Thread-doubling machine.	423,847	Mar. 18	2228	589	50	1575
White, Annie. (See Maybeck, Bernard R., assignor.)						
White, Anthony C., Boston, Mass. Lightnig-arrester.	438,788	Oct. 21	1710	459	53	339
White, Bruce C. (See Boyd and White.)						
White, Bruce C., and J. A. Boyd, assignors to Chisholm, Boyd & White, Chicago, Ill. Brick-machine.	429,296	June 3	284	68, 69	51	1525
White, Charles, and A. R. Middleton, Baltimore, Md. Gas-engine.	438,209	Oct. 14	819	{ 222 223 }	53	164
White, Charles H. (See Fowler and White.)						
White, Charles H., Malden, Mass. Fire-pot for furnaces.	424,634	Apr. 1	301	78	51	60
White, Charles W., New York, N. Y. Fire-proof partition.	432,917	July 22	2918	748	52	588
White, Clarence O., Minneapolis, Minn. Ironing and polishing machine.	419,164	Jan. 7	771	204	50	160
White, Clarence O., Minneapolis, Minn. Shirt-ironing machine.	429,076	May 27	3115	{ 802 803 }	51	1454
White, Clarence O., Minneapolis, Minn. Neckband-ironer.	436,466	Sept. 16	1699	447	52	1714
White Cycle Company. (See White, Frederick, assignor.)						
White Dental Manufacturing Company, S. S. (See Bonwill, William G. A., assignor.)						
White Dental Manufacturing Company, S. S. (See Brown, Benoni S., assignor.)						
White Dental Manufacturing Company, S. S. (See Browne, Arthur W., assignor.)						
White Dental Manufacturing Company, S. S. (See Browne, Arthur W., assignor.) (Re-issue.)						
White Dental Manufacturing Company, S. S. (See Davis, Charles A., assignor.)						
White Dental Manufacturing Company, S. S. (See Davis, Charles A., assignor.) (Reissue.)						
White Dental Manufacturing Company, S. S. (See Richmond, Cassius M., assignor.)						
White Dental Manufacturing Company, S. S. (See Starr, Eli T., assignor.)						
White Dental Manufacturing Company, S. S. (See Stroud, Edward M., assignor.)						
White Dental Manufacturing Company, S. S. (See Teal, Levi, assignor.)						
White Dental Manufacturing Company, S. S. (See Wilkerson, Basil M., assignor.)						
White, Edward F., Bergen Point, N. J. Manufacture of flowers of sulphur.	443,629	Dec. 30	3270	{ 841 842 843 }	53	1932
White, Elmer, Toledo, Ohio. Means for inserting movable type in stereotype-plates.	424,085	Mar. 25	2601	693	50	1653
White, Francis C., Pittsville, Wis. Horse-collar pad.	434,647	Aug. 19	1864	488	52	1141
White, Frank, and F. J. Murphy, Pomona, Cal. Animal-trap.	442,845	Dec. 16	1944	500	53	1659
White, Frank, and F. J. Murphy, Pomona, Cal., assignors, by mesne assignments, to themselves. Animal-trap.	436,643	Sept. 16	1979	519	52	1765
White, Frank L., assignor of one-half to J. B. Stone, Monroe, La. Cotton-press.	426,892	Apr. 29	3738	976	51	764
White, Frank L., assignor of one-half to J. B. Stone, Monroe, La. Cotton-press.	439,617	Oct. 28	3037	803	53	597
White, Fred H. (See Heath and White.)						
White, Fred M. (See Page, William I., assignor.)						
White, Frederick, Worcester, Mass., assignor to White Cycle Company, Portland, Me. Velocipede.	437,827	Oct. 7	237	73	53	47*
White, Frederick L., et al. (See Kimpton, Charles A., assignor.)						
White, George H. (See Thomas and White.)						
White, George W., Huntsville, Ala. Telegraphic sounder.	421,214	Feb. 11	1173	301	50	795
White, Henry, assignor of one-half to P. L. Craig, Allegheny, Pa. Apparatus for the manufacture of gas.	439,455	Oct. 28	2781	{ 741 742 }	53	546
White, Henry C., New York, N. Y. Bed-plate for steam-engines.	440,674	Nov. 18	1654	427	53	945
White, Henry C., assignor to G. A. Barnard, New York, N. Y. Steam-separator.	435,990	Sept. 9	947	248	52	1563
White, Henry J., assignor to Empire Wringer Company, Auburn, N. Y. Wringer-clamp.	435,375	Aug. 26	3005	796	52	1363
White, J. Sibley, et al. (See Bradley, Jay L., assignor.)						
White, James, Brooklyn, N. Y. Sheet-metal pipe.	421,366	Feb. 11	1382	358	50	833
White, James, Brooklyn, N. Y. Roofing-sheet.	437,271	Sept. 30	3039	796	52	1984
White, James, Brooklyn, assignor to Twist Pipe Company, New York, N. Y. Flashing for walls and chimneys.	423,888	Mar. 18	2295	606	50	1588
White, James, Brooklyn, N. Y., assignor to Vulcan Company, of New York. Brake for cornice-machines.	427,025	Apr. 29	3924	1023	51	800
White, James, Brooklyn, N. Y., assignor to Vulcan Company, of Pennsylvania. Curved molding-machine.	433,191	July 29	3371	872	52	681
White, James, Brooklyn, and A. O. Kittredge, Slate Hill, N. Y., assignors to Vulcan Company, of Pennsylvania. Perforating-machine.	435,003	Aug. 26	2436	645	52	1257
White, James C., et al., trustees. (See Rudd, Charles H., assignor.)						
White, James E., Malden, assignor to J. W. Tufts, Medford, Mass. Bail-ear for cake-baskets, &c.	443,213	Dec. 23	2605	670	53	1796
White, James G. (See Jones, Forrest R., assignor.)						
White, James H., Glens Falls, N. Y. Detachable seat-spring.	420,483	Feb. 4	85	20	50	580
White, James H., assignor to Manhattan Brass Company, New York, N. Y. Ornamental guard for radiators, &c.	432,172	July 15	1785	458	52	363
White, James W., et al., trustees. (See Rudd, Charles H., assignor.)						
White, John A. (See Cushman, Abe L., assignor.)						
White, John H., Washington, D. C. Graphophone.	424,914	Apr. 1	742	198	51	143

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White, John H., Washington, D. C. Phonograph-recorder	425,840	Apr. 15	2141	571	51	433
White, John H., Washington, D. C. Graphophone	429,827	June 10	1090	269	51	1692
White, John H., Washington, D. C. Graphophone	432,462	July 15	2212	571	52	444
White, John H., Washington, D. C. Phonograph	440,524	Nov. 11	1410	365	53	889
White, John M., Long Branch, N. J. Floating breakwater	436,644	Sept. 16	1980	519	52	1765
White, John M., assignor of one-half to B. H. Forbes, Lawrence, Mass. Spring-catch for whiffletree-hooks	430,716	June 24	2529	619	51	1987
White, Joseph A. (See Moore and White.)						
White, Joseph W. (See Diller and White.)						
White, Joseph W., Halebank, near Widnes, county of Lancaster, England. Chair and sleeper	430,553	June 17	2239	549	51	1923
White, Joseph W., assignor of one-half to W. S. Tyler, Cleveland, Ohio. Apparatus for drawing wire	424,839	Apr. 1	632	166	51	122
White, Joseph W., assignor of one-half to W. S. Tyler, Cleveland, Ohio. Wire-drawing apparatus	431,499	July 1	723	180	52	144
White, Le Roy S., Waterbury, Conn. Electric motor	419,808	Jan. 21	1730	458	50	363
White, Le Roy S., assignor to Electrical Appliance Manufacturing Company, Waterbury, Conn. Automatic electric gas-lighter	441,458	Nov. 25	2978	767	53	1202
White Lead Company. (See Hannay, James B., assignor.)						
White, Lewis B., Norfolk, Va. Plow	419,165	Jan. 7	773	{ 204 205 }	50	160
White, Lewis B., Norfolk, Va. Plow	420,587	Feb. 4	925	58, 59	50	608
White, Lyman, assignor to Randolph & Clowes, Waterbury, Conn. Machine for rolling cylindrical forms of metal	430,359	June 17	1964	{ 482 483 }	51	1870
White, Lyman, assignor to Randolph & Clowes, Waterbury, Conn. Machine for forming seamless tubes	432,463	July 15	2213	571	52	444
White, Lyman, assignor to Randolph & Clowes, Waterbury, Conn. Machine for rolling seamless tubes	432,464	July 15	2215	572	52	445
White, Maston T., Washburn, Tex. Sod-cutter	433,224	July 29	3416	882	52	690
White, Maurice W., assignor of one-half to G. W. Ross, Somerville, Mass. Sounding-post for violins	420,025	Jan. 21	2068	544	50	431
White, Maurice W., assignor of one-half to G. W. Ross, Somerville, Mass. Base-bar for violins	436,963	Sept. 23	2550	667	52	1883
White, Oscar B., Cleveland, Ohio. Window-stop fastener	430,158	June 17	1610	400	51	1802
White, Oscar B., Cleveland, Ohio. Automatic electric-lamp hanger and switch	434,038	Aug. 12	877	231	52	937
White, Patrick F., Western Port, Md. Sash-fastener	424,238	Mar. 25	2808	750	50	1694
White, Patrick F., assignor of one-half to J. S. Jamesson, Western Port, Md. Exhaust mechanism	440,525	Nov. 11	1412	365	53	889
White, Peter, St. Louis, Mo. Tank water-closet	425,921	Apr. 15	2252	597	51	453
White, Peter, St. Louis, Mo. Hydrant	428,707	May 27	2560	648	51	1345
White, Peter, St. Louis, Mo. Urinal	432,465	July 15	2217	573	52	445
White, Peter, St. Louis, Mo. Valve for basins, tanks, or tubs	439,456	Oct. 28	2784	742	53	547
White, Peter, St. Louis, Mo. Water-closet	441,045	Nov. 18	2262	586	53	1059
White, Peter, St. Louis, Mo. Water-closet	443,419	Dec. 23	2924	752	53	1857
White, Reynolds T., Boston, Mass. Railway-chair and its fastening	420,133	Jan. 28	2245	594	50	474
White, Reynolds T., Boston, Mass. Rail for street-railways	431,242	July 1	320	79	52	65
White, Reynolds T., Boston, Mass. Cable railway and conduit	437,955	Oct. 7	428	120	53	82
White, Reynolds T., Boston, Mass. Street-railway construction	437,956	Oct. 7	430	120	53	82
White, Reynolds T., Boston, Mass. Street-railway construction	443,027	Dec. 16	2240	577	53	1718
White, Reynolds T., Boston, assignor of two-thirds to R. Whidden, Brookline, Mass. Apparatus for raising and moving earth	428,437	May 20	2143	539	51	1249
White, Robert E. (See Mearns, Andrew, assignor.)						
White, Rolin, Lowell, assignor to W. F. Draper, Hopedale, Mass. Spinning-spindle and its support	442,655	Dec. 16	1596	413	53	1591
White, Samuel K., Chicago, Ill. Power-transmitting device	439,316	Oct. 28	2574	687	53	508
White Sewing Machine Company. (See Baker, George W., assignor.)						
White, Spencer M., Fisher, Ill. Churn	425,645	Apr. 15	1856	495	51	378
White, Warren B., Abington, Mass. Air-cushion	441,269	Nov. 25	2674	694	53	1144
White, Washington, New York, N. Y., assignor to Taylor Company, Newark, N. J. Support for caskets or other articles	443,469	Dec. 23	3008	773	53	1873
White, William. (See Garey, Caleb E., assignor.)						
White, William A., Staatsburg, N. Y. Fire-kindler	439,767	Nov. 4	206	53	53	649
White, William A., Staatsburg, N. Y. Mat	441,785	Dec. 2	246	65	53	1312
White, William A., Glastonbury, Conn., assignor to Williams Brothers Manufacturing Company, of Connecticut. Grinder for reaper and mower knives	434,123	Aug. 12	1027	266	52	967
White, William E., New York, N. Y. Refrigerator	424,392	Mar. 25	3072	{ 815 816 }	50	1745
White, William F. (See Steele, James W., assignor.)						
White, William H., Bride, Tenn. Fence construction	438,905	Oct. 21	1909	507	53	375
White, William J., Cleveland, Ohio. Confection-rolling machine	424,393	Mar. 25	3073	816	50	1745
White, William R., Hartford, Conn. Thermal cut-out	438,394	Oct. 14	1100	299	53	217
Whiteford, David, Chicago, Ill. Water-closet	442,564	Dec. 9	1463	{ 375 376 }	53	1556
Whiteford, Robert, assignor of five-eighths to P. Bannon, D. Shanahan, M. O'Sullivan, and M. O'Doherty, Louisville, Ky. Railway cross-tie	435,004	Aug. 26	2438	645	52	1257
Whitehead, Edward G., New Malden, county of Surrey, England. Sash-holder	429,669	June 10	859	203	51	1647
Whitehead, George E., Providence, R. I. Grinding-machine	441,997	Dec. 2	572	155	53	1375
Whitehead, Percival D., Chicago, Ill. Freight-car	424,915	Apr. 1	743	198	51	144
Whitehead, Walter C., assignor to J. Maddocks, Bradford, England. Device for the manufacture of union and fancy yarns	420,669	Feb. 4	341	89, 90	50	630
Whitehill, David B., North Clarendon, Pa. Rod and pipe tongs	440,214	Nov. 11	892	230	53	793
Whitehill, Robert, Milwaukee, Wis. Dust-collector	421,215	Feb. 11	1174	{ 301 302 }	50	795
Whitehouse, Benjamin T., et al. (See Walker, William B., assignor.)						
Whitehouse, Robert M., et al. (See Walker, William B., assignor.)						
Whitelaw, William R., Cobourg, Ontario, Canada. Water-heater	419,389	Jan. 14	1114	294	50	235
Whiteley, Alfred M., Sacramento, Cal. Attachment for chairs	439,989	Nov. 4	554	146	53	716
Whiteley, Nathan. (See Johnson, Hanson, and Whiteley.)						
Whiteley, William N., Springfield, Ohio. Pitman-connection for knife-heads	426,485	Apr. 29	3130	822	51	646
Whiteman, Abram V., Port Chester, N. Y. Milk-jar	421,461	Feb. 18	1515	393	50	867
Whiteman, John A., Wentworth, N. C. Tobacco-hanger	429,077	May 27	3117	803	51	1455
Whiteside, Sidney B., Los Angeles, Cal. Stamp canceling and dating machine	440,675	Nov. 18	1655	427	53	945
Whiteside, Sidney B., Los Angeles, Cal., assignor to H. Campbell, New York, N. Y. Duplex ledger-ruler	421,877	Feb. 18	2120	556	50	982

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Whitesides, Edward G., <i>et al.</i> (See Engquist, Nicholas, assignor.)						
Whitesides, George C., <i>et al.</i> (See Engquist, Nicholas, assignor.)						
Whiteway, William L., assignor of one-half to Z. Marx, Chicago, Ill. Lunch-box	443,183	Dec. 23	2533	{ 648 649 }	53	1780
Whitin Machine Works. (See Ellis, Harvey, assignor.)						
Whitin Machine Works. (See Taft, Cyrus A., assignor.)						
Whitin Machine Works. (See Thompson, John P., assignor.)						
Whiting, David, Ashland, Ohio. Clover-huller	428,260	May 20	1873	470	51	1196
Whiting, David, Ashland, Ohio. Cider-press	432,153	July 15	1757	451	52	357
Whiting, Ezra T., Dartford, Wis. Hot-air drum	442,846	Dec. 16	1945	590	53	1659
Whiting, George A., Neenah, Wis. Elevator-door-operating mechanism	420,525	Feb. 4	138	35	50	501
Whiting, Junius F., Albany, Oreg. Means for operating pumping-engines	434,369	Aug. 12	1400	367	52	1041
Whiting & Son, John L. (See Wolcott, Arthur H., assignor.)						
Whiting, William F., assignor of one-half to Howard & Son, Providence, R. I. Button	420,289	Jan. 28	2499	663	50	520
Whiting, William G., Wallington, N. Y. Gavel-carrier for grain-harvesters	439,710	Nov. 4	123	33, 34	53	632
Whiting, William J. (See Carter and Whiting.)						
Whitinsville Spinning Ring Company. (See Trowbridge, Charles E., assignor.)						
Whitley, Nathan, F. W. Thomson, and H. Hoyle. Halifax, county of York, England. Apparatus for covering cylinders with card fillets	429,985	June 10	1332	{ 330 331 }	51	1739
Whitlock, George C., Omaha, Nebr. Anchoring beams to walls and truss and girder beams	443,657	Dec. 30	3310	853	53	1940
Whitlock, George F. and F. Redfield, Wichita, Kans.; said Whitlock assignor to said Redfield. Combined door-bell and burglar-alarm	440,383	Nov. 11	1161	300	53	842
Whitlock Machine Company. (See Whitlock, Sturges, assignor.)						
Whitlock, Sturges. (See Cormack and Whitlock.)						
Whitlock, Sturges, assignor to Whitlock Machine Company, Shelton, Conn. Doctor-roller mechanism for printing-presses	436,846	Sept. 23	2336	{ 615 616 }	52	1843
Whitlock, Sturges, assignor to Whitlock Machine Company, Shelton, Conn. Ink-fount-roller mechanism for printing-machines	441,270	Nov. 25	2675	{ 694 695 }	53	1144
Whitlock, Thomas H., and C. L. Etheridge, Paris, Tenn. Combined plow and harrow	425,845	Apr. 15	2151	573	51	435
Whitman, Francis C., Canton, Pa. Parlor or lawn game	437,741	Oct. 7	98	31	53	22
Whitman, Levi H., Hawkeye, Nebr. Cultivator	429,668	June 10	858	{ 207 208 }	51	1647
Whitman, William S., Bangor, Mo. Reversing mechanism	431,636	July 8	931	234	52	194
Whitmarsh, James H., Sarnia, Ontario, Canada. Wash-boiler	420,526	Feb. 4	142	35	50	591
Whitmarsh, William W. (See Putnam, Silas S., Jr., assignor.)						
Whitmarsh, William W. (See Putnam and Whitmarsh.)						
Whitmore, Andrew E., Boston, Mass. Breech-loading breakdown gun	433,262	July 29	3470	896	52	702
Whitmore, Frank Y. (See Livermore, Darwin O., assignor.)						
Whitmore, Fred A., assignor to Hopedale Machine Company, Hopedale, Mass. Creel for warping-machines	428,261	May 20	1874	470	51	1196
Whitmore, James T., Cleveland, Ohio. Embroidering attachment for sewing-machines	422,558	Mar. 4	281	71	50	1189
Whitmore, Solomon S., assignor of one-half to J. Neumann, Baltimore, Md. Dumping-wagon	440,936	Nov. 18	2098	{ 544 545 }	53	1028
Whitney, Amos, Hartford, Conn., and H. Howard, assignors to Howard & Son, Providence, R. I. Button or stud	424,153	Mar. 25	2696	717	50	1671
Whitney, Baxter D. (See Loveland, Byron S., assignor.)						
Whitney, Edmund B., Gloversville, N. Y., assignor to M. D. Shipman and C. E. Bradt, De Kalb, Ill. Glove-fastener	422,272	Feb. 25	2703	712	50	1099
Whitney, Edwin, Attleborough Falls, Mass., assignor to Read & Lincoln, Providence, R. I. Bracelet	434,220	Aug. 12	1173	304	52	995
Whitney, Edwin H., East Providence, assignor to American Ship Windlass Company, Providence, R. I. Locking-gear for windlasses	440,784	Nov. 18	1845	475	53	980
Whitney Electric Manufacturing Company. (See Hoyt, Adrian H., assignor.)						
Whitney, Frank, Chicago, Ill. Photographic camera	430,794	June 24	2658	654	51	2013
Whitney Glass Works. (See Ferrari, Andrew, assignor.)						
Whitney, John R., Radnor, Pa. Plask for molding car-wheels	428,293	May 20	1925	484	51	1206
Whitney, John S., Nashua, N. H. Lubricating device	443,265	Dec. 23	2683	688	53	1810
Whitney, Jonah D., Syracuse, N. Y. Carriage-top	441,813	Dec. 2	295	80	53	1321
Whitney, Myra E., Bradford, Pa. Toy	424,587	Apr. 1	232	63	51	47
Whitney, Orison C., Cleveland, Ohio. Organ-case	419,000	Jan. 7	532	133	50	112
Whitney, Ruel W., San Francisco, Cal. Instrument for copying drawings	420,484	Feb. 4	86	20	50	580
Whitney, Ruel W., and B. K. Cowles, San Francisco, Cal. Month-piece for telephones	421,800	Feb. 18	1999	527	50	960
Whitney, Solomon, Manhattan, Kans. Churn	430,906	June 24	2833	695	51	2046
Whitney, Willie O., Glens Falls, N. Y. Shutter-fastener	431,301	July 1	404	101	52	82
Whiton, David E. and L. E., New London, Conn. Drilling-machine	426,347	Apr. 22	2900	763	51	592
Whiton, Lucius E. (See Whiton, David E. and L. E.)						
Whiton, Lucius E., New London, Conn. Chuck	422,479	Mar. 4	172	47	50	1169
Whiton, Lucius E., New London, Conn. Chuck	422,480	Mar. 4	172	48	50	1169
Whiton, Lucius E., New London, Conn. Reversible jaw for chucks	425,279	Apr. 8	1304	349	51	263
Whiton, Lucius E., New London, Conn. Speed-changing mechanism for lathes	437,067	Sept. 23	2690	703	52	1911
Whiton, Lucius E., New London, Conn. Speed-changing mechanism for lathes	437,068	Sept. 23	2692	{ 703 704 }	52	1912
Whittaker, Benjamin F., Belleville, Mich. Egg-tray	441,459	Nov. 25	2980	767	53	1202
Whittaker, Edward W., Mount Vernon, N. Y. Clasp for sashes	424,440	Mar. 25	3160	838	50	1762
Whittaker, George, assignor of one-half to O. L. Gardner, Brooklyn, N. Y. Gripper for traction-rope railways	434,140	Aug. 12	1052	272	52	971
Whittaker, John, St. Louis, Mo. Refrigerator-car	423,889	Mar. 18	2297	606	50	1588
Whittaker, John, St. Louis, Mo. Safe, vault, &c	425,280	Apr. 8	1306	{ 349 350 }	51	263
Whittaker, Thomas, Accrington, county of Lancaster, England. Mold for brick-machines	434,221	Aug. 12	1174	305	52	995
Whittelsey, Sidney S. (See Howieson, Peter, assignor.)						
Whittemore Brothers & Co. (See Wales, Sigourney, assignor.)						
Whittemore, James, Detroit, Mich., assignor to National Surface Guard Company, Chicago, Ill. Surface cattle-guard	437,742	Oct. 7	99	31	53	22
Whittemore, John Q. A. (See Fahnley, William J., assignor.)						
Whittemore, John Q. A. (See Jones, Walter S., assignor.)						
Whittemore, William H., and G. Miller, Newark, N. J. Ear-ring	439,457	Oct. 28	2785	742	53	547
Whittier, Charles, Boston, Mass. Elevator mechanism	421,150	Feb. 11	1078	277	50	778
Whittier, Charles, Boston, Mass. Elevator mechanism	435,957	Sept. 9	896	236	52	1553
Whittier, Charles, Boston, Mass. Elevator-operating mechanism	442,344	Dec. 9	1116	291	53	1485
Whittier, Ezra B. (See Rice and Whittier.)						
Whittier, Joseph G., Attica, Ind. Door-check	430,134	Jan. 28	2246	594	50	474
Whittier, Thomas P., Saginaw, Mich. Secondary-battery plate	436,050	Sept. 9	1041	270	52	1582

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Whittingham, Charles, <i>et al.</i> (See Whittingham, David L., assignor.)						
Whittingham, David L., assignor to C. Whittingham and F. A. Johnson, Detroit, Mich. Oil-stove	436,620	Sept. 16	1932	{ 507 508 }	52	1756
Whittingham, George H., assignor to Automatic Electric Switch Company, Baltimore, Md. Electric switch	423,462	Mar. 18	1662	439	50	1468
Whittingham, George H., assignor to Automatic Electric Switch Company, Baltimore, Md. Thermal cut-out	436,952	Sept. 23	2537	664	52	1880
Whittingham, George H., assignor to Automatic Switch Company, Baltimore, Md. Thermal cut-out	438,721	Oct. 21	1597	429	53	317
Whittle, Joseph, Philadelphia, Pa. Stocking	420,754	Feb. 4	450	119	50	652
Whittlesey, George P., Washington, D. C. Making hinges	442,656	Dec. 16	1597	413	53	1592
Whittlesey, James T., Lynn, Mass. Device for applying a crating to electric conductors	439,916	Nov. 4	434	112	53	693
Whittlesey, James T., New Haven, Conn., and A. B. Keyes, East Princeton, Mass. Rubber-cutting machine	426,577	Apr. 29	3265	856	51	672
Whitus, Charles, Chester, S. C., assignor of one-half to J. W. Wilkes Car-coupling	423,463	Mar. 18	1665	{ 439 440 }	50	1469
Whitworth, Albert J. (See Ford and Whitworth.)						
Whitworth & Company, Joseph. (See Canet, Jean B. G. A., assignor.)						
Wiard, Harry, and J. L. Judd, Syracuse, N. Y. Side-hill plow	420,218	Jan. 28	2385	634	50	499
Wiard, Harry, and J. L. Judd, Syracuse, N. Y. Side-hill plow	420,647	Feb. 4	317	82	50	626
Wiard, Harry, and J. L. Judd, Syracuse, N. Y. Harrow	420,848	Feb. 4	615	158	50	680
Wiard, Myron W., assignor of one-half to J. Banker, Concordia, Kans. Door-check	432,466	July 15	2219	573	52	446
Wiatt, William G., and F. Pickering, Columbus, Ohio. Mold for making pop-corn balls	436,818	Sept. 23	2287	603	52	1834
Wible, Milo B., Arcata, Cal. Swinging gate	423,504	Mar. 18	1724	454	50	1480
Wickers, Barney C., Westfield, Ind. Brick and tile kiln	438,335	Oct. 14	1015	275	53	200
Wickers, George O., Lawrence, assignor of one-half to Davis & Furber Machine Company, North Andover, Mass. Spinning-spindle	422,273	Feb. 25	2704	712	50	1099
Wickers, George O., Lawrence, assignor to Davis & Furber Machine Company, North Andover, Mass. Machine for grinding card-clothing	433,919	Aug. 5	705	183	52	894
Wickersham, William, Worcester, Mass. Cut nail	423,009	Mar. 11	984	259	50	1331
Wickersham, William, Worcester, Mass. Printer's quoin	438,210	Oct. 14	823	223	53	164
Wickes, James H., Rochester, N. Y. Refrigerator-car	431,221	July 1	291	72	52	59
Wickey, Andrew, Quincy, Ill. Baling-press	421,462	Feb. 18	1516	393	50	868
Wickey, Andrew, Quincy, Ill. Baling-press	424,840	Apr. 1	633	{ 166 167 }	51	122
Wickey, Andrew, Quincy, Ill. Baling-press	439,335	Oct. 28	2600	693	53	513
Wickey, Edward W., Quincy, Ill. Incubator	436,467	Sept. 16	1700	447	52	1714
Wickham, Dennis, Ware, county of Hertford, England. Apparatus connected with filling and corking bottles	422,867	Mar. 4	746	190	50	1280
Wickham, James M., and J. H. Stevens, Luray, Mo. Combination-tool	439,711	Nov. 4	126	34	53	632
Wickliffe, Nathaniel, New Orleans, La. Atomizer for toilet-fans	435,197	Aug. 26	2718	718	52	1311
Wickman, Charles C., New York, N. Y. Piano-damper	424,841	Apr. 1	1634	167	51	123
Wickman, James F., San Francisco, Cal. Stencil-cutter	440,835	Nov. 18	1933	497	53	996
Wicks, Frederick, Glasgow, county of Lanark, Scotland. Type-casting machine	430,051	June 10	1441	{ 358 359 }	51	1759
Wicks, Joseph, <i>et al.</i> (See Hughes, Willard C., assignor.)						
Wicks, Rhoda C. (See Wicks, Thomas, assignor.)						
Wicks, Thomas, assignor to R. C. Wicks, Toronto, Canada. Adjustable bed-clothes holder	433,312	July 29	3541	914	52	716
Widdifield, George B., assignor of one-half to W. H. Shifflet, Columbia City, Ind. Balance-wheel pliers and calipers	428,193	May 20	1757	444	51	1174
Widdifield, Watson P., Uxbridge, Ontario, Canada, and A. H. Bowman, Allentown, Pa., assignors, by mesne assignments, to Westinghouse Air Brake Company, Pittsburg, Pa. Electric-circuit coupling for railway-trains	433,706	Aug. 5	391	{ 99 100 }	52	832
Widdowson, Samuel and T. H., Delavan, Wis. Friction-clutch	437,828	Oct. 7	240	73, 74	53	47
Widdowson, Thomas H. (See Widdowson, Samuel and T. H.)						
Wider, Eugen, Stuttgart, Württemberg, Germany. Automatic fire-alarm	419,902	Jan. 21	1884	495	50	395
Widerman, Francis M., Georgetown, D. C. Atmospheric engine	439,222	Oct. 28	2405	646	53	477
Widmer, Fred. (See Knapp, Albert E., assignor.)						
Widmer, Jacob, New Hartford, Conn. Weft-tension-regulating device for looms	425,014	Apr. 8	902	239	51	183
Widule, Gottlieb, Milwaukee, Wis. Sample-record	429,401	June 3	459	108	51	1559
Wick, John A. (See Luchterhand, Jacob C., assignor.)						
Wiedenmayer, Gustavus A., Oceanic, N. J., and S. Bergmann, New York, N. Y. Draw-bridge	442,847	Dec. 16	1946	501	53	1659
Wiederer, Peter, Stapleton, N. Y. Mirror	433,707	Aug. 5	393	100	52	832
Wiederer, Peter, Stapleton, N. Y. Folding mirror	433,708	Aug. 5	394	{ 100 101 }	52	832
Wiedersheim, John A., <i>et al.</i> (See Kitsée, Isidor, assignor.)						
Wiegand, S. Lloyd, Philadelphia, Pa. Metallic railway cross-tie and rail-fastening	420,485	Feb. 4	87	20	50	580
Wiegand, S. Lloyd, Philadelphia, Pa. Letter-box	429,936	June 10	1334	331	51	1739
Wiegand, S. Lloyd, Philadelphia, Pa. Friction-clutch	430,907	June 24	2834	{ 695 696 }	51	2046
Wiegand, S. Lloyd, Philadelphia, Pa. Telephone	436,512	Sept. 16	1762	465	52	1726
Wiegand, S. Lloyd, Philadelphia, Pa. Telephone	436,513	Sept. 16	1762	465	52	1727
Wiegand, S. Lloyd, Philadelphia, Pa. Telephone-relay	436,514	Sept. 16	1765	466	52	1727
Wiegand, S. Lloyd, Philadelphia, Pa. Cask-forming machine	437,408	Sept. 30	3260	{ 849 850 851 852 }	52	2025
Wiegand, S. Lloyd, Philadelphia, Pa. Hoop-driving machine	437,409	Sept. 30	3265	{ 853 854 }	52	2026
Wiegand, S. Lloyd, Philadelphia, Pa. Cask	437,410	Sept. 30	3271	854	52	2028
Wier, Marshall A., Upper Norwood, England. Type-writer ciphograph	442,674	Dec. 16	1628	420	53	1599
Wies, Charles, assignor of one-half to J. M. Lockey, Faulkton, S. D. Vise	432,918	July 22	2919	748	52	588
Wiesbauer, Joseph, assignor to M. Wiesbauer, Buffalo, N. Y. Combined ash and cigar receptacle	441,913	Dec. 2	440	118	53	1351
Wiesbauer, M. (See Wiesbauer, Joseph, assignor.)						
Wiese, Heinrich, and J. Braack, Milwaukee, Wis. Refrigerator	433,709	Aug. 5	395	101	52	832
Wiese, Henry, Fort Wayne, Ind. Feed-cutter	432,845	July 22	2215	721	52	568
Wiesebroek, Frederick W., New York, N. Y. Inhaler	437,070	Sept. 23	2698	704	52	1913
Wiesebroek, Frederick W., New York, N. Y. Feeding fuel to fires	439,738	Nov. 4	163	42	53	639
Wiesebroek, Frederick W., assignor of one-half to R. M. Bruno, New York, N. Y. Electric distance heat-indicator and alarm	437,069	Sept. 23	2693	704	52	1912
Wiesner, Josef, Vienna, Austria-Hungary, assignor to H. Conried, New York, N. Y. Fuel	421,878	Feb. 18	2121	50	982	

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Wiest, Peter C., York, Pa. Caramel-holder	428,765	May 27	2644	670	51	1362
Wiester, William H., San Francisco, Cal. Water-back for gas-stoves	439,917	Nov. 4	436	113	53	693
Wiett, George J. (See Flickinger and Wiett.)						
Wiggin, Joseph N., Orange, N. J., and C. A. Collord, New York, N. Y., assignors to said Wiggin. Machine for printing shade fabrics	440,413	Nov. 11	1226	317	53	855
Wight, Arthur M., <i>et al.</i> (See Prescott, George P., assignor.)						
Wightman, Merle J. (See Lemp and Wightman.)						
Wightman, Merle J., Hartford, Conn. Electric railway	430,329	June 17	1918	470	51	1861
Wightman, Merle J., Hartford, Conn. Electric railway	442,407	Dec. 9	1213	313	53	1505
Wightman, Merle J., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Incandescent-lamp socket	420,370	Jan. 28	2609	694	50	540
Wightman, Merle J., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Controller for electric motors	423,975	Mar. 25	2441	648	50	1623
Wightman, Merle J., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Regulating electrically-operated mechanism	435,958	Sept. 9	898	236	52	1554
Wightman, Merle J., and E. Thomson, Lynn, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Dynamo-electric machine	426,348	Apr. 22	2903	763	51	593
Wigmore, William H., Philadelphia, Pa. Paddle-wheel for vessels	431,096	July 1	98	24	52	22
Wigmore, William H., Philadelphia, Pa. Ship's propeller	432,846	July 22	2817	721	52	568
Wizzell, Eustace E. (See Cooper and Wizzell.)						
Wikle, Wilbur S., Indian Creek, W. Va. Hay rake and shocker	425,721	Apr. 15	1968	523	51	400
Wilber, Elijah S., Englewood, Ill. Heater	438,336	Oct. 14	1016	524	53	200
Wilbur, Alfred, Allegheny, assignor of one-half to B. H. Lightfoot, Pittsburg, Pa. Pipe-joint	441,525	Nov. 25	3067	789	53	1219
Wilbur, John E., Rochester, N. Y. Heating and cooking apparatus	419,485	Jan. 14	1254	333	50	264
Wilbur, Lloyd E. (See Codding and Wilbur.)						
Wilbur Publishing Company. (See Thain, Richard S., assignor.)						
Wilburn, Robert L., Mexico, Mo. Needle-case	437,543	Sept. 30	3453	909	52	2071
Wilck, Hermann. (See Dixon, John G., assignor.)						
Wilcomb, Frank, Providence, R. I., assignor, by mesne assignments, to Wilcomb Knitting Machine Company, Jersey City, N. J. Stocking	422,868	Mar. 4	748	191	50	1280
Wilcomb, Frank, Providence, R. I., assignor, by mesne assignments, to Wilcomb Knitting Machine Company, Jersey City, N. J. Knitting stockings	422,869	Mar. 4	749	191	50	1280
Wilcomb Knitting Machine Company. (See Wilcomb, Frank, assignor.)						
Wilcox, Alfred J., Muskegon, Mich. Compensating gang sawing-machine	420,849	Feb. 4	617	159	50	680
Wilcox, Amos A., Cleveland, Ohio. Type-writing machine	421,536	Feb. 18	1635	422	50	889
Wilcox, Curtis N., Brooklyn, N. Y. Line-puller	434,691	Aug. 19	1942	504	52	1154
Wilcox, Curtis N., Brooklyn, N. Y. Toy	442,675	Dec. 16	1631	420	53	1599
Wilcox, David, Warrington, England, assignor of one-half to S. W. Taylor, East Orange, N. J. Handle for files and other tools	436,515	Sept. 16	1766	466	52	1727
Wilcox, Darius, Batavia, N. Y. Fifth-wheel	439,826	Nov. 4	293	74	53	665
Wilcox, Edgar A., Monterey, Mich. Car-coupling	433,621	Dec. 30	3253	835	53	1929
Wilcox, Elbert F., assignor of one-half to J. D. Hall, Chicago, Ill. Adjustable strip for window-jamb	431,500	July 1	724	180	52	144
Wilcox, Frank E., Batavia, N. Y. Reach-socket	439,827	Nov. 4	293	74	53	665
Wilcox, Frederick W., and W. D. Moshier, assignors to Moshier Bros., Utica, N. Y. Paper rail	426,698	Apr. 29	3450	904	51	707
Wilcox, Jackson B., Manistee, Mich. Bee-hive	419,809	Jan. 21	1732	458	50	364
Wilcox, John C., 60 London Road, Carlisle, county of Cumberland, England. Life-saving belt	419,132	Jan. 7	718	189	50	151
Wilcox, John L., assignor of one-half to C. E. Shultz, Fort Howard, Wis. Harness-tug	434,648	Aug. 19	1866	488	52	1141
Wilcox, John T., assignor of one-half to A. W. Williams, Leominster, Mass. Fountain-pen	420,504	Feb. 4	110	27	50	585
Wilcox, Levi P. (See Morgan, Everard H., assignor.)						
Wilcox, Lewis C., assignor to American Bit Brace Company, Buffalo, N. Y. Machine for bending rods for bit-braces	425,157	Apr. 8	1116	297	51	224
Wilcox, Lewis C., assignor to American Bit Brace Company, Buffalo, N. Y. Bit-brace	428,984	May 27	2963	760	51	1426
Wilcox, Lewis T. (See Isbell and Wilcox.)						
Wilcox, Margaret A., Chicago, Ill. Combined clothes and dish washer	426,486	Apr. 29	3132	822	51	646
Wilcox, Melvin L., Bay City, Mich. Sleigh	441,729	Dec. 2	157	42	53	1292
Wilcox, Samuel W., Mendon, Mass. Tuning-peg for violins	423,648	Mar. 18	1949	513	50	1522
Wilcox Silver Plate Company. (See Babbitt, Seth W., assignor.)						
Wilcox, William F., Tipton, Ind. Adjustable reflector and holder	423,100	Mar. 11	1126	293	50	1357
Wilcoxson, M. H., <i>et al.</i> (See Redlinger, Michael, assignor.)						
Wild Engineering Company. (See Wild, William H., assignor.)						
Wild, Henri, Zurich, Switzerland. Photographic stand	422,559	Mar. 4	281	71	50	1190
Wild, Joseph, <i>et al.</i> (See Armitage and Topham, assignors.)						
Wild, William H., assignor to Wild Engineering Company, Valatie, N. Y. Intermittent friction-grip	432,348	July 15	2041	525	52	409
Wilde, Daniel, Washington, Iowa. Thrashing-machine	440,751	Nov. 18	1785	461	53	969
Wilde, Daniel, Washington, Iowa. Grain-elevator	442,159	Dec. 9	837	224	53	1433
Wildemore, Jacob L., Philadelphia, Pa. Pinch-dog	426,893	Apr. 29	3740	976	51	764
Wilder, Charles O., South Bend, Ind. Fuel-oil burner	429,205	June 3	150	36	51	1500
Wilder, Edmund R., Kansas City, Mo. Electric burglar or automatic fire-alarm	436,030	Sept. 9	999	261	52	1575
Wilder, Elihu, Newton, Mass., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Stop-motion	419,390	Jan. 14	1116	295	50	235
Wilder, Fred W., Chicago, Ill. Method of and knife for cutting pork	431,097	July 1	100	25	52	22
Wilder, Fred W., Chicago, Ill. Device for drawing sausage-casings upon the nozzles of sausage-stuffing machines	432,173	July 15	1785	459	52	363
Wilder, Fred W., Chicago, Ill. Device for pritching up cattle	440,676	Nov. 18	1656	428	53	945
Wilder, Vernetta E., Waco, Mich. Fence	422,675	Mar. 4	465	119	50	1225
Wilder, William H., Gardner, Mass. Oil-stove range	432,847	July 22	2819	722	52	568
Wildhagen, Louis, assignor to himself and J. Millidge, Bailey's Harbor, Wis. Hame-fastener	434,967	Aug. 26	2382	631	52	1247
Wildi, Emil, Highland, Ill. Can-filling machine	424,394	Mar. 25	3074	816	50	1745
Wildi, Emil, Highland, Ill. Soldering-iron heater	438,967	Oct. 21	1998	534	53	393
Wildin, George M., Melvern, Kans. Suspension-bridge	441,862	Dec. 2	370	97	53	1337
Wildin, George M., J. and R. J. Harper, Melvern, Kans. Tightening apparatus for cable bridges	424,154	Mar. 25	2697	717	50	1671
Wilds, Thaddeus R., Scoville, N. D. Feeder for self-binding harvesters	434,854	Aug. 19	2162	567	52	1198

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Wile, Sol. (See La Casse and Wile.)						
Wile, Sol., and H. La Casse, assignors to Bottlers' Specialty Company, Rochester, N. Y.						
Cork-feeding machine	443,062	Dec. 16	2292	587	53	1728
Wile, Sol., and H. La Casse, assignors to Bottlers' Specialty Company, Rochester, N. Y.						
Feed or carrier mechanism	443,184	Dec. 23	2535	649 650 650 651 652 653 654 655 656	53	1780
Wile, Sol., and H. La Casse, assignors to Bottlers' Specialty Company, Rochester, N. Y.						
Machine for corking bottles and wiring the corks therein	443,185	Dec. 23	2540	653 654 655 656	53	1782
Wiles, John E. (See Weed, Edward B., assignor.)						
Wiles, Thomas S. (See Brown and Wiles.)						
Wiles, Thomas S., Albany, N. Y. Magazine for photographic cameras	423,649	Mar. 18	1950	514	50	1522
Wiles, Thomas S., Albany, N. Y. Magazine photographic-plate holder	424,396	Mar. 25	3087	820	50	1748
Wiles, Thomas S., Albany, and F. W. Brown, Troy, N. Y. Stand-pipe	424,395	Mar. 25	3078	817 818 819 820 263 264 265	50	1746
Wiles, Thomas S., assignor of one-half to A. P. Adams, Albany, N. Y. Ironing-machine	440,292	Nov. 11	1025	263 264 265	53	817
Wiley, Abraham S., Detroit, Mich. Vault or strong room	424,664	Apr. 1	353	93	51	68
Wiley, George L., Arlington, N. J., and E. G. Acheson, assignors to Standard Underground Cable Company, Pittsburg, Pa. Joint for electric conductors	433,920	Aug. 5	707	183	52	895
Wiley, George L., Arlington, N. J., and E. G. Acheson, assignors to Standard Underground Cable Company, Pittsburg, Pa. Joint for electric conductors	433,921	Aug. 5	709	184	52	895
Wiley, George L., Arlington, N. J., and E. G. Acheson, assignors to Standard Underground Cable Company, Pittsburg, Pa. Joint for electric conductors	433,922	Aug. 5	710	184	52	895
Wiley, P. B., <i>et al.</i> (See Goodwin, Charles Q., assignor.)						
Wiley & Russell Manufacturing Company. (See Russell, Charles P., assignor.)						
Wilgus, Daniel C., Los Angeles, Cal. Lawn-sprinkler	443,734	Dec. 30	3440	882	53	1964
Wilgus, Daniel C., Los Angeles, Cal. Petroleum-burner	443,808	Dec. 30	3557	912	53	1988
Wilhelm, Albert, Bernham, Tex. Plow	429,670	June 10	859	208	51	1647
Wilhelm, Peter, Portland, Oreg. Stove lid and center-piece and lifter therefor	434,617	Aug. 19	1801	470	52	1129
Wilhelm, Solon H., <i>et al.</i> (See Phipps, Edward L., assignor.)						
Wilhelmi, Valentin, Paterson, N. J. Range-boiler	434,075	Aug. 12	941	247	52	950
Wilke, Frederick A., Richmond, Ind. China-firing kiln	427,941	May 13	1395	353	51	1093
Wilke, Friedrich H., Bradford, England. Loom for weaving velvets, &c	441,084	Nov. 18	2335	605	53	1074
Wilkening, Friedrich, Elkhart, Ind. Lamp-supporting device	419,576	Jan. 14	1374	368	50	289
Wilkening, Gottlieb, Dayton, Ohio. Alarm game-wheel	428,985	May 27	2965	761	51	1427
Wilkerson, Basil M., Baltimore, Md., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental chair	419,299	Jan. 14	977	259 260	50	207
Wilkerson, John L., San Marcos, Tex. Hay-rack	431,302	July 1	405	102	52	83
Wilkes-Barré Molding Machine Company. (See Sturges, Frank C., assignor.)						
Wilkes, James, South St. Paul, Minn. Attachment for wrenches	439,918	Nov. 4	437	113	53	693
Wilkes, John W. (See Whitus, Charles, assignor.)						
Wilkin, Alexander, London, Ontario, Canada. Potato-digger	439,223	Oct. 28	2407	646 647	53	477
Wilkin Manufacturing Company. (See Emery, John G., Jr., assignor.)						
Wilkin Manufacturing Company. (See James, William A., assignor.)						
Wilkin, Theodore S., Milwaukee, Wis. Band-saw mill	432,682	July 22	2562	656	52	519
Wilkin, Theodore S., Milwaukee, Wis. Band-saw mill	432,683	July 22	2563	657	52	520
Wilkin, Theodore S., Milwaukee, Wis. Saw-mill	436,468	Sept. 16	1702	447 448	52	1715
Wilkin, Theodore S., Milwaukee, Wis. Saw-mill carriage	436,621	Sept. 16	1934	508	52	1757
Wilkin, Theodore S., Milwaukee, Wis. Saw-mill carriage	437,957	Oct. 7	432	121	53	82
Wilkin, Thomas C., Independence, Oreg. Harvester	434,494	Aug. 19	1607	420	52	1090
Wilkin, Thomas C., Independence, Oreg. Needle for grain-binders	443,639	Dec. 30	3384	847	53	1935
Wilking, Franz, Berlin, and H. Müller, Nuremberg, Germany. Distribution and regulation of electric currents	437,272	Sept. 30	3040	797	52	1984
Wilkins, Alexander G., Meadville, Pa., assignor to Railway Speed Recorder Company, Kent, Ohio. Holder for shoe-button fasteners	429,828	June 10	1094	269	51	1692
Wilkins, Beriah, <i>et al.</i> (See Gillis, Bosanquet W., assignor.)						
Wilkins, Caroline J., Denver, Colo. Remedial cosmetic	431,157	July 1	184	.....	52	38
Wilkins Company, S. B. (See Bridges, John R., assignor.)						
Wilkins, Stillman, Albia, Iowa. Portable lemonade-holder and glass-washer combined	423,650	Mar. 18	1954	514	50	1522
Wilkins, Turney M., Miller, S. D., and A. H. Reed, Glencoe, Minn. Electric call and voting apparatus	429,330	June 3	347	82	51	1537
Wilkins, Walter L., Hastings, Mich. Lock	419,903	Jan. 21	1885	495	50	395
Wilkinson, Edward C., Penn Yan, N. Y. Bag-holder and truck	422,274	Feb. 25	2705	712	50	1099
Wilkinson, Edward W., <i>et al.</i> (See Smallman, James W., assignor.)						
Wilkinson, George, Aurora, Ontario, Canada. Sulky-plow	427,942	May 13	1398	353	51	1093
Wilkinson, James, Philadelphia, Pa. Tool attachment for planers	428,360	May 20	2027	509	51	1227
Wilkinson, Thomas P., <i>et al.</i> (See Locke, Jesse A., assignor.)						
Wilkinson, William A., Minneapolis, Minn. Friction-clutch	429,402	June 3	460	109	51	1559
Wilkinson, William H., Boston, Mass. Oil-cup	433,972	Aug. 12	799	204	52	921
Wilkinson, William H., Boston, Mass. Oil-cup	441,731	Dec. 2	159	42	53	1293
Wilkoshesky, Edmund, and L. Van Orton, Butte City, Mont. Leaf-turner	424,155	Mar. 25	2699	718	50	1672
Wilks, Stephen, Chicago, Ill. Tank-heater	430,717	June 24	2530	619	51	1988
Will, Fredrick. (See Scott, William H., assignor.)						
Will, William R., assignor of one-half to W. H. Sadler, Baltimore, Md. Time and date calculator	432,919	July 22	2919	749	52	588
Willard, Albert G., Cincinnati, Ohio. Rail-supporter	435,594	Oct. 14	1387	376	53	274
Willard, Arthur M. (See Duncan and Willard.)						
Willard, Charles, <i>et al.</i> (See Annis, Thomas, assignor.)						
Willard, Erastus, <i>et al.</i> (See Jenkins, Samuel B., assignor.)						
Willard, Jackson J., Herman, N. Y. Milk-cooler	422,676	Mar. 4	466	119	50	1225
Willard, John H., <i>et al.</i> (See Mackenzie, James A., assignor.)						
Willcox, Charles H., New York, N. Y., and E. Weiss, Nottingham, England. Jacquard apparatus and connected mechanism for use in embroidering and other machines	435,875	Sept. 2	758	203	52	1522
Willcox, Charles H., New York, N. Y., and J. E. A. Gibbs, Raphine, Va., assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Sewing-machine	429,206	June 3	151	37	51	1500

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Willcox, Charles H., New York, N. Y., and R. Weiss, Nottingham, England, assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Embroidering-machine	435,876	Sept. 2	765	{ 204 205 206 }	52	1523
Willcox, Deforest. (See Parsons and Willcox.)						
Willcox, George B., Bay City, Mich. Bouquet-holder	436,110	Sept. 9	1142	298	52	1599
Willcox & Gibbs Sewing Machine Company. (See Willcox and Gibbs, assignors.)						
Willcox & Gibbs Sewing Machine Company. (See Willcox and Weiss, assignors.)						
Willcox, James M., Philadelphia, Pa. Burning cement-making materials	420,371	Jan. 28	2610		50	541
Willeford, Joseph W., Peoria, Ill. Policeman's club	442,470	Dec. 9	1366	337	53	1524
Willert, Charles, and W. L. Zeiger, Athena, Oreg. Leather bearing	430,159	June 17	1611	401	51	1802
Willot, Nicholas M., assignor of one-half to J. J. Dederich, Detroit, Mich. Wrench	439,919	Nov. 4	438	113	53	694
Willets, Edward F. (See Beebe, Oscar, assignor.)						
Willett, Robert A., assignor of one-half to I. Cook, Brooklyn, N. Y. Repress-brick machine	423,401	Mar. 11	1571	412	50	1442
Willett, Samuel J., et al. (See Newman, Nelson, assignor.)						
Willey, George W., Athol, Mass. Lasting boots or shoes	436,550	Sept. 16	1836	424	52	1738
Willey, George W., Athol, Mass. Manufacture of boots or shoes	436,551	Sept. 16	1838	424	52	1739
Willey, John P. (See Landry, Adolphus J., assignor.)						
Willey, Leonard E., Barre, Vt. Bake-pan	428,792	May 27	2683	620	51	1370
Willford, Joseph L., Minneapolis, Minn. Roller-mill	420,026	Jan. 21	2069	545	50	431
Willi, Theodore, Dayton, Ohio. Burner for crude oil or other liquid fuel	443,342	Dec. 23	2816	724	53	1836
Williams, Albert W. (See Wilcox, John T., assignor.)						
Williams, Allen G., and S. H. Hackett, Brockton, said Williams assignor, by mesne assignments, to C. F. Curtis, Stoughton, Mass. Wardrobe-hook	424,239	Mar. 25	2809	750	50	1694
Williams, Arthur B., et al. (See Ennis, Henry J., assignor.)						
Williams Automatic Machine Company. (See Williams, John A., assignor.)						
Williams, B. A. & G. N., Jr. (See Williams, George N., Jr., assignor.)						
Williams Brothers Manufacturing Company. (See White, William A., assignor.)						
Williams Brothers Manufacturing Company. (See Williams, William S., assignor.)						
Williams, Charles A. (See Williams, Levi K. and C. A.)						
Williams, Charles D., Philadelphia, Pa. Lock	419,091	Jan. 7	662	173	50	139
Williams, Charles E., Westfield, Mass. Propelling device for cash-carriers	421,999	Feb. 25	2282	601	50	1022
Williams, Charles E., Utica, N. Y. Washing-machine	442,408	Dec. 9	1216	314	53	1506
Williams, Charles H., Prineville, Oreg. Combined ax, hammer, and maul	426,894	Apr. 29	3740	977	51	764
Williams, Charles I. (See Slocum, Charles A., assignor.)						
Williams Company, John R. (See Williams, John R., assignor.)						
Williams, Daniel W., Fortuna, Cal. Shingle-shaping machine	439,224	Oct. 28	2411	647	53	478
Williams, David N., et al. (See Maret, James, assignor.)						
Williams, David S., Philadelphia, Pa. Draftsman's compasses	437,411	Sept. 30	3273	854	52	2028
Williams, Dayton C., et al. (See Barnes, Cortez E., assignor.)						
Williams, Edward, et al. (See Sanborn, George S., assignor.)						
Williams, Edward, Lynn, Mass. Oil-distributing apparatus	434,968	Aug. 26	2384	631	52	1247
Williams, Edward A. (See Williams, George C. and E. A.)						
Williams, Edward D., et al. (See Smith, Charles R., assignor.)						
Williams, Edward W., San Francisco, Cal. Overflow sloop-hopper	428,986	May 27	2966	761	51	1427
Williams, Ernest O., Tallahassee, Fla. Shoe or glove buttoner	438,044	Oct. 7	574	156	53	109
Williams, Evan R. (See Jones and Williams.)						
Williams, F. H., et al. (See Graham, Thomas W., assignor.)						
Williams, Farmer R., Beloit, Wis. assignor to W. Deering & Company, Chicago, Ill. Machine for manufacturing twine for use in grain-binding harvesters	429,829	June 10	1095	270	51	1692
Williams, Farmer R., Beloit, Wis., assignor to W. Deering and Company, Chicago, Ill. Twine and making the same	437,386	Sept. 30	3230	842	52	2019
Williams, Farmer R., Beloit, Wis., assignor to W. Deering & Company, Chicago, Ill. Machine for making combined paper and fiber twine	439,225	Oct. 28	2412	647	53	478
Williams, Frank E., Alhambra, Cal. Appliance for spinning-tops, &c.	420,755	Feb. 4	451	120	50	653
Williams, Frank E., New York, N. Y. Button or stud	432,218	July 15	1851	475	52	375
Williams, Frank E., New York, N. Y. Button or stud	437,273	Sept. 30	3044	797	52	1984
Williams, Frank R., Syracuse, N. Y. Injector	430,308	June 17	1878	462	51	1854
Williams, George, Toledo, Ohio. Opening and closing screen-boards	420,135	Jan. 28	2246	595	50	474
Williams, George B., Portland, Oreg. Automatic air-brake	431,303	July 1	406	102	52	83
Williams, George B., Portland, Oreg. Releasing attachment for air-brakes	431,304	July 1	411	102	52	84
Williams, George B., Portland, Oreg. Automatic air-brake	431,790	July 8	1192	{ 298 299 }	52	241
Williams, George B., Portland, Oreg. Releasing attachment for air-brakes. (Reissue)....	11,124	Nov. 18	2397	621	53	1086
Williams, George B., La Crosse, Wis. Air-brake	441,526	Nov. 25	3068	789	53	1219
Williams, George C. and E. A., Brooklyn, N. Y. Card-rack	419,235	Jan. 14	887	233	50	190
Williams, George E. (See Dennis and Williams.)						
Williams, George H., assignor of one-half to R. D. Montague, Albany, Oreg. Car-coupling	442,160	Dec. 9	839	225	53	1434
Williams, George M. (See Black, Robert D., assignor.)						
Williams, George N., Jr., Mount Vernon, assignor to B. A. & G. N. Williams, Jr., New York, N. Y. Stone-sawing machine	429,874	June 10	1165	{ 288 289 }	51	1706
Williams, Harry J., Meriden, Conn. Central-draft lamp	425,221	Apr. 8	1308	350	51	263
Williams, Henry, Chicago, Ill. Stage-scene apparatus	430,259	June 17	1771	440	51	1833
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Package-carrier	433,111	July 29	3253	{ 837 838 }	52	657
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Vehicle-hub	433,112	July 29	3256	838	52	657
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Parcel-carrier	434,222	Aug. 12	1175	{ 305 306 }	52	995
Williams, Henry C., New Britain, Conn. Door-bell	438,789	Oct. 21	1713	459	53	339
Williams, Henry J., assignor to H. J. Davison, New York, N. Y. Button-hole attachment for sewing-machines	421,463	Feb. 18	1518	394	50	868
Williams, Henry R., Oshkosh, Wis. Meat-roaster	429,708	June 10	919	225	51	1659
Williams, Herbert F., Brooklyn, N. Y. Inhaler and respirator	432,780	July 23	2725	697	52	550
Williams, Horace E. (See Williams, James H., assignor.)						
Williams, Hugh, Stockport, England. Mechanism for governing the speed of gas or similar motor-engines	441,085	Nov. 18	2337	605	53	1074
Williams, Humphrey J., and S. C. Warner, New York Mills, N. Y. Fruit-brushing machine	440,677	Nov. 18	1657	428	53	945
Williams, J. D. (See Pederson, Ole, assignor.)						
Williams, James B., San Francisco, Cal. Insulating compound	420,648	Feb. 4	319		50	626
Williams, James C., Erie, Pa. Pipe-threading device	441,223	Nov. 25	2573	666	53	1128
Williams, James C., assignor to Jarecki Manufacturing Company, (limited,) Erie, Pa. Pipe-threading die	425,394	Apr. 8	1468	393	51	293
Williams, James C., assignor to Jarecki Manufacturing Company, Limited, Erie, Pa. Machine for cutting threads on bolts	434,898	Aug. 19	2250	592	52	1217

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Williams, James H., assignor of one-third to H. E. Williams, Fayetteville, Ark. Combined cotton chopper and scraper	436,201	Sept. 9	1281	334	52	1624
Williams, James M., Hawkinsville, Ga. Device for transmitting motion	419,092	Jan. 7	664	173	50	139
Williams, James M., Renick, Mo. Road-cart	433,607	Aug. 5	248	66	52	804
Williams, James M., assignor to Williams & Son, Petersburg, Va. Peanut-cleaning machine	436,645	Sept. 16	1981	519	52	1765
Williams, John, and R. Lade, Holyoke, Mass. Button	439,920	Nov. 4	439	113	53	694
Williams, John A., Brooklyn, N. Y. Vending apparatus	426,086	Apr. 22	2527	666	51	514
Williams, John A., Brooklyn, N. Y., assignor to Williams Automatic Machine Company, Moundsville, W. Va. Vending apparatus	430,497	June 17	2158	531	51	1909
Williams, John A., Brooklyn, N. Y., assignor to Williams Automatic Machine Company, Moundsville, W. Va. Vending-machine	430,498	June 17	2161	532	51	1909
Williams, John A., Brooklyn, N. Y., assignor to Williams Automatic Machine Company, Moundsville, W. Va. Automatic vending-machine	430,499	June 17	2163	532	51	1910
Williams, John A., Brooklyn, N. Y., assignor to Williams Automatic Machine Company, Moundsville, W. Va. Vending apparatus	440,983	Nov. 18	2170	561	53	1042
Williams, John A., Brooklyn, N. Y., assignor to Williams Automatic Machine Company, Moundsville, W. Va. Vending apparatus	440,984	Nov. 18	2171	562	53	1042
Williams, John A., Brooklyn, N. Y., assignor to Williams Automatic Machine Company, Moundsville, W. Va. Vending apparatus	443,343	Dec. 23	2817	724	53	1836
Williams, John H., Waterloo, Iowa. Nut-lock	443,344	Dec. 23	2820	724	53	1836
Williams, John H., Maple Hill, Kans. Hay-press	433,755	Aug. 5	468	121	52	847
Williams, John H., New Louisville, Ark. Car-coupling	436,683	Sept. 16	2046	535	52	1778
Williams, John H., Boston, assignor, by mesne assignments, to himself and G. A. Sleeper, Somerville, Mass. Feed-basket	432,006	July 8	1515	384	52	304
Williams, John H., Boston, assignor of two-thirds to B. F. Barnard, Wakefield, Mass. Street-railway switch	434,692	Aug. 19	1943	504	52	1154
Williams, John J. A., and G. J. Edelston, New Orleans, La. Car-coupling	429,371	June 3	412	97	51	1549
Williams, John M., Pittsburg, Pa. High and low water alarm	420,649	Feb. 4	321	83	50	627
Williams, John N., Brooklyn, N. Y. Type-writing machine	442,697	Dec. 16	1671	428	53	1606
Williams, John N. S., Honolulu, Hawaii. Sugar-cane-slicing machine	420,427	Jan. 28	2687	712	50	555
Williams, John R., Newark, N. J. Cigar-bunching machine	422,000	Feb. 25	2284	601	50	1023
Williams, John R., Newark, N. J. Cigar-bunching machine	442,278	Dec. 9	1008	602	53	1466
Williams, John R., Newark, N. J., assignor to J. R. Williams Company, New York, N. Y. Cigar-bunching machine	419,742	Jan. 21	1624	603	50	343
Williams, John S., Chicago, Ill. Sole for boots or shoes	441,730	Dec. 2	159	42	53	1293
Williams, John T., Mount Vernon, N. Y. Portelectric	436,281	Sept. 9	1392	434	52	1648
Williams, John T., Mount Vernon, assignor to International Portelectric Company, New York, N. Y. Electro-magnetic transmitter	419,166	Jan. 7	775	362	50	160
Williams, John T., Mount Vernon, assignor to International Port-Electric Company, New York, N. Y. Electro-magnetic transmitter	433,381	July 29	3630	205	52	733
Williams, John W. (See Messer, Garner, and Williams.)						
Williams, John W., and J. G. Capps, Lowell, Ark. Fifth-wheel for vehicles	424,397	Mar. 25	3090	266	50	1749
Williams, Joseph T., Easton, Pa. Anchor	439,921	Nov. 4	441	267	53	694
Williams, Leonard A., assignor of one-half to O. H. Vornbrock, St. Louis, Mo. Drawer-guide equalizer	430,908	June 24	2837	433	51	2047
Williams, Leonard L., assignor of one-half to D. P. Mills, Naugatuck, Conn. Carding-engine	425,091	Apr. 8	1010	601	51	204
Williams, Levi K. and C. A., Chicago, Ill. Machine for shearing sheet metal	430,718	June 24	2531	619	51	1988
Williams, Louis N. D. (See Scott, Robert W., assignor.)						
Williams, Louis N. D. (See Scott and Williams.)						
Williams, Martin, St. Johnsville, N. Y. Fan-blower	424,696	Apr. 1	402	105	51	79
Williams, Martin, St. Johnsville, N. Y. Label-holder for freight-cars	426,349	Apr. 22	2908	765	51	594
Williams, Milton F. (See Horton, Hilon R., assignor.)						
Williams, Milton F., St. Louis, Mo. Clutch	441,998	Dec. 2	574	155	53	1375
Williams, Morgan H. (See Thompson, Thomas J., assignor.)						
Williams, Moses J., Orange, N. J. Stall-floor	440,236	Nov. 11	932	156	53	802
Williams, Nathan G., Bellows Falls, Vt. Cabinet-reamer	435,005	Aug. 26	2439	240	52	1257
Williams, Orange, assignor of two-ninths to C. P. Foster, Milwaukee, Wis. Preserving compound	435,911	Sept. 2	833	645	52	1536
Williams, Owen M., Wymore, Nebr. Railway-signal device	423,651	Mar. 18	1955	515	50	1523
Williams, Philip A., Decatur, Ill. Car-truck	431,133	July 1	145	38	52	31
Williams, Robert E., assignor of one-half to W. F. Shook, Dallas, Tex. Electric bath-brush	428,510	May 20	2279	579	51	1275
Williams, Robert E., assignor of one-half to W. F. Shook, Dallas, Tex. Electric belt and appliances	434,746	Aug. 19	2013	525	52	1168
Williams, Robert S., Red Wing, Minn. Flour-bolt	419,236	Jan. 14	888	526	50	190
Williams, Samuel S., Meridian, Miss. Cotton-seed huller	435,636	Sept. 2	406	233	52	1451
Williams, Samuel T., Baltimore, Md. Valve for steam-engines	430,160	June 17	1611	109	51	1803
Williams, Samuel T., Baltimore, Md. Governor for steam-engines	432,781	July 22	2727	401	52	550
Williams, Silas J., Alliance, Ohio. Brake-shoe	423,848	Mar. 18	2229	697	50	1576
Williams, Sion H., Hornbeak, Tenn. Broom-head	441,271	Nov. 25	2676	589	53	1145
Williams & Son. (See Williams, James M., assignor.)						
Williams, Stephen P., Calloway, Tex. Portable dam	419,093	Jan. 7	664	174	50	140
Williams, Thomas, et al. (See Newhall, John E., assignor.) (Reissue.)						
Williams, Thomas, Jr., London, England. Mincing-machine	440,215	Nov. 11	893	230	53	794
Williams, Thomas L., Big Bend, Cal. Carriage-jack	422,275	Feb. 25	2706	713	50	1100
Williams, Warren, assignor of one-half to W. Munz, Detroit, Mich. Extension-table	436,622	Sept. 16	1935	508	52	1757
Williams, Wesley C., et al. (See Annis, Thomas, assignor.)						
Williams, William, Caledonia, assignor to E. Rice, Morrow County, Ohio. Thill-coupling	437,544	Sept. 30	3484	909	52	2071
Williams, William A. (See Kelly and Williams.)						
Williams, William C., Williamsburg, Ohio. Grading and ditching machine	422,870	Mar. 4	751	191	50	1281
Williams, William C., and A. W. Thomson, Cleveland, Ohio. Copy-holder	419,026	Jan. 7	572	144	50	121

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Williams, William H. (See Morris, James E., assignor.)						
Williams, William M., <i>et al.</i> (See Richards, Philip, assignor.)						
Williams, William S., East Hartford, Conn., assignor to Williams Brothers Manufacturing Company, of Connecticut. Grinder for finger-bars and sickle-bars for mowing and reaping machines	434,124	Aug. 12	1029	{ 266 267 }	52	967
Williamson, Catharine A. (See Mitchell, Robert L., assignor.)						
Williamson, Charles R., Topeka, Kans. Roll-paper cutter	426,578	Apr. 29	3266	856	51	672
Williamson, Daniel, assignor of one-half to J. Slaymaker, Sunbury, Pa. Machine for cutting ice	423,652	Mar. 18	1957	515	50	1523
Williamson, George H. (See Finch, Thomas F. N., assignor.)						
Williamson, George H., assignor of one-half to S. Thornton, Skaneateles, N. Y. Axle for harvester-trucks	424,398	Mar. 25	3091	821	50	1749
Williamson, James F. (See Kilgore, Fred. O., assignor.)						
Williamson, James F., <i>et al.</i> (See Goodson, George A., assignor.)						
Williamson, John B., Louisville, Ky. Advertising device	433,841	Aug. 5	600	156	52	873
Williamson, Marshall J., Jonesborough, Ga. Churn-power	428,987	May 27	2967	761	51	1427
Williamson, Samuel S. (See Smith and Williamson.)						
Williamson, Samuel S., assignor to Lightning Check Punch Company, Bridgeport, Conn. Check-punch	418,905	Jan. 7	401	98, 99	50	84
Williamson, Samuel S., assignor to Lightning Check Punch Company, Bridgeport, Conn. Check-punch	431,831	July 8	1261	{ 316 317 }	52	255
Williamson, Thomas, Collegeville, Cal. Tread for wheels.	430,309	June 17	1881	462	51	1855
Willig, John, Harris, Minn. Sleigh-runner	431,501	July 1	725	181	52	145
Willingham, Alexander M., <i>et al.</i> (See Lee and Reed, assignors.)						
Willis, Don F., assignor of one-half to J. M. and J. S. Griffin, Lynn, Mass. Last	432,684	July 22	2564	657	52	520
Willis, George F., and J. F. Keith, Village Mills, Tex. Kneec and head block for saw-mills.	426,895	Apr. 29	3741	977	51	764
Willis, John F., Minneapolis, Minn. Water-strainer	420,136	Jan. 28	2248	595	50	475
Willis, John M., New York, N. Y. Paper-file	437,071	Sept. 23	2699	705	52	1913
Willis, Vincent, Camden-Town, county of Middlesex, England. Pneumatic action for organs	427,209	May 6	284	72, 73	51	867
Willis, William, Bromley, England. Photo-chemical printing	423,849	Mar. 18	2231		50	1576
Williseraft, William H., Juniper, Ariz. Ter. Wagon-spring	424,842	Apr. 1	635	167	51	123
Willison, George W., Marysville, Ohio. Fodder-binder	423,010	Mar. 11	985	259	50	1331
Willits, Clinton H., New Boston, Ill. Rowing apparatus	420,137	Jan. 28	2249	595	50	475
Willits, Ward W., Chicago, Ill., assignor to Adams & Westlake Company, of Illinois. Lamp	427,491	May 6	697	175	51	950
Willmer, Arnold, Hanover, Prussia, Germany, assignor to Korting Gas Engine Company, (limited,) New York, N. Y. Automatic governor for power-engines	425,118	Apr. 8	1046	279	51	211
Willms, Charles. (See Liebig and Willms.)						
Willms, Charles, and G. A. Liebig, Jr., assignors to J. A. Barrett Battery Company, Baltimore, Md. Electric battery	421,801	Feb. 18	2000	527	50	960
Willson, Freeman R., Sr., Columbus, Ohio. Spring-whiffletree	432,659	July 22	2524	648	52	511
Willson, George V. (See Smith, Abia B., assignor.)						
Willson, Henry, Chicago, Ill. Compartment box	420,527	Feb. 4	143	35	50	592
Willson, Henry, Chicago, Ill. Receptacle for gummed letters, &c	424,526	Apr. 1	127	37	51	28
Willson, Horace W., Worcester, Mass. Means for annealing the wire cables of cable railways.	426,552	Sept. 16	1840	484	52	1739
Willson, Thomas L., Brooklyn, N. Y. Melting or reducing metals by electricity	430,453	June 17	2091	516	51	1895
Willson, Walter V. H., Troy, N. Y. Car-platform	422,677	Mar. 4	467	119	50	1226
Willson, William H., Washington, D. C. Portable sanitary stand or closet	440,340	Nov. 11	1097	281	53	829
Willson, William W., Appleton, Wis. Meat-block	441,527	Nov. 25	3071	789	53	1220
Wilmsington Dental Manufacturing Company. (See Faught, Luther E., assignor.)						
Wilmsington Dental Manufacturing Company. (See Mathews, Leroy M., assignor.)						
Wilmsington Dental Manufacturing Company. (See Moffitt, John W., assignor.)						
Wilmsington Dental Manufacturing Company. (See Richmond, Cassius M., assignor.)						
Wilnot, John F., Rahway, N. J. Dyeing apparatus	441,528	Nov. 25	3072	790	53	1220
Wilnot, Samuel, Lockport, Ill. Paper-making machine	427,943	May 13	1399	354	51	1094
Wilnot, W. H., <i>et al.</i> (See Fisher, Joseph H., assignor.)						
Wilmoth, James, Elk Creek, Ky. Gate	435,339	Aug. 26	2947	782	52	1352
Wilmsen, Bernhard, Philadelphia, Pa. Easter-egg	419,391	Jan. 14	1118	296	50	236
Wilmsen, Bernhard, Philadelphia, Pa. Christmas-tree ornament	424,916	Apr. 1	744	198	51	144
Wilsey, Frank C., Bentonville, Ark. Ice-cream freezer	442,742	Dec. 16	1776	459	53	1624
Wilsey, Jay F., Jerry City, Ohio. Churn	433,503	Aug. 5	81	26	52	774
Wilson, Alexander B., Boston, Mass. Car-heating apparatus	432,349	July 15	2043	526	52	400
Wilson, Andrew H., South Vineland, N. J. Hitching device	439,285	Oct. 28	2515	674	53	496
Wilson, Augustus H., and W. Harvey, Readfield, Me. Halter	441,732	Dec. 2	160	43	53	1233
Wilson, Augustus N., Greenville, Ohio. Fabric holding and stretching clamp	433,756	Aug. 5	470	121	52	847
Wilson & Bates. (See Rowland, Horace B., assignor.)						
Wilson, Benjamin F., Harrodsburg, Ky. Dish-washer	431,305	July 1	415	103	52	85
Wilson, Benjamin F., assignor of one-half to B. P. Clements, St. Louis, Mo. Heel	436,553	Sept. 16	1841	485	52	1739
Wilson, Benjamin J., Atlanta, Ga. Machine for re-pressing bricks, tiles, &c	430,554	June 17	2241	550	51	1923
Wilson, Benjamin P. (See Shank, Charles A., assignor.)						
Wilson, Calvin R., Ellenton, S. C. Railway-signal	431,425	July 1	602	151	52	121
Wilson, Cassius M., Fairchild, Wis. Account and record holding case and correlative sheet, card, or ticket	423,850	Mar. 18	2234	{ 590 591 }	50	1576
Wilson, Charles. (See Evans and Wilson.)						
Wilson, Charles C., Greensborough, N. C. Oscillating steam-engine	430,555	June 17	2244	{ 550 551 }	51	1924
Wilson, Charles E., Denver, Colo. Stair-rule	421,216	Feb. 11	1177	302	50	796
Wilson, Charles E., Chicago, Ill. Electric switch	434,899	Aug. 19	2261	593	52	1217
Wilson, Charles H. (See Main and Wilson.)						
Wilson, Columbus. (See McCool, John W., assignor.)						
Wilson, Daniel T., and F. C. Rhenbottom, Union City, Mich. Whip-rack	429,987	June 10	1335	331	51	1739
Wilson, David Y., Gum Tree, Pa. Car-coupling	423,297	Mar. 11	1426	370	50	1414
Wilson, E. J., <i>et al.</i> (See Stone, Thomas W., assignor.)						
Wilson, George E. (See Scofield, Seville, Wilson, and Dixon.)						
Wilson, George F., New Castle, Pa. Hot-air furnace	438,667	Oct. 21	1504	{ 406 407 }	53	301
Wilson, George T., Lowville, N. Y. Spring-back for road-carts	431,098	July 1	101	25	52	22
Wilson, George T., Lowville, N. Y. Holdback	433,429	July 29	3700	955	52	748
Wilson, George W., Arcadia, La. Post or pile driver	431,306	July 1	416	103	52	85
Wilson, Harry M., Baltimore, Md. Shield for spectacle-frames	422,001	Feb. 25	2291	603	50	1094
Wilson, Henry W. (See Straight, Asa W., assignor.)						
Wilson, Herbert W., <i>et al.</i> (See Keene, Samuel D., assignor.)						
Wilson, Herman E., Freeport, Ill. Paper-cutter	440,293	Nov. 11	1031	265	53	813

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Wilson, Hugh, Duncan's Mills, Cal. Lifting-jack	436,943	Sept. 23	2525	661	52	1878
Wilson, James, Chicago, Ill. Railway-ticket	439,226	Oct. 28	2413	648	53	478
Wilson, James, Chicago, Ill. Railway-ticket	439,227	Oct. 28	2416	{ 648 649 458 459 }	{ 53 53 50 }	479
Wilson, James G., New York, N. Y. Blackboard-partition	419,810	Jan. 21	1733	{ 458 459 }	{ 50 50 }	364
Wilson, James H. (See Smith and Wilson.)						
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Hydrocarbon-burner	421,642	Feb. 18	1793	469	50	920
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Hydrocarbon-burner	423,011	Mar. 11	986	260	50	1331
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Burning petroleum or other hydrocarbons	423,012	Mar. 11	987	260	50	1332
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Petroleum-burner	438,512	Oct. 14	1268	343	53	249
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Hydrocarbon-burner	438,513	Oct. 14	1269	343	53	250
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Hydrocarbon-burner	438,514	Oct. 14	1270	344	53	250
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Hydrocarbon-burner	438,515	Oct. 14	1271	344	53	250
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Maintaining combustion in secondary chambers of boiler or other furnaces	438,872	Oct. 21	1862	494	53	366
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Apparatus for maintaining combustion in secondary chambers of boiler or other furnaces	438,873	Oct. 21	1864	495	53	366
Wilson, John, New York, and A. Mason, Brooklyn, assignors to H. H. Sanderson, trustee, New York, N. Y. Hydrocarbon-burner	438,874	Oct. 21	1865	495	53	366
Wilson, John A., Baltimore, Md. Heating attachment for gas-burners	421,217	Feb. 11	1178	302	50	796
Wilson, John A., and J. T. Hutchings, Independence, Mo. Adjustable pole and shaft for vehicles	430,203	June 17	1667	415	51	1813
Wilson, John C., Boston, Mass. Message-recording instrument	426,554	Apr. 29	3228	{ 846 847 }	{ 51 51 }	664
Wilson, John C., Boston, Mass. Message-recording instrument	426,555	Apr. 29	3231	847	51	665
Wilson, John C., Boston, Mass., assignor to Municipal Signal Company, Portland, Me. Light-signal system	433,505	Aug. 5	95	27	52	775
Wilson, John C., and B. J. Noyes, Boston, Mass., assignors to Municipal Signal Company, Portland, Me. Municipal signal apparatus	433,504	Aug. 5	92	26	52	775
Wilson, John D., New Bedford, Mass. Reversible soldering-iron	438,458	Oct. 14	1199	325	53	235
Wilson, John M., Omaha, Nebr. Railway-track foot-guard	422,560	Mar. 4	282	72	50	1190
Wilson, John M., Montgomery City, Mo. Frame-clamp	433,506	Aug. 5	97	27	52	776
Wilson, John R., Farmville, Va. Stock-car	442,161	Dec. 9	840	225	53	1434
Wilson, Joseph. (See Meeker and Wilson.)						
Wilson, Joseph A., Churchville, Va. Combined pot-lifter and stove-shelf	440,453	Nov. 11	1292	335	53	866
Wilson, Joseph B. (See Schwend and Wilson.)						
Wilson, Joseph B., assignor of one-half to L. M. Green, Woodbury, N. J. Railway-tie	420,895	Feb. 4	700	180	50	696
Wilson, Joseph B., assignor of one-half to C. Walton, Woodbury, N. J. Railway-chair	428,988	May 27	2968	761	51	1427
Wilson, Joseph P., et al. (See Besette, Frank B., assignor.)						
Wilson, Joshua H., et al. (See Keene, Samuel D., assignor.)						
Wilson, Joshua H., and J. Greenwood, Todmorden, county of Lancaster, England. Flanged bobbin	427,719	May 13	1046	262	51	1027
Wilson, Julius W., Holyoke, Mass. Roll-paper holder and cutter	427,246	May 6	347	88	51	878
Wilson, Lavinia, et al. (See Seabury, Samuel, assignor.)						
Wilson, Merrick F., Chicago, Ill. Pasting-machine	437,545	Sept. 30	3484	909	52	2072
Wilson, Milford J., Painesville, Ohio. Wrench	440,294	Nov. 11	1032	265	53	818
Wilson, Peter M., assignor of three-fourths to C. M. Hawkins and Reed & McGee, Raleigh, N. C. Tobacco product	421,372	Feb. 11	1394	.....	50	836
Wilson, Peter M., assignor of three-fourths to C. M. Hawkins and Reed & McGee, Raleigh, N. C. Manufacturing tobacco	421,373	Feb. 11	1395	.....	50	836
Wilson, Robert H., Lay, Colo. Wagon-jack	440,678	Nov. 18	1659	428	53	946
Wilson, Samuel H., et al. (See Fuller, Wily S., assignor.)						
Wilson, Sarah E. L., assignor to Adjustable Hat and Bonnet Holder Company, Baltimore, Md. Hat and bonnet stand	421,879	Feb. 18	2121	556	50	982
Wilson, Sylvanus S. (See Dickey, George W., assignor.)						
Wilson, Thomas, Jr., Menand's, N. Y. Cash or bundle carrier	428,194	May 20	1758	444	51	1174
Wilson, Thomas H., assignor of two-thirds to N. A. Newton and H. P. Kauffer, Kalamazoo, Mich. Buggy-seat	422,359	Feb. 25	2850	752	50	1127
Wilson, Thomas T., Jackson, Tenn. Work-bench	427,139	May 6	176	46, 47	51	846
Wilson, Wesley T., Grand Rapids, Mich. Bed-slat lock	438,722	Oct. 21	1600	429	53	318
Wilson, William. (See Middleton and Wilson.)						
Wilson, William, Middletown, N. Y. Brake for baby-carriages	429,709	June 10	920	225	51	1659
Wilson, William H., New York, N. Y. Globe for electric lamps	428,989	May 27	2969	762	51	1427
Wilson, William H., Fremont, Ohio. Bolt-cutter head	435,991	Sept. 9	948	248	52	1564
Wilson, William H., New York, N. Y., assignor of one-half to W. J. Kelly, Boston, and C. H. Arnold, Woburn, Mass. Automatic electric train signal and controlling device	435,340	Aug. 26	2948	782	52	1352
Wilson, William R., assignor to Hooper, Wilson & Co., Baltimore, Md. Machine for washing printers' type-forms	423,402	Mar. 11	1574	412	50	1443
Wilson, William S., Tombstone, Ariz. Vehicle-wheel	427,286	May 6	400	104	51	889
Wilson, William T., assignor of two-fifths to J. S. O'Shea, Buffalo, N. Y. Railway-car	439,046	Oct. 21	2114	565	53	416
Wilson, William W., and H. J. Van Tuyl, Homer, N. Y. Milk-cooler	436,469	Sept. 16	1704	448	52	1716
Wilt, John A., Eureka, Cal. Street-sweeper	443,558	Dec. 30	3155	811	53	1910
Winmer, Louis, assignor to himself and E. D. Smith, Elizabeth, N. J. Yarn-nipper for spinning-machines	423,013	Mar. 11	988	260	50	1332
Wimpenny, George. (See Perkins, Wimpenny, and Evans.)						
Winand, Paul A. N. (See Schleichner and Winand.)						
Winand, Paul A. N., and L. V. Goebbels, Philadelphia, Pa. Gas and hydrocarbon engine	435,637	Sept. 2	407	110	52	1451
Winby, Frederick C., Brighton, county of Sussex, and W. Strickland, Woodford, county of Essex, England. Fish joint and fish-joint chair for railway and tramway rails	419,577	Jan. 14	1375	368	50	229
Winby, William E. and W. M., Birmingham, county of Warwick, England. Cable-tramway pulley	425,282	Apr. 8	1310	350	51	263
Winby, William E. and W. M., Birmingham, county of Warwick, England. Cable tramway	431,099	July 1	102	25, 26	52	22

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Winby, William M. (See Winby, William E. and W. M.)						
Winchell, A. (See Rusk, John W., assignor.)						
Winchester Repeating Arms Company. (See Browning, John M. and M. S., assignors.)						
Winchester Repeating Arms Company. (See Mason, William, assignor.)						
Windell, Marquis D. L., assignor to self and Z. T. Funk, Corydon, Ind. Rock-drill	419,392	Jan. 14	1119	296	50	236
Winding, George, Milwaukee, Wis. Mold for paving blocks or tiles	438,875	Oct. 21	1867	495	53	367
Windler, John, Jr., Canton, Kans. Seed-planter	433,382	July 29	3631	936	52	733
				937		
Windolph, Jacob F., Brooklyn, N. Y. Atomizer	423,198	Mar. 11	1270	331	50	1386
Windom, Charles E., Sterling, Ill. Casket-lowering device	433,113	July 29	3257	838	52	658
Windsor, Benjamin F. (See Long and Windsor.)						
Windsor, Ewell. (See Windsor, Sterling P. and E.)						
Windsor Machine Company. (See Sherman, Charles S., assignor.)						
Windsor, Sterling P. and E., Madison, Cal. Spreader for dratt-chains	428,708	May 27	2561	649	51	1345
Windus, Werner, Baltimore, Md. Door-check	441,914	Dec. 2	441	118	53	1351
Winegar, George H., and H. O. Farrar, Oakland, Me. Warp stop-motion for looms	431,637	July 8	933	234	52	194
Winegarden, James, Grand Rapids, Mich. Burglar-alarm	430,979	June 24	2941	722	51	2065
Wines, Frederick H. (See McCurdy and Wines.)						
Winey, Christian S., Richfield, Pa. Lifting-jack	425,358	Apr. 8	1407	375	51	283
Winfield Manufacturing Company. (See Winfield, William C., assignor.)						
Winfield Manufacturing Company. (See Winfield and McNutt, assignors.)						
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Lantern	430,719	June 24	2532	620	51	1988
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Tubular lantern	441,529	Nov. 25	3075	790	53	1221
Winfield, William C., assignor to Winfield Manufacturing Company, Warren, Ohio. Combined vessel and pump	441,530	Nov. 25	3077	791	53	1221
Winfield, William C., and J. F. McNutt, assignors to Winfield Manufacturing Company, Warren, Ohio. Lantern	433,313	July 29	3542	915	52	716
Wing, Charles S., Brooklyn, N. Y., assignor of one-half to P. S. Riddelle, Washington, D. C. Step-ladder	438,459	Oct. 14	1200	325	53	236
Wing, Lingan C., assignor to Union Button Sewing Machine Company, Boston, Mass. Machine for sewing on buttons	431,832	July 8	1264	317	52	256
				318		
Wingate, John H., and J. L. Mell, Atlanta, Ga. Pipe-bending core	425,395	Apr. 8	1469	393	51	294
Winger, Elam B. and O. E., Freeport, Ill. Windmill	425,841	Apr. 15	2143	571	51	433
				572		
Winger, Oswald E. (See Winger, Elam B. and O. E.)						
Wingert, Henry M., Berrysburg, Pa. Vehicle-brake	428,361	May 20	2028	509	51	1227
				510		
Winholtz, Peter A., and J. J. Weinmann, St. Paul, Minn. Stake-pocket	430,454	June 17	2096	517	51	1895
Winkler, Charles F., Troy, N. Y. Dynamo-electric machine	431,134	July 1	145	38	52	31
Winkler, Charles F., Troy, N. Y. Dynamo-electric machine	433,557	Aug. 5	171	46	52	790
Winkler, Charles F., Troy, N. Y. Brush-holder for dynamo-electric machines	438,668	Oct. 21	1506	407	53	301
Winkler, Eliregott T., Philadelphia, Pa. Pressure-regulator	430,720	June 24	2534	620	51	1988
Winkler, Eliregott T., Philadelphia, Pa. Hose-coupling	430,721	June 24	2535	620	51	1989
Winn, David C., Sycamore, Ill. Railway-rail splice	439,228	Oct. 28	2419	649	53	479
Winn, Henry D. (See Parkinson, James D., assignor.)						
Winn, James N., Darien, Ga. Station-indicator	443,692	Dec. 30	3370	866	53	1951
Winn, Thomas B., Darien, Ga. Car-coupling	420,258	Jan. 28	2452	651	50	511
Winslow, Sidney W., trustee. (See Rogers, Andrew W., assignor.)						
Winslow, William H., Chicago, Ill. Electroplating non-metallic articles	423,101	Mar. 11	1127	294	50	1357
Winter, Anton, Minnesota, Minn. Harness-chip	430,556	June 17	2245	551	51	1924
Winter, Carl, Chicago, Ill. Hydraulic device for elevating ladders	423,851	Mar. 18	2239	591	50	1577
Winterbottom, Charles, Ocean Grove, N. J. Circular-knitting machine	420,505	Feb. 4	111	27	50	585
Winterdorf, Léon, New York, N. Y. Opera-glass holder	441,915	Dec. 2	442	118	53	1352
Wintermute, Aquila, and F. Hearshaw, Chicago, Ill. Sash-fastener	426,404	Apr. 22	3065	788	51	612
Wintermute, Harris C., Kansas City, Mo. Ankle-joint	434,618	Aug. 19	1802	470	52	1129
Wintermute, Harris C., assignor of one-half to H. Lithgow, Kansas City, Mo. Artificial leg	433,638	Aug. 5	288	77	52	813
Winternight, Henry A., assignor of one-half to J. M. Cornyn, Philadelphia, Pa. Car-coupling	441,624	Nov. 25	3228	833	53	1252
Winternitz, Richard. (See Mautner, Adalbert, assignor.)						
Winters, John C., and J. M. Prophet, Mount Morris, N. Y. Drier	425,842	Apr. 15	2145	572	51	434
Wintherlich, Hans J., assignor of one-half to C. Gilbert, Omaha, Nebr. Device for indicating the condition of the air	429,078	May 27	3118	803	51	1455
Winton, Henry D. (See Morse and Winton.)						
Winton, Henry D., Wellesley Hills, Mass. Rotary steam-drier	443,201	Dec. 23	2586	665	53	1793
Winton, Henry D., Wellesley, Mass., assignor to Hersey Meter Company, Portland, Me. Rotary water-meter	423,298	Mar. 11	1428	371	50	1414
Winton, Henry D., Wellesley Hills, Mass., assignor, by mesne assignments, to Hall Signal Company, Portland, Me. Railway signaling apparatus	427,387	May 6	534	136	51	917
Witzenburg, Robert A. W., St. Louis, Mo. Book-binding	443,588	Dec. 30	3204	824	53	1920
Wippler, Joseph, New York, N. Y. Combination bureau, wash-stand, and writing-desk	429,802	June 10	1048	257	51	1683
Wire Fence Improvement Company. (See Duncan and Willard, assignors.)						
Wire Goods Company. (See Hinds, Franklin P., assignor.)						
Wire Grip Fastening Company. (See Parker, Charles O., assignor.)						
Wire Grip Fastening Company. (See Pratt, Prescott H., assignor.)						
Wire Grip Fastening Company. (See Robinson, Stillman W., assignor.)						
Wirsching, Aloys. (See Burry, John, assignor.)						
Wirsching, Aloys, Brooklyn, N. Y., assignor of three-fourths to J. F., T. M. F., L. F., and E. F. Randolph, Morristown, N. J. Type-writing machine	422,276	Feb. 25	2708	713	50	1100
				714		
Wirt, Charles, Orange, N. J. Adjustable resistance for electrical circuits	440,384	Nov. 11	1163	300	53	842
Wirt, Charles, assignor of one-half to F. R. Upton, Orange, N. J. Commutator-brush	436,964	Sept. 23	2551	668	52	1883
Wirt, Herbert C. (See Jacques and Emmett, assignors.)						
Wirt, Herbert C. (See Kimball and Wirt.)						
Wirt, Herbert C., et al. (See Kitfeld, Edward H., assignor.)						
Wirt, Herbert C., Boston, Mass. Electric-railway car	421,464	Feb. 18	1521	394	50	868
Wirt, Herbert C., Boston, Mass. Support or hanger for trolley-wires	438,211	Oct. 14	824	223	53	164
Wirt, Reuben D., Independence, Mo. Hose-reel	432,467	Aug. 15	2219	573	52	446
Wirth, Alexander, Parsons, Kans. Spring-motor	433,668	July 5	338	86	52	821
Wirth, George, Gratz, Austria-Hungary. Clutch	440,679	Nov. 18	1660	429	53	946
Wirth, George, Gratz, Austria-Hungary. Wire-drawing machine	440,680	Nov. 18	1651	429	53	946
Wirtz, Frederick M. and J., Columbus, Ohio. Wrench	429,552	June 3	683	167	51	1603

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Wirtz, Johann. (See Wirtz, Frederick M. and J.)						
Wirz, Henry M., Media, Pa., assignor to W. N. Wheelless, deceased, Augusta, Ga., S. L. Wheelless, administratrix. Mold for casting pencil-sharpeners	435,959	Sept. 9	901	{ 237 238 }	52	1554
Wise Brothers. (See Hazard and Crain, assignors.)						
Wise, Charles L., Brooklyn, N. Y. Receptacle for keeping press-copying pads moist	429,163	June 3	89	21	51	1489
Wise, David E. and B. F. Jones, New Market, Va. Fence-machiué	419,578	Jan. 14	1376	{ 368 369 }	50	289
Wise, Jacob, <i>et al.</i> (See Betz, William, assignor.)						
Wise, Jacob, Daretown, N. J. Corn-planter	424,240	Mar. 25	2810	{ 750 751 }	50	1694
Wise, Joseph N., Norwalk, Ohio. Expansion-gear for rolls	429,331	June 3	349	83	51	1538
Wise, Marcus, <i>et al.</i> (See Brenand, Spire, assignor.)						
Wise, Mathew, Athens, Ohio. Truss	440,083	Nov. 4	680	181	53	741
Wise, Morris, <i>et al.</i> (See Brenand, Spire, assignor.)						
Wise, W. H. (See Carroll, Thomas, assignor.)						
Wischaupt, Edwin J., assignor of one-half to J. J. Shoemaker, Bluffton, Ind. Machine for tapping mains	440,856	Nov. 18	1968	{ 506 507 }	53	1002
Wiselogel, Frederick G., Indianapolis, Ind. Bleaching hair	442,297	Dec. 9	1040		53	1472
Wiselogel, Frederick G., Indianapolis, Ind. Apparatus for treating garbage	442,298	Dec. 9	1041	274	53	1472
Wiseman, Arthur G., Webster Groves, Mo. Clock-synchronizer	437,168	Sept. 23	2876	748	52	1945
Wisner, George Y., Detroit, Mich. Jetty	419,237	Jan. 14	8-9	234	50	190
Wissler, Franklin H., Winchester, Va. Plow	428,259	Jan. 28	2453	651	50	511
Wissler, Georg, Cincinnati, Ohio. Binding attachment for sewing-machines	438,212	Oct. 14	825	233	53	165
Wistrand, Peter E., assignor to W. H. Taylor, Kewanee, Ill. Windmill	440,084	Nov. 4	681	181	53	741
Wiswell, Francis, Philadelphia, Pa. Mechanism for operating coffee-mills	428,709	May 27	2562	649	51	1346
Wiswell, Jacob C. (See Wiswell, John F., assignor.)						
Wiswell, John F., assignor to J. C. Wiswell, Medford, Mass. Ore-crusher	421,151	Feb. 11	1080	{ 277 278 }	50	778
Witherow, James P. (See Wyllie, Colin C., assignor.)						
Withers, Addison L., Jr., Paterson, N. J., assignor of one-half to B. H. Richardson, Brooklyn, N. Y. Velocipede	428,737	May 27	2604	660	51	1354
Withers, Thomas B., and C. Knobel, Monticello, Wis. Weather-strip	440,857	Nov. 18	1969	507	53	1002
Withers, William R. (See Crane and Withers.)						
Withington, Charles B., Janesville, Wis. Grain-binder	422,103	Feb. 25	2439	{ 644 645 646 }	50	1050
Withington, Charles B., Janesville, Wis. Sheaf-carrier	435,534	Sept. 2	234	65	52	1420
Witkowsky, Lewis, New York, N. Y. Button-fastener	426,350	Apr. 22	2909	765	51	594
Witt, Alfred C., Grigsby, Kans. Device for raising water from wells	434,969	Aug. 26	2385	{ 631 632 }	52	1248
Witt, Otto N., Westend-Charlottenburg, Prussia, assignor to Badische Anilin und Soda Fabrik, Mannheim, Germany. Blue dye	420,372	Jan. 28	2612	-----	50	541
Witt, Otto N., Westend-Charlottenburg, Prussia, assignor to Badische Anilin und Soda Fabrik, Mannheim, Germany. Ammonium salt of beta-naphthohydroquinone-beta-sulphonic acid	420,373	Jan. 28	2613	-----	50	541
Witt, Otto N., Westend-Charlottenburg, Prussia, assignor to Badische Anilin und Soda Fabrik, Mannheim, Germany. Dark-blue dye	420,374	Jan. 28	2614	-----	50	541
Witt, William C., Jr., Jonesborough, Tex. Ditching-machine	439,739	Nov. 4	164	43	53	640
Witte, William. (See Anderson and Witte.)						
Witte mann, Jacob F., New York, N. Y. Bottle-washing-machine	419,486	Jan. 14	1255	{ 333 334 }	50	264
Witter, Ezra E., Milford Centre, Ohio. Marker for corn-planters	423,363	Mar. 11	1515	398	50	1431
Witter, Ezra E., Milford Centre, Ohio. Adding-machine	423,364	Mar. 11	1517	399	50	1432
Witthaus, Erich L., Baltimore, Md. Underground conduit for electric wires	429,104	May 27	3155	813	51	1463
Wittig, Franz A., New York, N. Y. Frame for grip-sacks or traveling-bags	435,577	Sept. 2	305	84	52	1434
Wittig, Fred E., Marietta, Ohio. Locking device for bicycles	432,920	July 22	2922	749	52	569
Wnuck, Charles E., Cincinnati, Ohio. Shaft-gear for vehicles	430,410	June 17	2031	501	51	1884
Wohls, Reinhard, St. Charles, Mo. Educational appliance for teaching reading and numbers	419,393	Jan. 14	1120	296	50	236
Wock, John, assignor to Canton Steel Roofing Company, Canton, Ohio. Water-conductor strainer	428,581	May 20	2349	596	51	1288
Wodell, Joseph, assignor to Boynton Furnace Company, New York, N. Y. Furnace and grate	439,229	Oct. 28	2420	649	53	479
Wodiska, Julius. (See Hamilton and Wodiska.)						
Woelble, David, Sioux Falls, S. D. Finger-guard bolt	437,072	Sept. 23	2701	705	52	1913
Woek, John, assignor to Canton Steel Roofing Company, Canton, Ohio. Eaves-trough	434,310	Aug. 12	1312	342	52	1023
Woerd, Charles V., deceased, Waltham, Mass.; D. O'Hara, administrator. Stem winding and setting mechanism	430,099	June 10	1526	378	51	1775
Wofford, Benjamin F., and L. W. Blackwell, Hartman, Ark. Measuring shot-canister	424,156	Mar. 25	2700	{ 718 719 }	50	1672
Wofford, John W., Spartanburg, S. C. Feeder for cotton-gins	421,037	Feb. 11	918	237	50	747
Wogan, Emile T. de, Paris, France. Focusing mechanism for optical instruments	424,399	Mar. 25	3092	821	50	1749
Wohlmanth, Theodor, assignor of one-half to F. Zoelch, Vienna, Austria-Hungary. Candle-holder	441,625	Nov. 25	3230	833	53	1252
Wohnlich, Louis J. (See Tideman, Sven, assignor.)						
Wolcott, Arthur H., Winthrop, Mass. Nailing-machine	437,073	Sept. 23	2702	{ 706 707 }	52	1914
Wolcott, Arthur H., Winthrop, assignor to J. L. Whiting & Son, Boston, Mass. Brush and mode of making the same	430,557	June 17	2245	551	51	1924
Wolcott, Clayton, assignor to Wolcott Hardware Company, Hartford, Conn. Sash-fastener	438,337	Oct. 14	1018	276	53	200
Wolcott, George H., <i>et al.</i> (See Gregg, Luther B., assignor.)						
Wolcott Hardware Company. (See Wolcott, Clayton, assignor.)						
Wolf, Abraham N., Allentown, Pa. Dust-collector	432,350	July 15	2044	526	52	409
Wolf, Andrew. (See Killin, Robert B., assignor.)						
Wolf, Benjamin, Philadelphia, Pa. Book-protector	424,241	Mar. 25	2811	751	50	1695
Wolf Brothers. (See Remus, Theodore, assignor.)						
Wolf, Frank, New York, N. Y. Cloak-hanger	422,871	Mar. 4	753	192	50	1281
Wolf, Frank, New York, N. Y. Cloak-rack	431,833	July 8	1266	318	52	256
Wolf, Frederick W., Chicago, Ill. Ice or refrigerating machine	424,746	Apr. 1	480	131	51	94
Wolf, Frederick W., Chicago, Ill. Ice or refrigerating machine	424,747	Apr. 1	481	131	51	95
Wolf, Frederick W., Chicago, Ill. Attachment for refrigerator-pipes	424,748	Apr. 1	483	132	51	95
Wolf, Isaac V., Lancaster, Ohio. Bottom for fence-posts	427,815	May 13	1201	302	51	1056
Wolf, Johann G., Graz, Austria-Hungary. Fire and water proof roof-covering	423,583	Mar. 18	1836	-----	50	1499
Wolf, John L., New York, N. Y. Extension step-ladder	426,747	Apr. 29	3530	922	51	73

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Wolf, Julius J., Cincinnati, Ohio, assignor of one-half to P. Goldsmith, Covington, Ky. Exhibitor-form	434,102	Aug. 12	986	257	52	959
Wolf, Julius J., assignor of two-thirds to M. Weil and A. M. Sloss, Kansas City, Mo. Ear- phone for telephones	423,299	Mar. 11	1429	372	50	1414
Wolf, Thomas E., Hampton, S. C. Cotton-press	425,481	Apr. 15	1603	428	51	329
Wolfe, Benjamin F. and S. C., Fremont, Ind. Fence	440,681	Nov. 18	1663	429	53	946
Wolfe, Charles F. (See Smith, Joshua W., assignor.)						
Wolfe, Charles W., Albany, and T. H. Campbell, Green Island, N. Y. Railway-car axle	427,816	May 13	1202	302	51	1057
Wolfe, Martin V., assignor of one-half to W. F. Tennison, Greenwood, Nebr. Washing- machine	420,323	Jan. 28	2540	673	50	528
Wolfe, Samuel C. (See Wolfe, Benjamin F. and S. C.)						
Wolfe, William, Huntingdon, Pa. Picture-hanger	437,546	Sept. 30	3487	910	52	2072
Wolff, Anna E. (See Wolff, Frank E., assignor.)						
Wolff, Frank E., assignor to A. E. Wolff, Chicago, Ill. Earth-closet	426,896	Apr. 29	3742	977	51	765
Wolff Manufacturing Company, L. (See Gielow, Charles, assignor.)						
Wolff, Raphael H. (See Allis and Wolff.)						
Wolfram, Edward, Pelican, Wis. Railway-spike	432,351	July 15	2045	526	52	410
Wolfinger, Francis R. (See Brown and Wolfinger.)						
Wolfskill, Charles E., <i>et al.</i> (See Julian and Guillaume, assignors.)						
Wolfmyer, Fredrick H., La Grange, Mo. Churn	433,507	Aug. 5	98	27, 28	52	776
Wolkow, Ferdinand, Minneapolis, Minn. Coat-fastener	426,087	Apr. 22	2529	667	51	514
Wollensak, John F., Chicago, Ill. Electric cut-out	419,487	Jan. 14	1257	334	50	265
Wollensak, John F., Chicago, Ill. Door-alarm	421,339	Feb. 11	1346	349	50	827
Wollensak, John F., Chicago, Ill. Electric compound push	421,340	Feb. 11	1348	349	50	828
Wollensak, John F., Chicago, Ill. Flexible electric connection	421,802	Feb. 18	2002	527	50	960
Wollensak, John F., Chicago, Ill. Speaking-tube whistle	427,720	May 13	1048	262	51	1027
Wollensak, John F., Chicago, Ill. Trap-lock	432,716	July 22	2614	669	52	529
Wollensak, John F., Chicago, Ill. Trap-lock	432,964	July 22	3010	773	52	603
Wollensak, John F., and W. E. Gill, Chicago, Ill. Galvanic battery	436,516	Sept. 16	1766	466	52	1727
Wollenweber, August. (See Livingston, Blum, Wollenweber, Westheimer, and Cohn.)						
Wollenweber, August, assignor of one-half to A. B. Flach, New York, N. Y. Sash-holder	420,324	Jan. 28	2541	674	50	528
Wollin, William F., and E. H. Werline, York, Pa. Electric-lamp socket with regulating attachment	439,047	Oct. 21	2116	568	53	416
Wollin, William F., and E. H. Werline, assignors of one-half to A. E. Rieker, York, Pa. Incandescent-lamp socket	422,360	Feb. 25	2851	752	50	1128
Wolsley Shearing Machine Company. (See Ryley, William, assignor.)						
Wolstencroft, James, and W. H. Soley, Philadelphia, Pa. Electrical target-trap	428,030	May 13	1524	387	51	1119
Wolz, Max. (See Kochs and Wolz.)						
Womersley, William, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeding machine	434,649	Aug. 19	1867	{ 488 489 }	52	1141
Wonderful Burner Company. (See Cohen, Victor E., assignor.)						
Wonderly, Thomas G., Galena, Ill. Tooth-brush	430,909	June 24	2838	697	51	2047
Wonsou, Roger W., Gloucester, Mass. Windlass operative mechanism	435,128	Aug. 26	2620	693	52	1292
Wood, Albert A., Atlanta, Ga. Cotton-harvester	430,100	June 10	1527	379	51	1776
Wood, Albert A., assignor to Brosius Motor Sewing Machine Company, Atlanta, Ga. Spring- motor	428,326	May 20	1977	{ 497 498 }	51	1216
Wood, Albert A., assignor to Brosius Motor Sewing Machine Company, Atlanta, Ga. Ten- sion device for sewing-machines	428,990	May 27	2969	762	51	1427
Wood, Albert A., assignor to Interstate Ventilator-Refrigerator Car Company, Atlanta, Ga. Drain for refrigerator-cars	430,599	June 17	2314	569	51	1938
Wood, Alice J., New York, N. Y. Seam-pressing frame	439,286	Oct. 28	2516	674	53	496
Wood, Alice M., Muskegon, Mich. Toy toboggan	429,492	June 3	597	147	51	1586
Wood, Bertena T. See Wood, Thomas W. and B. T.)						
Wood, Charles, Toronto, Canada. Lock	443,887	Dec. 30	3661	943	53	2008
Wood, Charles, Clinton, assignor of two-thirds to G. Hill, Newton, Mass. Gig-mill	434,223	Aug. 12	1179	307	52	996
Wood, Charles F., New York, N. Y., assignor to T. M. Fell, Tenafly, N. J., and W. T. A. Hart, New York, N. Y. Oil-burner	429,588	June 3	737	177	51	1614
Wood & Company, Thomas. (See Goodyear, Robert B., assignor.)						
Wood, Edgar J., Brooklyn, N. Y. Hydraulic governor	436,164	Sept. 9	1220	318	52	1612
Wood, Elgin E., assignor of one-half to B. Westwood, Toronto, Canada. Can-opener	434,818	Aug. 19	2117	554	52	1189
Wood, Ellery W., and C. E. Burnap, Chicago, Ill. Velocipede	439,922	Nov. 4	442	{ 114 115 }	53	694
Wood, Felix, Claremont, N. H. Lasting-jack support	423,584	Mar. 18	1837	483	50	1500
Wood, Francis. (See Macnair and Wood.)						
Wood, Francis J., Greenville, Mich. Mop-wringer	427,817	May 13	1203	303	51	1057
Wood, Frank B., New York, N. Y. Electric call	424,635	Apr. 1	302	78	51	60
Wood, Frank B., New York, N. Y., assignor to E. S. Greeley & Company, of Connecticut. Electrical recording-instrument	420,850	Feb. 4	618	159	50	680
Wood, Frank B., New York, N. Y., assignor to E. S. Greeley & Company, of Connecticut. Electrically recording signals	420,851	Feb. 4	621	160	50	681
Wood, Frank B., New York, N. Y., assignor to E. S. Greeley & Company, of Connecticut. Apparatus for electrically recording signals	420,852	Feb. 4	623	160	50	681
Wood, Frank J., Los Angeles, Cal. Pneumatic door check and spring	443,702	Dec. 30	3388	870	53	1954
Wood, Frank W., Baldwin, Me. Water-wheel	440,085	Nov. 4	682	182	53	741
Wood, George P. (See West and Wood.)						
Wood, H. A. Wise. (See Guerrant, George M., assignor.)						
Wood, Harry C., and A. J. Snoburger, New Brighton, Pa. Machine for grinding and pol- ishing glassware	428,195	May 20	1760	445	51	1174
Wood, Henry A. W., New York, N. Y. Preventing offset in printing-machines	432,289	July 15	1962	501	52	395
Wood, Henry S. (See McMullen, Wood, and Krusi.)						
Wood, J. G. W. (See Porter, William D., assignor.)						
Wood, James F., assignor of one-half to H. A. Dixon, Woodyards, Ohio. Sad-iron	438,968	Oct. 21	1998	534	53	393
Wood, James F., and J. F., Wilmington, Del. Extensible car-step	431,307	July 1	417	103	52	85
Wood, James H., and E. D. Woods, Lebanon, N. H., assignors to said Wood, trustee. Lasting-jack	440,526	Nov. 11	1413	365	53	889
Wood, James J., Brooklyn, N. Y. Regulator for dynamos	420,138	Jan. 28	2250	596	50	475
Wood, James J., Brooklyn, N. Y. Journal-bearing	421,089	Feb. 11	994	{ 254 255 }	50	761
Wood, James J., Brooklyn, N. Y. Thermal cut-out	423,102	Mar. 11	1131	294	50	1357
Wood, James J., Brooklyn, N. Y. Arc light	426,405	Apr. 22	3006	{ 788 789 790 }	51	613
Wood, James J., Brooklyn, N. Y. Regulator for dynamos	426,699	Apr. 29	3451	{ 904 905 }	51	707

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
Wood, James J., Brooklyn, N. Y. Arc lamp	430,722	June 24	2536	{ 620 621	{ 51	1989
Wood, James J., Brooklyn, N. Y. Incandescent-lamp socket	431,681	July 8	1024	256	52	209
Wood, James J., Brooklyn, N. Y. Magnet-winding machine	437,387	Sept. 30	3231	{ 842 843	{ 52	2019
Wood, James J., Brooklyn, N. Y. Lightning-arrester	441,999	Dec. 2	575	{ 156 157	{ 53	1376
Wood, James J., Brooklyn, N. Y. Electric meter	442,501	Dec. 9	1359	349	53	1535
Wood, James J., Brooklyn, N. Y. Electric switch	443,693	Dec. 30	3372	{ 866 867	{ 53	1951
Wood, Jerome I., assignor of one-half to W. M. West, Wilmington, Del. Making fabrics	431,426	July 1	603		52	122
Wood, John, Philadelphia, Pa. Wheel	432,848	July 22	2821	{ 722 723	{ 52	569
Wood, John C., and C. F. Houston, Raton, N. Mex. Ter. Valve	426,351	Apr. 22	2910	765	51	594
Wood, John F. (See Wood, James F. and J. F.)						
Wood, John T. (See Houck, Thomas J., assignor.)						
Wood, Joseph, assignor of one-half to W. G. Thau, Chicago, Ill. Sash-fastener	440,800	Nov. 18	1871	481	53	985
Wood, Joseph S., Brooklyn, N. Y., assignor to W. F. McCully, trustee, Philadelphia, Pa. Street lamp and burner	435,551	Sept. 2	265	74	52	1426
Wood, Joseph S., Brooklyn, N. Y., assignor to W. F. McCully, trustee, Philadelphia, Pa. Gas-machine	437,136	Sept. 23	2803	730	52	1933
Wood, L. Elmer, <i>et al.</i> (See Kerr, George, assignor.)						
Wood, Lorenzo D. (See Hill, Abraham J., assignor.)						
Wood, Marion N. (See Evans, Samuel W., assignor.)						
Wood, Morris, Chicago, Ill. Combined boring-tool	421,218	Feb. 11	1178	302	50	796
Wood Mowing and Reaping Machine Company, Walter A. (See Watrous, Earl G., assignor.)						
Wood, Rosto O., Worcester, Mass. Door-spring	422,678	Mar. 4	468	120	50	1236
Wood, Rosto O., Worcester, Mass. Automatic brake for vehicles	438,669	Oct. 21	1507	407	53	302
Wood, Rosto O., Worcester, Mass. Brake mechanism	443,028	Dec. 16	2242	577	53	1718
Wood, Samuel, and G. H. Heppleston, Heckmondwike, county of York, England. Reversible ingrain or imitation Brussels carpet	421,219	Feb. 11	1180	303	50	796
Wood, Thomas, Arrowsmith, Ill. Loom-shuttle	422,481	Mar. 4	473	48	50	1169
Wood, Thomas W. and B. T., Berlin, Wis. Awning	427,287	May 6	402	104	51	890
Wood, Walter, Philadelphia, Pa. Traveling crane	433,156	July 29	3320	858	52	671
Wood, Walter, Philadelphia, Pa. Traveling crane	433,157	July 29	3321	{ 858 859	{ 52	671
Wood, Walter, Philadelphia, Pa. Traveling crane	433,158	July 29	3323	859	52	671
Wood, Walter, Philadelphia, Pa. Traveling crane	435,164	Aug. 26	2671	706	52	1302
Wood, Walter S., Kalamazoo, Mich. Grain and seed separator and grader	429,749	June 10	971	238	51	1670
Wood, William C., assignor of one-half to J. W. Fowler, Brooklyn, N. Y. Girder-rail and its fastening	433,923	Aug. 5	711	184	52	895
Wood, William C., assignor to Lewis & Fowler Girder-Rail Company, Brooklyn, N. Y. Girder-rail	443,470	Dec. 23	3009	773	53	1873
Wood, William E., Utica, N. Y. Radiator-valve	428,031	May 13	1527	387	51	1120
Wood, William H., Maryville, Mo. Pitch-board	433,383	July 29	3633	937	52	734
Wood, William H., and G. C. Gillmore, Newark, N. J., assignors to Celluloid Manufacturing Company, New York, N. Y. Embossing sheets of celluloid	421,367	Feb. 11	1384		50	834
Wood, William H., and G. C. Gillmore, Newark, N. J., assignors to Celluloid Manufacturing Company, New York, N. Y. Embossing sheets of celluloid. (Reissue.)	11,074	Apr. 15	2355		51	474
Wood, William M., Boston, Mass. Pneumatic tool	443,030	Dec. 16	2248	578	53	1720
Wood, William M., Boston, Mass., assignor to Thomson Electric Welding Company, of Maine. Burr-remover	440,682	Nov. 18	1664	430	53	947
Wood, William M., Washington, D. C., assignor to Thomson Electric Welding Company, Boston, Mass. Manufacturing projectiles by electric welding	424,441	Mar. 25	3160	839	50	1762
Wood, William M., Washington, D. C., assignor to Thomson Electric Welding Company, Boston, Mass. Projectile	424,442	Mar. 25	3163	839	50	1763
Wood, William M., Washington, D. C., assignor to Thomson Electric Welding Company, of Maine. Pneumatic tool	443,029	Dec. 16	2244	578	53	1719
Wood, William T., assignor of one-half to R. M. Giddens, Nashville, Tenn. Cuff-holder	437,074	Sept. 23	2706	707	52	1914
Woodall, Adelaide H. (See Romme, William S., assignor.)						
Woodard, Alonzo B. (See Hathaway and Woodard.)						
Woodard, Alonzo B., and R. W. Barney, Hornellsville, N. Y., said Woodard assignor to said Barney. Vulcanizing apparatus	424,942	Apr. 1	783	209	51	152
Woodard, Alvin N., Jamestown, N. Y. Potato-digger	424,242	Mar. 25	2812	752	50	1695
Woodard, Lyman E. (See Palmer, Albert E., assignor.)						
Woodard, Lyman E., Owosso, Mich. Coffin-fastener	420,290	Jan. 28	2500	663	50	520
Woodbridge, Henry D., Newark, Ohio. Bag-holder	433,114	July 29	3258	838	52	658
Woodbury, Crayton A. (See Richardson and Woodbury.)						
Woodbury, Edward F. (See Woodbury, James A. and E. F.)						
Woodbury Engine Company. (See Creelman, William J., assignor.)						
Woodbury, George E., San Francisco, Cal. Belt or apron for ore-concentrator	434,693	Aug. 19	1945	506	52	1155
Woodbury, James A., Winchester, and E. F. Woodbury, Boston, Mass. Dust-collector	424,157	Mar. 25	2702	719	50	1672
Woodbury, Leander S., Calumet, Mich. Casing for electric or other apparatus	423,014	Mar. 11	991	261	50	1332
Woodbury, Orson E., assignor of three-fourths to J. M. Clifford, Madison, Wis. Mechanical toy	432,810	July 22	2773	710	52	559
Woodcock, Charles H., Worcester, Mass. Door-opener	435,109	Aug. 26	2592	684	52	1286
Woodcock, James S., New Lexington, Ohio. Grinding-mill	419,394	Jan. 14	1121	{ 296 297	{ 50	236
Woodcock, Willard J., Auburn, N. Y. Friction-clutch	443,694	Dec. 30	3376	867	53	1952
Woodhouse & Rawson United, Company. (See Rawson, Frederick L., assignor.)						
Woodhull, Morris, Dayton, Ohio. Jump-seat carriage	426,158	Apr. 22	2637	693	51	537
Woodlie, Isaac N., Albany, Oreg. Thill-coupling	419,579	Jan. 14	1377	369	50	229
Woodley, Isaac L., <i>et al.</i> (See Ricard, Louis, assignor.)						
Woodley, Thomas E., Norway, Me., assignor to C. F. Brown, trustee, Reading, Mass. Boot or shoe upper	423,709	Mar. 18	2037	537	50	1538
Woodling, Reason L., Logansport, Ind. Check-row corn-planter	433,757	Aug. 5	471	{ 121 122	{ 52	847
Woodman, George H. (See Lavey, William J., assignor.)						
Woodman, Manson, Boston, Mass. Drum	438,670	Oct. 21	1510	407	53	302
Woodman, William H., Columbia, S. D. Horseshoer's implement	440,454	Nov. 11	1294	335	53	866
Woodmansee, Alfred M., and C. B. Klohr, assignors of one-third to G. G. Lashey, Jr., Cincinnati, Ohio. Buggy-boot	424,588	Apr. 1	234	63	51	48
Woodmanson, Joseph A., New Vienna, Ohio. Guard-rail for locomotives	424,697	Apr. 1	403	106	51	80
Woodruff, Oliver D., Southington, Conn. Meat-cutter	443,589	Dec. 30	3204	824	53	1920

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Woodruff, Oliver D., Southington, Conn. Meat-cutter	443,590	Dec. 30	3205	820	53	1920
Woodruff, Richard E., Toronto, Canada. Combined rule, square, bevel, scribe-gage, spirit-level, and dividers	439,458	Oct. 28	2785	743	53	547
Woodruff, Wales E., Essex, Conn. Device for sharpening shears, &c	440,985	Nov. 18	2172	562	53	1043
Woodruff, William N. (See Johnson, Moses C., assignor.)						
Woods, Edward D. (See Wood and Woods.)						
Woods, Edwin. (See Woods, George and E.)						
Woods Electric Company. (See Woods, Granville T., assignor.)						
Woods, George and E., Warrington, county of Lancaster, England. Seat and seat-back	434,495	Aug. 19	1610	420	52	1091
Woods, Granville T., assignor to Woods Electric Company, Cincinnati, Ohio. Automatic safety cut-out for electric circuits	438,590	Oct. 14	1381	374	53	273
Woods, John R., <i>et al.</i> (See Bromberg, Samuel A., assignor.)						
Woods, Justus O., New York, N. Y. Inhaler and respirator	427,247	May 6	348	89	51	878
Woods, Justus O., New York, N. Y. Vaporizer	430,161	June 17	1613	401	51	1803
Woods, Justus O., New York, N. Y. Vaporizer	430,162	June 17	1613	402	51	1803
Woods Machine Company, S. A. (See Thomas, John R., assignor.)						
Woods Machine Company, S. A. (See Woods and Thomas, assignors.)						
Woods, Sherwood & Co. (See Bryant, Charles A., assignor.)						
Woods, Solomon A., and J. R. Thomas, Boston, Mass., assignors to S. A. Woods Machine Company, of Massachusetts. Planing-machine	438,746	Oct. 21	1654	{ 443 444 }	{ 53 51 }	327
Woodsford, Bedford, Chelsea, county of Middlesex, England. Pocket-fastener	425,060	Apr. 8	967	259	51	195
Woodside, George W., assignor of one-half to W. F. Gillin, Philadelphia, Pa. Nut-shell-severing machine	442,657	Dec. 16	1599	413	53	1592
Woodward, Albert C., Camden, N. J. Elastic fabric	419,395	Jan. 14	1124	297	50	237
Woodward, Amos W. and E. E., Rockford, Ill. Water-wheel governor	432,105	July 15	1676	431	52	342
Woodward, Beaumaris. (See Mack and Woodward.)						
Woodward, Charles E. W., assignor to Overman Wheel Company, Chicopee Falls, Mass. Rim and rubber tire for vehicle-wheels	443,735	Dec. 30	3441	883	53	1965
Woodward, Charles E. W., Chicopee Falls, and C. R. Overman, assignors to Overman Wheel Company, Boston, Mass. Velocipede	428,991	May 27	2970	762	51	1427
Woodward, Elmer E. (See Woodward, Amos W. and E. E.)						
Woodward, Elmer E., Rockford, Ill. Lathe-center grinder	438,876	Oct. 21	1867	{ 495 496 }	{ 53 51 }	367
Woodward, Erastus. (See Hawkins and Woodward.)						
Woodward, Erastus. (See Hussey and Woodward.)						
Woodward, Erastus, Somerville, Mass. Sewing-machine	426,159	Apr. 22	2639	{ 693 694 }	{ 51 51 }	538
Woodward, Erastus, Somerville, Mass. Tack-driving machine	426,160	Apr. 22	2641	694	51	538
Woodward, Erastus, Somerville, Mass., assignor to Waters Wrapping and Mailing Machine Company, Portland, Me. Address-printing machine	434,412	Aug. 12	1480	{ 386 387 }	{ 52 51 }	1057
Woodward, Erastus, Somerville, Mass., assignor to Waters Wrapping and Mailing Machine Company, Portland, Me. Address-printing machine	442,752	Dec. 16	1789	{ 463 464 }	{ 53 52 }	1628
Woodward, Frank E., Hill, N. H. Recorder for cash-drawers	432,468	July 15	2220	{ 573 574 }	{ 52 51 }	446
Woodward, George W., Brooklyn, assignor to Ansonia Brass and Copper Company, New York, N. Y. Lamp	429,181	June 3	113	26	51	1493
Woodward, George W., Brooklyn, assignor to Ansonia Brass and Copper Company, New York, N. Y. Wick-raising mechanism for lamps	440,683	Nov. 18	1665	430	53	947
Woodward, Henry, Toronto, Canada. Secondary battery	434,224	Aug. 12	1180	307	52	996
Woodward, James H., Seward, Nebr. Electrical syringe	433,384	July 29	3633	938	52	734
Woodward, John M. (See Sutton and De Voe, assignors.)						
Woodward, Russel G., Waukegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Thread-controlling device for sewing-machines	427,026	Apr. 29	3926	1023	51	800
Woodward, William H., assignor of two-thirds to T. McGee and G. King, Chicago, Ill. Combined file, package-holder, and binder	441,607	Nov. 25	3197	824	53	1245
Woodworth, George D., Brooklyn, N. Y. Cigar-cutter	419,300	Jan. 14	922	260	50	207
Woodworth, Hiram E., New Castle, Pa. Store-service apparatus	428,362	May 20	2030	510	51	1228
Woodworth, James E. (See Stager, Henry E., assignor.)						
Woodworth, Ralph J., Wahoo, Nebr. Feed-trough	421,465	Feb. 18	1523	394	50	869
Woodworth, Silas F., Clipper Gap, Cal. Sheet-metal-folding machine	426,352	Apr. 22	2911	765	51	594
Woodworth, Zachary, Nankin, Mich. Barrel-follower	422,482	Mar. 4	175	48	50	1169
Woodworth, Zachary, Nankin, Mich. Barrel-cover	429,671	June 10	861	209	51	1647
Woolard, William H., Windsor, Ill. Steam-cooker	430,980	June 24	2943	722	51	2065
Woolbridge, William H., Birmingham, Ala. Cooking-stove	431,158	July 1	185	47	52	39
Woolf, Albert E., New York, N. Y. Secondary-battery plate	439,850	Nov. 4	330	85	53	672
Woolf, Albert E., New York, N. Y. Secondary-battery plate	440,216	Nov. 11	895	{ 230 231 }	{ 53 51 }	794
Woolf, Henry M., <i>et al.</i> (See Corbett, Joseph, assignor.)						
Woolley, Amos G., Cincinnati, Ohio. Hame-tug	433,159	July 29	3324	860	52	671
Woolley, Claude L., Baltimore, Md. Eraser	432,588	July 22	2401	618	52	488
Woolley, Edgar M., Cincinnati, Ohio. Hame-tug	437,958	Oct. 7	432	121	53	83
Woolley, John L., Golden, Colo. Potato-harvester	425,932	Apr. 15	2254	597	51	453
Woolnough, Henry B. (See Betham and Woolnough.)						
Woolsey, Herbert W., Jersey City, N. J. Surgical safety appliance	423,976	Mar. 25	2444	648	50	1623
Woolston, Elijah B., Marlton, N. J. Heater	429,672	June 10	862	209	51	1648
Woolworth, Calvin C. (See Woolworth, Charles D., assignor.)						
Woolworth, Charles D., Chicago, Ill., assignor to C. C. Woolworth, Castleton, N. Y. Refrigerator-wall of wood pulp	429,830	June 10	1095	270	51	1693
Wooster, Frederick J., Waterbury, Conn. Puzzle	432,589	July 22	2402	618	52	488
Wooster, Letsonie T., assignor to Seymour Manufacturing Company, Seymour, Conn. Wire block and carrier	423,015	Mar. 11	991	261	50	1332
Wooster, Letsonie T., assignor to Seymour Manufacturing Company, Seymour, Conn. Die for drawing wire	423,016	Mar. 11	993	261	50	1333
Wooster, William I., Harvard, Ill. Clevis and pin	437,388	Sept. 30	3234	843	52	2020
Wootton, William S., Scottsburg, Va. Tobacco-hanger	422,679	Mar. 4	469	120	50	1226
Worcester Corset Company. (See Bray, Morris P., assignor.)						
Worcester Elevator Company. (See Allen, Dwight P., assignor.)						
Worcester Polytechnic Institute. (See Walker, Oakley S., assignor.)						
Worden, Lester A. (See Goff, William E., assignor.)						
Worden, Miner E., assignor of one-half to G. B. Carson, Scranton, Pa. Plumber's tool	441,347	Nov. 25	2789	721	53	1165
Workman, William J., Toronto, Canada. Builder's plumb	433,842	Aug. 5	601	156	52	873
Worley, George W., and R. B. Davis, Altoona, Pa. Rotary engine	440,858	Nov. 18	1970	{ 507 508 }	{ 53 51 }	1003
Worms, Eugène, and A. S. Zwierzchowski, Paris, France. Velocipede	442,345	Dec. 9	1117	{ 291 292 }	{ 53 51 }	1485

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Wormwood, Daniel W. (See Pruden, Daniel R., assignor.)						
Worrall, Thomas D., Lynn, Mass. Type-writing machine	419,396	Jan. 14	1125	{ 297 298 }	{ 50 53 }	237 1321
Worrall, Thomas H., Laconia, N. H. Take-up mechanism for knitting-machines	441,814	Dec. 2	296	80	53	1321
Worrell, Frank. (See Antonides, Peter, assignor.)						
Worsley, Charles A., New Orleans, La. Box	434,855	Aug. 19	2163	567	52	1199
Worsley, Samuel L., Taunton, Mass., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Metal-screw machine	424,527	Apr. 1	128	{ 37 38 39 }	{ 51 51 51 }	28
Worth, John D. (See Swain and Worth.)						
Worth, William O. (See Swain and Worth.)						
Worth, William O., Cedar Rapids, Iowa. Governor for steam-engines	434,575	Aug. 19	1724	451	52	1114
Worthen, Adrian D., Sandown, N. H. Leather-skiving machine	423,977	Mar. 25	2445	648	50	1623
Worthing, George S., and J. Eneix, Anita, Iowa; said Eneix assignor to said Worthing.						
Refrigerator	423,403	Mar. 11	1575	413	50	1443
Worthingham, Charles M., Bradshaw, Nebr. Churn	433,059	July 29	3169	815	52	641
Worthington, Amasa, Brooklyn, N. Y. Water-gage	419,743	Jan. 21	1629	434	50	343
Worthington, Amasa, Brooklyn, N. Y. Steam-holler	424,528	Apr. 1	137	39, 40	51	29
Worthington, Amasa, Brooklyn, N. Y. Steam-boller	429,164	June 3	91	21, 22	51	1489
Worthington, Charles C., Irvington, N. Y. Direct-acting engine	422,680	Mar. 4	470	120	50	1226
Worthington, George, Chicago, Ill. Dumping-wagon	422,561	Mar. 4	283	72	50	1190
Worthington, James M. (See Touchstone and Worthington.)						
Worthington, John V., and J. Gehr, Clear Spring, Md. Singletree	441,916	Dec. 2	443	118	53	1352
Worthington, Ralph A. (See King and Jennings, assignors.)						
Worthington, Thomas K., et al. (See Silkman, Edward J., assignor.)						
Wortman, Jacob L., Washington, D. C. Book for stylographic manifolding	434,370	Aug. 12	1401	368	52	1041
Wotton, Walter M., Dover, Mass. Nut-lock	441,224	Nov. 25	2575	667	53	1129
Woulf, Charles, Black River, N. Y. Baling-press	431,958	July 8	1444	366	52	291
Woven Down Duster Company. (See Hair, Josiah T., assignor.)						
Wragg, Matthew W. (See White and Wragg.)						
Wragham, Thomas J., Rutland, Vt. Stop-watch	441,608	Nov. 25	3198	824	53	1246
Wray, John C., Peoria, Ill. Armature for electric machines	422,681	Mar. 4	471	121	50	1226
Wray, William V., Cedartown, Ga. Car-coupling	433,385	July 29	3635	938	52	734
Wrede, Friedrich. (See Henning, Julius, assignor.)						
Wren, Robert M. (See Oliver and Wren.)						
Wright, Aaron, Hudson, N. Y. Feeding-trough	434,856	Aug. 19	2164	567	52	1199
Wright, Albert S., Lowry City, Mo. Mail-box	421,643	Feb. 18	1794	469	50	921
Wright, Alfred G., assignor of one-half to W. A. McCowen, Wilmington, Del. Pill-machine	432,502	July 15	2267	588	52	455
Wright, Allen J., Cleveland, Ohio. Brake mechanism for cars	430,455	June 17	2097	517	51	1896
Wright, Allen J., Cleveland, Ohio. Brake mechanism for cars	430,500	June 17	2165	533	51	1910
Wright, Benjamin B., assignor of one-half to G. J. Brinkman, Evansville, Ind. Bracket or shelf	438,280	Oct. 14	937	253	53	184
Wright, Benjamin F., Lovington, Va. Rotary engine	426,976	Apr. 29	3646	1005	51	784
Wright, Calvin B. (See Krause and Wright.)						
Wright, Charles C., London, England. Watch-protector	441,046	Nov. 18	2264	586	53	1060
Wright, Charles E., Waterbury, Conn. Band-saw guide	434,010	Aug. 12	839	{ 220 221 }	{ 52 52 }	929
Wright, Charles L. (See Bock, Leo, Jr., assignor.)						
Wright, Charles O., Richmond, Va. Middlings separator and double purifier	427,027	Apr. 29	3927	{ 1023 1024 }	{ 51 51 }	800
Wright, Daniel P., Berkeley Springs, W. Va. Apparatus for raising water	432,849	July 22	2392	723	52	569
Wright, Delos C., North Parma, N. Y. Scaffold-bracket	437,389	Sept. 30	3235	843	52	2020
Wright, Ebenezer, London, England. Type-writing and matrix-making machine	440,086	Nov. 4	683	{ 182 183 }	{ 53 53 }	741
Wright, Edmund, Chicago, Ill. Machine for separating organic matter from aqueous components	430,456	June 17	2100	518	51	1896
Wright, Edward. (See Goulding, Alfred, assignor.)						
Wright, Edward, Worcester, Mass. Apparatus for transmitting and converting motion	427,492	May 6	698	{ 175 176 }	{ 51 51 }	950
Wright, Edward, Worcester, Mass. Friction-band clutch	442,346	Dec. 9	1118	292	53	1486
Wright, Edward, Worcester, assignor to Davis & Furber Machine Company, North Andover, Mass. Shedding and shuttle-box-operating mechanism for looms	425,843	Apr. 15	2146	{ 572 573 }	{ 51 51 }	434
Wright, Edward, Worcester, assignor to Davis & Furber Machine Company, North Andover, Mass. Mechanical movement	425,844	Apr. 15	2150	573	51	435
Wright, Edward, Worcester, assignor to Davis & Furber Machine Company, North Andover, Mass. Shedding mechanism for looms	441,626	Nov. 25	3230	833	53	1252
Wright, Edward F. (See Duff, John, assignor.)						
Wright, Elias G. (See Ford and Wright.)						
Wright, Eliza M., Brooklyn, N. Y., assignor of one-half to M. J. Reid, Wayne, Mich. Combined holder and bracket	434,413	Aug. 12	1484	387	52	1057
Wright, George E., Birmingham, county of Warwick, England. Gas-burner for heating or cooking	427,651	May 13	936	235	51	1006
Wright, George W., Lapel, Ind. Gas-regulator	422,483	Mar. 4	176	48	50	1169
Wright, George W., and C. M. Grubb, Philadelphia, Pa. Garment-stretcher	440,385	Nov. 11	1165	300	53	843
Wright, Goodlope. (See Watkin, Benjamin M., assignor.)						
Wright, Henry S., Newton Abbot, county of Devon, England. Box-fastener	428,992	May 27	2972	762	51	1428
Wright & Hills Linseed Oil Company. (See Nelson, Oliver R., assignor.)						
Wright, James A. and J. B., Rockingham, assignors of one-half to D. E. McIver and M. C. Stanback, Sanford, N. C. Automatic station or street indicator	436,730	Sept. 16	2107	{ 555 556 557 }	{ 52 52 52 }	1792
Wright, James M., Brooklyn, N. Y. Shaping-machine	434,039	Aug. 12	879	{ 231 232 }	{ 52 52 }	937
Wright, James P., Reynolds, Ind. Sand-band for vehicles	435,472	Sept. 2	133	38	52	1400
Wright, James R., York, Pa. Adjustable picture-wire hanger	437,470	Sept. 30	3367	881	52	2048
Wright, John B. (See Wright, James A. and J. B.)						
Wright, John S. (See Hamblin and Goldsmith, assignors.)						
Wright, John T., Bigbyville, Tenn. Mechanism for operating churns	426,353	Apr. 22	2912	766	51	594
Wright, John T., Columbia, Tenn. Planter	426,354	Apr. 22	2913	766	51	595
Wright, Lewis J., Carrollton, Ky. Tobacco-conveyer	423,505	Mar. 18	1725	454	50	1481
Wright, Lysander, Jr. (See Wright, Marcus L., assignor.)						
Wright, Marcus L., Newton, assignor of one-half to L. Wright, Jr., Newark, N. J. Last	438,671	Oct. 21	1511	408	53	302
Wright, Maurice L., et al. (See Miller, Lewis, assignor.)						
Wright, Melancthon R. (See Smith and Wright.)						
Wright, Phin B. (See Ensign and Wright.)						
Wright, Pliny J. (See Sampson and Wright.)						
Wright, Ransom C., Philadelphia, Pa. Compound locomotive	438,969	Oct. 21	1999	535	53	393

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Wright, Robert M. (See Smith and Wright.)						
Wright, Rufus, Chicago, Ill. Hose	425,283	Apr. 8	1311	350	51	264
Wright, W. F. (See Wheeler, Theodore A., assignor.)						
Wright, Walter S., Chicago, Ill. Gas-generating apparatus	438,213	Oct. 14	827	224	53	165
Wright, William, Newburg, N. Y. Valve for steam-engines	423,541	May 20	2282	580	51	1275
Wright, William, Newburg, N. Y. Eccentric-rod	425,542	May 20	2283	580	51	1275
Wright, William A., Ayer, Mass. Caster	435,473	Sept. 2	134	38	52	1401
Wright, William A., Centreton, assignor of one third to T. S. Sapp, Camden, N. J. Car-seat	443,308	Dec. 23	2766	709	53	1825
Wright, William F., assignor of one-half to H. Carter, Keokuk, Iowa. Adjustable ham-mock-canopy	428,993	May 27	2973	763	51	1428
Wright, William H. (See Henkels, Stanislaus V., assignor.)						
Wright, William H., Buffalo, N. Y. Die for rolling steel balls	439,712	Nov. 4	127	34	53	632
Wright, William H., Buffalo, N. Y. Machine for making steel balls	439,713	Nov. 4	128	34	53	633
Wright, William H., Buffalo, N. Y. Machine for rolling balls	439,714	Nov. 4	129	35	53	633
Wright, William H., Buffalo, N. Y. Machine for making balls	439,715	Nov. 4	131	35	53	633
Wright, William H., and E. O. Simpson, Buffalo, N. Y.; said Simpson assignor to said Wright. Hub-attaching device	421,341	Feb. 11	1350	349	50	828
Wright, William H. H., San Francisco, assignor of one-half to T. E. Johnson, San Jose, Cal. School-ruler	437,879	Oct. 7	312	93	53	61
Wright, William H. S., Elkhart, Ind. Grooved switch	436,944	Sept. 23	2527	662	52	1878
Wright, William J., Cooperstown, Pa. Stave trimming, jointing, and planing machine	438,045	Oct. 7	574	157 158	53	109
Wrightson, Arthur. (See Holt and Wrightson.)						
Wrightson, Arthur. (See Salisbury and Wrightson.)						
Wrightson, Leonard B. (See Stanley and Wrightson.)						
Wrigley, Charles, Chicago, Ill. Welding compound	426,897	Apr. 29	3743	-----	51	765
Wrigley, Thomas, Oak Park, Ill. Dressing-tool for emery-wheels and grindstones	450,204	June 17	1667	415 622	51	1813
Wrigley, Thomas, Oak Park, Ill. Ticket and card printing machine	443,129	Dec. 23	2434	633	53	1761
Wrigley, Thomas, Oak Park, assignor of one-half to F. B. Badt, Chicago, Ill. Vertically-adjustable-dynamo support	434,011	Aug. 12	841	221	52	929
Writing Telegraph Company. (See Etheridge, Harry, assignor.)						
Writing Telegraph Company. (See Robertson, James H., assignor.)						
Wroe, Missouri E., Brenham, Tex. Trace and trace-chain supporter	430,163	June 17	1614	402	51	1803
Wroughton, Cyrus L., and J. C. Moore, Fairfield, Nebr. Churn	423,365	Mar. 11	1519	399	50	1433
Wuerpel, Morris, St. Louis, Mo. Railway-switch stand and signal	432,106	July 15	1679	431	52	342
Wuerpel, Morris, St. Louis, Mo. Railway-signal	432,469	July 15	2222	574 575	53	446
Wulfers, Fredrick. (See Dilts, William, assignor.)						
Wunderle, Gerhard. (See Zimmermann, Schmid, and Wunderle.)						
Wundes, John H., assignor to E. F. Bowman, Lancaster, Pa. Tool-handle	429,223	June 3	176	42	51	1505
Wurster, Frederick V., Hudson, N. Y. Ledger	436,554	Sept. 16	1841	485	52	1739
Wurster, Julius, Derendingen, near Tübingen, Germany. Feeding device for sawing-machines	421,803	Feb. 18	2003	527 528 529	50	961
Wurts, Alexander, assignor to Westinghouse Electric Company, Pittsburg, Pa. Electric interrupter	434,166	Aug. 12	1094	282	52	980
Wurts, Alexander, assignor to Westinghouse Electric Company, Pittsburg, Pa. Lightning-arrester	434,167	Aug. 12	1095	283	52	980
Wurts, Alexander, assignor to Westinghouse Electric Company, Pittsburg, Pa. Safety-fuse for electric circuits	434,168	Aug. 12	1096	283	52	980
Wurts, Alexander, assignor to Westinghouse Electric Company, Pittsburg, Pa. Electric safety-fuse box	434,169	Aug. 12	1097	283	52	981
Wurts, Alexander, assignor to Westinghouse Electric Company, Pittsburg, Pa. Lightning-arrester	434,170	Aug. 12	1098	283 284	52	981
Wurts, Alexander, assignor to Westinghouse Electric Company, Pittsburg, Pa. Lightning-arrester	434,371	Aug. 12	1403	368	52	1041
Wurts, Alexander, and O. H. Baldwin, assignors to Westinghouse Electric Company, Pittsburg, Pa. Lightning-arrester	433,430	July 29	3701	956	52	749
Wüstemann, Carl, Oberhausen, Germany. Hat	437,807	Oct. 7	209	64	53	42
Wyant, Eli M., Waterloo, Iowa. Extension-rod for window-curtains	420,436	Feb. 4	88	20	50	580
Wyant, W. J. (See McKinley, Walter, assignor.)						
Wyatt Chromatic Printing Company. (See Wyatt, Harry F., assignor.)						
Wyatt, Harry F., New York, N. Y., assignor, by mesne assignments, to Wyatt Chromatic Printing Company. Chromatic-printing machine	420,399	Jan. 28	2651	703	50	548
Wyckoff, Ambrose B., Washington, D. C., assignor of three-fifths to J. W. Coulston, Philadelphia, Pa. Electrical signaling apparatus	443,157	Dec. 23	2495	638	53	1772
Wyckoff, Arcalous and E. L., Elmira, N. Y. Pipe-casing	438,516	Oct. 14	1272	344	53	250
Wyckoff, Arcalous and E. L., Elmira, N. Y. Composite tubing	441,733	Dec. 2	161	43	53	1293
Wyckoff, Edwin, Camden, N. J. Furrower and coverer	425,359	Apr. 8	1408	375	51	283
Wyckoff, Ernest L. (See Wyckoff, Arcalous and E. L.)						
Wyckoff, John, C. W. Lunquist, and M. J. Smith; said Lunquist and Smith assignors to C. G. Laybourne, Minneapolis, Minn. Friction-brake for cars	436,750	Sept. 16	2158	567	52	1800
Wyckoff, Seamans & Benedict. (See Lewis, William P., assignor.)						
Wyckoff, Seamans & Benedict. (See Ray, Harvey, assignor.) (Reissue.)						
Wyckoff, Seamans & Benedict. (See Webb, George B., assignor.)						
Wyckoff, Elbert N. (See Morgan, John H., assignor.)						
Wyckoff, William M., Fonda, Iowa. Case for the canvas coverings of binders, &c.	425,646	Apr. 15	1857	496	51	378
Wyland, William H., assignor of one-half to J. Arnd, Pittsburg, Pa. Machine for making spikes	440,095	Nov. 4	699	186	53	745
Wyllie, Colin C., London, county of Middlesex, England, assignor of one-half to J. P. Witherow, Pittsburg, Pa. Apparatus for utilizing waste gases from coke-ovens	427,210	May 6	286	73	51	867
Wyman, Arnold, Brooklyn, N. Y. Trousers-stretcher	437,390	Sept. 30	3236	843	52	2020
Wyman Company, I. C. (See Monroe, Halsey H., assignor.)						
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Take-up mechanism for looms	422,044	Feb. 25	2350	620 621	50	1034
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Driving mechanism for looms	423,103	Mar. 11	1133	294	50	1358
Wyman, Horace, assignor to Crompton Loom Works, Worcester, Mass. Stop mechanism for looms	438,591	Oct. 14	1382	374 375	53	273
Wyman, Horace, and A. A. Gordon, assignors to Crompton Loom Works, Worcester, Mass. Shuttle-operating mechanism for narrow-ware looms	438,214	Oct. 14	830	225	53	166
Wyman, Horace B., Newburyport, Mass., assignor of one-half to C. G. Welch, Osceola Mills, Pa. Drilling-machine	434,576	Aug. 19	1726	452	52	1114

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Wyman, John A. (See Fithian and Wyman.)						
Wyneken, Frederick, New York, N. Y. Grain-elevator	430,553	June 17	2246	551	51	1924
Wynn, Arthur E., assignor of three-fourths to A. B. Balfour, Ilkley, J. R. Robinson, Headingley, and J. Wangh, Bradford, England. Type-writing machine	437,959	Oct. 7	433	121	53	83
Wynne, Frank, Westminster, England. Apparatus for propelling vehicles by electricity	419,094	Jan. 7	665	174 175	50	140
Wynne, Pembroke S., Edinburg, Mo. Grain-carrier for self-binders for harvesters	443,031	Dec. 16	2252	578	53	1720
Xenia Canning Company. (See Little, John, assignor.)						
Ximenes, Isaac L., London, England. Stringed musical instrument	439,230	Oct. 28	2421	649	53	479
Yagn, Nicholas, St. Petersburg, Russia. Apparatus for facilitating walking, running, and jumping	420,178	Jan. 28	2320	613	50	487
Yagn, Nicholas, St. Petersburg, Russia. Apparatus for facilitating walking, running, and jumping	420,179	Jan. 28	2322	613 614	50	487
Yagn, Nicholas, St. Petersburg, Russia. Apparatus for facilitating walking, running, and jumping	438,830	Oct. 21	1793	478	53	354
Yagn, Nicholas, St. Petersburg, Russia. Apparatus for facilitating walking, running, and jumping	440,684	Nov. 18	1667	430	53	947
Yakel, Carl, Orwigsburg, assignor to Engle Spring Gun Company, Hazleton, Pa. Egg-tester	434,141	Aug. 12	1054	272	52	972
Yale, Charles O., Rome, N. Y. Safe or vault lock	427,140	May 6	178	47	51	846
Yale, Charles O., New York, N. Y. Safe or vault lock	427,141	May 6	182	47, 48	51	847
Yale, Charles O., New York, N. Y. Burglar-proof safe	428,240	May 20	1838	461	51	1180
Yale, Charles O., New York, N. Y. Bank-vault	428,241	May 20	1839	461	51	1180
Yale, Charles O., assignor to H. P. Brown and M. L. Yale, New York, N. Y. Loading and discharging guns	424,043	Mar. 25	2542	678	50	1642
Yale, Marie L., et al. (See Yale, Charles O., assignor.)						
Yale & Towne Manufacturing Company. (See Bramble, William H., assignor.)						
Yale & Towne Manufacturing Company. (See Cook, George W., assignor.)						
Yale & Towne Manufacturing Company. (See Keating, Thomas F., assignor.)						
Yale & Towne Manufacturing Company. (See Taylor, Warren H., assignor.)						
Yale & Towne Manufacturing Company. (See Towne, Henry R., assignor.)						
Yale & Towne Manufacturing Company. (See Weston, Thomas A., assignor.)						
Yarbrough, Todd M., Shreveport, La. Corn and cotton-seed planter and fertilizer-distributer	437,075	Sept. 23	2707	707 708	52	1914
Yard, Frank A., assignor of one-half to More, Jones & Co., St. Louis, Mo. Cable-grip	433,843	Aug. 5	602	156	52	874
Yarger, George E., Fostoria, Ohio. Roll-paper holder and cutter	426,088	Apr. 22	2530	667	51	515
Yarger, George E., Fostoria, Ohio, assignor of one-half to J. Lozon, Detroit, Mich. Roll-paper holder and cutter	432,107	July 15	1680	432	52	343
Yarnall, Albin P., Ashbourne, Pa. Adjustable filtering and percolating stand	422,484	Mar. 4	177	49	50	1170
Yaryan, Harvey B., Crawfordsville, Ind. Fifth-wheel	433,844	Aug. 5	603	156	52	874
Yaryan, Homer T., Toledo, Ohio. Making fertilizer from tank-water	443,559	Dec. 30	3156		53	1911
Yates, John W., New Decatur, Ala. Machine for making sheet-metal moldings	438,970	Oct. 21	2004	535	53	394
Yates, Joseph, London, England. Device for facilitating taking pills	442,698	Dec. 16	1678	430	53	1607
Yates, Thomas D., Chicago, assignor of one-half to E. J. Learned, Lake Forest, Ill. Key-fastener	430,501	June 17	2168	533	51	1911
Yates, William, New York, N. Y. Car-coupling	432,470	July 15	2224	575	52	447
Yates, William A. (See Kaye, Kane, and Yates.)						
Yates, William A., Vine Grove, Ky. Spring-bed	440,937	Nov. 18	2101	545	53	1029
Yawman, Philip H. (See Eastman and Yawman.)						
Yawman, Philip H., Rochester, N. Y., assignor to Office Specialty Manufacturing Company, of New York. Metallic filing case or cabinet	435,877	Sept. 2	777	207	52	1525
Yeager, Clinton E. (See Monroe and Yeager.)						
Yeager, Harvey. (See Carr, Joseph J., assignor.)						
Yenne, Jesse, Egan, assignor of one-half to J. E. Clifford and G. F. Stannard, Demersville, Mont. Bob-sled	435,341	Aug. 26	2950	783	52	1353
Yeutzer, Enoch S., Ottawa, assignor of one-half to J. L. Flannery, Chicago, Ill. Blind-stitch hemmer for sewing-machines	427,944	May 13	1401	354	51	1094
Yeoman, J. M., et al. (See Robinson, Clark, assignor.)						
Yeoman, William P., Waukegan, Ill. Wire-fence looper	431,222	July 1	292	72	52	59
Yerdon, William, Fort Plain, N. Y. Hose-coupling band	428,660	May 27	2474	629	51	1330
Yerkes, Martin V., Berwyn, Pa. Horse-boot	434,619	Aug. 19	1803	470	52	1129
Yesinger, Christian. (See Bersch, Anton, assignor.)						
Yewell, John W., Baltimore, Md. Ship's windlass	434,054	Aug. 12	897	236	52	940
Yingst, Cyrus, Annville, Pa. Tricycle	426,518	Apr. 29	3173	833 834	51	654
Yokum, Robert, Denison, Tex., assignor of one-half to L. C. Anderson. Portable folding poultry-coop	420,260	Jan. 28	2454	652	50	511
Yoch, Benhard, Belleville, Ill. Nail-machine	423,017	Mar. 11	994	262	50	1333
Yoch, Benhard, Belleville, Ill. Machine for pointing cut nails	423,366	Mar. 11	1520	399	50	1433
York, Francis L. (See Herbert and York.)						
Yorke, Nathan F., Concord, N. C. Seed-planter and fertilizer-distributer	441,386	Nov. 25	2849	735	53	1177
Yost, George W. N., New York, N. Y., assignor, by mesne assignments, to American Writing Machine Company, of New York. Type-writing machine	428,294	May 20	1927	484	51	1206
Yost, George W. N., assignor to Yost Writing Machine Company, New York, N. Y. Stem-key for type-writing machines	420,566	Feb. 4	195	50	50	603
Yost, George W. N., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine	420,567	Feb. 4	196	51	50	603
Yost, George W. N., New York, N. Y., assignor to Yost Writing Machine Company. Driving mechanism for type-writing machines	427,652	May 13	938	235	51	1006
Yost, George W. N., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine	428,438	May 20	2146	540	51	1250
Yost, George W. N., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine	429,710	June 10	921	225	51	1659
Yost, George W. N., New York, N. Y., and C. E. Merritt, Springfield, Mass., assignors to Yost Writing Machine Company, New York, N. Y. Type-writing machine	442,409	Dec. 9	1217	314	53	1506
Yost, Joseph L. (See McCune and Yost.)						
Yost, Joseph L., et al. (See Torkelson, Reinhard T., assignor.)						
Yost, Joseph L., and C. J. Moore, assignors to Lozier & Yost Bicycle Manufacturing Company, Toledo, Ohio. Bicycle	420,756	Feb. 4	452	120	50	653
Yost Writing Machine Company. (See Prentice, George G., assignor.)						
Yost Writing Machine Company. (See Steiger, Andrew W., assignor.)						
Yost Writing Machine Company. (See Yost, George W. N., assignor.)						
Yost Writing Machine Company. (See Yost and Merritt, assignors.)						
Youmans, Henry, Cannon Falls, Minn. Clothes-pouder	425,360	Apr. 8	1408	375	51	283

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Yound, Joseph D., deceased; M. Yound administratrix, Rich Hill, Mo. Washing-machine.	419,904	Jan. 21	1886	{ 495 496 }	50	395
Yound, Maggie, administratrix. (See Yound, Joseph D.)						
Young, Alexander H., assignor of one-half to J. M. Yznaga and A. G. Heylman, Washington, D. C. Tool-handle.	431,959	July 8	1445	366	52	291
Young, Andrew, East Randolph, N. Y. Bag-holder	435,474	Sept. 2	135	38	52	1401
Young, Charles, assignor of two-thirds to W. P. Cortis and J. W. Boyden, Chicago, Ill. Liquid-heater.	434,225	Aug. 12	1181	307	52	996
Young, Charles G., New York, N. Y. Safety device for electric circuits	424,665	Apr. 1	354	94	51	69
Young, Charles H., Manchester, N. H., assignor of two-thirds to W. Ziack, R. Emerson, W. A. Talcott, Rockford, Ill., and A. P. Olzendam, Manchester, N. H. Knitting narrowed tubular fabrics.	430,981	June 24	2944	{ 722 723 }	51	2065
Young, Charles S., Monroe, Wis., and F. Lewis, Rockford, Ill. Cover for tobacco-pails	437,321	Sept. 30	3114	815	52	1997
Young, Charles W., Easton, Pa. Cart-brake	432,219	July 15	1851	475	52	375
Young, Cornelius, Selma, Ala. Cotton huller and cleaner	432,921	July 22	2922	{ 749 750 }	52	589
Young, David. (See Hall and Young.)						
Young, David, Cleveland, Ohio. Clothes-line reel	438,215	Oct. 14	832	225	53	166
Young, Edward (See Elster, Young, and Knapp.)						
Young, Edward T., assignor of one-half to W. Scott, Detroit, Mich. Reversing mechanism for elevators	428,196	May 20	1762	445	51	1175
Young, Effie E., Orange, N. J. Card-game promoting the study of language.	422,682	Mar. 4	473	121	50	1227
Young, Elisha <i>et al.</i> (See Harris, Mifford B., assignor)						
Young, Frank A., Chicopee, assignor, by mesne assignments, to Merritt Manufacturing Company, Springfield, Mass. Type-writing machine.	428,738	May 27	2606	661	51	1354
Young, Frank E., Canton, Ohio. Combination-lock	420,528	Feb. 4	143	36	50	592
Young, George A., Brooklyn, N. Y. Drier.	442,213	Dec. 9	918	243	53	1449
Young, George A., Brooklyn, N. Y. Grinding-mill	442,848	Dec. 16	1947	501	53	1660
Young, Homer H., Kansas City, Mo. Underground electric conduit	442,162	Dec. 9	842	{ 225 226 }	53	1435
Young, John, assignor to Western Electric Company, Chicago, Ill. Fire-alarm signal-box	437,668	Sept. 30	3649	952	52	2104
Young, John C., and G. A. Davis, Neenah, Wis. Suction-box for paper-making machines	426,089	Apr. 22	2531	667	51	515
Young, John J., Williamsport, Pa. Thimble and rope clamp combined.	421,120	Feb. 11	1034	265	50	769
Young, John M., Lawrence, Neb. Compound for treating seeds.	424,843	Apr. 1	636	—	51	123
Young, John S., Defiance, Ohio. Wheel	431,927	July 8	1394	354	52	281
Young, John S., Defiance, Ohio. Washing-machine.	438,216	Oct. 14	832	226	53	166
Young, John W. (See Carey, Frank, assignor.)						
Young, Joseph C., <i>et al.</i> (See Carnahan, Cyrus M., assignor.)						
Young, Joseph M., Tilson's Mill, Va. Corn-planter.	419,095	Jan. 7	670	{ 175 176 }	50	141
Young, Maximilian, Chicago, Ill. Medicine-spoon	423,018	Mar. 11	996	262	50	1333
Young, McClintock, Frederick, Md. Brush	423,506	Mar. 18	1726	456	50	1481
Young, McClintock, Frederick, Md. Brush-machine.	423,507	Mar. 18	1728	455	50	1481
Young, McClintock, Frederick, Md. Brush-machine	423,508	Mar. 18	1729	{ 455 456 457 }	50	1481
Young, Oliver B., Detroit, Mich. Toy	442,931	Dec. 16	2104	542	53	1690
Young, Otis W., assignor of five-eighths to D. E. Moore, B. T. Bailey, Charles City, Iowa, W. G. Collins and J. B. Cable, Minneapolis, Minn. Boring and mortising machine.	427,818	May 13	1204	{ 303 304 }	51	1057
Young, Robert J., Philadelphia, Pa. Steam and hot water generator	432,811	July 22	2775	710	52	559
Young, Robert O., Homestead, assignor of one-half to H. Aiken, Pittsburg, Pa. Open-heart furnace	421,220	Feb. 11	1181	{ 303 304 }	50	796
Young, Tapley W., assignor of one-half to C. A. McEuen, Washington, D. C. Carbureting street-lamp	423,367	Mar. 11	1522	400	50	1433
Young, Thomas, Bradford, Pa. Wrench	425,647	Apr. 15	1857	496	51	379
Young, Thomas J., <i>et al.</i> (See Brown, Louis A., assignor.)						
Young, Thomas N. (See Pool, Francis W., assignor.)						
Young, Wesley, Dayton, Ohio. Implement for planting hedges.	425,531	Apr. 15	1675	{ 446 447 }	51	343
Young, William F., assignor of one-half to R. E. Adams and G. A. Hollister, Toledo, Ohio. Metal wheel	426,631	Apr. 29	3348	877	51	688
Young, William P., and C. D. Middlekauff, San Francisco, Cal. Vapor sad-iron	430,164	June 17	1616	402	51	1803
Youngblood, Eli L. (See Lowell, James E., assignor.)						
Youngkin, John A., <i>et al.</i> (See Blackmon, Albert M., assignor.)						
Youngkin, John A. and J. S. Sweet Home, Tex. Veterinary medicine	426,355	Apr. 22	2915	—	51	595
Youngkin, Josiah S. (See Youngkin, John A. and J. S.)						
Youngkin, Josiah S., <i>et al.</i> (See Blackmon, Albert M., assignor.)						
Youngman, Horace N. (See Boone, Robert, assignor.)						
Youns, Edward F., West Camp, N. Y. Type-writing machine.	438,971	Oct. 21	2005	536	53	394
Youns, Leonard G., and R. Richardson, Grant Park, Ill. Corn harvester and husker	438,972	Oct. 21	2009	{ 536 537 }	53	395
Yount, John B., Dixon, Cal. Device for laying out orchards	422,104	Feb. 25	2446	646	50	1051
Yule, George, assignor to Yule Machine Company, Newark, N. J. Ornamenting hats.	430,457	June 17	2102	518	51	1297
Yule Machine Company. (See Yule, George, assignor.)						
Yund, James H., Grand Island, Neb. Plate, cup, and saucer holder	428,543	May 20	2224	580	51	1276
Yznaga, J. M., <i>et al.</i> (See Young, Alexander H., assignor.)						
Zachary, James F., Chelsea, assignor of one-half to C. A. Eastman, Cambridge, and J. Y. Taylor, Boston, Mass. Puzzle	438,217	Oct. 14	834	226	53	166
Zalikowski, John (See Lewandowski and Zalikowski.)						
Zalinski, Edmund L. (See Reynolds and Zalinski.)						
Zalinski, Edmund L., Fort Hamilton, N. Y. Regulating firing-fluid delivery to pneumatic guns	430,101	June 10	1528	379	51	1776
Zalinski, Edmund L., U. S. Army, assignor to Pneumatic Dynamite Gun Company, New York, N. Y. Gas-pressure gun and operating the same	429,988	June 10	1336	331	51	1739
Zallée, John C., St. Louis, Mo. Roof	438,973	Oct. 21	2013	537	53	396
Zallud, Charles, assignor of one-half to I. Pforzheimer, New York, N. Y. Check-registering machine	432,686	July 22	2570	{ 658 659 660 }	52	520
Zallud, Charles, assignor of one-half to I. Pforzheimer, New York, N. Y. Check-record-ing machine	432,961	July 22	3003	{ 771 772 }	52	602
Zallud, Charles, and I. Pforzheimer, New York, N. Y. Ticket-registering machine	432,685	July 22	2565	{ 657 658 }	52	520
Zalud, Albert, Chicago, Ill. Horse-arrester	432,922	July 22	2924	750	52	589

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Zander, Louis, Oakland, Cal. Lamp-burner.....	424,666	Apr. 1	356	94	51	69
Zapp, John, New York, N. Y. Underground refuse-can.....	419,905	Jan. 21	1887	496	50	396
Zartman, Daniel R., et al. (See Musick, William, assignor.)						
Zattau, Charles, Morris, assignor to Coleman Hardware Company, Chicago, Ill. Spring-hinge.....	421,342	Feb. 11	1351	349	50	828
Zawisch, Franz. (See Klinik and Zawisch.)						
Zehren, Auguste. (See Zehren, Jean and A.)						
Zehren, Jean and A., Paris, France, assignors to N. Koch, Milwaukee, Wis. Valve and cut-off for steam, water, and other pipes.....	433,060	July 29	3170	815	52	641
Zeidler, William C., Toronto, Ontario, Canada, and A. Nowell, Chicago, Ill. Making key-boards.....	423,104	Mar. 11	1135	{ 294 295 }	{ 50 }	1358
Zeiger, William L. (See Willert and Zeiger.)						
Zeigler, Lyman H., Redkey, Ind. Road-cart.....	433,386	July 29	3635	938	52	735
Zeigler, Philip W., Manhattan, Kans. Wire-screen holder.....	436,974	Oct. 21	2014	538	53	396
Zeigler, William, Waverly, N. Y. Cake-cutter.....	433,431	July 29	3703	956	52	749
Zeigler, William R., assignor of one-half to M. S. Hoadley, Waverly, N. Y. Car-brake.....	442,085	Dec. 2	717	193	53	1403
Zeiber, John P. (See Funk and Zeiber.)						
Zein, Julius W., and J. Reichelt, La Crosse, Wis. Fire-escape.....	439,263	Oct. 28	2475	664	53	489
Zeis, John. (See Albers, Joseph, assignor.)						
Zeisloff, Jacob D., Foster, Pa. Coal-jig.....	437,743	Oct. 7	100	32	53	22
Zeitinger, Christian J., Chicago, Ill. Device for utilizing waste water-power from natural falls.....	432,923	July 22	2927	751	52	590
Zeitinger, Christian J., Zeitonia, Mo. Device for utilizing water-power of falls.....	442,000	Dec. 2	579	{ 157 158 }	{ 53 }	1376
Zeitschel, Berthold, Berlin, Germany. Regenerative gas-lamp.....	430,723	June 24	2540	621	51	1989
Zell, Benjamin F., assignor of one-half to A. Fogel, Orrville, Ohio. Cultivator.....	434,747	Aug. 19	2016	527	52	1168
Zell, Robert R., assignor to Campbell & Zell Company, Baltimore, Md. Steam-boiler.....	437,274	Sept. 30	3044	798	52	1985
Zeller, John B., Boston, Mass. Portable support and striker for triangles.....	437,744	Oct. 7	101	32	53	22
Zeller, John G., Richmond, Ind. Elevator-gate.....	424,917	Apr. 1	744	199	51	144
Zeller, William, assignor of one-half to H. Rasmusson, Moorhead, Minn. Railway-gate.....	442,001	Dec. 2	584	158	53	1377
Zellers, Mahlon M., and J. W. Denmead, Akron, Ohio. Match-machine.....	436,470	Sept. 16	1705	{ 448 449 450 451 452 }	{ 52 }	1716
Zellers, Theodor A., assignor to Ottawa Glass Company, Ottawa, Ill. Appliance for glass-flattening ovens.....	421,152	Feb. 11	1083	{ 278 279 }	{ 50 }	779
Zeltmacher, George E., New York, N. Y. Combined sash and belt.....	428,793	May 27	2684	680	51	1370
Zeman, Frank, Philadelphia, Pa. Dyeing.....	440,414	Nov. 11	1223	.....	53	855
Zerbe, J. S., et al. (See Lawton, Charles H., assignor.)						
Zerbe, John A., Dodge City, Kans. Multiple-movement device for transmitting and increasing motion.....	426,610	Apr. 29	3310	{ 568 569 }	{ 51 }	681
Zerr, John, assignor to United States Roll Paper Company, Quincy, Ill. Roll-paper holder and cutter.....	419,811	Jan. 21	1734	459	50	364
Ziebarth, Charles F., Jr., and F. C. Schadeewald, Osseo, Minn. Double-acting force-pump.....	431,960	July 8	1446	366	52	291
Ziegenfelder, C. T., et al. (See Argerbright, Daniel, assignor.)						
Ziegler, Charles F., Bloomington, Ill. Shoe-fastener.....	430,982	June 24	2945	723	51	2066
Ziegler, Charles G. (See Ziegler, John F. and C. G.)						
Ziegler, Edward H. (See Ziegler, John F. and C. G., assignors.)						
Ziegler, John F. and C. G., assignors of one-third to E. H. Ziegler, Toledo, Ohio. Well or cistern filter.....	436,763	Sept. 16	2175	571	52	1803
Ziegler, Oscar J., and W. A. Hance, assignors to Stover Bicycle Manufacturing Company, Freeport, Ill. Bicycle.....	431,308	July 1	418	103	52	85
Zimmer, George J. A., Elkhart, Ind. Signal-lantern.....	441,348	Nov. 25	2790	721	53	1166
Zimmer, Otto, assignor to R. Neumann & Co., Newark, N. J. Satchel.....	423,464	Mar. 18	1667	440	50	1469
Zimmer, Phillip, Hammondsport, N. Y. Steam-engine and valve mechanism therefor.....	440,527	Nov. 11	1415	{ 365 366 }	{ 53 }	890
Zimmerling, August F., Jackson, Mich. Lamp.....	442,299	Dec. 9	1042	274	53	1472
Zimmerling, August F., Jackson, Mich. Gas heating-stove.....	442,300	Dec. 9	1043	274	53	1473
Zimmerman, Charles H. (See Bryant, Zimmerman, and Becker.)						
Zimmerman, David, et al. (See Swegles, John, assignor.)						
Zimmerman, Frank T., Auburn, Ind. Windmill.....	418,859	Jan. 7	312	76	50	65
Zimmerman, George F. S., assignor of one-half to W. H. Blentlinger, Frederick, Md. Corn-harvester.....	427,531	May 6	762	189	51	963
Zimmerman, George F. S. and H. Frederick, Md. Shutter-blower.....	420,180	Jan. 28	2325	614	50	488
Zimmerman, Harry. (See Zimmerman, George F. S. and H.)						
Zimmerman, John, Cincinnati, Ohio. Meat-mixer.....	420,291	Jan. 28	2501	663	50	520
Zimmerman, John, and E. Barrath, assignors to Zimmerman Machine Company, Cincinnati, Ohio. Meat-cutting machine.....	431,638	July 8	937	235	52	195
Zimmerman Machine Company. (See Zimmerman and Barrath, assignors.)						
Zimmermann & Co., F. E. (See Zimmerman, Schmid, and Wunderle, assignors.)						
Zimmermann, Emil, A. Schmid, and G. Wunderle, assignors to F. E. Zimmermann & Co., New York, N. Y. Tubular cutter-lathe.....	420,982	Feb. 11	836	{ 216 217 }	{ 50 }	731
Zimmermann, Jakob, Augsburg, Bavaria, Germany. Potato-harvesting machine.....	428,794	May 27	2684	681	51	1370
Zimmermann, John G., Jr., and J. J., and R. A. Stiles, West Troy, N. Y. Car-brake.....	436,517	Sept. 16	1767	466	52	1727
Zimmermann, John J. (See Zimmerman and Stiles.)						
Zimmermann, Robert E., Beaver Falls, Pa. Carpet-stretcher.....	421,343	Feb. 11	1352	350	50	828
Zincke, August, administrator. (See Bogusch, Gustav and R. J.)						
Zink, John. (See Fry and Zink.)						
Zinn, Simon. (See Scheuber, August W., assignor.)						
Zinus, Jennie A. (See Rosa, Albert, assignor.)						
Zinsser, August, New York, N. Y. Barrel-lining.....	427,721	May 13	1049	.....	51	1027
Zipack, William, et al. (See Young, Charles H., assignor.)						
Zipernowsky, Carl, and M. Déri, Buda-Pesth, Austria-Hungary. Current-converting apparatus.....	433,758	Aug. 5	472	{ 122 123 }	{ 52 }	847
Zipernowsky, Carl, Buda-Pesth, M. Déri, Vienna, and O. T. Bláthy, Buda-Pesth, Austria-Hungary. Operating synchronous alternating-current motors.....	425,923	Apr. 15	2255	598	51	454
Zipernowsky, Charles, Buda-Pesth, Austria-Hungary. Switch for railways with vertical tracks.....	421,848	Feb. 18	2077	{ 546 547 }	{ 50 }	973
Zipernowsky, Charles, M. Déri, and O. T. Bláthy, Buda-Pesth, Austria-Hungary. Synchronous alternating-current electric motor.....	439,459	Oct. 28	2787	743	53	547
Zirikelback, Joseph, Buffalo, N. Y. Ratchet-bit brace.....	438,338	Oct. 14	1019	277	53	201
Zirkilton, Francis X., Philadelphia, Pa. Jewelry.....	424,749	Apr. 1	484	132	51	95

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Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
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Zisseler, David, Wetzlar, Prussia, Germany. Machine for making cement tubes	427,388	May 6	537	136	51	918
Zitlow, George, Tacoma, Wash. Combination-tool	439,336	Oct. 28	2603	694	53	513
Ziv, Jonas, and N. Davis, Chicago, Ill. Combined mop-wringer and squillgee	431,100	July 1	104	26	52	23
Ziv, Jonas, and N. Davis, Chicago, Ill. assignors, by mesne assignments, to said Davis. Scrubbing-brush	438,218	Oct. 14	835	226	53	167
Zoelch, Francis. (See Wohlmuth, Theodor, assignor.)						
Zogg, Nicholas, New York, N. Y. Sash-cord fastener	419,744	Jan. 21	1630	434	50	344
Zogg, Nicholas, New York, N. Y. Sash-weight attacher	429,403	June 3	462	109	51	1559
Zolk, Louis C., Louisville, Ky. Collapsible railway-car	421,344	Feb. 11	1353	350	50	829
Zöpke, Franz G. C., Berlin, Germany. Underground electric conduit	434,076	Aug. 12	942	247	52	950
Zuber, Henry, Norwich, Kans. Pipe or rod wrench	421,062	Feb. 11	957	246	50	754
Zuchtmann, Frederick, <i>et al.</i> (See Moore, Morris W., assignor.)						
Zumwalt, William A., Farmington, Cal. Gang-plow harrow	433,608	Aug. 5	249	66	52	805
Zwergern, Franz von und zu, Frankfort-on-the-Main, Germany, assignor of one-fourth to J. G. Eastland, San Francisco, Cal. Fire-arm	426,977	Apr. 29	3848	{1005 1006}	{51	784
Zwierzchowski, Alexandre S. (See Worms and Zwierzchowski.)						
Zwiesler, Louis, and J. Menchen, Kansas City, Mo. Weighing and measuring scoop	421,221	Feb. 11	1182	304	50	797

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Name, residence, and design.	No.	Date.	Official Gazette.	
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Adams, Charles F., and A. W. Rivett, assignors to Chicago Gas Stove Company, Chicago, Ill. Gas-stove	19,700	Mar. 18	50	1452
Adams, Peter, assignor to C. G. and W. J. Shepard, Buffalo, N. Y. Toy savings-bank	20,007	July 15	52	311
Adams, Samuel T., Mansfield, Mass., assignor to Rogers & Brother, Waterbury, Conn. Handle for spoons, &c	20,297	Nov. 11	53	762
Adams & Westlake Company. (See Willets, Ward W., assignor.)				
Adams, William, Philadelphia, Pa. Settee	19,767	Apr. 22	51	482
Adhesive Gimp Company. (See Salathe, Charles, assignor.)				
Alden, Dana K., Boston, Mass. Caster	20,134	Sept. 9	52	1542
Alexander, James H., assignor to T. Devlin, Philadelphia, Pa. Steam-pipe bracket	19,588	Jan. 21	50	308
Allen, Samuel L., Cinnaminson, N. J. Cultivator-blade	19,712	Mar. 25	50	1596
Allen, Samuel L., Cinnaminson, N. J. Cultivator-rake	19,713	Mar. 25	50	1593
Anderson, William, Hulton, Pa. Mantel	19,872 19,873 19,875 to 19,877	June 3	51	1471
Anderson, William, Hulton, Pa. Mantel		June 3	51	1471
Arensberg, John C., assignor to Thompson Glass Company, Limited, Uniontown, Pa. Pepper-pot or salt-shaker	20,042	July 22	52	461
Argersinger, Frank H., Newkirk Mills, N. Y. Game-board	20,117	Aug. 26	52	1229
Armstrong, Henry C., Providence, R. I. Wagon-body	20,206	Oct. 14	53	142
Armstrong, Henry C., Providence, R. I. Wagon-body	20,214	Oct. 21	53	280
Arnold, Constable & Co. (See McFadyen, William, assignor.)				
Australian Knitting Company. (See Kinsey, George D., assignor.)				
Australian Knitting Company. (See Kinsey, Peter S., assignor.)				
Babbitt, Seth W., assignor to Wilcox Silver Plate Company, Meriden, Conn. Ornamentation of silver or other table-ware	19,701 19,888 to 19,890 20,232 20,401 to 20,408	Mar. 18	50	1452
Babcock, George H., Plainfield, N. J. Roofing-tile		June 10	51	1624
Babcock, George H., Plainfield, N. J. Roofing-tile		Oct. 21	53	280
Babcock, George H., Plainfield, N. J. Roofing-tile		Dec. 16	53	1576
Backus, Edward, New York, N. Y. Bottle	19,892	June 10	51	1624
Balch, George H., assignor to Towle Manufacturing Company, Newburyport, Mass. Forks, spoons, &c	20,051	July 22	52	461
Barkentin, George S., assignor to P. & F. Corbin, New Britain, Conn. Latch-case	19,533	Jan. 7	50	1
Barkentin, George S., assignor to P. & F. Corbin, New Britain, Conn. Escutcheon-plate for door knobs and locks	20,035 20,036	July 15	51	312
Barkentin, George S., assignor to P. & F. Corbin, New Britain, Conn. Hinge	20,083	Aug. 12	52	907
Barlow, James, assignor to J. Moses, Trenton, N. J. Table-ware	19,572	Jan. 14	50	170
Barnard, Obed W., Seneca, Kans. Washing-machine dasher	19,856	May 27	51	1310
Barnes & Beyer. (See Hartley, Riley, assignor.)				
Barnhart Brothers & Spindler. (See Barnhart, Warren, assignor.)				
Barnhart Brothers & Spindler. (See Bear, Montague M., assignor.)				
Barnhart Brothers & Spindler. (See Heyer, Charles E., assignor.)				
Barnhart Brothers & Spindler. (See Jackson, William W., assignor.)				
Barnhart Brothers & Spindler. (See Lauschke and Schmohl, assignors.)				
Barnhart Brothers & Spindler. (See Schmohl and Lauschke, assignors.)				
Barnhart Brothers & Spindler. (See Whipple, Charles J., assignor.)				
Barnhart, Warren, assignor to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type	20,382	Dec. 9	53	1412
Baron & Co., S. (See Branson, Joseph, assignor.)				
Bartels, Charles V., Nelsonville, Ohio. Paving block or brick	19,714	Mar. 25	50	1596
Bartlett, Fred H., Yonkers, N. Y., assignor to M. J. Whittall, Worcester, Mass. Rug, &c	20,123	Sept. 2	52	1373
Bartmann, Theodor H., Brooklyn, N. Y. Fringe	20,171	Sept. 30	52	1954
Bascom, H. Clay, Lansingburg, and F. Ritchie, Troy, N. Y. Heating-stove	20,123 20,124 20,189 to 20,191	Dec. 23	53	1744
Bascom, Henry C., Lansingburg, and F. Ritchie, Troy, N. Y. Heating-stove		Oct. 7	53	2
Bascom, Henry C., Lansingburg, and F. Ritchie, Troy, N. Y. Cooking-stove	20,319	Nov. 18	53	926
Bascom, Henry C., Lansingburg, and F. Ritchie, Troy, N. Y. Heating-stove	20,320	Nov. 18	53	926
Bascom, Henry C., Lansingburg, and F. Ritchie, Troy, assignors to Simonds Manufacturing Company, New York, N. Y. Heating-stove	19,768	Apr. 22	51	482
Bascom, Henry C., Lansingburg, and F. Ritchie, Troy, assignors to Hanging Rock Stove Company, Hanging Rock, N. Y. Cooking-stove	20,105	Aug. 26	52	1229
Bascom, Henry C., and R. Galbraith, Lansingburg, N. Y., assignors to said Bascom. Cooking stove or range	20,240	Oct. 22	53	436
Bayley, George W., Brooklyn, N. Y. Lamp	20,053	July 22	52	461
Beach, Edward P., Newark, N. J. Brooch	20,008 20,009	July 15	52	311
Beach, Edward P., assignor to Unger Brothers, Newark, N. J. Bracelet	19,608	Jan. 28	50	439
Beach, Edward P., assignor to Unger Brothers, Newark, N. J. Sleeve-button or similar article	19,672	Mar. 4	50	1136
Beach, Edward P., assignor to Unger Brothers, Newark, N. J. Bracelet, &c	19,715	Mar. 25	50	1596
Beach, Edward P., assignor to Unger Brothers, Newark, N. J. Brooch or similar article	19,716	Mar. 25	50	1596
Beach, Edward P., assignor to Unger Brothers, Newark, N. J. Sleeve-button, &c	19,728	Apr. 1	51	2
Beach, Edward P., assignor to Unger Brothers, Newark, N. J. Brooch or similar article	19,729 19,730	Apr. 1	51	2
Bear, Montague M., assignor to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type	20,204	Oct. 14	53	142
Beauchemin, Louis N., Tacoma, Wash. Wear-plate for boots, &c	19,891	June 10	51	1624

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Beck, Frederick. (See Groeber, Paul, assignor.)				
Beck, Frederick. (See Hiscoe, Charles C., assignor.)				
Beckstein, William, Washington, D. C. Bread-pan	19,696	Mar. 11	50	1299
Beeler, Charles H., Jr., assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type	20,103	Aug. 12	52	908
Beiderhase, George B. (See Fuchs and Beiderhase.)				
Belcher, Etta, Providence, R. I. Bubble-blower	20,050	July 22	52	461
Benedict, William K., assignor to Co-Operative Building Plan Association, New York, N. Y. Exterior of a residence	19,554 to 19,559	Jan. 7	50	1
Benedict, William K., assignor to Co-Operative Building Plan Association, New York, N. Y. Exterior of a house	20,083 to 20,085	Aug. 12	52	907
Benfield, Thomas, Newark, N. J. Watch-case	19,589	Jan. 21	50	308
Benfield, Thomas, Newark, N. J. Watch-case	19,634	Feb. 4	50	564
Bennett, George H. (See Newman and Bennett.)				
Bentley, Charles E., New York, N. Y. Bottle	20,026	July 15	52	312
Benton, Linn B., Milwaukee, Wis. Font of printing-type	20,032	Aug. 26	52	1230
Berger, William H., Philadelphia, Pa. Gas-pipe band	19,673	Mar. 4	50	1136
Bergner & Co., Frederick. (See Bergner, William, assignor.)				
Bergner, William, assignor to F. Bergner & Co., Baltimore, Md. Album-case	20,347	Nov. 25	53	1096
Berliner, Henry, New York, N. Y. Scarf-fastener	20,010	July 15	52	311
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Back for brushes, mirrors, &c.	19,702	Mar. 18	50	1452
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Handle for combs, brushes, &c.	19,703	Mar. 18	50	1452
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Handle for combs, &c.	19,717	Mar. 25	50	1596
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Handle for combs	20,011 to 20,012	July 15	52	311
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Back for brushes	20,013 to 20,014	July 15	52	311
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Dish or basket	20,197	Oct. 14	53	142
Beuckmann, Henry G., Youngstown, Ohio. Scale weigh-beam standard	20,022	July 15	52	311
Bigelow Carpet Company. (See Halliday, Arthur L., assignor.)				
Binns, Richard W., Worcester, county of Worcester, England. Vase	20,060	July 29	52	610
Binns, Richard W., Worcester, county of Worcester, England. Vase, jug, or ewer	20,061	July 29	52	610
Binns, Richard W., Worcester, county of Worcester, England. Jug	20,062	July 29	52	610
Binns, Richard W., Worcester, county of Worcester, England. Jug or vase	20,063	July 29	52	610
Binns, Richard W., Worcester, county of Worcester, England. Ewer or jug	20,064	July 29	52	610
Binns, Richard W., Worcester, England. Jar and lid	20,293	Nov. 11	53	762
Birge & Sons, M. H. (See Booze, Charles, assignor.)				
Bissell Carpet Sweeper Company. (See Drew, Walter J., assignor.)				
Blackburn, Walter, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,259	Nov. 4	53	605
Blackmore, George C. (See Blackmore, Lawrence P., G. C., and J. J.)				
Blackmore, Joseph J. (See Blackmore, Lawrence P., G. C., and J. J.)				
Blackmore, Lawrence R., G. C., and J. J., Newark, N. J. Horizontal radiator	20,254	Nov. 4	53	605
Blackmore, Lawrence R., G. C., and J. J., Newark, N. J. Radiator	20,409	Dec. 16	53	1576
Blair, George W., Pittsburg, Pa. Lamp	19,718	Mar. 25	50	1596
Blesch, August F., and J. Hermann, Columbus, Ohio. Flushing-tank	19,850	May 27	51	1310
Block, Israel. (See Goldstein and Block.)				
Blum, Isaac, Baltimore, Md. Clasp for trousers	19,952	July 1	52	1
Blumenkrohn, Adolph, New York, N. Y. Trimming for belts	20,049	July 22	52	461
Bogert, Matt. J., Demarest, N. J. Box	20,356	Dec. 2	53	1262
Bogert, Matthew J., Demarest, N. J. Box	20,167	Sept. 23	52	1812
Boldenweck, William. (See Weinschenk and Boldenweck.)				
Boman, Claes W., New York, N. Y., assignor to Eagle Pencil Company. Fountain-pen case	20,156	Sept. 16	52	1670
Boman, Claes W., New York, N. Y., assignor to Eagle Pencil Company, of New York. Pen-tip	20,157	Sept. 23	52	1812
Boman, Claes W., New York, N. Y., assignor to Eagle Pencil Company, of New York. Pen-case	20,158	Sept. 23	52	1812
Bonninghausen, Hugo, Detroit, Mich. Billiard-table	19,560	Jan. 7	50	2
Boorum, William B., et al. (See Harte, Michael F., assignor.)				
Booth, Charles P., Atlantic City, N. J., assignor of one-half to S. Snellenburg, Philadelphia, Pa. Bottle	20,135	Sept. 9	52	1542
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	20,218 to 20,231	Oct. 21	53	280
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	20,321 to 20,333	Nov. 18	53	926
Boremsky, Max, New York, N. Y. Cigar	19,705	Mar. 18	50	1452
Boynton, Nathan S., assignor to Boynton & Son, Port Huron, Mich. Badge	20,159	Sept. 23	52	1812
Boynton & Son. (See Boynton, Nathan S., assignor.)				
Branson, Joseph, Brooklyn, assignor to S. Baron & Co., New York, N. Y. Fabric	20,073	Aug. 5	52	756
Braun, Henry C., and A. Ford-Lloyd, London, England. Case for electro-medical batteries	20,207	Oct. 14	53	142
Brehmer, Henry, assignor to D. W. Bruce, New York, N. Y. Font of printing-type	19,674 to 19,675	Mar. 4	50	1136
Brehmer, Henry, assignor to B. Danchy, New York, N. Y. Font of printing-type	20,192	Oct. 7	53	2
Bretzfeld, Samuel, New York, N. Y. Toy bank	20,375	Dec. 9	53	1412
Brewster & Company, J. B. (See Fest, William P., assignor.)				
Brewster & Company, J. B. (See Smith, Joseph C., assignor.)				
Brigham, William T., Baltimore, Md. Hat-band	20,255	Nov. 4	53	605
Brockway, Martha A., Boston, Mass. Spool	19,909	June 17	51	1788
Brodhag, Eduard. (See Pattiberg and Brodhag.)				
Bromley & Sons, John. (See Grubb, Reuben J., assignor.)				
Bromley & Sons, John. (See Pegel, Julius, assignor.)				
Bromley & Sons, John. (See Petzold, Adolph, assignor.)				
Bromley & Sons, John. (See Weiss, Albert, assignor.)				
Brooks, Frederick P., Norwich, N. Y. Chair	19,573	Jan. 14	50	170
Brooks, May, and D. S. Porter, Washington, D. C. Match-box and stamp-holder	19,574	Jan. 14	50	170
Bruce, David W. (See Brehmer, Henry, assignor.)				
Bruce, David W. (See Guildenstine, Julius, assignor.)				
Bruce, David W. (See Ruthven, Edwin C., assignor.)				
Bryant, William A., Glen Ridge, N. J. Finger-ring	20,058	July 29	52	610
Buckwalter Stove Company. (See McLaughlin, John K., assignor.)				
Buckwalter Stove Company. (See Spring, Henry T. and C. A., assignors.)				
Buffham, George R., Baltimore, Md. Ornamental stand	20,425	Dec. 23	53	1744

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Bull, Jeremiah N., Springfield, Mass. Halter-trimming	19,676	Mar. 4	50	1136
Burnett, Benjamin F., Brooklyn, assignor to H. L. Judd & Co., New York, N. Y. Mirror-frame, &c.	20,136	Sept. 9	52	1542
Burnett, Cedula M., Terre Haute, Ind. Toilet-stand for babies	19,706	Mar. 18	50	1452
Butler & Kelley. (See Kelley, Thomas W., assignor.)				
Button, Conyers, <i>et al.</i> (See La Tour, Charles T., assignor.)				
Caldwell, George S., Auburn, N. Y. Handle for sleighs, doors, &c	19,561	Jan. 7	50	2
Caldwell, George S., Auburn, N. Y. Handle for sleighs, &c	19,758	Apr. 15	51	302
Caldwell, George S., Auburn, N. Y. Guard-rail for wagons, sleighs, &c	19,893	June 10	51	1624
Cameron, Allan B., Williamsport, Pa. Panel	19,590	Jan. 21	50	308
	{ 20,360			
	{ to	Dec. 2	53	1262
	{ 20,362			
Cameron, Allan B., Williamsport, Pa. Panel	{ 20,366	Dec. 9	53	1412
	{ 20,367			
Cameron, Allan B., Williamsport, Pa. Panel	{ 20,380	Dec. 9	53	1412
	{ 20,413			
	{ to	Dec. 16	53	1576
	{ 20,416			
Canastota Casket Company. (See Sweet, Clarence D., assignor.)				
Cannon, Frederic C., New Haven, Conn. Coach-lamp	{ 19,751	Apr. 8	51	160
	{ 19,752			
Captain, William F., assignor to Marder, Luce & Co., Chicago, Ill. Font of printing-type	19,800	May 6	51	810
Capital Manufacturing Company. (See Gurney, Charles H., assignor.)				
Carhuft, Ellis R. (See Hall, George F., assignor.)				
Carr, Charles, assignor to J. B. Forsyth, Boston, Mass. Mat	{ 20,106	Aug. 26	52	1229
	{ to			
	{ 20,108			
Carter, Ezra W., Cohoes, N. Y. Drain or other pipe	19,677	Mar. 4	50	1136
Carter, Ezra W., Cohoes, N. Y. Drain or other pipe	19,731	Apr. 1	51	2
Chadwick, Charles E., Syracuse, N. Y. Vehicle-spring	19,732	Apr. 1	51	2
Chance Brothers & Company. (See Chance, Edward F., assignor.)				
Chance, Edward F., West Smethwick, county of Stafford, England. Ornamentation of glass	19,707	Mar. 18	50	1452
Chance, Edward F., assignor to Chance Brothers & Company, Limited, West Smethwick, near Birmingham, England. Ornamentation of glass	20,044	July 22	52	461
Chase, Andrew J., assignor to Kansas City Packing and Chase Refrigerating Company, Boston, Mass. Refrigerator-casing	{ 20,002	July 8	52	164
	{ 20,003			
Chicago Gas Stove Company. (See Adams and Rivett, assignors.)				
Christesen, Rudolph W. E., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Latch-case	19,639	Feb. 11	50	713
Christesen, Rudolph W. E., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock-case	20,099	Aug. 12	52	908
Clark & Co., T. B. (See Hawken, William H., assignor.)				
Cleveland, John B., Indianapolis, Ind. Fence-gate	19,769	Apr. 22	51	482
Clemencet, Louis, West Hoboken, N. J., assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,261	Nov. 4	53	605
Clogg, Levin H., Philadelphia, Pa. Tip-cup for umbrellas	{ 20,275	Nov. 11	53	762
	{ 20,276			
Clogg, Levin H., Philadelphia, Pa. Tip-cup for umbrellas	20,290	Nov. 11	53	762
Co-Operative Building Plan Association. (See Benedict, William K., assignor.)				
Co-Operative Building Plan Association. (See Dissosway, Crowel M., assignor.)				
Co-Operative Building Plan Association. (See Lacroix, Antoine, Jr., assignor.)				
Co-Operative Building Plan Association. (See Morison, Augustus B., assignor.)				
Co-Operative Foundry Company. (See Wilkinson, William H., assignor.)				
Collins, Timothy J., assignor to Ransom & Randolph, Toledo, Ohio. Barber's dressing-case	{ 19,777	Apr. 29	51	628
	{ 19,778			
Condell, John, New York, N. Y. Last	19,801	May 6	51	810
Convery, Robert A. (See Vaughn and Convery.)				
Cook & Bernheimer. (See Stent, Edward J. N., assignor.)				
Cook, Henry F., assignor to Fahy's Watch Case Company, Sag Harbor, N. Y. Knurl	{ 20,348	Nov. 25	53	1096
	{ 20,349			
Corbin, P. & F. (See Barkentin, George S., assignor.)				
Cortes, Auguste, New York, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,260	Nov. 4	53	605
Cottier, Jean G. C., New York, N. Y. Precious or imitation stone	20,043	July 22	52	461
Cottle, Shubael, New York, N. Y. Purse	19,591	Jan. 21	50	308
Cousen, Alfred, Detroit, Mich. Pot or jar	19,609	Jan. 28	50	439
Cox, Arthur W., Ballardvale, Mass. Table-knife	20,341	Nov. 18	53	926
Cox Stove Company, Abram. (See Rankin, Thomas I., assignor.)				
Crocker, Henry J., San Francisco, Cal. Inside wrapper for raisin-boxes	19,874	June 3	51	1471
Crowell, Gilbert L., Jr., Arlington, N. J., assignor to Dominick & Haff, New York, N. Y. Spoon, &c	19,802	May 6	51	810
Crowell, Gilbert L., Jr., Arlington, N. J., assignor to Dominick & Haff, New York, N. Y. Back for brushes, &c	19,803	May 6	51	810
Curran, John T., Brooklyn, assignor to Tiffany & Company, New York, N. Y. Fork, &c	19,650	Feb. 18	50	843
Curran, John T., Brooklyn, assignor to Tiffany & Company, New York, N. Y. Spoons, &c	20,173	Sept. 30	52	1954
Cusson, Japhet S., Fredonia, N. Y. Pad for harness breast-straps	20,277	Nov. 11	53	762
Danner, John, Canton, Ohio. Book-rack	20,074	Aug. 5	52	756
Danby, Burr. (See Brehmer, Henry, assignor.)				
De Haven, Isaac, Allegheny, Pa. Heating-stove	20,202	Oct. 21	53	280
Demartial, Gustave, Limoges, France. Dish	19,975	July 1	52	1
Demartial, Gustave, Limoges, France. Dish	20,291	Nov. 11	53	762
Demuth, Charles G., assignor to J. W. Fiske, New York, N. Y. Statue of a fireman	20,426	Dec. 23	53	1744
Derby Silver Company. (See Berry, Henry, assignor.)				
Devlin, Thomas. (See Alexander, James H., assignor.)				
Dieterich, Fred G., assignor to J. U. O'Meara, Washington, D. C. Front for vending-machines	20,251	Nov. 4	53	605
Dieterich, Fred G., and J. U. O'Meara, Washington, D. C.; said Dieterich assignor to said O'Meara. Indicator	20,121	Aug. 26	52	1230
Dissosway, Crowel M., assignor to Co-Operative Building Plan Association, New York, N. Y. Exterior of a house	20,098	Aug. 12	52	908
Dodge, Ezra S., Providence, R. I. Jeweler's finding-strip	19,834	May 13	51	972
Dominick & Haff. (See Crowell, Gilbert L., Jr., assignor.)				
Dominick & Haff. (See Whitney, John F., assignor.)				
Douglas, John W., Shelburne, Ontario, Canada. Weeding-hoe	19,562	Jan. 7	50	2
Douzel, Joseph, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,262	Nov. 4	53	605
Dowd, John C., New York, N. Y. Smoker's set	20,209	Oct. 21	53	280

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Dreher, Charles L., Lancaster, Pa. Handle for canes, umbrellas, &c	{ 19,844 to 19,846 }	May 20	51	1136
Dreher, Charles L., Lancaster, Pa. Handle for canes, umbrellas, &c	19,853	May 27	51	1310
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Casing for carpet-sweepers	19,859	May 27	51	1310
Dueber, John C., Newport, Ky. Watch-pendant	20,294	Nov. 11	53	762
Duncan & Sons, George. (See Miller, John E., assignor.)	20,202	Oct. 14	53	142
Dunlap & Sons, John. (See Lawton, Thomas L., assignor.)				
Dunlap & Sons, John. (See Schmidt, Walter A., assignor.)				
Dunne, James J., Winona, Ill. Show-case	20,154	Sept. 9	52	1542
Durr, Albert W., Philadelphia, Pa. Trimming	19,692	Mar. 11	50	1299
Duryea, William F., New York, N. Y. Watch-chain bar	19,759	Apr. 15	51	302
Dwyer, James, Detroit, Mich. Heating-stove	19,903	June 10	51	1624
Dyke, Actaeon L., Akron, Ohio. Shipping and exhibiting case	20,104	Aug. 12	52	908
Eagle Pencil Company. (See Boman, Claes W., assignor.)				
Eberhard Manufacturing Company. (See Schleicher, William A., assignor.)				
Edwards, George C., assignor to Holmes & Edwards Silver Company, Bridgeport, Conn. Spoon ...	19,770	Apr. 22	51	482
Eiseman, Nathan, Chicago, Ill. Clasp	19,897	June 10	51	1624
Elbel & Co. (See Gshwend, Paul, assignor.)				
Elnore, Charles, Brooklyn, N. Y. Dress goods	{ 20,184 to 20,185 }	Oct. 7	53	2
Ennes, Homer L., Sandusky, Ohio. Fence-post stub	20,137	Sept. 9	52	1542
Estey Organ Company. (See Fuller, Levi K., assignor.)				
Fahy's Watch Case Company. (See Cook, Henry F., assignor.)				
Fahy's Watch-Case Company. (See Schaefer, Casper, assignor.)				
Fairchild, Harry P., New York, N. Y. Match-box	19,563	Jan. 7	50	2
Fairchild, Harry P., New York, N. Y. Match-box	19,894	June 10	51	1624
Fairchild, Harry P., New York, N. Y. Match-box	19,910	June 17	51	1788
Fairchild, Harry P., New York, N. Y. Match-box	20,252	Nov. 4	53	605
Fairchild, Harry P., New York, N. Y. Handle for cutlery	20,256	Nov. 4	53	605
Fairchild, Harry P., New York, N. Y. Match-box	19,635	Feb. 4	50	564
Falcimaigne, Charles, Paris, France. Sunshade	19,857	May 27	51	1310
Feldmann, Moritz, New York, N. Y. Clasp for hose-supporters	19,733	Apr. 1	51	2
Fernow, John A. W., St. Louis, Mo. Bottle	20,056	July 29	52	610
Ferrell, Frank J., New York, N. Y. Hand-wheel	20,037	July 15	52	312
Fest, William P., Brooklyn, N. Y. Carriage-body				
Fest, William P., Brooklyn, assignor to J. B. Brewster & Company, New York, N. Y. Carriage- body	19,951	June 24	51	1950
Fest, William P., Brooklyn, assignor to J. B. Brewster & Company, New York, N. Y. Carriage- body	20,065	July 29	52	610
Feust, Sigmund, <i>et al.</i> (See Voit, George F., assignor.)				
Finckel, Martin L., <i>et al.</i> (See La Tour, Charles T., assignor.)				
Fishel, Henry W., New York, N. Y. Bracelet	20,298	Nov. 11	53	762
Fisher, Alvin L., New Brunswick, N. J. Bottle-cap	{ 19,854 to 19,855 }	May 27	51	1310
Fisher, Alvin L., New Brunswick, N. J. Bottle-cap	19,861	May 27	51	1310
Fisher, Edwin, New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet ..	{ 19,878 to 19,881 }	June 10	51	1624
Fisher, John J., Allentown, Pa. Radiator	20,131	Sept. 2	52	1374
Fiske, J. W. (See Demuth, Charles G., assignor.)				
Flaccus, Charles L., Pittsburg, Pa. Bottle	19,669	Feb. 25	50	994
Fleisch, Jacob H., New York, N. Y. Necktie	19,760	Apr. 15	51	302
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet ..	{ 19,804 to 19,809 }	May 6	51	810
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet ..	{ 19,812 to 19,820 }	May 6	51	810
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet ..	{ 20,301 to 20,313 }	Nov. 18	53	926
Folsom, James L., Brooklyn, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet ..	20,363	Dec. 2	53	1262
Forbes, Daniel, assignor to G. H. Hibbler, Brooklyn, N. Y. Ornamentation of bowls or dishes	19,642	Feb. 11	50	713
Ford-Lloyd, Arthur. (See Braun and Ford-Lloyd.)				
Ford, Samuel N., trustee. (See Jones, Montfort S., assignor.)				
Forsyth, James B. (See Carr, Charles, assignor.)				
Foster, James D., assignor to Foster Stove Company, Ironton, Ohio. Cooking-stove	20,115	Aug. 26	52	1229
Foster Stove Company. (See Foster, James D., assignor.)				
Fostoria Glass Company. (See Martin, Lucien B., assignor.)				
French, Albert C., Peotone, Ill. Hedge-knife	19,898	June 10	51	1624
Freyfogle, William H., Haverstraw, assignor to Hopkins & Dickinson Manufacturing Company, Brooklyn, N. Y. Escutcheon, &c.	20,138	Sept. 9	52	1542
Fuchs, Rudolph, Staten Island, N. Y., and G. B. Beiderhase, Jersey City, N. J. Brush or mirror back	{ 20,174 to 20,176 }	Sept. 30	52	1954
Fuller, Levi K., assignor to Estey Organ Company, Brattleborough, Vt. Organ-case	20,342	Nov. 18	53	926
Fuller, Levi K., assignor to Estey Organ Company, Brattleborough, Vt. Organ-case	20,419	Dec. 23	53	1744
Galbraith, Robert. (See Bascom and Galbraith.)				
Gardner, Frederick N., Beloit, Wis. Clamp	19,779	Apr. 29	51	628
Gebauer, Julius, assignor to J. Greer, Philadelphia, Pa. Pattern for cloth fabric	20,177	Sept. 30	52	1954
Gerstendörfer, Albert. (See Gerstendörfer, Max and A.)				
Gerstendörfer, Max and A., New York, N. Y. Bottle-case	19,592	Jan. 21	50	308
Geyser, John B. (See Torrance and Geyser.)				
Glaser, Gustave D., assignor to Glaser, Kohn & Co., Chicago, Ill. Bottle	19,864	June 3	51	1471
Glaser, Kohn & Co. (See Glaser, Gustave D., assignor.)				
Glaser, Kohn & Co. (See Kohn, Alfred, assignor.)				
Gnichwitz, Rudolph, Ashbourne, assignor to Mather Manufacturing Company, Philadelphia, Pa. Pont of printing-type	20,057	July 29	52	610
Gnichwitz, Rudolph, Ashbourne, assignor to Mather Manufacturing Company, Philadelphia, Pa. Pont of printing-type	20,364	Dec. 2	53	1262
Gnichwitz, Rudolph, Ashbourne, assignor to Mather Manufacturing Company, Philadelphia, Pa. Pont of printing-type	20,417	Dec. 16	53	1576

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Gniehwitz, Rudolph, Ashbourne, and E. C. Ruthven, assignors to Mather Manufacturing Company, Philadelphia, Pa. Font of type-border	19,821	May 6	51	810
Gobeille, Joseph L., Cleveland, Ohio, assignor to J. S. & M. Peckham, Utica, N. Y. Cooking-range	20,045	July 22	52	461
Goding, Edwin L., Portland, Me. Shoe	20,109	Aug. 26	52	1229
Godshalk, Edward H. (See Hampton, Richard M., assignor.)				
Goetting, Ernest C., New York, N. Y. Show card or stand	20,124	Sept. 2	52	1373
Goetting, Ernest C., New York, N. Y. Show card or stand	20,155	Sept. 9	52	1542
Goldstein, Jacob, and I. Block, New York, N. Y. Oil-stove	20,139	Sept. 9	52	1542
Goodman, Isaac, assignor to self, A. and W. Kaufman, and S. C. Klopfer, Philadelphia, Pa. Trimming	19,610	Jan. 28	50	439
Goodwin, Harvey B., Elmwood, Conn. Cuspidor	19,899	June 10	51	1624
Goodwin, William W., Bordentown, N. J. Gas-range	19,678 to 19,681	Mar. 4	50	1136
Goodwin, William W., Bordentown, N. J. Gas-range	19,734	Apr. 1	51	2
Gorham Manufacturing Company. (See Wilkinson, Walter, assignor.)				
Gorman, William, assignor to Peck, Stow & Wilcox Company, Southington, Conn. Ornamentation of builders' hardware	19,646	Feb. 11	50	714
Grant, Oscar F., assignor to Standard Manufacturing Company, Pittsburg, Pa. Casing for bathtubs	20,178	Sept. 30	52	1954
Grant, Oscar F., assignor to Standard Manufacturing Company, Pittsburg, Pa. Cradle for bathtubs	20,179	Sept. 30	52	1954
Greer, Joseph. (See Gebauer, Julius, assignor.)				
Groeber, Paul, Rutherford Park, N. J., assignor to F. Beck, New York, N. Y. Wall and ceiling covering	19,611 to 19,624	Jan. 28	50	439
Groeber, Paul, Rutherford Park, N. J., assignor to F. Beck, New York, N. Y. Wall and ceiling covering	19,670	Feb. 25	50	994
Grubb, Reuben J., Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	19,920	June 24	51	1949
Gschwend, Paul, Canton, Ohio. Terret	19,661	Feb. 18	50	843
Gschwend, Paul, Canton, Ohio. Bridle-bit	20,210	Oct. 21	53	280
Gschwend, Paul, assignor to Elbel & Co., Canton, Ohio. Check-rein hook	19,568	Jan. 7	50	2
Guildenstine, Julius, Roselle, N. J., assignor to D. W. Bruce, New York, N. Y. Font of printing-type	19,663	Feb. 25	50	993
Gumbinner, Paul, New York, N. Y. Fabric	20,286	Nov. 11	53	762
Gurney, Charles H., assignor to Capital Manufacturing Company, Chicago, Ill. Handle for pulling traps	19,980	July 1	52	1
Gurney, Charles H., assignor to Capital Manufacturing Company, Chicago, Ill. Tack-puller	19,981	July 1	52	1
Gurney, Edward. (See Levey, Charles, assignor.)				
Gurney, Edward, Toronto, Ontario, Canada. Hot-water or steam radiator	19,625	Jan. 28	50	439
Gutmann, Emil, New York, N. Y. Back-piece for suspenders	19,735	Apr. 1	51	2
Haas, Frank A., New York, N. Y., assignor to M. J. Whittall, Worcester, Mass. Rug, &c.	20,125	Sept. 2	52	1373
Haas, Leonard J., New York, N. Y. Lady's vest	19,687	Mar. 4	50	1136
Hahn, George W., assignor to H. J. Heinz Company, Pittsburg, Pa. Bottle-cap	19,835	May 13	51	972
Haley, Jonathan, Fostoria, Ohio. Toothpick-holder	20,186	Oct. 7	53	2
Hall, George F., assignor of one-half to E. R. Carhuff, Newark, N. J. Rocking-chair base	19,693	Mar. 11	50	1239
Hall, Zachary T., Philadelphia, Pa. Toy money-box	20,076	Aug. 5	52	756
Halliday, Arthur L., New York, N. Y., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet	20,193	Oct. 7	53	2
Hamm, Charles, assignor to G. A. Macbeth, Pittsburg, Pa. Lamp-chimney	19,836	May 13	51	972
Hammerstein, Alfred, assignor of one-half to E. Ikelheimer, New York, N. Y. Lamp-screen	19,996	July 1	52	1
Hampton, Richard M., assignor to E. H. Godshalk, Philadelphia, Pa. Knitted fabric	20,111	Aug. 26	52	1229
Hancock, Joseph L., Chicago, Ill. Breast-pump	19,593	Jan. 21	50	308
Hanging Rock Stove Company. (See Bascom and Ritchie, assignors.)				
Harder, Charles N. (See Sagendorph, Longley L., assignor.)				
Hargrave, George, Philadelphia, Pa. Skirt	20,295	Nov. 11	53	762
Harris, Joseph T., New York, N. Y. Salt or pepper box	20,140	Sept. 9	52	1542
Harte, Michael F., Brooklyn, assignor to W. B. Boorum and G. L. Pease, New York, N. Y. Photographic album	20,000	July 1	52	2
Hartford Carpet Company. (See Folsom, James L., assignor.)				
Hartford Carpet Company. (See Heinigke, Otto, assignor.)				
Hartford Carpet Company. (See Hunt, Henry, assignor.)				
Hartley, Riley, assignor to Barnes & Beyer, Philadelphia, Pa. Curtain	20,070	Aug. 5	52	756
Haviland, Charles E., Limoges, France. Dish	19,594 to 19,596	Jan. 21	50	308
Haviland, Charles E., Limoges, France. Dish	19,651	Feb. 18	50	843
Haviland, Charles E., Limoges, France. Ornamentation of dishes	19,849	May 27	51	1310
Hawken, William H., assignor to T. B. Clark & Co., Honesdale, Pa. Ornamentation of glassware	19,780	Apr. 29	51	628
Hawkes, Thomas G., Corning, N. Y. Ornamentation of glassware	19,865	June 3	51	1471
Hawkes, Thomas G., Corning, N. Y. Ornamentation of glassware	20,132	Sept. 2	52	1374
Hawkes, Thomas G., Corning, N. Y. Ornamentation of glassware	20,257	Nov. 4	53	605
Hayden, William B., Columbus, Ohio. Hame line-ring	19,761	Apr. 15	51	302
Haynes, David F., Baltimore, Md. Bowl or basin	19,575	Jan. 14	50	170
Haynes, David F., Baltimore, Md. Ewer or jug	19,576	Jan. 14	50	170
Haynes, Will P., Cortland, N. Y. Music-rack	20,168	Sept. 23	52	1812
Healy, John J., Far Rockaway, N. Y. Bottle	19,577	Jan. 14	50	170
Hecht, Max, New York, N. Y. Belt ornament	20,368	Dec. 9	53	1412
Hecht, Max, New York, N. Y. Belt ornament	20,410	Dec. 16	53	1576
Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	19,811	May 6	51	810
Heinigke, Otto, New Utrecht, N. Y., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	20,314 to 20,315	Nov. 18	53	926
Heinz Company, H. J. (See Hahn, George W., assignor.)				
Heinz, Henry J., Pittsburg, Pa. Bottle	19,911	June 17	51	1788
Heiter, Simon, New York, N. Y. Parasol	19,632 to 19,633	Feb. 18	50	843
Hero Fruit Jar Company. (See Perry, Frank W., assignor.)				
Herrick, Carleton E., Marietta, Wis. Toy	20,187	Oct. 7	53	2
Herrick, Frank J., New Britain, Conn. Belt-clasp	19,578 to 19,580	Jan. 14	50	170
Herrick, Frank J., New Britain, Conn. Combination-tool	19,913	June 17	51	1788
Herrick, Frank J., New Britain, Conn. Belt-clasp	20,110	Aug. 26	52	1229
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Clasp for belts	19,863	May 27	51	1310

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Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Belt-clasp	20,141	Sept. 9	52	1542
Herrmann, Jonas. (See Blesch and Herrmann.)				
Heyer, Charles E., assignor to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type	20,205	Oct. 14	53	142
Hibbler, George H. (See Forbes, Daniel, assignor.)				
Hicks, William, assignor of one-half to E. B. Russel, Danville, Ky. Ironing-table	19,852	May 27	51	1310
Higby, Luther L., Fort Worth, Tex. Advertising-banner	20,241	Oct. 28	53	436
Hill, Thomas, Fort Wayne, Ind. Organ-case	19,915	June 17	51	1788
Hills, Lester S., Chicago, Ill. Gentlemen's neck-wear	19,597	Jan. 21	50	308
Hiscoe, Charles C., assignor to F. Beck, New York, N. Y. Wall and ceiling covering	19,598 to 19,604	Jan. 21	50	308
Holder, John T., Geneva, Fla. Rustic table or stand	19,837	May 13	51	972
Holmes & Edwards Silver Company. (See Edwards, George C., assignor.)				
Holmes & Edwards Silver Company. (See Wilks, Walter L., assignor.)				
Hoop, James W., Huntingdon, Pa. Poker	20,142	Sept. 9	52	1542
Hopkins & Dickinson Manufacturing Company. (See Freyfogle, William H., assignor.)				
Horan, Henry, East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	19,882	June 10	51	1624
Horn, William C., Orange, N. J., assignor to Koch, Sons and Company, New York, N. Y. Album-leaf	20,015	July 15	52	311
House, George V., Jr., New York, N. Y. Truss-webbing	19,905	June 17	51	1788
Houts, Andrew J., St. Louis, Mo. Bottle	19,847	May 27	51	1310
Howard, Frank H. (See Walker and Howard.)				
Howard, Stephen C., Providence, R. I. Back for brushes	20,038	July 15	52	312
Hubbard, George M., New Haven, Conn. Belt-clasp	19,860	May 27	51	1310
Hunt, Henry, Greenville, N. J., assignor to Hartford Carpet Company, Hartford, Conn. Carpet	20,316	Nov. 18	53	926
Hunt, William F., London, England. Receptacle for ice-cream	20,075	Aug. 5	52	756
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Combination type-border	19,659	Feb. 18	50	843
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of type	19,660	Feb. 18	50	843
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type	20,169	Sept. 23	52	1812
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type	20,198	Oct. 14	53	142
Ikelheimer, Emanuel. (See Hammerstein, Alfred, assignor.)				
Irwin, George M., Pittsburg, Pa. Surface ornamentation of jars	20,059	July 29	52	610
Jackson, Aaron T. (See Smith and Jackson.)				
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c.	20,077 20,078	Aug. 5	52	756
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c.	20,427 20,428	Dec. 23	53	1744
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Back of brush, mirror, &c.	20,429 to 20,433	Dec. 23	53	1744
Jackson, Milton, Philadelphia, Pa. Padlock	20,016	July 15	52	311
Jackson, William W., Philadelphia, Pa., assignor to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type	19,753	Apr. 8	51	160
Jackson, William W., assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type	19,810	May 6	51	810
Jacobs, Winthrop L., East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	19,781 19,782	Apr. 29	51	628
Jacobs, Winthrop L., East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	19,883 19,884	June 10	51	1624
Jacobs, Winthrop L., East Orange, N. J., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	20,039	July 15	52	312
Jennings, Arthur O., Southport, Conn. Clock-case	19,822	May 6	51	810
Jewett & Co., Sherman S. (See Walther, Charles F., assignor.)				
Johnson, Ephraim S., Jr., New York, N. Y. Pen-holder	20,215	Oct. 21	53	280
Johnson, Seth W., New York, N. Y. Printed fabric	19,564	Jan. 7	50	2
Jolley, Joseph H., Philadelphia, Pa. Stair-button	19,754	Apr. 8	51	160
Jones, Frederick V., assignor to United Zylonite Company, Zylonite, Mass. Toilet-comb	20,071	Aug. 5	52	756
Jones, Frederick V., assignor to United Zylonite Company, Zylonite, Mass. Brush or mirror back	20,112	Aug. 26	52	1229
Jones, Melville D., Somerville, Mass. Shelf-bracket	20,233	Oct. 21	53	280
Jones, Montfort S., assignor of one-half to S. N. Ford, trustee, Shreveport, La. Society-emblem	19,862	May 27	51	1310
Judd & Co., H. L. (See Burnett, Benjamin F., assignor.)				
Kansas City Packing and Chase Refrigerating Company. (See Chase, Andrew J., assignor.)				
Kaufman, Abraham, et al. (See Goodman, Isaac, assignor.)				
Kaufman, William, et al. (See Goodman, Isaac, assignor.)				
Keep, William J., Detroit, Mich. Heating-stove	19,921	June 24	51	1949
Keep, William J., Detroit, Mich., assignor to Lamson & Sessions Company, Cleveland, Ohio. Nut for mica-frame bolts	19,645	Feb. 11	50	713
Keep, William J., and C. Wipfler, Detroit, Mich. Heating-stove	19,929	June 24	51	1950
Keifel, Fred. W., Jr., Louisville, Ky. Fire-place	20,033	July 15	52	312
Kelley, Thomas W., Brooklyn, assignor to Butler & Kelley, New York, N. Y. Card	19,901	June 10	51	1624
Kelly, John T., Brooklyn, N. Y. Pipe-coupling	20,236	Oct. 28	53	436
Kolsh, Charles, assignor to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Trimming	19,581	Jan. 14	50	170
Kernan, Francis, Jr. (See Landers and Kernan.)				
Kevan, John, Allegheny, Pa. Hanging banner	20,234	Oct. 21	53	280
Keys, William J., York Hill, Loughton, England. Button-hook	20,160	Sept. 23	52	1812
Kinnear, William R., Columbus, Ohio. Ceiling	19,755	Apr. 8	51	160
Kinsey, George D., Brooklyn, N. Y., assignor to Australian Knitting Company, Paterson, N. J. Knitted fabric	19,664	Feb. 25	50	993
Kinsey, Peter S., Newark, assignor to Australian Knitting Company, Paterson, N. J. Knitted fabric	19,647 19,736	Feb. 11 Apr. 1	50 51	714 2
Kleineick, Hugo, Newark, N. J. Violin-case				
Klopfer, Sylvester C., et al. (See Goodman, Isaac, assignor.)				
Koch, Sons and Company. (See Horn, William C., assignor.)				
Kohn, Alfred, assignor to Glaser, Kohn & Co., Chicago, Ill. Bottle	19,866	June 3	51	1471
Komor, Norie, New York, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,263	Nov. 4	53	605
Kromer, Harry C., Baltimore, Md. Laundry-wagon	20,122	Aug. 26	52	1230
Krouse, Andrew, Bridgeport, Conn. Cane or umbrella handle	19,900	June 10	51	1624
La Pierre, Frank H., New York, N. Y. Plate for canes or umbrella-handles	20,170	Sept. 23	52	1812

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La Tour, Charles T., assignor to C. Button and M. L. Finckel, Philadelphia, Pa. Ornament for hoods, &c.	19,867	June 3	51	1471
Lacroix, Antoine, Jr., Brooklyn, assignor to Co-Operative Building Plan Association, New York, N. Y. Exterior of a residence.	19,565	Jan. 7	50	2
Lacroix, Antoine, Jr., Brooklyn, assignor to Co-Operative Building Plan Association, New York, N. Y. Exterior of a house.	{ 20,087 to 20,090 }	Aug. 12	52	908
Lamond, Angus, Takoma, D. C. Sewer-block	20,357	Dec. 2	53	1262
Lamson & Sessions Company. (See Keep, William J., assignor.)				
Landers, William H., Syracuse, and F. Kernan, Jr., Utica, assignors to Syracuse Stove Works, Syracuse, N. Y. Heating-stove.	20,438	Dec. 30	53	1890
Lange & Co., Warren. (See Lange, John H., assignor.)				
Lange, John H., assignor to W. Lange & Co., New York, N. Y. Paper-hangings.	20,194	Oct. 7	53	2
Lapham-Dodge Company. (See Sargent, Samuel R., assignor.)				
Lau, Rudolph, Hoboken, N. J. Curtain-pole end	19,582	Jan. 14	50	170
Lauschke, Ernst. (See Schmohl and Lauschke.)				
Lauschke, Ernst, and J. Schmohl, assignors to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type.	19,997	July 1	52	1
Lauschke, Ernst, and J. Schmohl, assignors to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type.	20,244	Oct. 28	53	436
Lawton, Thomas L., Philadelphia, Pa., assignor to J. Dunlap & Sons. Carpet	{ 19,654 to 19,657 }	Feb. 18	50	843
Lazarus, Augustus A., et al. (See Kelsh, Charles, assignor.)				
Lazarus, Augustus A., et al. (See Lipper, Benjamin, assignor.)				
Leding, Robert, Washington, D. C. Handle for spoons, forks, &c.	{ 20,338 20,339 }	Nov. 18	53	926
Lee, George W., Schenectady, N. Y. Sash-cord fastener.	19,719	Mar. 25	50	1596
Lee, James R. (See Torsch and Lee.)				
Lee, Lewis S., Philadelphia, Pa. Carriage-robe.	20,243	Oct. 28	53	436
Lehman, Otto A., Hoboken, N. J. Lady's hand-bag	20,153	Sept. 9	52	1542
Leschhorn, Friedrich, New York, N. Y. Trimming	19,626	Jan. 28	50	439
Lessard, Benjamin J., assignor of one-half to T. Pillow, Toronto, Ontario, Canada. Dust-brush.	20,006	July 8	52	164
Levey, Charles, assignor to E. Gurney, Toronto, Ontario, Canada. Hot-water or steam radiator.	19,627	Jan. 28	50	439
Levy, Herman, New York, N. Y. Ornamentation of pile fabrics	19,906	June 17	51	1788
Lewis, Eugene H., St. Joseph, Mich. Building-block	20,242	Oct. 28	53	436
Lewis, Eugene H., St. Joseph, Mich. Building-block	20,287	Nov. 11	53	762
Lipper, Benjamin, et al. (See Kelsh, Charles, assignor.)				
Lipper, Benjamin, assignor to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Dress or upholstery trimming.	20,086	Aug. 12	52	908
Littman, Selig. (See Schneekloth, Hans A., assignor.)				
Lochbaum, Norbert, Berlin, Germany. Photographic album	19,720	Mar. 25	50	1596
Lochbaum, Norbert, Berlin, Germany. Photographic album	19,737	Apr. 1	51	2
Locke, Edward G., Chicago, Ill. Badge	20,365	Dec. 2	53	1262
Lockwood, James F., Philadelphia, Pa. Toy savings-bank	20,054	July 22	52	462
Loew, John M., Brooklyn, N. Y. Loaf-bread	20,420	Dec. 23	53	1744
Londergon, William H., Chicago, Ill. Eraser	19,628	Jan. 28	50	439
Lowell Manufacturing Company. (See Fisher, Edwin, assignor.)				
Lowell Manufacturing Company. (See Horan, Henry, assignor.)				
Lowell Manufacturing Company. (See Jacobs, Winthrop L., assignor.)				
Lowell Manufacturing Company. (See Poole, Edward, assignor.)				
Lowell Manufacturing Company. (See Swapp, Charles W., assignor.)				
Lyon John G., Pittsburg, Pa. Inkstand-cover.	20,046	July 22	52	461
Lyon, John G., Pittsburg, Pa. Glassware	20,411	Dec. 16	53	1576
Mabie, George W., Brooklyn, N. Y. Pen-holder.	20,040	July 15	52	312
MacKellar, Smiths & Jordan Company. (See Beeler, Charles H., Jr., assignor.)				
MacKellar, Smiths & Jordan Company. (See Ihlenburg, Herman, assignor.)				
MacKellar, Smiths & Jordan Company. (See Jackson, William W., assignor.)				
Macbeth, George A. (See Hamm, Charles, assignor.)				
Maddock, Henry. (See Steel, George, assignor.)				
Mann, William H., Buffalo, N. Y. Box	19,697	Mar. 11	50	1299
Marder, Luce & Co. (See Capitain, William F., assignor.)				
Marks, Solomon, Cincinnati, Ohio. Pattern for ornamentation of slate-frames	20,245	Oct. 28	53	436
Marsh, Horace C., Rockford, Ill. Miter-box	19,629	Jan. 28	50	439
Martin, Lucien B., Fostoria, Ohio, assignor to Fostoria Glass Company. Inkstand	19,953	July 1	52	1
Martin, Lucien B., Fostoria, Ohio, assignor to Fostoria Glass Company. Ornamentation of glassware.	20,018	July 15	52	311
Martineau, Joseph R., Philadelphia, Pa. Fabric for children's carriages	19,566	Jan. 7	50	2
Mason, John, New York, N. Y. Handle for spoons, forks, &c.	20,381	Dec. 9	53	1412
Mather Manufacturing Company. (See Gnichwitz, Rudolph, assignor.)				
Mather Manufacturing Company. (See Gnichwitz and Ruthven, assignors.)				
Mather Manufacturing Company. (See Schmohl and Lauschke, assignors.)				
Mather, Richard H., Windsor, Conn. Steam-engine bed.	19,923	June 24	51	1949
Mathieu Henri, assignor to Sté Dufaux, Mathieu & André, Paris, France. Clasp for corsets	20,023	July 15	52	312
Manrer, Frederick, Peoria, Ill. Chimney top or cap	19,823	May 6	51	810
McCann, Charles A., Kingston, N. Y. Saw-handle	19,904	June 10	51	1624
McDonough, Thomas, Montclair, N. J. Hoe	20,188	Oct. 7	53	2
McFadyen, William, Glasgow, county of Lanark, Scotland, assignor to Arnold, Constable & Co., New York, N. Y. Rug.	19,583	Jan. 14	50	170
McGovern, Francis P., New York, N. Y. Household altar or shrine	19,922	June 24	51	1949
McKerahan, Charles, Allegheny, Pa. Inkstand	20,211	Oct. 21	53	280
McLaughlin, John K., Philadelphia, assignor to Buckwalter Stove Company, Royer's Ford, Pa. Heating-stove	20,418	Dec. 16	53	1576
McLean, John, Brooklyn, N. Y. Gate	{ 19,771 19,772 }	Apr. 22	51	482
McLean, John, Brooklyn, N. Y. Fence ornament	19,773	Apr. 22	51	482
McMurry, Joseph, assignor of one-half to Peerless Lead Glass Works, Pittsburg, Pa. Lamp-chimney	19,838	May 13	51	972
Meguin, George, Tremont, N. Y., assignor to M. J. Whittall, Worcester, Mass. Rug, &c.	20,126	Sept. 2	52	1374
Megson, Richard, Lawrence, Mass. Cake	20,434	Dec. 23	53	1744
Meinecke, Christian W., Jersey City, N. J. Pot or jar	19,762	Apr. 15	51	302
Meinecke, Christian W., Jersey City, N. J. Bottle	{ 20,376 20,377 }	Dec. 9	53	1412
Melvin, Duncan L., North Brookfield, Mass. Hammer	20,017	July 15	52	311
Merkel, George, Philadelphia, Pa. Hat-rack	20,024	July 15	52	312

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Mersereau, William T., South Orange, N. J. Bedstead	20,353	Dec. 2	53	1262
Meyer, Charles T. and V. E., Bergen, N. J. Oil-cloth	19,783 to 19,794	Apr. 29	51	628
Meyer, Charles T. and V. E., Jersey City, N. J. Oil-cloth	20,353 to 20,399	Dec. 9	53	1412
Meyer, Charles T. and V. E., Bergen, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth	19,824 to 19,829	May 6	51	810
Meyer, Charles T. and V. E., Jersey City, N. J., assignors to E. C. Sampson, New York, N. Y. Oil-cloth	19,930 to 19,938	June 24	51	1950
Meyer, George U., Providence, R. I. Ornamental chain	20,052	July 22	52	461
Meyer, Victor E. (See Meyer, Charles T. and V. E.)				
Miller, Henry, assignor of three-fourths to T. Miller, D. H. Stoeck, and A. A. Moore, Pittsburg, Pa. Glass paper-weight	19,858	May 27	51	1310
Miller, Henry, assignor of three-fourths to T. Miller, D. H. Stoeck, and A. A. Moore, Pittsburg, Pa. Door-knob	19,976	July 1	52	1
Miller, Henry, assignor of three-fourths to T. Miller, D. H. Stoeck, and A. A. Moore, Pittsburg, Pa. Flower-vase	19,977	July 1	52	1
Miller, John E., assignor to G. Duncan & Sons, Pittsburg, Pa. Table-ware	19,871	June 3	51	1471
Miller, Thomas, <i>et al.</i> (See Miller, Henry, assignor.)				
Milliken, Benjamin D., Somerville, Mass. Twine-box	19,691	Mar. 4	50	1136
Mistrot, F. E. (See Zanetti, Fortunato C., assignor.)				
Moffat, John B., assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,264	Nov. 4	53	605
Monahan, Frank A., assignor to J. H. Pocock Can Company, St. Louis, Mo. Can	19,738	Apr. 1	51	2
Monteith, William, Plymouth, Ohio. Coin-receptacle	19,708	Mar. 18	50	1452
Montgomery, Harry C., Cleveland, Ohio. Sink-trap	20,421	Dec. 23	53	1744
Moore, Alexander P., Chicago, Ill. Bottle	19,640	Feb. 11	50	713
Moore, Alva A., <i>et al.</i> (See Miller, Henry, assignor.)				
Moore, Van Zandt M., Milwaukee, Wis. Register	19,839	May 13	51	972
Morgan, Frank E., assignor to New Haven Clock Company, New Haven, Conn. Clock-case	19,868 to 19,870	June 3	51	1471
Morison, Augustus B., Jersey City, N. J., assignor to Co-Operative Building Plan Association, New York, N. Y. Exterior of a house	20,091 to 20,093	Aug. 12	52	908
Morse, John H., Shady Grove, Ky. Kitchen-rack	19,907	June 17	51	1788
Moses, James. (See Barlow, James, assignor.)				
Mott Iron Works, J. L. (See Peet, William C., assignor.)				
Mott Iron Works, J. L. (See Reid, John, assignor.)				
Mott Iron Works, J. L. (See Tweeddale, William, assignor.)				
Munn, William H., Milwaukee, Wis. Burner for oil or gas stoves	19,641	Feb. 11	50	713
Myrick, George, and W. Roller, assignors to Myrick, Roller & Holbrook, Philadelphia, Pa. Spoon or similar article	19,709	Mar. 18	50	1452
Myrick, Roller & Holbrook. (See Myrick and Roller, assignors.)				
Nelson, Charles R., Portland, Me. Radiator	19,739	Apr. 1	51	2
New Haven Clock Company. (See Morgan, Frank E., assignor.)				
Newman, Moses, and G. H. Bennett, New York, N. Y. Money-box	19,569	Jan. 7	50	2
Noble, William J., New York, N. Y. Burial-casket	19,567	Jan. 7	50	2
Noble, William W., Philadelphia, Pa. Stove-plate	20,100	Aug. 12	52	908
North & Judd Manufacturing Company. (See Herrick, Frank J., assignor.)				
O'Meara, John U. (See Dieterich, Fred G., assignor.)				
O'Meara, John U. (See Dieterich and O'Meara.)				
Ottinger, Charles, Philadelphia, Pa. Hammer	19,689	Mar. 4	50	1136
Overton, Charles C., Coney Island, N. Y. Dish	19,690	Mar. 4	50	1136
Palmer, Horace A., Erie, Pa. Sewer-grate	19,636	Feb. 4	50	564
Palmer, Stephen, Lansingburg, N. Y. Sash-cord-guide face-plate	19,570	Jan. 7	50	2
Parton, Henry W., assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,266 to 20,272	Nov. 4	53	606
Parton, Henry W., assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,278 to 20,285	Nov. 11	53	762
Patching, Alexander W., Birmingham, England. Clasp or buckle for belts or sashes	20,094	Aug. 12	52	908
Pattberg & Brothers, Lewis. (See Pattberg and Brodhag, assignors.)				
Pattberg, Hilarius, and E. Brodhag, Jersey City, N. J., assignors to L. Pattberg & Brothers, New York, N. Y. Album cover or case	20,343	Nov. 18	53	926
Patterson, James B., Philadelphia, Pa. Hammock-stretcher	20,102	Aug. 12	52	908
Pearsall, Charles W., Syracuse, N. Y. Hose-nozzle	19,908	June 17	51	1788
Pearsall, Richard S., Sea Cliff, N. Y. Scissors or shears	20,422	Dec. 23	53	1744
Pearson, Edward M., Wheeling, W. Va. Dish	20,118	Aug. 26	52	1229
Pearson, George S., Waterbury, assignor to Tucker Manufacturing Company, Waterville, Conn. Drawer-pull handle	20,246	Oct. 28	53	436
Pease, George L., <i>et al.</i> (See Harte, Michael F., assignor.)				
Peck, Charles M., New Haven, Conn. Bracket	20,172	Sept. 30	52	1954
Peck, Stow & Wilcox Company. (See Gorman, William, assignor.)				
Peckham, J. S. & M. (See Gobeille, Joseph L., assignor.)				
Pedersen, Johannes T., New York, N. Y. Tool-handle	20,358	Dec. 2	53	1262
Peerless Lead Glass Works. (See McMurtry, Joseph, assignor.)				
Peet, William C., assignor to J. L. Mott Iron Works, New York, N. Y. Leg for sinks, &c.	19,698	Mar. 11	50	1300
Pegel, Julius, Philadelphia, Pa., assignor to J. Bromley & Sons. Table-cover, &c.	20,180	Sept. 30	52	1954
Pegel, Julius, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	20,369	Dec. 9	53	1412
Pegel, Julius, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	20,372 to 20,373	Dec. 9	53	1412
Pegel, Julius, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	20,435	Dec. 23	53	1744
Perry, Frank W., assignor to Hero Fruit Jar Company, Philadelphia, Pa. Bottle-cap	20,300	Nov. 11	53	762
Pettibone, James, Avondale, Ohio. Button	19,924	June 24	51	1949
Petzold, Adolph, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	19,940	June 24	51	1950
Petzold, Adolph, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	20,181 to 20,182	Sept. 30	52	1954
Petzold, Adolph, Philadelphia, Pa., assignor to J. Bromley & Sons. Table-cover, &c.	20,239	Oct. 28	53	436
Petzold, Adolph, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	20,436	Dec. 23	53	1744

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Pierce, Charles S. (See Tibbetts, John E., assignor.)				
Pignot, Paul, Hastings, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet....	20,258	Nov. 4	53	605
Pignot, Paul, Hastings, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet....	20,265	Nov. 4	53	606
Pignot, Paul, Hastings, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet....	20,273	Nov. 4	53	606
Pilkington Brothers. (See Pilkington, William L., assignor.)				
Pilkington, William L., assignor to Pilkington Brothers, St. Helens, county of Lancaster, England. Glass ornamentation	{ 19,643 } { 19,644 }	Feb. 11	50	713
Pilkington, William L., assignor to Pilkington Brothers, St. Helen's, county of Lancaster, England. Ornamentation of glass	19,939	June 24	51	1950
Pillow, Thomas. (See Lessard, Benjamin J., assignor.)				
Pinkus, Frederick S., New York, N. Y. Table-cloth, &c.	20,101	Aug. 12	52	908
Pinkus, Frederick S., New York, N. Y. Ornamentation of pillow-cases, &c.	20,370	Dec. 9	53	1412
Pistorius, Henry A., assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon, &c.	19,851	May 27	51	1310
Plumb, William H. (See Rogers, Corinna T., assignor.)				
Pocock Can Company, J. H. (See Monahan, Frank A., assignor.)				
Poole, Edward, Philadelphia, Pa., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	19,795	Apr. 29	51	628
Porter, Deruelle S. (See Brooks and Porter.)				
Pouyat, Emil, Limoges, France. Dish	{ 19,740 } to { 19,744 }	Apr. 1	51	2
Pratt, Edward L., assignor to H. M. Strieby, Newark, N. J. Carriage-step	19,584	Jan. 14	50	170
Proeger, Julius, Uniontown, Pa. Glass vessel	20,079	Aug. 5	52	756
Proeger, Julius, assignor to Thompson Glass Company, (limited,) Uniontown, Pa. Surface ornamentation of vessels	19,694	Mar. 11	50	1299
Raab, George, Cleveland, Ohio. Quilting fabric	19,848	May 27	51	1310
Raibert, George, Jr., Louisville, Ky. Paddle	20,161	Sept. 23	52	1812
Rambo, Elmer J., Findlay, Ohio. Lamp-chimney	20,183	Sept. 30	52	1954
Rangette, Joseph, Düsseldorf, Germany. Book-cover	20,292	Nov. 11	53	762
Rankin, Thomas I., assignor to A. Cox Stove Company, Philadelphia, Pa. Stove	19,662	Feb. 18	50	843
Rankin, Thomas I., assignor to A. Cox Stove Company, Philadelphia, Pa. Boiler-head	20,238	Oct. 28	53	436
Ransom & Randolph. (See Collins, Timothy J., assignor.)				
Rectanus, Theodore, Louisville, Ky. Cigar-lighter case	20,080	Aug. 5	52	756
Reed & Barton Corporation. (See Jackson, Austin F., assignor.)				
Reichard, Theophilus, Brooklyn, N. Y. Tower	20,095	Aug. 12	52	908
Reid, John, Yonkers, assignor to J. L. Mott Iron Works, New York, N. Y. Seat-plate for water-closets	20,346	Nov. 18	53	926
Richards, Francis H., Hartford, Conn. Machine-frame	19,745	Apr. 1	51	2
Richards, Francis H., Hartford, Conn. Frame for grain-weighing machines	19,796	Apr. 29	51	628
Richards, Francis H., Hartford, Conn. Scale-beam for grain-weighers	19,835	May 6	51	810
Richardson & Co., Enos. (See Thommen, Adolph, assignor.)				
Richardson, Julius C., Auburn, N. Y. Hammer	20,247	Oct. 28	53	436
Rigali, Zeffiro, Boston, Mass. Portable niche for statuery	20,248	Oct. 28	53	436
Ripley, Nathaniel L., Boston, Mass. Jewel-setting	19,830	May 6	51	810
Ripley, Nathaniel L., Boston, Mass. Jewel-setting	20,025	July 15	52	312
Ritchie, Francis. (See Bascom and Ritchie.)				
Ritchie, Francis. (See Sheppard and Ritchie.)				
Ritchie, Francis, Troy, N. Y., assignor to I. A., F. L., and H. R. Sheppard, Philadelphia, Pa. Heating-stove	19,914	June 17	51	1788
Rivett, Arthur W. (See Adams and Rivett.)				
Rivett, Edward, Boston, Mass. Staking-tool	19,637	Feb. 4	50	564
Roberts, John, Indianapolis, Ind. Cabinet-desk	19,746	Apr. 1	51	2
Rogers, Arthur G., assignor to C. Rogers & Bros., Meriden, Conn. Spoon or fork handle	{ 19,840 } { 19,841 }	May 13	51	972
Rogers, Arthur G., assignor to C. Rogers & Bros., Meriden, Conn. Handle for spoons or forks	20,113	Aug. 26	52	1229
Rogers & Brother. (See Adams, Samuel T., assignor.)				
Rogers & Bros., C. (See Rogers, Arthur G., assignor.)				
Rogers, Corinna T., assignor of one-half to W. H. Plumb, Ansonia, Conn. Sachet-bag	19,774	Apr. 22	51	482
Roller, William. (See Myrick and Roller.)				
Rosenburgh, Chester B., Rome, N. Y. Hame	20,235	Oct. 21	53	280
Rosenstein, Albert, Lancaster, Pa. Cane or umbrella handle	20,047	July 22	52	461
Rosenstein, Albert, Lancaster, Pa. Cane or umbrella handle	{ 20,066 } to { 20,068 }	July 29	52	610
Rosenstein, Albert, Lancaster, Pa. Cane or umbrella handle	20,096	Aug. 12	52	908
Rosenstein, Albert, Lancaster, Pa. Cane or umbrella handle	{ 20,143 } to { 20,150 }	Sept. 9	52	1542
Rosenstein, Albert, Lancaster, Pa. Cane or umbrella handle	{ 20,162 } to { 20,164 }	Sept. 23	52	1812
Russel, Edward B. (See Hicks, William, assignor.)				
Russell & Erwin Manufacturing Company. (See Christesen, Rudolphe W. E., assignor.)				
Ruthven, Edwin C. (See Gnichwitz and Ruthven.)				
Ruthven, Edwin C., Philadelphia, Pa., assignor to D. W. Bruce, New York, N. Y. Font of printing-type	19,710	Mar. 18	50	1452
Sagendorph, Longley L., Philadelphia, Pa. Metallic lathing	19,721	Mar. 25	50	1596
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic ceiling-strip	19,699	Mar. 11	50	1300
Salathe, Charles, assignor to Adhesive Gimp Company, (limited) New York, N. Y. Gimp	19,585	Jan. 14	50	170
Sampson, Edward C. (See Meyer, Charles T. and V. E., assignors.)				
Sanders, Louis, Brooklyn, N. Y. Belt-buckle	20,048	July 22	52	461
Sargent, Samuel R., assignor to Lapham-Dodge Company, Cleveland, Ohio. Wash-board	{ 20,378 } { 20,379 }	Dec. 9	53	1412
Schaefer, Casper, assignor to Fahy's Watch-Case Company, Sag Harbor, N. Y. Knurling-tool	20,317	Nov. 18	53	926
Schleicher, John N., and A. Vedovelli, Chicago, Ill. Observatory	20,004	July 8	52	164
Schleicher, William A., assignor to Eberhard Manufacturing Company, Cleveland, Ohio. Buckle	19,666	Feb. 25	50	994
Schmidt, Henry O., New York, N. Y., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	{ 19,941 } to { 19,948 }	June 24	51	1950
Schmidt, Henry O., New York, N. Y., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	{ 19,954 } to { 19,964 }	July 1	52	1

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
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Schmidt, Henry O., New York, N. Y., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	{ 19,982 to 19,987 }	July 1	52	1
Schmidt, Henry O., New York, N. Y., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	19,998	July 1	52	1
Schmidt, Henry O., New York, N. Y., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	20,001	July 1	52	2
Schmidt, Walter A., Philadelphia, Pa., assignor to J. Dunlap & Sons. Carpet	{ 19,683 19,684 }	Mar. 4	50	1136
Schmohl, Julius. (See Lauschke and Schmohl.)				
Schmohl, Julius and E. Lauschke, Chicago, Ill., assignors to Mather Manufacturing Company, Philadelphia, Pa. Font of printing-type	19,722	Mar. 25	50	1596
Schmohl, Julius and E. Lauschke, assignors to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type	19,775	Apr. 22	51	482
Schneekloth, Hans A., assignor to S. Littman, New York, N. Y. Barber's chair	20,344	Nov. 18	53	926
Schon, Hans v., Philadelphia, Pa. Coupon-blank	19,978	July 1	52	1
Schrader, Henry C., Wheeling, W. Va. Surface ornamentation of table-ware	19,842	May 13	51	972
Schuck, Valentine G., New York, N. Y. Braid	19,630	Jan. 28	50	439
Schuck, Valentine G., New York, N. Y. Braid	20,081	Aug. 5	52	756
Schuck, Valentine G., New York, N. Y., assignor to Sutro Brothers Braid Company, of New York. Braid	{ 19,747 19,748 }	Apr. 1	51	2
Schultz, Charles, Chicago, Ill. Quilting fabric	19,928	June 24	51	1950
Schultz, Charles, Chicago, Ill. Quilting fabric	20,019	July 15	52	311
Schwarz, Isaac A., et al. (See Kelsh, Charles, assignor.)				
Schwarz, Isaac A., et al. (See Lipper, Benjamin, assignor.)				
Shallenberger, Oliver B., Rochester, assignor to Westinghouse Electric Company, Pittsburg, Pa. Box for electric meters	19,723	Mar. 25	50	1596
Shepard, Charles G., et al. (See Adams, Peter, assignor.)				
Shepard, Walter J., et al. (See Adams, Peter, assignor.)				
Sheppard, Franklin L., et al. (See Ritchie, Francis, assignor.)				
Sheppard, Franklin L., et al. (See Sheppard and Ritchie, assignors.)				
Sheppard, Franklin L., Philadelphia, Pa., and F. Ritchie, Troy, N. Y., assignors to I. A., F. L., and H. K. Sheppard, Philadelphia, Pa. Range or stove	19,797	Apr. 29	51	628
Sheppard, Howard R., et al. (See Ritchie, Francis, assignor.)				
Sheppard, Howard R., et al. (See Sheppard and Ritchie, assignors.)				
Sheppard, Isaac A., et al. (See Ritchie, Francis, assignor.)				
Sheppard, Isaac A., et al. (See Sheppard and Ritchie, assignors.)				
Shepperd, Egbert, San Francisco, Cal. Photographic card-board	20,350	Nov. 25	53	1096
Simonds Manufacturing Company. (See Bascom and Ritchie, assignors.)				
Simons, Brother & Co. (See Schmidt, Henry O., assignor.)				
Simons, Brother & Co. (See Weihman, Henry A., assignor.)				
Sippili, Isaac, New York, N. Y. Button	20,216	Oct. 21	53	280
Smith, Benjamin C., and A. T. Jackson, Olathe, Kans. Mop-rubber	20,152	Sept. 9	52	1542
Smith, Charles F., New Britain, Conn. Cutlery handle-tip	20,116	Aug. 26	52	1229
Smith, Edwin L., Portland, Me. Bottle-stopper	19,586	Jan. 14	50	170
Smith, Joseph C., Mount Vernon, N. Y., assignor to J. B. Brewster & Company, of New York. Carriage-body	20,041	July 15	52	312
Smith, Oliver C. (See Tewksbury, George C., assignor.)				
Smith, Orren M., Philadelphia, Pa. Umbrella-ferrule	20,249	Oct. 28	53	436
Smith & Sons Carpet Company, Alex. (See Blackburn, Walter, assignor.)				
Smith & Sons Carpet Company, Alex. (See Clemencet, Louis, assignor.)				
Smith & Sons Carpet Company, Alex. (See Cortes, Auguste, assignor.)				
Smith & Sons Carpet Company, Alex. (See Douzel, Joseph, assignor.)				
Smith & Sons Carpet Company, Alex. (See Komori, Norie, assignor.)				
Smith & Sons Carpet Company, Alex. (See Moffat, John B., assignor.)				
Smith & Sons Carpet Company, Alex. (See Parton, Henry W., assignor.)				
Smith & Sons Carpet Company, Alex. (See Pignot, Paul, assignor.)				
Smith & Sons Carpet Company, Alex. (See Stengel, George J., assignor.)				
Smith & Sons Carpet Company, Alex. (See Thomas, Walter, assignor.)				
Smith, William T., Philadelphia, Pa. Rug	{ 19,605 to 19,607 }	Jan. 21	50	308
Smith, William T., Philadelphia, Pa. Rug	20,165	Sept. 23	52	1812
Smith, William T., Philadelphia, Pa. Chenille fabric	{ 20,351 20,352 }	Nov. 25	53	1096
Smith, William T., Philadelphia, Pa. Chenille fabric	20,371	Dec. 9	53	1412
Snellenburg, Samuel. (See Booth, Charles P., assignor.)				
Spayd, George W., Palmyra, N. J. Puzzle-board	19,756	Apr. 8	51	160
Spring, Charles A. (See Spring, Henry T. and C. A.)				
Spring, Henry T. and C. A., assignors to Buckwalter Stove Company, Royer's Ford, Pa. Range and boiler	20,437	Dec. 23	53	1744
Springsteen, Silas, Manitowoc, Wis. Church-pew	20,151	Sept. 9	52	1542
Spruill, Benjamin F., Brooklyn, N. Y. Scraper	19,979	July 1	52	1
Standard Manufacturing Company. (See Grant, Oscar F., assignor.)				
Starling, Frederick H., Philadelphia, Pa. Show-case	19,571	Jan. 7	50	2
Sté Dufaux, Mathieu & André. (See Mathieu, Henri, assignor.)				
Steding, George W., Bowling Green, Mo. Knife	20,334	Nov. 18	53	926
Steel, George, assignor to H. Maddock, Brooklyn, N. Y. Dish	20,374	Dec. 9	53	1412
Steere, Oscar A., Providence, R. I. Ornamentation of tape	19,658	Feb. 18	50	843
Stein, Leo, assignor to Stein Manufacturing Company, Rochester, N. Y. Burial-casket lid	19,724	Mar. 25	50	1596
Stein Manufacturing Company. (See Stein, Leo, assignor.)				
Steltz, Franklin, Pottstown, Pa. Socket for meat-supporters	19,587	Jan. 14	50	170
Stengel, George J., assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	{ 20,288 20,289 }	Nov. 11	53	762
Stent, Edward J. N., Bergen Point, N. J., assignor to Cook & Bernheimer, New York, N. Y. Bottle	{ 19,725 19,726 }	Mar. 25	50	1596
Stephenson, John, New York, N. Y. Frame for electric-car trucks	19,688	Mar. 4	50	1136
Stoehr, Daniel H., et al. (See Miller, Henry, assignor.)				
Story, John T., Buffalo, N. Y. Envelope	19,695	Mar. 11	50	1299
Strieby, Henry M. (See Pratt, Edward L., assignor.)				
Strüver, Frederick R. C., Pine Creek, Darling Downs, Queensland. Butter-fork	20,400	Dec. 9	53	1412
Sutro Brothers Braid Company. (See Schuck, Valentine G., assignor.)				
Swapp, Charles W., New York, N. Y., assignor to Lowell Manufacturing Company, Lowell, Mass. Carpet	{ 19,885 to 19,887 }	June 10	51	1624

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Sweet, Clarence D., assignor to Canastota Casket Company, (limited,) Canastota, N. Y. Memorial album	19,648	Feb. 11	50	714
Swindell, Walter B., Baltimore, Md. Bottle	20,199	Oct. 14	53	142
Syracuse Stove Works. (See Landers and Kernan, assignors.)				
Taber, Orrin, Nashua, N. H. Filling-block for saddle-tree seats	19,631	Jan. 28	50	440
Tanner, George W., Providence, R. I. Cigar or cigarette case	19,667	Feb. 25	50	994
Tappan, Herman, New York, N. Y. Perfume-holder	19,843	May 13	51	972
Tewksbury, George C., assignor to O. C. Smith, Bridgeport, Conn. Dial-plate for registering apparatus	20,005	July 8	52	164
Thomas, Walter, assignor to A. Smith & Sons Carpet Company, Yonkers, N. Y. Carpet	20,274	Nov. 4	53	606
Thommen, Adolph, assignor of one-half to E. Richardson & Co., Newark, N. J. Postage-stamp box	19,925	June 24	51	1949
Thommen, Adolph, assignor of one-half to E. Richardson & Co., Newark, N. J. Match-box	20,200	Oct. 14	53	142
Thompson, Charles H., Detroit, Mich. Front frame for vending apparatus	19,757	Apr. 8	51	160
Thompson, George W., Sag Harbor, N. Y. Mustache-spoon	19,926	June 24	51	1949
Thompson Glass Company. (See Arensberg, John C., assignor.)				
Thompson Glass Company. (See Proeger, Julius, assignor.)				
Thompson Glass Company. (See Walter, William G., assignor.)				
Thorp, Elliott G., Boston, Mass. Album-leaf	19,831	May 6	51	810
Thorp, Elliott G., Boston, Mass. Book or album leaf	20,166	Sept. 23	52	1812
Tibbetts, John B., assignor of one-half to C. S. Pierce, Brockton, Mass. Shoe	19,912	June 17	51	1788
Tiffany & Company. (See Curran, John T., assignor.)				
Tonk, Max, Chicago, Ill. Piano-stool	19,638	Feb. 4	50	564
Torrance, Francis J., Allegheny, Pa. Bath-tub	19,682	Mar. 4	50	1136
Torrance, Francis J., Allegheny, Pa. Wash-tray	19,711	Mar. 18	50	1452
Torrance, Francis J., and J. B. Geyser, Allegheny, Pa. Trap-standard for sinks	19,665	Feb. 25	50	994
Torsch, Edward L., and J. R. Lee, Baltimore, Md. Badge	19,776	Apr. 22	51	482
Towle Manufacturing Company. (See Balch, George W., assignor.)				
Towle Manufacturing Company. (See Pistorius, Henry A., assignor.)				
Townsend, Harrison. (See Wilson, William G., assignor.)				
Tucker Manufacturing Company. (See Pearson, George S., assignor.)				
Tweeddale, William, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Statue	{ 20,020 } { 20,021 }	July 15	52	311
Unger Brothers. (See Beach, Edward P., assignor.)				
United Zylonite Company. (See Jones, Frederick V., assignor.)				
Upmeyer, William H., Milwaukee, Wis. Badge, pin, &c.	20,201	Oct. 14	53	142
Upton, William H., Camden, N. J. Badge	20,212	Oct. 21	53	280
Urstadt, George, Jr., New York, N. Y., assignor to M. J. Whittall, Worcester, Mass. Rug, &c.	{ 20,127 } { 20,128 }	Sept. 2	52	1374
Urstadt, George, Jr., New York, N. Y., assignor to M. J. Whittall, Worcester, Mass. Rug or carpet	{ 20,129 } { 20,130 }	Sept. 2	52	1374
Van der Elst, John, Newark, N. J. Clothes-pin	20,412	Dec. 16	53	1576
Vaughn, Thomas, and R. A. Convery, Trenton, N. J. Letter-file	19,902	June 10	51	1624
Vedovelli, Anthony J. (Schipex and Vedovelli.)				
Vickers, Samuel, Philadelphia, Pa. Hosiery	{ 19,916 } to { 19,919 }	June 17	51	1788
Vogel, William, Brooklyn, N. Y. Oiler	20,217	Oct. 21	53	280
Vogt, Gustave, Linoges, France. Dish	20,250	Oct. 22	53	436
Voit, George F., assignor to S. Feust and D. Wolf, New York, N. Y. Drawer-pull and back plate	20,203	Oct. 14	53	142
Volk, Emil, New York, N. Y. Badge or emblem	19,671	Feb. 25	50	994
Waddell, Hanson E., Wheeling, W. Va. Surface ornamentation of dishes	19,749	Apr. 1	51	2
Waite, Henry E., New York, N. Y. Cabinet for electrical appliances	19,763	Apr. 15	51	302
Walker, David, Newark, and F. H. Howard, Irvington, N. J. Stair-carpet fastener	19,973	July 1	52	1
Wallace, John J., Montrose, Ill. Link for clothes-lines	19,685	Mar. 4	50	1136
Walter, William G., assignor to Thompson Glass Company, (limited,) Pittsburg, Pa. Dish	19,764	Apr. 15	51	302
Walther, Charles F., assignor to S. S. Jewett & Co., Buffalo, N. Y. Range	20,359	Dec. 2	53	1262
Wardle, Francis R., New York, N. Y. Bottle	19,798	Apr. 29	51	628
Ware, Joseph G., Dayton, Ohio. Ornamental nut-lock	20,237	Oct. 28	53	436
Warner, Richard E. (See White and Warner.)				
Washburn, William R., Rockland, Mass. Ornamentation of flags, banners, &c.	20,097	Aug. 12	52	908
Weatherhead, Edward H., Cleveland, Ohio. Air-compressor case	19,765	Apr. 15	51	302
Webb, Joseph, Beaver, Pa. Globe or shade	20,296	Nov. 11	53	762
Webb, Joseph, Beaver, Pa. Globe or shade	20,299	Nov. 11	53	762
Weihman, Henry A., Philadelphia, Pa. Thimble	19,750	Apr. 1	51	2
Weihman, Henry A., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	{ 19,949 } { 19,950 }	June 24	51	1950
Weihman, Henry A., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	{ 19,965 } to { 19,972 }	July 1	52	1
Weihman, Henry A., assignor to Simons, Brother & Co., Philadelphia, Pa. Cane or umbrella handle	{ 19,988 } to { 19,995 }	July 1	52	1
Weinberg, Charles, assignor to C. Weinberg & Co., New York, N. Y. Galloon	19,727	Mar. 25	50	1596
Weinberg & Co., C. (See Weinberg, Charles, assignor.)				
Weinschenk, Maier, and W. Boldenweck, Chicago, Ill. Medal	{ 20,195 } { 20,196 }	Oct. 7	53	2
Weiss, Albert, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	19,927	June 24	51	1950
Westinghouse Electric Company. (See Shallenberger, Oliver B., assignor.)				
Weston, Edward, Newark, N. J. Case for electrical instruments	19,895	June 10	51	1624
Weston, Edward, Newark, N. J. Magnet	19,896	June 10	51	1624
Weston, Edward, Newark, N. J. Magnet	20,318	Nov. 18	53	926
Weston, Edward, Newark, N. J. Case for electrical measuring-instruments	20,354	Dec. 2	53	1262
Wheeler, Nathan A., Alpowa, Wash. Soup-spoon	20,340	Nov. 18	53	926
Whilldin, John G., Philadelphia, Pa. Flower-pot	20,031	July 15	52	312
Whilldin, John G., Philadelphia, Pa. Flower-pot	20,055	July 22	52	462
Whilldin, John G., Philadelphia, Pa. Flower-pot	20,133	Sept. 2	52	1374
Whilldin, John G., assignor to Whilldin Pottery Company, Philadelphia, Pa. Flower-pot	{ 20,335 } to { 20,337 }	Nov. 18	53	926
Whilldin Pottery Company. (See Whilldin, John G., assignor.)				
Whipple, Charles J., assignor to Barnhart Brothers & Spindler, Chicago, Ill. Font of printing-type	20,253	Nov. 4	53	605
White, Charles P. and R. E. Warner, Taunton, Mass. Cooking-stove	20,069	July 29	52	610
Whitney, John F., Brooklyn, assignor to Dominick & Haff, New York, N. Y. Back and handle for brushes	20,345	Nov. 18	53	926

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Whittall, Matthew J. (See Bartlett, Fred H., assignor)				
Whittall, Matthew J. (See Haas, Frank A., assignor.)				
Whittall, Matthew J. (See Meguin, George, assignor.)				
Whittall, Matthew J. (See Urstadt, George, Jr., assignor.)				
Wiggin, Frank L., Lowell, Mass. Knitted fabric.....	20,213	Oct. 21	53	280
Wilcox Silver Plate Company. (See Babbitt, Seth W., assignor.)				
Wilkinson, Walter, assignor to Gorham Manufacturing Company, Providence, R. I. Handle for spoons, &c.....	20,119	Aug. 26	52	1229
Wilkinson, William H., assignor to Co-Operative Foundry Company, Rochester, N. Y. Cooking-stove.....	20,072	Aug. 5	52	756
Wilks, Walter L., assignor to Holmes & Edwards Silver Company, Bridgeport, Conn. Spoon.....	19,649	Feb. 11	50	714
Williams, George W., Elizabeth, N. J. Soap-dish.....	19,668	Feb. 25	50	994
Willits, Ward W., Chicago, Ill., assignor to Adams & Westlake Company, of Illinois. Lamp-hanger.....	19,832	May 6	51	810
Wilson, William G., Norristown, assignor to H. Townsend, Philadelphia, Pa. Rug.....	{ 19,632 } { 19,633 }	Jan. 28	50	440
Wipfler, Charles. (See Keep and Wipfler.)				
Wolf, David, <i>et al.</i> (See Voit, George F., assignor.)				
Wollensack, John F., Chicago, Ill. Battery-carbon.....	19,999	July 1	52	1
Woodard, Alonzo B., Hornellsville, N. Y. Fence-strand.....	19,974	July 1	52	1
Woodhull, Morris, Dayton, Ohio. Carriage-body.....	19,766	Apr. 15	51	302
Worthley, Frank O., Boston, Mass. Feeding-manger.....	19,686	Mar. 4	50	1136
Young, Mortimer M., Baltimore, Md. Envelope.....	19,799	Apr. 29	51	628
Young, Richard D., New York, N. Y. Bottle-handle.....	20,355	Dec. 2	53	1262
Zanetti, Fortunato C., assignor of one-half to F. E. Mistrot, Bryan, Tex. Lamp-chimney cap.....	20,114	Aug. 26	52	1229

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

Name, residence, and title.	No.	Date.	Official Gazette.	
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A. B. C. Chemical Company, Richmond, Va. Blood tonic and resolvent, alterative, and expectorant..	17,758	Apr. 15	51	302
Adams & Sons, Brooklyn, N. Y. Chewing-gum.....	17,577	Feb. 25	50	994
Adams & Sons, Brooklyn, N. Y. Chewing-gum.....	18,046	June 17	51	1788
Adler, Joseph, New York, N. Y. Ointment.....	18,512	Oct. 14	53	142
Aitken, Son & Co., New York, N. Y. Corsets.....	18,309	Aug. 19	52	1066
Albaugh Nursery and Orchard Company, Tadmor, Ohio. Nursery-grown peach-trees.....	17,923	May 20	51	1136
Albemarle Soapstone Company, New York, N. Y. Soapstone wash-tubs, griddles, and other articles for household use.....	18,147	July 8	52	164
Albion Company, Providence, R. I., and New York, N. Y. Muslin and other cotton goods.....	18,548	Oct. 21	53	280
Alden & Co., George A., Boston, Mass. India-rubber, gutta-percha, and other vulcanizable gums.....	18,239	July 29	52	610
Alden & Co., George A., Boston, Mass. India-rubber, gutta-percha, and other vulcanizable gums.....	18,373	Sept. 2	52	1374
Algosine Manufacturing Co., Reading, Pa. Headache cure.....	18,756	Dec. 30	53	1890
Allaman, George W., Atchison, Kans. Liniment for external and internal use.....	18,332	Aug. 26	52	1230
Allen, Benjamin, Chicago, Ill. Watch-springs, pin-tongues, and case-springs.....	18,757	Dec. 30	53	1890
Allen, Charles F., New York, N. Y. Currants.....	18,741	Dec. 30	53	1890
Althouse, John A., Palmyra, N. J. Liquid filler for wood and other substances.....	17,578	Feb. 25	50	994
Altman, Benjamin, New York, N. Y. Corsets.....	18,367	Sept. 2	52	1374
Altman, Benjamin, New York, N. Y. Corsets.....	18,368	Sept. 2	52	1374
Altmayer & Flatau, Macon, Ga. Whisky, wines, and champagnes.....	17,629	Mar. 11	50	1300
American Cash Register Company, Charlevoix, Mich. Cash indicators, recorders, registers, and tills.....	18,289	Aug. 12	52	908
American Encaustic Tiling Company, (limited), Zanesville, Ohio, and New York, N. Y. Encaustic tiles for flooring, &c.....	17,538	Feb. 18	50	843
American Florida Water Co., New York, N. Y. Florida water.....	18,237	July 29	52	610
American Hominy Flake Company, Yellow Springs, Ohio. Hominy.....	18,573	Oct. 28	53	436
American Roll Paper Company, St. Louis, Mo. Roll-paper holders and cutters.....	17,630	Mar. 11	50	1300
American Waltham Watch Company, Waltham, Mass. Watch-movements.....	17,406	Jan. 21	50	308
American Waltham Watch Company, Waltham, Mass. Patent silver screw-bezel watch-cases.....	17,579	Feb. 25	50	994
American Waltham Watch Company, Waltham, Mass. Double-stock screw-bezel watch-cases.....	18,101	July 1	52	2
American Waltham Watch Company, Waltham, Mass., and New York, N. Y. Watch-movements.....	17,838	Apr. 29	51	628
American Watch Tool Co., Waltham, Mass. Foot-wheels for watches.....	17,506	Feb. 11	50	714
American Whip Company, Westfield, Mass. Whips.....	18,238	July 29	52	610
Amoskeag Manufacturing Company, Manchester, N. H. Cotton fabrics.....	17,857	May 6	51	811
Anchor Tobacco Works, Covington, Ky. Tobacco in packages, plugs, cigars, and cigarettes.....	17,631	Mar. 11	50	1300
Anderson, John B., Buck Grove, Iowa. Vegetable compound, a remedy for Bright's disease, dyspepsia and scrofula.....	17,561	Feb. 18	50	844
Angell, George W., Newark, N. J. Medical belt for the cure of disease.....	18,626	Nov. 18	53	926
Anglo-American Food Co., Chicago, Ill. Medicated vegetable compound food for stock.....	17,696	Mar. 25	50	1596
Antikamnia Chemical Company, East St. Louis, Ill., and St. Louis, Mo. Remedy for headache, neuralgia, rheumatism, and analogous diseases.....	18,622	Nov. 11	53	762
Aphro Medicine Company, Portland, Oreg. Pills.....	17,507	Feb. 11	50	714
Aphro Medicine Company, Portland, Oreg. Pills.....	18,217	July 22	52	462
Arkell & Douglas, New York, N. Y. Refined petroleum.....	18,189	July 22	52	462
Arkell & Douglas, New York, N. Y. Refined petroleum.....	18,767	Dec. 30	53	1890
Armour & Co., Chicago, Ill. Lard.....	17,580	Feb. 25	50	994
Armour & Co., Chicago, Ill. Lard, bacon, hams, and cured and pickled meats.....	17,581	Feb. 25	50	994
Armour & Co., Chicago, Ill. Extracts of beef, spiced and seasoned.....	17,970	June 3	51	1471
Armstrong Manufacturing Company, Limited, J. B. Flint, Mich., and Guelph, Canada. Tempered-steel manufactures.....	18,659	Dec. 2	53	1262
Arnold & Co., F. R., New York, N. Y. Toilet perfumes, powders, cosmetics, and soaps.....	18,249	July 29	52	610
Ashworth, John J., Manchester, England. Special woven fabric for shirtings, sheetings, under-clothing, and dress goods.....	18,222	July 22	52	462
Atkins & Company, E. C., Indianapolis, Ind. Saws.....	17,508	Feb. 11	50	714
Atkins & Company, E. C., Indianapolis, Ind. Saws.....	17,666	Mar. 18	50	1452
Atkins & Company, E. C., Indianapolis, Ind. Saws.....	17,858	May 6	51	811
Atkins & Company, E. C., Indianapolis, Ind. Saws.....	18,030	June 17	51	1788
Atkins & Company, E. C., Indianapolis, Ind. Saws.....	18,200	July 22	52	462
Atkins & Durbrow, New York, N. Y. Hoof-stuffing.....	17,921	May 20	51	1136
Auffermann & Co., New York, N. Y. Dyed and stained woods.....	18,627	Nov. 18	53	926
Augsburger Mechanische Trikotwaaren-Fabrik, vormals A. Koblenzer, Pfersee, Pfersee, Germany. Jackets, shirts, drawers, and stockings.....	18,523	Oct. 14	53	142
Aunt Jemima Manufacturing Co., St. Joseph, Mo. Self-raising flour.....	17,825	Apr. 29	51	628
Avery & Sons, B. F., Louisville, Ky., New York, N. Y., New Orleans, La., and Fort Worth and Houston, Tex. Plows.....	18,595	Nov. 4	53	606
Bacheller & Co., New York, N. Y. Proof-sheets.....	17,632	Mar. 11	50	1300
Backus, Edward, New York, N. Y. Medicinal compounds for the blood.....	17,971	June 3	51	1471
Bagley, William M., and R. W. Tilford, Greenville, Miss. Liniments capable of use externally and internally.....	18,104	July 1	52	2
Bailey, Charles J., Boston, Mass. Antiseptic material in solid form.....	17,697	Mar. 25	50	1596
Bailey, Charles R., New York, N. Y. Wooden puzzle.....	17,894	May 13	51	972
Bailly, Paul, Paris, France. Braces and suspenders.....	18,132	July 1	52	2
Baker & Co., Maurice, Portland, Me. Perfumery, toilet-water, and flavoring extracts.....	18,103	July 1	52	2
Baldwin, Edward L., Detroit, Mich. Tooth-soap.....	17,790	Apr. 22	51	482
Baldwin & Graham, Pittsburg, Pa. Stoves, ranges, and fuel-gas burners.....	18,256	Aug. 5	52	756
Baldwin & Graham, Pittsburg, Pa. Stoves, ranges, and fuel-gas burners.....	18,257	Aug. 5	52	756
Balm of Gilead Co., New York, N. Y. Tonic for debility in females.....	18,672	Dec. 2	53	1262
Ballard & Co., Stephen, New York, N. Y. Rubber belting and rubber hose.....	17,843	May 6	51	810
Banker & Campbell Company, Limited, New York, N. Y. Velocipedes.....	18,348	Aug. 26	52	1230
Banker & Campbell Company, Limited, New York, N. Y. Velocipedes.....	18,349	Aug. 26	52	1230
Bard, George F., Norwich, Conn. Anti-friction metals for journal-bearings.....	17,815	Apr. 29	51	628
Baird, William E., Jr., Sedalia, Mo. Medicine for colds, coughs, and other throat and lung diseases.....	17,390	Jan. 14	50	170

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Barff & Co., Patras and Zante, Greece, London and Liverpool, England, and New York, N. Y. Currants	18,369	Sept. 2	52	1374
Barkley, John C., New York, N. Y. Tea, coffee, and spices	18,727	Dec. 23	53	1744
Barnes Manufacturing Company, Paterson, N. J. Silk, worsted, and mohair fabrics, braids, bind-ings, and trimmings	17,430	Jan. 28	50	440
Barrow, Eugene, Bayou Sara, La. Medicine for the treatment of diarrhea	17,633	Mar. 11	50	1300
Bartholomay Brewery Company, Rochester, N. Y. Lager-beer	18,350	Aug. 26	52	1230
Bartlett, Henry T., New York, N. Y. Foreign and domestic cabinet woods	18,554	Oct. 28	53	436
Basler, Wallace, Chicago, Ill. Emollient	18,261	Aug. 5	52	756
Bassermann & Herrschel, Mannheim, Germany. Sago and tapioca	18,206	July 22	52	462
Bassett & Brumaghin, Albany, N. Y. Restorative preparation for diseased eyes	18,495	Oct. 7	53	2
Bates, Mary E., Newton Centre, Mass. Remedy for rheumatism and similar ailments	17,471	Feb. 4	50	564
Bätjer & Co., H. A., New York, N. Y. Rye whisky	18,395	Sept. 2	52	1374
Baum, Michael, Boston, Mass. Trousers	17,422	Jan. 21	50	308
Baumer, Francis, Syracuse, N. Y. Candles	17,667	Mar. 18	50	1452
Bavier & Co., Yokohama, Japan. Raw silks	18,333	Aug. 26	52	1230
Bavier & Co., Yokohama, Japan. Raw silks	18,334	Aug. 26	52	1230
Bavier & Co., Yokohama, Japan. Raw silks	18,335	Aug. 26	52	1230
Bavier & Co., Yokohama, Japan, and New York, N. Y. Raw silks	18,628	Nov. 18	53	936
Bavier & Co., Yokohama, Japan, and New York, N. Y. Raw silks	18,629	Nov. 18	53	936
Bavier & Co., Yokohama, Japan, and New York, N. Y. Raw silks	18,630	Nov. 18	53	936
Bavier & Co., Yokohama, Japan, and New York, N. Y. Raw silks	18,631	Nov. 18	53	936
Beach, William G., Toronto, Ontario, Canada. Lamp-chimneys	17,509	Feb. 11	50	714
Beasley Supply Company, (limited,) Philadelphia, Pa. Locks	17,369	Jan. 7	50	2
Beatty, Claudius F., New York, N. Y. Hats and caps	18,070	June 24	51	1950
Beck & Co., Joseph, New York, N. Y. Rye and bourbon whisky	18,255	Aug. 5	52	756
Beckel & Co., Joseph, New York, N. Y. Corsets	18,456	Sept. 23	52	1812
Becker, Ulrich W., Stapleton, N. Y. Perfumery	18,005	June 10	51	1624
Becker, Ulrich W., Stapleton, N. Y. Soap	18,133	July 8	52	164
Beckermann & Co., New York, N. Y. Tailors' trimmings, as buttons, braids, linings, and buckles	17,895	May 13	51	972
Bee Hive Starch Co., New Haven, Conn. Laundry-starch	18,728	Dec. 23	53	1744
Beers, Charles H., New York, N. Y. Cosmetics	18,006	June 10	51	1624
Beissel Sel., Wwe. & Sohn, Stephan, Olachen, Germany. Needles	18,321	Aug. 19	52	1066
Beissel Sel., Wwe. & Sohn, Stephan, Aachen, Germany. Sewing-needles	18,574	Nov. 4	53	606
Bell, Ben D., Lexington, Ky. Medicinal cure for gonorrhea	18,677	Dec. 9	53	1412
Bellbrook Magnetic Springs Company, Bellbrook, Ohio. Mineral water	17,472	Feb. 4	50	564
Bell's Sons, Henry H., New York, N. Y. Fleece, plush, stockinet, eider-down cloth, and flannel	18,336	Aug. 26	52	1230
Bemis & Fletcher, Worcester, Mass. Boots and shoes	18,253	Aug. 5	52	756
Benedict & Burnham Manufacturing Company, Waterbury, Conn., and New York, N. Y. Insulated electrical wire	18,340	Aug. 26	52	1230
Benger Sons & Co., W., New York, N. Y. Underwear for men, women, and children	18,555	Oct. 28	53	436
Benlisa, David, New York, N. Y. Cotton goods	18,075	June 24	51	1950
Berg, Hart O., New York, N. Y. Portland or hydraulic cement	18,359	Aug. 26	52	1230
Berg, Walter S., Philadelphia, Pa. Lamp-shades	17,431	Jan. 28	50	440
Besly, Charles H., Chicago, Ill. Lubricating and machine oil	18,153	July 8	52	164
Besly & Co., Charles H., Chicago, Ill. Manufacturers' and metal-workers' hardware, tools, and materials	17,859	May 6	51	811
Biddle & Smart Co., Amesbury, Mass. Buckboards	18,326	Sept. 2	52	1374
Billau John L., Cedar Rapids, Iowa. Soda water	18,059	June 24	51	1950
Bielefeld & Spahn, New York, N. Y. Children's shoes	18,440	Sept. 23	52	1812
Black & Co., Alexander, Toledo, Ohio. Plush coat or jacket	18,431	Sept. 16	52	1670
Black, Julius, and G. A. Kirchmaier, Toledo, Ohio. Compounds and lotions for use on the skin	17,698	Mar. 25	50	1596
Blackwood Company, St. Paul, Minn. Medicinal-spring water	17,634	Mar. 11	50	1300
Blake, Charles H., Pueblo, Colo. Compounds for removing scale from boilers	18,310	Aug. 19	52	1066
Bliss Co., E. A., New York, N. Y. Jewelry and solid and plated gold and silver ware	18,479	Sept. 30	52	1954
Block & Sons, Elias, Cincinnati, Ohio, and Prestonville, Ky. Whisky	17,473	Feb. 4	50	564
Blue Flame Manufacturing Company, North Plainfield, N. J. Refined illuminating and heating oil	17,999	June 3	51	1472
Blue Flame Manufacturing Company, North Plainfield, N. J., and New York, N. Y. Refined oil for illuminating and heating	18,001	June 3	51	1472
Blue Flame Manufacturing Company, North Plainfield, N. J., and New York, N. Y. Oil and gas stoves	18,068	June 24	51	1950
Blue Flame Manufacturing Company, North Plainfield, N. J., and New York, N. Y. Oil and gas stoves	18,069	June 24	51	1950
Blum, Edward C., New York, N. Y. Dress-shields	17,582	Feb. 25	50	994
Blum, Edward C., New York, N. Y. Dress-shields	18,252	Aug. 5	52	756
Blum, Isaac, Baltimore, Md. Fasteners for waistbands of trousers	18,055	June 17	51	1788
Blumenthal, A. & S., New York, N. Y. Ribbons	17,933	May 20	51	1136
Blumenthal, A. & S., New York, N. Y. Ribbons	17,934	May 20	51	1136
Blumenthal, A. & S., New York, N. Y. Ribbons	17,935	May 20	51	1136
Blumenthal, A. & S., New York, N. Y. Ribbons	18,496	Oct. 7	53	2
Blumenthal & Boas, New York, N. Y. Needles	18,152	July 8	52	164
Blumenthal & Boas, New York, N. Y. Harmonicas	18,533	Oct. 28	53	436
Blydenburgh, Charles M., Riverhead, N. Y. Buggies and light carriages	17,531	Feb. 11	50	714
Blyn & Sons, I., New York, N. Y. Boots and shoes	18,550	Oct. 28	53	436
Boardman, Henry M., Brooklyn, N. Y. Insect-powder	17,944	May 27	51	1310
Boker & Co., Hermann, New York, N. Y. Shotguns	17,432	Jan. 28	50	440
Boker & Co., Hermann, New York, N. Y. Shotguns	17,433	Jan. 28	50	440
Boker & Co., Hermann, New York, N. Y. Shotguns	17,482	Feb. 4	50	564
Boker & Co., Hermann, New York, N. Y. Shotguns and rifles	17,483	Feb. 4	50	564
Booth, Isaac J., Birmingham, Conn. Fishing-reels	18,004	June 10	51	1624
Borsum Bros., New York, N. Y. Polish for metals	17,510	Feb. 11	50	714
Borsum Bros., New York, N. Y. Liquid metal-polish	17,537	Feb. 11	50	714
Boston Chemical Company, Boston, Mass. Disinfectants	17,474	Feb. 4	50	564
Boston Rubber Company, Boston, Mass. Rubber goods	17,495	Feb. 4	50	564
Boston Rubber Shoe Company, Boston and Malden, Mass. Covering for electric and telephonic wires	18,402	Sept. 9	52	1542
Boston Rubber Shoe Company, Boston and Malden, Mass. Rubber shoes called "Footholds"	18,567	Oct. 28	53	436
Boston Rubber Shoe Company, Boston and Malden, Mass. Rubber shoes	18,568	Oct. 28	53	436
Boston Rubber Shoe Company, Boston and Malden, Mass. Rubber shoes	18,569	Oct. 28	53	436
Boston Rubber Shoe Company, Boston and Malden, Mass. Rubber shoes	18,599	Nov. 4	53	606
Boston Rubber Shoe Company, Boston and Malden, Mass. Rubber shoes	18,671	Dec. 2	53	1262
Boston Rubber Shoe Company, Boston and Malden, Mass. Rubber overshoes	18,760	Dec. 30	53	1890
Boston Woven Hose Company, Boston, Mass. Garden, mill, fire, and steam hose	17,791	Apr. 22	51	482
Boston Woven Hose Company, Boston, Mass. Garden, mill, fire, and steam hose	17,792	Apr. 22	51	482

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Name, residence, and title.	No.	Date.	Official Gazette.	
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Bowden & Co., J. B., New York, N. Y. Finger-rings.....	18,562	Oct. 28	53	436
Bowden Lithia Springs Co., Lithia Springs, Ga. Bromine water and lithia water.....	18,646	Nov. 25	53	1096
Bower, John G., and F. H. Miller, Watontown, Pa. Certain fluid preparation for laundry purposes.....	17,793	Apr. 22	51	482
Bowker Fertilizer Company, Boston, Mass. Meal for live stock.....	18,686	Dec. 9	53	1412
Boyce, William D., Chicago, Ill. Weekly newspaper.....	18,457	Sept. 30	52	1954
Boyd, Charles W., Newark, N. J. Saws, saw-sets, and trowels.....	17,962	May 27	51	1310
Bradley Company, Milton, Springfield, Mass. Game devices embodying a checkered board and movable men.....	17,722	Apr. 1	51	2
Bradley Company, Milton, Springfield, Mass. Toys for producing effects for optical illusions.....	18,182	July 15	52	312
Brady, Charles N., Washington, Pa. Glass fruit-jars.....	17,583	Feb. 25	50	994
Brainerd & Armstrong Company, New London, Conn., and New York, N. Y. Silk threads, cords, and upholstery and drapery fabrics.....	18,192	July 22	52	402
Brainerd & Armstrong Company, New London, Conn., and New York, N. Y. Silk threads, cords, and upholstery and drapery fabrics.....	18,394	Sept. 2	52	1374
Brandenburg Frères, Bordeaux, France. Olive-oil.....	17,530	Feb. 18	50	243
Bridgman, Adolphus, New York, N. Y. Remedy for infants' and children's diseases.....	18,590	Nov. 4	53	606
Brigg, Neumann & Co., Bradford, county of York, England. Silk plushes and silk seals.....	17,361	Jan. 7	50	2
Brinkmann, August H., Baltimore, Md. Shirt-waists.....	18,067	June 24	51	1950
Broderick, John F., St. Paul, Minn. Medicines compounded by prescription and official and pharmaceutical preparations, except bitters, and an herb tea.....	17,609	Mar. 25	50	1596
Broening Brothers, Lincoln, Nehr. Tonics and malt extracts.....	18,193	July 22	52	462
Brook Haven Rubber Shoe Company, Setauket, N. Y. Foot-wear made wholly or partly of rubber.....	17,609	Mar. 4	50	1136
Brook Haven Rubber Shoe Company, Setauket, N. Y. Foot-wear made wholly or partly of rubber.....	17,610	Mar. 4	50	1136
Brooke & Company, Benjamin, Philadelphia, Pa. Soap.....	17,391	Jan. 14	50	170
Brooke & Company, Benjamin, Philadelphia, Pa. Scouring-soap.....	17,540	Feb. 18	50	843
Brookmire & Co., James H., St. Louis, Mo. Baking-powder.....	17,362	Jan. 7	50	2
Brookmire & Co., James H., St. Louis, Mo. Coffee and tea of all kinds.....	17,363	Jan. 7	50	2
Brown, Augustus L., New York, N. Y. Hosiery.....	17,434	Jan. 28	50	440
Brown, Charles A., Troy, N. Y. Underwear.....	18,102	July 1	52	2
Brown & Co., New York, N. Y. Men's hats.....	18,768	Dec. 30	53	1890
Brown & Co., J. W., Philadelphia, Pa. Canned fish, fruit, and vegetables.....	18,484	Oct. 7	53	2
Buck, Harry K., Philadelphia, Pa. Soap.....	18,071	June 24	51	1950
Buck, Harry K., Philadelphia, Pa. Soap.....	18,072	June 24	51	1950
Buck, Harry K., Philadelphia, Pa. Soap.....	18,073	June 24	51	1950
Buck, Harry K., Philadelphia, Pa. Soap.....	18,074	June 24	51	1950
Buckley & Son, John H., Norwalk, Conn. Elastic shoe-web.....	18,458	Sept. 30	52	1954
Buffalo Milling Co., Limited, Lewisburg, Pa. Wheat-flour.....	18,685	Dec. 9	53	1412
Buffalo Polish Company, (limited,) Buffalo, N. Y. Stove-polish.....	17,767	Apr. 15	51	302
Buffalo Specialty Manufacturing Company, Buffalo, N. Y. Double-pointed tacks, staples, and blind-staples.....	17,536	Feb. 11	50	714
Bullene, Moore, Emery & Co., Kansas City, Mo. Cotton and wool fabrics.....	18,173	July 15	52	312
Bullock, Marion L., Passaic, N. J. Throat and lung balsam.....	18,513	Oct. 14	53	142
Runtin Drug Co., Terre Haute, Ind. Body-wash for horses, in the form of tablets.....	17,768	Apr. 15	51	302
Burdon Seamless Filled Wire Company, Providence, R. I. Seamless plated filled wire and articles of personal wear made therefrom.....	18,364	Aug. 26	52	1230
Burgess & Co., C. A., San Francisco, Cal. Remedy for purifying the blood.....	18,589	Nov. 4	53	606
Burke, Thomas P., Peoria, Ill. Baking-powder.....	17,435	Jan. 28	50	440
Burnham, Edson H., Boston, Mass. Liquid remedy for diseases of the eye.....	18,656	Dec. 2	53	1262
Burnham, Walter S., Cleveland, Ohio. Blood-purifiers, tonics, and like remedies.....	18,115	July 1	52	2
Burns & Hunt, Keokuk, Iowa. Laundry-starch.....	18,739	Dec. 23	53	1744
Burpee & Co., W. Atlee, Philadelphia, Pa. Flower and vegetable seeds.....	18,260	Aug. 5	52	756
Burroughs, Charles S., Clinton, Mich. Chewing-gum.....	18,641	Nov. 18	53	926
Burson, Ernest E., Rockford, Ill. Medicated or aromatic tooth-picks.....	18,227	July 29	52	610
Burton Bros. & Co., New York, N. Y. Cotton goods.....	17,635	Mar. 11	50	1300
Bush, Andrew L., Westfield, Mass. Grinding-wheels of white corundum.....	17,660	May 6	51	811
Butler & Co., James G., St. Louis, Mo. Smoking and chewing tobacco, cigars, and cigarettes.....	17,769	Apr. 15	51	302
Butler & Kelley, New York, N. Y. Paper and envelopes.....	18,047	June 17	51	1788
Byerly, Charles H., Philadelphia, Pa. Remedy for coughs, colds, and diseases of the stomach and liver.....	18,575	Nov. 4	53	606
Cabot, Samuel, Boston, Mass. Germ and insect destroyers.....	17,475	Feb. 4	50	564
Caen, Camille, New York, N. Y. Feminine apparel.....	18,603	Nov. 11	53	762
Café Savarin Company, New York, N. Y., and Jersey City, N. J. Wines and liquors.....	18,556	Oct. 28	53	436
Caffray, Andrew, Maryville, Mo. Cigars.....	18,060	June 24	51	1950
Callaway, Alonzo N., and C. O. McClure, San Antonio, Tex. Blood-purifying medicine.....	17,896	May 13	51	972
Callustro Company, San Francisco and Oakland, Cal. Soaps and cleansing and polishing powders.....	17,541	Feb. 18	50	843
Cameron & Co., A. J., Philadelphia, Pa., Chicago, Ill., and New York, N. Y. Yarns.....	17,407	Jan. 21	50	308
Cameron & Co., A. J., Philadelphia, Pa., Chicago, Ill., and New York, N. Y. Yarns.....	17,408	Jan. 21	50	308
Cameron Manufacturing Co., New York, N. Y. Dry compressed yeast-cakes.....	17,611	Mar. 4	50	1136
Campbell, Henry F., Belmont, Mass. Remedy for neuralgia and rheumatic ailments.....	17,972	June 3	51	1471
Canedy & Wilkinson, North Adams and Boston, Mass. Shoes.....	17,584	Feb. 25	50	994
Carlile, Lawrence J. (See Rumph and Carlile.)				
Carlton's Blended Tea Company, Philadelphia, Pa. Mixed teas.....	17,770	Apr. 15	51	302
Carroll, Daniel B., New Orleans, La. Smoking-tobacco.....	17,562	Feb. 18	50	844
Carson, Pirie, Scott & Co., Chicago, Ill. Stockings, socks, shirts, and drawers.....	18,050	June 17	51	1788
Carter, Dinsmore & Co., Boston, Mass., and New York, N. Y. Laundry-blue.....	17,585	Feb. 25	50	994
Cassard & Son, G., Baltimore, Md. Refined hogs' lard.....	18,261	Aug. 12	52	908
Cassard & Son, G., Baltimore, Md. Hog lard.....	18,262	Aug. 12	52	908
Cattaraugus Cutlery Company, Little Valley, N. Y. Butchers' knives and steel implements.....	17,700	Mar. 25	50	1596
Celluloid Novelty Company, New York, N. Y. Collars and cuffs.....	18,076	June 24	51	1950
Celluloid Starch Co., New Haven, Conn. Laundry-starch.....	18,220	July 22	52	462
Celluloid Starch Co., New Haven, Conn. Laundry-starch.....	18,221	July 22	52	462
Champion Soap Powder Co., Providence, R. I. Soap-powder.....	18,441	Sept. 23	52	1812
Chapman, John M., New York, N. Y. Dried fruits.....	17,922	May 20	51	1136
Chapman & Meehan, New York, N. Y. Water-pails.....	18,532	Oct. 14	53	142
Chapman & Smith Company, Chicago, Ill. Almond paste for making macaroons.....	18,416	Sept. 9	52	1542
Chase, Arthur M., Orleans, Mass. Remedy for pulmonary diseases.....	17,911	May 13	51	972
Chase, R. F. M. (See Enricht, Drake, Wilson, and Chase.)				
Chase & Sanborn, Boston, Mass. Teas and coffees.....	17,741	Apr. 8	51	160
Chase & Sanborn, Boston, Mass. Teas and coffees.....	17,742	Apr. 8	51	160
Chase & Sanborn, Boston, Mass. Teas and coffees.....	17,743	Apr. 8	51	160
Chase & Sanborn, Boston, Mass. Teas and coffees.....	17,744	Apr. 8	51	160
Chautauqua Grape Growers' Shipping Association, Brocton, N. Y. Grapes.....	17,409	Jan. 21	50	308
Cheever, John H., New York, N. Y. Hose, belting, and packing.....	17,511	Feb. 11	50	714

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Cheney & Goulden, South Manchester, Conn. Ointment for chapped hands or roughness of the skin	17,701	Mar. 25	50	1596
Cherry, Morrow & Co., Nashville, Tenn. Farm and freight wagons	17,436	Jan. 28	50	440
Chicago Newspaper Union, Chicago, Ill. Printing and wrapping paper	18,376	Sept. 2	52	1374
Chicago Newspaper Union, Chicago, Ill. Printing and wrapping paper	18,377	Sept. 2	52	1374
Choate Drug and Chemical Company, Boston, Mass. Medicine for bronchial and pulmonary affections	17,563	Feb. 18	50	841
Choate Drug and Chemical Company, Boston, Mass. Solid medicines, usually in the form of lozenges, tablets, or troches	17,861	May 6	51	811
Clafin & Co., H. B., New York, N. Y. Hosiery	17,364	Jan. 7	50	2
Clafin & Co., H. B., New York, N. Y. Hosiery	17,365	Jan. 7	50	2
Clark & Co., H. H., Mendota, Ill. Condition-powders	17,965	May 27	51	1310
Clark & Co., James M., Louisville, Ky. Chewing-gum	17,898	May 13	51	972
Clark Johnson Medicine Company, New York, N. Y. Topical remedy for the cure of corns and other callosities	18,682	Dec. 9	53	1412
Clark Johnson Medicine Company, New York, N. Y. Remedy for diseases of the blood, stomach, and kidneys	18,683	Dec. 9	53	1412
Clarke & Courts, Galveston, Tex. Blank books, calendars, blotter-covers for writing-pads, and printed stationery	18,612	Nov. 11	53	762
Clarkson & Ford, New York, N. Y. Lubricating-oils	17,974	June 3	51	1471
Class, Franklin N., New York, N. Y. Remedy for diseases of the digestive organs	18,228	July 29	52	610
Clauber, Frederick A., New York, N. Y. Scissors, knives, axes, and razors	17,542	Feb. 18	50	844
Cleveland Baking Powder Company, New York, N. Y. Baking-powder	18,058	June 17	51	1788
Cleveland Chewing Gum Company, Cleveland, Ohio. Chewing-gum	17,958	May 27	51	1310
Cleveland Refining Company, Cleveland, Ohio. Illuminating-oil	17,668	Mar. 18	50	1452
Cleveland Rubber Company, Cleveland, Ohio. Rubber belting, hose, packing, clothing, druggists' and stationers' sundries, surgical goods, and like articles	18,491	Oct. 7	53	2
Clevenger Hair Balsam Co., Minneapolis, Minn. Medicine for curing diseases of the scalp	17,612	Mar. 4	50	1136
Clevenger Hair Balsam Co., Minneapolis, Minn. Medicine for curing diseases of the scalp	17,816	Apr. 29	51	628
Clifton Springs Manufacturing Company, Clifton Springs, N. Y. Certain named tinware	17,702	Mar. 25	50	1596
Climax Gasolene Company, Limited, Titusville, Pa. Naphtha	18,540	Oct. 21	53	280
Clotworthy, William P., Baltimore, Md. Fruit puddings and fruit jellies	17,745	Apr. 8	51	160
Clotworthy, William P., Baltimore, Md. Farinaceous compound with fruit flavorings	18,223	July 22	52	462
Cobb, Marvin W., and E. D. Merriam, Oberlin, Ohio. Local anæsthetic	17,543	Feb. 18	50	844
Colcord & Co., J. M., Saratoga Springs, N. Y. Dentifrice	18,745	Dec. 30	53	1890
Colgate & Co., New York, N. Y. Soap	17,794	Apr. 22	51	482
Colgate & Co., New York, N. Y. Soap, perfumery, and other toilet articles	17,956	May 27	51	1310
Collins Company, Collinsville, Conn. Plows and edge-tools	18,524	Oct. 14	53	142
Collins, Dennis H., Boston, Mass. Finishing-leather	18,311	Aug. 19	52	1066
Collins, George W., Holyoke, Mass. Roach-powder	17,897	May 13	51	972
Colliver, Jonathan R., Chicago, Ill. Salve or ointment	17,437	Jan. 28	50	440
Colt's Patent Fire Arms Manufacturing Company, Hartford, Conn. Pistols, rifles, and sporting-guns	17,817	Apr. 29	51	628
Columbia Shirt Company, Columbia, Pa. Shirts, collars, and cuffs	17,512	Feb. 11	50	714
Combremont, Louis, New York, N. Y. Watch-springs	18,740	Dec. 23	53	1744
Commercial Wood & Lime Company, Philadelphia, Pa. Cement	17,862	May 6	51	811
Conklin & Mersereau, Binghamton, N. Y. Timothy-seeds	17,366	Jan. 7	50	2
Conklin & Mersereau, Binghamton, N. Y. Timothy-seeds	17,367	Jan. 7	50	2
Connable & Co., R. M., Dayton, Ohio. Pantaloon, coats, vests, and overalls	18,019	June 10	51	1624
Conner, Arthur J., Boston, Mass. Disinfectants	17,703	Mar. 25	50	1596
Connors, William, Troy, N. Y. Paints, driers, whitelead, stove-polish, and stove, furnace, and roofing cement	18,539	Oct. 21	53	280
Conrad, Louis, Elizabeth, N. J. Liniment	18,329	Aug. 19	52	1066
Consolidated Cigarette Company, New York, N. Y. Cigarettes, cigarros, cheroots, and cigars	18,357	Aug. 26	52	1230
Consolidated Fastener Company, New York, N. Y. Buttons, clasps, and spring-fasteners for gloves and apparel	18,707	Dec. 16	53	1576
Coonley, Dwight M., South Bend, Ind. Suppositories for curing female diseases and piles	18,114	July 1	52	2
Cooper, George C., Detroit, Mich. Herb remedies for certain chronic diseases	18,442	Sept. 23	52	1812
Cooper, James L., Fort Worth, Tex. Medical compound for liver diseases	17,759	Apr. 15	51	302
Cooper, Richard H., Omaha, Nebr. Preparation for the prevention and removal of scale in steam-boilers	18,341	Aug. 26	52	1230
Corle, Eugene K. (See Corle, Joseph F. and E. K.)				
Corle, Joseph F. and E. K., Kansas City, Mo. Oat products	17,818	Apr. 29	51	628
Corner & Farnum, Wichita, Kans. Yeast	17,795	Apr. 22	51	482
Coronado Water Company, Coronado, Cal. Natural mineral water	18,105	July 1	52	2
Cotton Oil Product Company, Union, N. J. Cotton-seed oil in all its forms	18,580	Nov. 4	53	606
Cotton Oil Product Company, Union, N. J. Cotton-seed oil and solidified cotton-oil	18,581	Nov. 4	53	606
Cotton Oil Product Company, Union, N. J. Soap	18,649	Nov. 25	53	1096
Couch, Ellen S., Fredonia, Ohio. Liquid toilet preparation for the hair	18,417	Sept. 9	52	1542
Coventry Company, Coventry, R. I. Bleached sheeting and like goods	18,570	Oct. 28	53	436
Craver, John W., Harrisburg, Pa. Cigars	18,538	Oct. 21	53	280
Creedmore Cartridge Company, New Portage, Ohio. Cartridges for fire arms	18,723	Dec. 23	53	1744
Creedmore Cartridge Company, New Portage, Ohio. Cartridges for fire arms	18,724	Dec. 23	53	1744
Creedmoor Cartridge Company, New Portage, Ohio. Cartridges for fire arms	18,759	Dec. 30	53	1890
Creehman, McCormick & Co., St. Paul, Minn. Teas, coffees, spices, baking-powders, and flavoring extracts	17,727	Apr. 1	51	2
Crichton & Burch, New York, N. Y. Lawns, cotton, and woolen goods	18,337	Aug. 26	52	1230
Crompton & Brothers, James R., Elton Paper Mills, near Bury, county of Lancaster, England. Paper	17,476	Feb. 4	50	564
Crooks & Co., Robert, New York, N. Y. Green and roasted coffee	18,729	Dec. 23	53	1744
Crosby Electric Company, New York, N. Y. Galvanic batteries	17,746	Apr. 8	51	160
Crystal Gelatine Co., Boston, Mass. Gelatine	18,224	July 22	52	462
Crystal Tablet Company, Rochester, N. Y. Washing compound	18,542	Oct. 21	53	280
Cumberland Hydraulic Cement and Manufacturing Company, Cumberland, Md., and New York, N. Y. Cement	18,432	Sept. 16	52	1670
Cumberledge, Samuel G., J. U. Garver, and T. W. Deal, Carthage and Kansas City, Mo. Specific for affections of the throat, chest, and lungs	18,401	Sept. 2	52	1374
Curran, James A., Denver, Colo. Cosmetic and remedial cream	18,769	Dec. 30	53	1890
Curtice Brothers Company, Rochester, . . Y., and Boston, Mass. Catsup	18,148	July 8	52	164
Cutting Packing Company, San Francisco, Cal. Dried fruits and vegetables	18,119	July 1	52	2
Cutting Packing Company, San Francisco, Cal. Canned meats, fish, fruits, and vegetables	18,120	July 1	52	2
Dadiirlian, Markar G., New York, N. Y. Tonic and remedy for asthma, bronchitis, and consumption	18,048	June 17	51	1788
Danner Manufacturing Company, John, Canton, Ohio. Revolving book-cases	17,613	Mar. 4	50	1136

Alphabetical list of registrants of trade-marks—Continued.

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Darlington, Celestia H. (See Ward and Darlington.)				
Davalos & Co., L. Gonzalez, Chicago, Ill. Pickled meats	17,669	Mar. 18	50	1452
Davenport, Joseph B., Augusta, Ga. Remedies for fever and ague and malarial affections	17,438	Jan. 28	50	440
Davis & Co., Brooklyn, N. Y. Japans and varnishes	17,439	Jan. 28	50	440
Davis, William B., Newport, N. Y. Harness-oil	18,077	June 24	51	1950
Day, John H., Albany, N. Y. Dry paste	17,723	Apr. 1	51	2
De-Oxidized Metal Company, Bridgeport, Conn. Deoxidized bronze digesters for making sulphite fiber	17,636	Mar. 11	50	1300
De-Oxidized Metal Company, Bridgeport, Conn. Deoxidized bronze digesters for making sulphite fiber	17,637	Mar. 11	50	1300
De-Oxidized Metal Company, Bridgeport, Conn. Deoxidized bronze digesters for making sulphite fiber	17,638	Mar. 11	50	1300
De-Oxidized Metal Company, Bridgeport, Conn. Deoxidized bronze digesters for making sulphite fiber	17,639	Mar. 11	50	1300
De Witt, Elden C., Chicago, Ill. Liver-pills	17,819	Apr. 29	51	628
Deal, Theodore W. (See Cumberledge, Garver, and Deal.)				
Decker Bros., New York, N. Y. Piano-fortes	18,389	Sept. 2	52	1374
Delacro & Co., Ch., Brussels, Belgium. Insecticide	17,440	Jan. 28	50	440
Delacro & Co., Ch., Brussels, Belgium. Insecticide	17,441	Jan. 28	50	440
Delafeld, McGovern & Co., New York, N. Y. Wine	18,678	Dec. 9	53	1412
Demartial & Co., Gustave, Limoges, France. Porcelain, crockery, earthenware, faience, and glass	18,533	Oct. 14	53	142
Denny, Poor & Co., New York, N. Y. Cotton dress goods and draperies	18,761	Dec. 30	53	1690
Desbecker & Co., Buffalo, N. Y. Hats or caps	17,587	Feb. 25	50	994
Detre & Blackburn, Philadelphia, Pa. Filing-binders for bills and documents	18,418	Sept. 9	52	1542
Deutsch & Co., New York, N. Y. Misses' cloaks and suits	18,443	Sept. 23	52	1812
Devoc Manufacturing Company, New York, N. Y. Illuminating-oil	18,226	July 29	52	610
Diamond Laboratory Company, Naugatuck, Conn. Emulsified preparations, throat and lung tablets, cough-mixtures, and lotions for the skin	17,704	Mar. 25	50	1596
Dickerman, Fletcher W., Chicago, Ill. Desks, seats, and similar articles of school, office, and business furniture	17,899	May 13	51	972
Dickinson & Co., H. A., New York, N. Y. Whisky	18,165	July 15	52	312
Dicks, Charles B. (See Dicks, Frederick A. and C. B.)				
Dicks, Frederick A. and C. B., Natchez, Miss. Medical compound for the cure of certain named diseases	17,963	May 27	51	1310
Didisheim, Hippolyte, New York, N. Y. Watch-movements	18,514	Oct. 14	53	142
Dietz & Co., George H., Louisville, Ky. Filing-boxes, pens, gum erasers, and writing-paper	18,138	July 8	52	164
Dithridge & Co., Pittsburg, Pa. Lamp for burning kerosene-oil	17,863	May 6	51	811
Ditmar & Weisser, Antwerp, Belgium. Chicory	17,442	Jan. 28	50	440
Dodge & Olcott, New York, N. Y. Oil of lemon	18,290	Aug. 12	52	908
Dodge & Olcott, New York, N. Y. Oil of bergamot	18,291	Aug. 12	52	908
Dodge & Olcott, New York, N. Y. Oil of orange	18,292	Aug. 12	52	908
Doehrer, George, San Francisco, Cal. Remedy for catarrh and kidney and liver diseases	18,358	Aug. 26	52	1230
Dongan & Co., John, New York, N. Y. Velvetens	18,207	July 22	52	462
Dougherty, Matson I., Philadelphia, Pa. Cigars	18,106	July 1	52	2
Douthett, Andrew T., Allegheny, Pa. Metal for steam-boilers	18,137	July 8	52	164
Dover Stamping Company, Boston and Cambridge, Mass. Certain household and kitchen articles	18,056	June 17	51	1788
Dowd, Daniel L., New York, N. Y. Exercising-machines	17,670	Mar. 18	50	1452
Dowd, John E., Chicago, Ill. Pulley-weights and similar exercising apparatus	17,771	Apr. 15	51	302
Drake, Albert A. (See Enricht, Drake, Wilson, and Chase.)				
Drees, Heinrich G., Bentheim, Hanover, Germany. Soluble metal albuminates	17,586	Feb. 25	50	994
Drevet Manufacturing Company, New York, N. Y. Remedy for dyspepsia, catarrh of the stomach, ulcers, and other microbial diseases	18,218	July 22	52	462
Drevet Manufacturing Company, New York, N. Y. Chemical preparation for bleaching purposes	18,235	July 29	52	610
Drevet Manufacturing Company, New York, N. Y. Remedy for the destruction of bacteria, microbes, and germs in the human system	18,236	July 29	52	610
Drevet Manufacturing Company, New York, N. Y. Peroxide of hydrogen	18,273	Aug. 5	52	756
Dryden & Palmer, New York, N. Y. Rock-candy and rock-candy sirup	17,733	Apr. 8	51	160
Du Vivier & Co., New York, N. Y. Whisky	18,327	Aug. 19	52	1066
Dueber Watch Case Manufacturing Company, Canton and Cincinnati, Ohio; Newport, Ky.; Chicago, Ill.; New York, N. Y.; Boston, Mass., and San Francisco, Cal. Composition watch-cases	18,320	Aug. 19	52	1066
Dukes, Aaron N., Peru, Ind. Refrigerators and ice-chests	18,534	Oct. 14	53	142
Dullam Bros., Flint, Mich. Remedy for diseases of the blood, liver, and kidneys	18,459	Sept. 30	52	1954
Duluth Imperial Mill Company, Duluth, Minn. Wheat-flour	17,443	Jan. 28	50	440
Dumois & Co., Hipolito, New York, N. Y. Bananas	18,460	Sept. 30	52	1954
Dunlap, Lawton & Hall, Chicago, Ill. Leather and canvas clothing	18,185	July 15	52	312
Dunn, George W., New York, N. Y. Medical preparation for the cure of germ diseases	17,477	Feb. 4	50	564
Durand, Huguenin & Co., L., Basle, Switzerland, and St. Fons, France. Violet dyes	18,107	July 1	52	2
Durand, Huguenin & Co., L., Basle, Switzerland, and St. Fons, France. Blue dyes	18,108	July 1	52	2
Durkee & Co., E. R., New York, N. Y. Spices, mustard, and bread-raising materials, including soda, cream of tartar, and baking-powder	17,532	Feb. 11	50	714
Durkee & Co., E. R., New York, N. Y. Natural and prepared food for birds and fowls	17,772	Apr. 15	51	302
Durkee & Co., E. R., New York, N. Y. Bread-raising materials	18,374	Sept. 2	52	1374
Durkee & Co., E. R., New York, N. Y. Food preparations of grain and other seeds, including starches, tapioca, and sago	18,492	Oct. 7	53	2
Durkee & Co., E. R., New York, N. Y. Extracts, essences, oils, condiments, and pepper-sauce	18,493	Oct. 7	53	2
Eagle Roller Mill Co., New Ulm, Minn. Wheat-flour	18,520	Oct. 14	53	142
Eames, George F., Roxey, Miss. Compound for the cure of hog-cholera	17,588	Feb. 25	50	994
East St. Louis Packing and Provision Company, Chicago and East St. Louis, Ill., and St. Louis, Mo. Smoked meats	18,730	Dec. 23	53	1744
East St. Louis Packing and Provision Company, Chicago and East St. Louis, Ill., and St. Louis, Mo. Smoked meats	18,731	Dec. 23	53	1744
Eastman & Bro., Philadelphia, Pa. Toilet-essences and toilet-soap	17,671	Mar. 18	50	1452
Easton, John, Brockville, Canada. Remedy for bronchial affections	18,687	Dec. 9	53	1412
Eberlein, Frederick, Chicago, Ill. Various medicinal remedies as specified	18,109	July 1	52	2
Eccles Drug Co., Franklin, Ind. Remedy for throat and lung troubles	18,725	Dec. 23	53	1744
Eckermann & Will, Syracuse, N. Y. Wax candles	17,513	Feb. 11	50	714
Eckermann & Will, Syracuse, N. Y. White-wax and bleached-wax goods	17,514	Feb. 11	50	714
Eckermann & Will, Syracuse, N. Y. Wax candles	18,396	Sept. 2	52	1374
Eddy & Co., W. B., Whitehall, N. Y. Ointment	18,262	Aug. 5	52	756
Edel Brothers, Richmond, Va. Whisky	18,592	Nov. 4	53	606
Edel Brothers, Richmond, Va. Whisky	18,636	Nov. 18	53	926
Edson & Co., Starks, Westminster Station, Vt. Wall-coating	17,640	Mar. 11	50	1300
Efing, John, Rochester, N. Y. Cigars	17,705	Mar. 25	50	1596
Eisner & Mendelson Company, New York, N. Y. Soporific	18,375	Sept. 2	52	1374

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Electric Cutlery Company, New York, N. Y. Razer strops, bones, steels, and the like.....	17,864	May 6	51	811
Electrical Supply Company, Chicago, Ill., and Ansonia, Conn. Wire for electrical purposes.....	17,564	Feb. 18	50	844
Electrical Supply Company, Ansonia, Conn. Wire used in electric manufactures.....	17,706	Mar. 25	50	1596
Ellingwood & Co., Lowell, Mass. Deodorizers, disinfectants, liniments, and ointments.....	18,034	June 17	51	1788
Elson & Co., Thomas, Manchester, England. Velvets.....	18,035	June 17	51	1788
English, John L., Martinsville, Va. Smoking-tobacco.....	17,900	May 13	51	972
Eoricht, Louis, A. A. Drake, W. S. Wilson, and R. F. M. Chase, New York, N. Y. Basic cement forming artificial stone.....	17,747	Apr. 8	51	160
Ensign, Charles, Chicago, Ill. Cigars.....	18,433	Sept. 16	52	1670
Esche, Moritz S., New York, N. Y. Hosiory.....	18,411	Sept. 9	52	1542
Essex Watch Case Company, Newark, N. J. Watch-cases.....	18,174	July 15	52	312
Essex Watch Case Company, Newark, N. J. Watch-cases.....	18,186	July 15	52	312
Essex Watch Case Company, Newark, N. J. Watch-cases.....	18,366	Aug. 26	52	1230
Essex Watch Case Company, Newark, N. J. Watch-cases.....	18,509	Oct. 7	53	2
Esterbrook Steel Pen Manufacturing Company, Camden, N. J. Metallic pens.....	17,565	Feb. 18	50	844
Eureka Fertilizer Company, Perryville, Md. Artificial fertilizers.....	18,726	Dec. 23	53	1744
Eureka Fire Hose Company, New York, N. Y. Hydraulic hose, (rubber-lined, seamless, one-ply, and cotton-fabric).....	17,641	Mar. 11	50	1300
Evans, John T., San Francisco, Cal. Specific for the cure of poisoning produced by poison-oak.....	18,576	Nov. 4	53	606
Ewer, Fernando A., New York, N. Y. Tooth-powder.....	18,322	Aug. 19	52	1066
Excelsior Rubber Works, New York and Brooklyn, N. Y. Dental rubber.....	17,444	Jan. 28	50	440
Excelsior Springs Company, Kansas City, Mo. Natural mineral waters.....	18,543	Oct. 21	53	280
Excelsior Waterproof Co., Cleveland, Ohio. Water-proof wearing-apparel and blankets.....	18,390	Sept. 2	52	1374
Ezekiel, Ezekiel M., Springfield, Mass. Varnish or material for exterior finish of wood-work.....	18,662	Dec. 2	53	1262
F. B. Q. Clothing Company, Jersey City, N. J., and New York, N. Y. Outside clothing for men and boys.....	17,973	June 3	51	1471
Faber, Herman W., St. Louis, Mo. Medicine for private use.....	18,486	Oct. 7	53	2
Fairbank & Company, N. K., St. Louis, Mo., Chicago, Ill., and New York, N. Y. Soap.....	17,865	May 6	51	811
Fairbank & Company, N. K., St. Louis, Mo., Chicago, Ill., and New York, N. Y. Bar and cake soap.....	17,866	May 6	51	811
Fait & Winebrenner, Baltimore, Md. Canned oysters.....	17,445	Jan. 28	50	440
Falk, H. E., Liverpool, county of Lancaster, England. Salt.....	17,820	Apr. 29	51	628
Falk, Jung & Borchert Brewing Company, Milwaukee, Wis. Lager-beer.....	17,867	May 6	51	811
Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Antiseptic powder.....	17,393	Jan. 14	50	170
Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Anti-febriles.....	18,637	Nov. 18	53	926
Farbenfabriken, vormals Fr. Bayer & Company, Elberfeld, Germany. Anti-gonorrhoeic and ad-striking medicines.....	17,868	May 6	51	811
Farbenfabriken, vormals Fr. Bayer & Company, Elberfeld, Germany. Antiseptic medical substance in powdered form.....	17,869	May 6	51	811
Farbenfabriken, vormals Fr. Bayer & Company, Elberfeld, Germany. Antiseptic medical substance in powdered form.....	17,888	May 6	51	812
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,748	Apr. 8	51	160
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,844	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,845	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,846	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,847	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,848	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,849	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,850	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	17,851	May 6	51	810
Farnum & Co., John, Philadelphia, Pa. Gingham.....	18,078	June 24	51	1950
Farnum & Co., John, Philadelphia, Pa. Gingham.....	18,240	July 29	52	610
Farnum & Co., John, Philadelphia, Pa. Gingham.....	18,241	July 29	52	610
Farnum & Co., John, Philadelphia, Pa. Gingham.....	18,242	July 29	52	610
Farnum & Co., John, Philadelphia, Pa. Gingham.....	18,243	July 29	52	610
Farnum & Co., John, Philadelphia, Pa. Gingham.....	18,244	July 29	52	610
Farnum & Co., John, Philadelphia, Pa. Gingham.....	18,245	July 29	52	610
Farrington & Co., H. & G. B., New York, N. Y. Teas.....	18,594	Nov. 4	53	606
Favier, Albert J., Boston, Mass. Prepared seasoning for food.....	18,746	Dec. 30	53	1890
Feddeman & Earle, Centerville, Md. Phosphate fertilizers.....	17,734	Apr. 8	51	160
Felt & Tarrant Manufacturing Company, Chicago, Ill. Computing and transcribing machines.....	18,154	July 8	52	164
Fernoline Chemical Company, New York, N. Y., and Charleston S. C. Insect-powder.....	18,732	Dec. 23	53	1744
Fernoline Chemical Company, New York, N. Y., and Charleston, S. C. Liniment.....	18,733	Dec. 23	53	1744
Fernow, John A. W., St. Louis, Mo. Certain named medical remedies.....	17,773	Apr. 15	51	302
Ferrer, Carlos F., New York, N. Y. Lard.....	17,368	Jan. 7	50	2
Feuerherd, May & Co., London, England. Port wine.....	18,342	Aug. 26	52	1230
Feuerherd, May & Co., London, England. Port wine.....	18,351	Aug. 26	52	1230
Fibre Manufacturing Company, New York, N. Y. Plastic compound for the manufacture of battery-jars, insulators, door-knobs, billiard-counters, cane-handles, and similar articles.....	18,559	Oct. 28	53	436
Figge & Brother, Brooklyn, N. Y. Lard.....	18,020	June 10	51	1624
Findley, William J., Atlantic, Iowa. Healing lotion.....	17,774	Apr. 15	51	302
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,410	Jan. 21	50	308
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,411	Jan. 21	50	308
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,412	Jan. 21	50	308
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,413	Jan. 21	50	308
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,414	Jan. 21	50	308
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,415	Jan. 21	50	308
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,416	Jan. 21	50	308
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all descriptions.....	17,515	Feb. 11	50	714
Finlayson, Bousfield & Co., Johnstone, county of Renfrew, Scotland. Yarns and threads of all kinds.....	17,516	Feb. 11	50	714
Finlayson, Bousfield & Co., Johnstone, Scotland. Yarns and threads of all kinds.....	18,699	Dec. 16	53	1576
Fishel & Levy, New York, N. Y. Whisky.....	18,263	Aug. 5	52	756
Fisher, Hart C., Chicago, Ill. Tea.....	17,707	Mar. 25	50	1596
Fisher & Wise, Boston, Mass. Flour.....	18,095	July 1	52	2
Fiss & Doerr, Lancaster, Pa. Cigars and cigarettes.....	18,403	Sept. 9	52	1542
Fitzgerald, John, Worcester, Mass. Pills.....	18,079	June 24	51	1950
Fogel, Ruben R., New York, N. Y. Jewelry and watches.....	18,293	Aug. 12	52	908
Fogel, Ruben R., New York, N. Y. Jewelry.....	18,438	Sept. 16	52	1670
Fogg & Co., W. E. and E. H. West Milan, N. H. Medicine for indigestion, liver complaint, and analogous diseases.....	18,521	Oct. 14	53	142
Ford, Frederic C., New Orleans, La. Tiles.....	17,642	Mar. 11	50	1300
Forestville Canning Company, Hanover, N. Y., and Cleveland, Ohio. Pulp of green corn.....	17,966	June 3	51	1472
Foster, Milburn & Co., Buffalo, N. Y. Remedy for catarrh and bronchial affections.....	18,515	Oct. 14	53	142
Fouratt, Frank, New York, N. Y. Soft-felt and wool hats.....	18,593	Nov. 4	53	606

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Franco American Food Company, East Orange, N. J., and New York, N. Y. French soups.....	17,952	May 27	51	1310
Frankan & Co., Adolph, London, England. Tobacco-pipes and cigar and cigarette tubes and holders.....	17,369	Jan. 7	50	2
Freeman Bros., New York, N. Y. Hats.....	18,212	July 22	52	462
Freeman Wire and Iron Company, St. Louis, Mo. Barbed wire.....	17,370	Jan. 7	50	2
Fremery & Co., James de, San Francisco, Cal. Wash-blue.....	17,775	Apr. 15	51	302
Fremery & Co., James de, San Francisco, Cal. Wash-blue.....	17,901	May 13	51	972
French, Richards & Co., Philadelphia, Pa. Liquid perfumery.....	18,697	Dec. 16	53	1576
French, Richards & Co., Philadelphia, Pa. Liquid perfumery.....	18,698	Dec. 16	53	1576
Freurs Bros., Brooklyn, N. Y. Liniment.....	18,485	Oct. 7	53	2
Frost & Co., George, Boston, Mass. Hose-supporters.....	17,614	Mar. 4	50	1136
Fry & Sons, J. S., Bristol and London, England; Sydney, New South Wales, and New York, N. Y. Cocoa.....	17,446	Jan. 28	50	440
Fuller Bros. Manufacturing Company, Kalamazoo, Mich. Wash-board.....	17,797	Apr. 22	51	482
Fulton & Bro., Mount Airy, N. C. Plug and chewing tobacco.....	18,012	June 10	51	1624
Fulton & Bro., Mount Airy, N. C. Chewing-tobacco.....	18,404	Sept. 9	52	1542
Galbraith, William H., Philadelphia, Pa. Toilet preparations for the face and hands, including soaps and cosmetics.....	17,566	Feb. 18	50	844
Galer, Ebenezer, Brooklyn, N. H. Cocoa.....	17,672	Mar. 18	50	1452
Galt, Bro. & Co., M. W., Washington, D. C. Knives, forks, spoons, and other solid and plated ware.....	18,080	June 24	51	1950
Galt, Bro. & Co., M. W., Washington, D. C. Knives, forks, spoons, and other solid and plated ware.....	18,081	June 24	51	1950
Gambrell Manufacturing Company, C. A., Baltimore, Md. Wheat-flour.....	18,638	Nov. 18	53	926
Garver, John U. (See Cumberledge, Garver, and Deal.).....				
Gassner & Gust, New Orleans, La. Pile-ointment.....	17,371	Jan. 7	50	2
Gautschi, Henry, Philadelphia, Pa. Music-boxes.....	18,497	Oct. 7	53	2
Gautschi, Henry, Philadelphia, Pa. Music-boxes.....	18,498	Oct. 7	53	2
Gautschi, Henry, Philadelphia, Pa. Music-boxes.....	18,499	Oct. 7	53	2
Gem Shirt Company, Dayton, Ohio. Shirts, overalls, pantaloons, and working-jackets.....	18,378	Sept. 2	52	1374
General Company of the Pure Milks, Paris, France. Milk, butter, cheese, and similar articles.....	17,937	May 20	51	1136
Genesee Salt Company, New York, N. Y. Table and other salt.....	18,563	Oct. 28	53	436
Geneva Magnetic Water Company, Washington, D. C., and Geneva, N. Y. Natural mineral water.....	18,277	Aug. 5	52	756
German Medicine Company, Minneapolis Minn. Medicine for external use on the skin and scalp.....	17,643	Mar. 11	50	1300
Getzler, Solomon, New York, N. Y. Preventive of seasickness.....	17,798	Apr. 22	51	482
Gibbs Preserving Company, Baltimore, Md. Canned oysters, meats, fruits, and vegetables.....	18,516	Oct. 14	53	142
Gibson & Brother, George H., Wheeling, W. Va. Baking-powder.....	17,821	Apr. 29	51	628
Gillespie & Sons, Charles H., New York, N. Y., and Marion, N. J. Varnishes, japans, fillers, and finishers.....	18,564	Oct. 28	53	436
Gillespie & Sons, Charles H., New York, N. Y., and Marion, N. J. Japans, varnishes, fillers, and finishers.....	18,577	Nov. 4	53	606
Gillespie & Sons, Charles H., New York, N. Y., and Marion, N. J. Liquid-drier.....	18,632	Nov. 18	53	926
Gillett, John T., Dallas, Tex. Blood-purifying medicine.....	17,478	Feb. 4	50	564
Gilliam Manufacturing Co., Canton, Ohio. Harness.....	17,870	May 6	51	811
Gilman, George F., New York, N. Y. Breakfast coffee.....	18,734	Dec. 23	53	1744
Gilman, George F., New York, N. Y. Tea.....	18,735	Dec. 23	53	1744
Glassine Company, Boston, Mass. Cleaning and polishing preparations.....	17,992	June 3	51	1472
Gleisner, Moritz W. F., New York, N. Y. Refined petroleum.....	18,653	Nov. 25	53	1096
Globe Light and Heat Company, Chicago, Ill. Blow-pipes.....	18,380	Sept. 2	52	1374
Goetzmann & Co., F., Rochester, N. Y. Whisky.....	18,642	Nov. 18	53	926
Goodell & Waters, Philadelphia, Pa. Band-saw guides.....	17,975	June 3	51	1472
Gorton, George, Racine, Wis. Baskets.....	18,312	Aug. 19	52	1066
Gottschalk Co., Baltimore, Md. Whisky.....	17,544	Feb. 18	50	844
Gould, George T., New York, N. Y. Tea.....	18,541	Oct. 21	53	280
Gourd & Tournade, New York, N. Y. Mineral water.....	17,479	Feb. 4	50	564
Gousset, Cyprien, New York, N. Y. Chocolates and candies.....	17,673	Mar. 18	50	1452
Graef & Schmidt, New York, N. Y. Razors.....	18,007	June 10	51	1624
Graham, Hinkley & Co., New York, N. Y. Fencing, agricultural implements, including picks and shovels, and vehicles.....	18,613	Nov. 11	53	762
Gras, Rudolph, New York, N. Y. Puzzles.....	17,589	Feb. 25	50	994
Grauley, Henry B., Philadelphia, Pa. Cigars.....	18,670	Dec. 2	53	1262
Gravelly & Miller, Danville, Va. Plug and twist tobacco, smoking-tobacco, snuff, cigarettes, and cigars.....	18,229	July 29	52	610
Gravelly & Miller, Danville, Va. Tobacco, snuff, cigars, and cigarettes.....	18,264	Aug. 5	52	756
Graves, Gilbert S., Buffalo, N. Y. Laundry-starch.....	18,139	July 8	52	164
Graves, Gilbert S., Buffalo, N. Y. Laundry-starch.....	18,343	Aug. 26	52	1230
Gravure Etching Company, Boston, Mass. Black and white reproductions of paintings, drawings, and designs.....	18,444	Sept. 23	52	1812
Greeley & Company, E. S., New Haven, Conn. Telegraph-instruments and parts thereof.....	17,871	May 6	51	811
Green & Co., W. R., New York, N. Y. Inner soles for boots and shoes.....	18,213	July 22	52	462
Greene, Tweed & Co., New York, N. Y. Brass studs for machine-beltting.....	18,379	Sept. 2	52	1374
Greenebaum, Simon, Chicago, Ill. Soap and a cleaning and polishing compound.....	17,852	May 6	51	811
Greenleaf, Oscar S., Holyoke, Mass. Bond, note, and flat paper.....	18,049	June 17	51	1788
Grenamier, Jacob T., Chicago, Ill. Complexion-powder.....	18,604	Nov. 11	53	762
Gridley, Charles H., Newfield, Pa. Compound for the cure of kidney, liver, and stomach derangements.....	17,394	Jan. 14	50	170
Griffin & McElroy, Bridgeport, Conn. Hams, shoulders, bacon, and lard.....	18,096	July 1	52	2
Griffing Iron Company, A. A., Jersey City, N. J., and Chicago, Ill. Valves for stoves and heaters.....	17,822	Apr. 29	51	628
Griggs, Henry S., New York, N. Y. Soap-powder.....	17,799	Apr. 22	51	482
Groff, Charles R., St. Paul, Minn. Baking-powder.....	18,110	July 1	52	2
Grossman, Jacob, New Orleans, La. Hair-tonics.....	18,061	June 24	51	1950
Grossmith, John L., London, England. Perfumery.....	18,214	July 22	52	462
Grover, Charles S., Lynn, Mass. Ladies' boots and shoes.....	18,565	Oct. 28	53	436
Gude & Co., O. J., New York, N. Y. Ball-blue for laundry purposes.....	18,708	Dec. 16	53	1576
Guilath, Charles, St. Louis, Mo. Medicinal elixirs.....	17,480	Feb. 4	50	564
Gump, Jacob, Baltimore, Md. Buckles.....	17,872	May 6	51	811
Gurney, James T., Boston, Mass. Caps.....	18,405	Sept. 9	52	1542
Hagedorn & Merz, Philadelphia, Pa. Shirts.....	18,605	Nov. 11	53	762
Hager, George L. F., South Bend, Ind. Medicated tablets for female diseases.....	18,713	Dec. 16	53	1576
Hall, Edwin A., New Orleans, La. Remedy for gonorrhea and gleet.....	17,590	Feb. 25	50	994
Halma Company, Portland, Me., and Boston, Mass. Parlor-games.....	18,089	June 24	51	1950
Hand Brothers, New York, N. Y. Lard.....	17,481	Feb. 4	50	564
Hand Brothers, New York, N. Y. Lard.....	17,545	Feb. 18	50	844
Hanes, B. F., Winston, N. C. Plug and twist chewing and smoking tobacco.....	18,381	Sept. 2	52	1374

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Hankels, Frederick, Manch Chunk, Pa. Salve for piles and leucorrhœa	17,800	Apr. 22	51	482
Hann, Otto, New York, N. Y. Black dye for leather	17,593	Feb. 25	50	994
Hann, Otto, New York, N. Y. Black dye for leather	17,594	Feb. 25	50	994
Harbaugh Veterinary Remedy Company, Norfolk, Va. Veterinary remedies	17,644	Mar. 11	50	1300
Harburger Gummi-Kamm Co., Hamburg and Harburg, Germany. Rubber combs	17,595	Feb. 25	50	994
Harburger Gummi-Kamm Co., Harburg and Hamburg, Germany. Rubber combs	18,170	July 15	52	312
Hardy, Charles S., Boston, Mass. Remedy for diseases of the nervous and sexual system	18,082	June 24	51	1950
Harman & Strauss, New York, N. Y. Fountain-pens and like goods	17,546	Feb. 18	50	844
Harnist, William D., Edwardsville, Ill. Certain named toilet preparations	17,395	Jan. 14	50	170
Harper, Thomas H., Redditch, England. Needles	18,036	June 17	51	1788
Harr, Dock D., Belmond, Iowa. Preparation for the cure of catarrh	18,419	Sept. 9	52	1542
Harr, Dock D., Belmond, Iowa. Preparation for rough skin	18,445	Sept. 23	52	1812
Harrington, Alfred W., and A. E. Southward, New York, N. Y. Puzzles	17,591	Feb. 25	50	994
Harrison Bros. & Co., Philadelphia, Pa. Enamel-paint	18,597	Nov. 4	53	606
Harrison Bros. & Co., Philadelphia, Pa. Paints, stains, and similar preparations	18,600	Nov. 4	53	606
Harthill & Anderson, Louisville, Ky. Medicine for the cure of diseases of horses	18,134	July 8	52	164
Hartmann & Hubbard, New York, N. Y. Champagne-wine	17,447	Jan. 28	50	440
Hastings, Daniel H., Philadelphia, Pa. Hard-rubber trusses, supporters, and the like	17,448	Jan. 28	50	440
Hatchwell, Julio, New York, N. Y. Cigars	18,265	Aug. 5	52	756
Hatheway & Co., Boston, Mass. Lobsters, herring, mackerel, and clams	17,776	Apr. 15	51	302
Hauck, George W. and S. F., Mechanicsburg, Pa. Fly-nets for horses	17,592	Feb. 25	50	994
Hauck, Samuel F. (See Hauck, George W. and S. F.)				
Hawley, Folsom & Ronimus, Boston, Mass. Shirts, waists, underwear, and furnishings	18,063	June 24	51	1950
Hay, Frank R., Johnstown, Pa. Composition for cleaning glass, metals, and other hard substances	18,446	Sept. 23	52	1812
Hayden, F. von, Nachfolger, Radebeul, near Dresden, Germany. Medical compounds for antithermic, antirheumatic, and antiseptic uses	18,647	Nov. 25	53	1096
Hayden, William R., Bedford Springs, Mass. Remedy for certain named diseases	18,669	Dec. 2	53	1262
Healy, John J., Far Rockaway, N. Y. Perfumery	17,372	Jan. 7	50	2
Heath, Robert F. S., Camden, N. J. Preserved foods, including desserts, fruits, and jellies for soups	17,373	Jan. 7	50	2
Heaton-Peninsular Button Fastener Company, Providence, R. I. Three-pronged button-fasteners	17,749	Apr. 8	51	160
Hecker, The Estate of George V., New York, N. Y. Buckwheat-flour	18,000	June 3	51	1472
Helke, William L., Sacramento, Cal. Remedies for nervous and sexual diseases	18,747	Dec. 30	53	1890
Heller & Bro., A., New York, N. Y. Brandy	18,352	Aug. 26	52	1230
Heller & Merz Company, New York, N. Y. Laundry-blue	17,777	Apr. 15	51	302
Henderson, Peter G., Central City, Iowa. Creamery butter	17,533	Feb. 11	50	714
Hernandos, Diez, Jerez de la Frontera, Spain. Sherry wine	17,617	Mar. 4	50	1136
Hetherington, John E., New York, N. Y. Electrical machines for curative purposes	17,396	Jan. 14	50	170
Hetherington, John E., New York, N. Y. Toilet-masks for the complexion	18,500	Oct. 7	53	2
Hibbard, Spencer, Bartlett & Company, Chicago, Ill. Knives, scissors, shears, and razors	18,317	Aug. 19	52	1066
Hickey, Nancy E., Marathon, N. Y. Blood-purifier and tonic remedy for internal and external use	18,353	Aug. 26	52	1230
Hill, Edward B., Brookline, Mass. Remedies for skin diseases, burns, scalds, and similar ailments	18,748	Dec. 30	53	1890
Hirschberg Optical Company, H. St. Louis, Mo. Clinical thermometers	17,976	June 3	51	1472
Hirschberg & Steiunman, New York, N. Y. Clothing for men and youths	18,736	Dec. 23	53	1744
Hite, Samuel P., Staunton, Va. Remedy for blood and kidney diseases	18,447	Sept. 23	52	1812
Hobson & Co., New York, N. Y. Plows	17,873	May 6	51	811
Hodgin Bros. & Lunn, Wiuston, N. C. Plug chewing and tobacco prepared for smoking	17,778	Apr. 15	51	302
Hodgin Bros. & Lunn, Wiuston, N. C. Plug chewing and tobacco prepared for smoking	17,779	Apr. 15	51	302
Hodgin Bros. & Lunn, Winston, N. C. Plug chewing and tobacco prepared for smoking	17,780	Apr. 15	51	302
Holland & Company, (limited,) Deptford, England. Gin, whisky, and brandy	17,484	Feb. 4	50	564
Holmes & Coutts, New York, N. Y. Biscuits, crackers, and wafers	17,417	Jan. 21	50	308
Holmes & Coutts, New York, N. Y. Biscuits, crackers, wafers, and similar articles	17,938	May 20	51	1136
Holmes & Edwards Silver Company, Bridgeport, Conn. Forks, spoons, ladles, and other flat-metal table-ware	18,163	July 8	52	164
Holyoke Machine Company, Holyoke and Worcester, Mass. Turbine water-wheels	17,874	May 6	51	811
Holyoke Paper Company, Holyoke, Mass. Writing-paper	18,319	Aug. 19	52	1066
Home Medication Company, New York, N. Y. Compounded medicines	18,216	July 22	52	462
Hooker, Thomas, Syracuse, N. Y. Twist-drills	18,166	July 15	52	312
Hopkins & Dickinson Manufacturing Company, Brooklyn, N. Y. Locks and latches	18,052	June 17	51	1788
Hoppe, Edward F., St. Louis, Mo. Malt, hops, and beer	17,724	Apr. 1	51	2
Horsman, Edward L., New York, N. Y. Indoor games	18,155	July 8	52	164
Houston & Harris, Minneapolis, Minn. Certain named building materials	18,266	Aug. 5	52	756
Howard Bros., Buffalo, N. Y. Remedy for piles	18,015	June 10	51	1624
Howard & Son, Providence, R. I., and New York, N. Y. Buttons and necktie-holders	18,614	Nov. 11	53	762
Howard, William H., San Antonio, Tex. Salve	18,439	Sept. 16	52	1670
Howe, Hezekiah, Cortland and Syracuse, N. Y. Ventilating stoves and ranges	17,674	Mar. 18	50	1452
Howland, Henry S., Jr., Rochester, N. Y. Canned fruits, vegetables, catsups, mustard, horse-radish, pickles, and table-sauces	17,823	Apr. 29	51	628
Hubbard & Co., George K., Philadelphia, Pa. Flour	18,246	July 29	52	610
Hubbuck & Son, Thomas, London, England. Paints and pigments	18,021	June 10	51	1624
Huckfield, Herman, New York, N. Y. Cigars	18,140	July 8	52	164
Huey & Christ, Philadelphia, Pa. Flavoring compound used by liquor-dealers	18,517	Oct. 14	53	142
Huggins Cracker and Candy Company, Kansas City, Mo. Crackers and candies	18,092	July 1	52	2
Hull, George S., Lowell, Mass. Bronchial sirup	18,097	July 1	52	2
Hunt & Son, Edmund S., Weymouth, Mass. Fire-crackers	18,062	June 24	51	1950
Hürter, Henry, Coblenz, Germany. Natural-spring water	18,758	Dec. 30	53	1890
Iler & Burgweger, Kansas City, Mo. Beer, ale, and porter	18,382	Sept. 2	52	1374
Illinois Watch Case Company, Chicago, Ill. Watches	17,567	Feb. 18	50	844
India Wharf Brewing Company, Brooklyn, N. Y. Beer, ale, porter, and other malt beverages	18,033	June 17	51	1788
Iron-Malt Chemical Co., New York, N. Y. Prepared soda beverage	18,755	Dec. 30	53	1890
Irrigation Pump Company, Greeley, Colo. Hydraulic pumps	17,596	Feb. 25	50	994
Jacobs Manufacturing Company, E. H., Danielsonville, Conn. Lug-straps	18,308	Aug. 12	52	908
Jacques, Eugene L., Waterbury, Conn. Medical compound for liver and kidney troubles	17,449	Jan. 28	50	440
James, Emile, New York, N. Y. Screw-drivers	18,118	July 1	52	2
János, Loser, Buda-Pesth, Austria-Hungary. Mineral water	18,461	Sept. 30	52	1954
Jenkins, Thomas C., Pittsburg, Pa. Wheat-flour	18,462	Sept. 30	52	1954
Jester & Co., E. T., St. Louis, Mo. Antisepticstragents	17,912	May 13	51	972
Jester & Co., E. T., St. Louis, Mo. Antiseptics and germicides	18,409	Sept. 9	52	1542
Jetter & Scheerer, Tuttingen, Württemberg, Germany. Surgical instruments	17,761	Apr. 15	51	302
Jewett & Co., Sherman S., Buffalo, N. Y. Liquid and paste stove-blackening	18,719	July 15	52	312
Jewett & Co., Sherman S., Buffalo, N. Y. Hot-air, steam, and hot-water heaters	18,313	Aug. 19	52	1066
Jimenes, Haustedt & Co., New York, N. Y. Laundry-soap	18,475	July 15	52	312
Joachim Bros., New York, N. Y. Cigars	18,434	Sept. 16	52	1670

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Johnson, Glover & Company, Detroit, Mich. Medicinal compound for headache, sleeplessness, &c.	17,781	Apr. 15	51	302
Joly, Charles, Philadelphia, Pa. Lager-beer.	18,008	June 10	51	1624
Jones & Co., S. L., San Francisco, Cal. Medicinal bark known as Cascara Sagrada.	18,111	July 1	52	2
Jones, James W., Americus, Ga. Remedy for diseases of the liver, kidneys, and stomach.	18,088	July 1	52	2
Judd Company, Orange, New York, N. Y. Newspapers.	17,950	May 27	51	1310
Kaliske, Fabian S., New York, N. Y. Glazed kid.	17,750	Apr. 8	51	160
Kaliske, Fabian S., New York, N. Y. Glazed kid.	17,875	May 6	51	811
Kalle, Wilhelm, Biebrich, Germany. Medicinal tonic.	17,913	May 13	51	972
Kalle, Wilhelm, Biebrich, Germany. Medicinal tonic.	17,914	May 13	51	972
Kantorowicz, Hartwig, Posen, Hamburg, and Berlin, Germany. Liquors and fruit-juices.	17,899	May 6	51	812
Kantorowicz, Hartwig, Posen, Berlin, and Hamburg, Germany. Bitters.	18,344	Aug. 26	52	1230
Kappler & Becker, Baltimore, Md. Smoking-tobacco and cigars.	18,278	Aug. 5	52	756
Karnow, Samuel, New York, N. Y. Cigars.	17,597	Feb. 25	50	994
Kartavert Manufacturing Company, Wilmington, Del. Parchmentized fiber.	17,902	May 13	51	972
Kearley & Tonge, London, England. Tea.	18,141	July 8	52	164
Keefe & Becannon, New York, N. Y. Playing-balls.	18,121	July 1	52	2
Keidel & Co., Henry, Baltimore, Md. Razors.	18,009	June 10	51	1624
Keith, Francis C., Cleveland, Ohio. Catarrh-snuff.	17,675	Mar. 18	50	1452
Keith, Francis C., Cleveland, Ohio. Catarrh-snuff.	17,760	Apr. 15	51	302
Keller, George W. M., Middletown, Md. Flour.	18,535	Oct. 14	53	142
Kelly Axe Manufacturing Company, Louisville, Ky. Axes.	18,024	June 24	51	1950
Kelly & Company, (limited), Horace R., New York, N. Y. Cigars and cigarettes.	17,645	Mar. 11	50	1300
Kelty & Co., G. L., New York, N. Y. Pile fabrics, exclusive of carpets.	18,112	July 1	52	2
Kendrick, Julia L., Philadelphia, Pa. Periodical trade-journal.	18,029	June 10	51	1624
Kennett, William C., Cincinnati, Ohio. Harness-leather.	18,463	Sept. 30	52	1954
Kephart, Henry, Berrien Springs, Mich. Cure for piles.	17,418	Jan. 21	50	308
Kephart, Henry, Berrien Springs, Mich. Remedy for croup.	18,749	Dec. 30	53	1890
Kern Brothers, Brooklyn, N. Y. Disinfectant and insect-destroyer.	18,526	Oct. 14	53	142
Kerr, Bro. & Co., Alex., Philadelphia, Pa., and Baltimore, Md. Salt.	17,826	Apr. 29	51	628
Kerr, Bro. & Co., Alex., Philadelphia, Pa., and Baltimore, Md. Table-salt.	17,903	May 13	51	972
Kertell, Charles, San Francisco, Cal. Remedy for diseases of the stomach, liver, and kidneys.	18,770	Dec. 30	53	1890
Keystone Cement Company, New York, N. Y., and Coplay, Pa. Portland cement.	17,485	Feb. 4	50	564
Keystone Cement Company, New York, N. Y., and Coplay, Pa. Portland cement.	17,486	Feb. 4	50	564
Keystone Cement Company, New York, N. Y. Hydraulic cement.	17,487	Feb. 4	50	564
Keystone Watch Case Company, Philadelphia, Pa. Watch-cases.	18,464	Sept. 30	52	1954
Kiesel Fire Brick Company, Rochester, N. H. Fire-brick shapes and tiles.	17,876	May 6	51	811
Kiesel Fire Brick Company, Rochester, N. H. Fire-brick shapes and tiles.	17,877	May 6	51	811
Killmer, William G., Bond Brook, N. J. Bond and note paper.	18,465	Sept. 30	52	1954
King, Charles R., Lampasas, Tex. Medical compound for the cure of cholera, asthma, bronchitis, consumption, dyspepsia, rheumatism, paralysis, diarrhea, and diseases of the blood.	17,374	Jan. 7	50	2
King & Co., J. B., New York, N. Y. Plaster-of-paris.	18,299	Aug. 12	52	908
King & Co., J. B., New York, N. Y. Plaster-of-paris.	18,425	Sept. 9	52	1542
King, Edwin G., South Hammond, N. Y. Veterinary remedies.	17,598	Feb. 25	50	994
Kinkele, Robert A. (See Newman and Kinkele.)				
Kirchmaier, Gustavus A. (See Black and Kirchmaier.)				
Kirkpatrick, Helen M., Macedon, N. Y. Grain-drills.	18,247	July 29	52	610
Klaunberg, Charles H., Carlinville, Ill., and St. Louis, Mo. Medicated prune-sirups.	18,408	Sept. 9	52	1542
Knight, Thomas G., Brooklyn, N. Y. Laundry-tubs, sinks, feed-mangers, and troughs.	18,149	July 8	52	164
Knight, Thomas G., Brooklyn, N. Y. Water-closets.	18,643	Nov. 18	53	926
Knoll & Co., Ludwigshafen-on-the-Rhine, Germany. Medicine for kidney and heart diseases.	17,904	May 13	51	972
Koester, George W., Lyons, N. Y. Tooth-powder and cosmetics.	17,618	Mar. 4	50	1136
Köhne, Emil H., Hamburg, Germany. Medical preparations for veterinary purposes.	17,375	Jan. 7	50	2
Kohnstamm & Co., H., New York, N. Y. Coal-tar dyes.	17,488	Feb. 4	50	564
Kohnstamm & Co., H., New York, N. Y. Coal-tar dyes.	17,489	Feb. 4	50	564
Kohnstamm & Co., H., New York, N. Y. Coal-tar dyes.	17,490	Feb. 4	50	564
Kohnstamm & Co., H., New York, N. Y. Coal-tar colors.	18,466	Sept. 30	52	1954
Kohnstamm & Co., H., New York, N. Y. Coal-tar colors.	18,467	Sept. 30	52	1954
Kopp & Lichtenberger, Asheville, N. C. Soothing sirup.	18,037	June 17	51	1788
Kopp & Lichtenberger, Asheville, N. C. Tonic and blood-purifier.	18,038	June 17	51	1788
Krass, George V., New York, N. Y. Underwear and hosiery.	18,420	Sept. 9	52	1542
Krehbiel Capsule Company, Kalamazoo, Mich. Gelatine capsules.	17,619	Mar. 4	50	1136
Krey, William E., New York, N. Y. Glucose.	17,947	May 27	51	1310
Kroeger & Sons, New York, N. Y. Piano-fortes.	17,646	Mar. 11	50	1300
Krusius Brothers, New York, N. Y. Knives, scissors, shears, and razors.	17,392	Jan. 14	50	170
Kunheim & Co., Berlin, Germany. Tar and its chemical products.	18,083	June 24	51	1950
Kyle, William F., St. Paul, Minn. Clothing for men and boys.	18,557	Oct. 28	53	436
La Montagne & Sons, E., New York, N. Y. Champagne.	18,742	Dec. 30	53	1890
Ladd & Coffin, New York, N. Y. Perfumery, toilet-waters, soap, sachet-powders, and tooth-powders.	17,890	May 6	51	812
Ladd & Coffin, New York, N. Y. Perfumery.	18,010	June 10	51	1624
Ladd & Coffin, New York, N. Y. Perfumery, toilet-waters, soap, sachet-powders, and smelling-salts.	18,318	Aug. 19	52	1066
Ladd & Coffin, New York, N. Y. Perfumery, toilet-waters, sachet-powders, tooth-powders, and smelling-salts.	18,383	Sept. 2	52	1374
Lakin, John H., Boston, Mass. External application for the cure of headache.	18,668	Dec. 9	53	1412
Lalanc & Grosjean Manufacturing Company, New York, N. Y. Enameled sheet-metal utensils.	18,039	June 17	51	1788
Lamb, Robert B., Greenbush, N. Y. Remedy for diseases of the liver, kidneys, and throat and female diseases.	18,771	Dec. 30	53	1890
Lanahan & Son, William, Baltimore, Md. Whisky.	17,647	Mar. 11	50	1300
Lane & Co., George W., New York, N. Y. Japan tea.	17,547	Feb. 18	50	844
Lane & Co., George W., New York, N. Y. Japan tea.	17,751	Apr. 8	51	160
Lane & Co., George W., New York, N. Y. Japan tea.	17,752	Apr. 8	51	160
Lapham-Dodge Company, Cleveland, Ohio. Certain wash-boards.	18,667	Dec. 2	53	1262
Lappe & Sons, J. C., Allegheny, Pa. Leather.	17,977	June 3	51	1472
Lappin, James, Paterson, N. J. Milled and sifted Indian tea.	18,681	Dec. 9	53	1412
Laredo, José, New York, N. Y. Cigars.	17,949	May 27	51	1310
Lasker Brothers, New York, N. Y. Prepared ammonia.	18,545	Oct. 21	53	280
Lassig Co., E., Goodwin, S. D. Bitters.	18,315	Aug. 19	52	1066
Lantz Bros. & Co., Buffalo, N. Y. Soap.	18,085	June 24	51	1950
Lawall, Edwin, Easton, Pa. Remedy for coughs and colds.	18,528	Oct. 14	53	142
Lawson, Nels O., Geneva, Ill. Salve.	17,376	Jan. 7	50	2
Lazell, Dalley & Co., New York, N. Y. Toilet-powder.	18,354	Aug. 26	52	1230
Lazenby, Walter, London, England. Pickles.	18,176	July 15	52	312
Leavitt & Van Alstine, San Francisco, Cal. Tonic bitters.	17,725	Apr. 1	51	2

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Leclaché Battery Company, New York, N. Y. Electric batteries	18,510	Oct. 7	53	2
Lee, Johnson & Co., Raleigh, N. C. Anodyne	17,708	Mar. 25	50	1596
Leggett, William T., Pittsburg, Pa. White limo for building purposes	18,762	Dec. 30	53	1890
Lehn & Fink, New York, N. Y. Perfumes	17,397	Jan. 14	50	170
Leitch, Fredrick, Turtle Point, Pa. Medical preparations for lung diseases	18,694	Dec. 9	53	1412
Leprince, Henri P. F., Paris, France. Corsets	18,301	Aug. 12	52	908
Lesem & Co., Isaac, Quincy, Ill. Underwear and clothing for men and boys	17,966	June 3	51	1471
Lesem & Co., Isaac, Quincy, Ill. Trousers and overalls	18,064	June 24	51	1950
Leser, Jacob, Austin, Tex. Bar-soap	17,853	May 6	51	811
Leu & Sons, Jacob, Atchison, Kans. Roofing-plates	18,615	Nov. 11	53	762
Levy Bros., New York, N. Y. Ribbons	17,450	Jan. 28	50	440
Levy & Bro., A., New York, N. Y. Boys' suits, extra pantaloons, overcoats, and caps	18,338	Aug. 26	52	1230
Lewi, William G., Albany, N. Y. Certain named medical remedies	18,230	July 29	52	610
Lewisohn Brothers, New York, N. Y. Refined copper	17,735	Apr. 8	51	160
Libbey, Laura J., Brooklyn and New York, N. Y. Printed music and songs and works of fiction	18,566	Oct. 28	53	436
Lievre, Fricke & Co., San Francisco, Cal. Baking-powder	17,925	May 20	51	1136
Lievre, Fricke & Co., San Francisco, Cal. Baking-powder	17,926	May 20	51	1136
Lievre, Fricke & Co., San Francisco, Cal. Tea	17,928	May 20	51	1136
Lievre, Fricke & Co., San Francisco, Cal. Teas	18,546	Oct. 21	53	280
Lievre, Fricke & Co., San Francisco, Cal. Teas	18,654	Nov. 25	53	1096
Lindauer & Co., S., Cannstadt, Germany. Corsets	17,998	June 3	51	1472
Lindeman & Sons Piano Company, New York, N. Y. Pianos	18,300	Aug. 12	52	908
Lion Drug Co., Buffalo, N. Y. Regulator for female complaints	17,801	Apr. 22	51	482
Lipps, Christopher, Baltimore, Md. Soap in cakes, bars, and chips	18,314	Aug. 19	52	1066
Liquor Carnis Company, Limited, London, England. Liquid extract of meat	18,544	Oct. 21	53	280
Lisner, Rosa, New York, N. Y. Dressed dolls	17,517	Feb. 11	50	714
Livermore Falls Medicine Co., Livermore Falls, Me. Remedy for the cure of liver and kidney diseases	18,765	Dec. 30	53	1890
Livingston, Henry H., Savannah, Ga. Frozen liquid beverages	17,648	Mar. 11	50	1300
Lobe & Co., E., Seattle, Wash. Crockery, glass, and plated ware	18,719	Dec. 23	53	1744
Loew & Weaver, Brooklyn, N. Y. Bread	18,743	Dec. 30	53	1890
London Toilet Bazar Company, New York, N. Y. Cases for packing toilet outfits	18,700	Dec. 16	53	1576
Londonderry Lithia Spring Water Company, Nashua, N. H. Lithia water	17,649	Mar. 11	50	1300
Lone Star Cracker and Manufacturing Company, Galveston, Tex. Crackers and biscuits	17,377	Jan. 7	50	2
Lone Star Salt Company, Colorado, Tex. Salt	17,568	Feb. 18	50	844
Long Island Brewery, Brooklyn, N. Y. Lager-beer	17,676	Mar. 18	50	1452
Longfield, Joshua, New York, N. Y. Table-sauce	18,468	Sept. 30	52	1954
Lord & Taylor, New York, N. Y. Hosiery	18,099	July 1	52	2
Lounsbury, Henry B., New York, N. Y. Pads or packages of paper	18,606	Nov. 11	53	762
Lowney, Walter M., Boston, Mass. Chocolate bonbons	18,370	Sept. 2	52	1374
Lubelsky, Moses, New York, N. Y. White lead	18,397	Sept. 2	52	1374
Ludlow Manufacturing Company, Boston and Ludlow, Mass. Twines, marlines, cords, and ropes	17,419	Jan. 21	50	308
Ludlum & Co., Byron V., Swanton, Ohio. Toilet-deodorant	18,527	Oct. 14	53	142
Lundy, Ruththeller, Chicago, Ill. Skin-beautifier and wrinkle-eradicator	17,736	Apr. 8	51	160
Lutmer, Herman, Cincinnati, Ohio. Cigars	17,782	Apr. 15	51	302
Lutmer, Herman, Cincinnati, Ohio. Cigars	17,827	Apr. 29	51	628
Lutz, Ferdinand F., Louisville, Ky. Whisky	17,569	Feb. 18	50	844
Lyman, Moses, Waverly, N. Y. Toys and puzzles	17,451	Jan. 28	50	440
Lyman, Moses, Waverly, N. Y. Toys and puzzles	17,452	Jan. 28	50	440
Lynd, William H., Ironton, Ohio. Liniment	17,599	Feb. 25	50	994
Lynde & Son Company, B. A., Warren, Pa. Laundry and toilet soap	17,802	Apr. 22	51	482
Macbeth & Co., George A., Pittsburg, Pa. Lamp-chimneys	17,453	Jan. 28	50	440
Macdonald, David B. (See Wills and Macdonald.)				
Mackenzie, James A., Minneapolis, Minn. Dulcimer	18,435	Sept. 16	52	1670
Maddocks & Co., John, Bradford, England. Italian cloths and serges	17,548	Feb. 18	50	844
Maddocks, John, Bradford, England. Linen and hemp yarn and thread and piece goods, jute yarns and tissues, silk goods of all kinds, and yarns, cloths, and stuffs of wool, worsted, or hair	18,448	Sept. 23	52	1812
Magee, John A., Lawrence, Mass. Emulsion of cod-liver oil	17,920	May 13	51	972
Magic Introduction Company, Rutherford, N. J., and New York, N. Y. Pocket cigar-lighter	18,135	July 8	52	164
Magoffin, William H., Philadelphia, Pa. Oil or drier	18,190	July 23	52	462
Mahler, James H., St. Paul, Minn. Buggies and other spring vehicles	18,002	June 3	51	1472
Major, Margaret, New York, N. Y. Cement for repairing broken articles	17,570	Feb. 18	50	844
Malena Co., Warrior's Mark, Pa. Chewing-gum	17,378	Jan. 7	50	2
Manchester Cigar Manufacturing Co., Baltimore, Md. Cigars	17,491	Feb. 4	50	564
Mandelbaum & Co., G., New York, N. Y. Perfumery	18,371	Sept. 2	52	1374
Manitow Mineral Water Company, Manitow Springs, Colo. Carbonated mineral water and ginger	18,525	Oct. 14	53	142
Mannheimer Portland Cement Fabrik, Mannheim, Germany. Portland cement	18,360	Aug. 26	52	1230
Mansfield, Thomas A., Des Moines, Iowa. Leather for boots, shoes, and harness	18,122	July 1	52	2
Marion Phosphate Company, Savannah, Ga. Fertilizing-phosphates	18,209	July 22	52	462
Marion Phosphate Company, Savannah, Ga. Fertilizing-phosphates	18,210	July 22	52	462
Marion Phosphate Company, Savannah, Ga. Fertilizing-phosphates	18,384	Sept. 2	52	1374
Marion Phosphate Company, Savannah, Ga. Fertilizing-phosphates	18,391	Sept. 2	52	1374
Marsh & Co., C. E., Lynn, Mass. Bar-soap	18,086	June 24	51	1950
Marshall, Samuel L., Allegheny, Pa. Flour	17,492	Feb. 4	50	564
Martin & Co., E. Remy, Rouillac, France. Brandy	18,258	Aug. 5	52	756
Martin & Co., E. Remy, Rouillac, France. Brandy	18,259	Aug. 5	52	756
Mason, Burr T., Phoenix, N. Y. Chest-protectors	17,891	May 6	51	812
Mason, Burr T., Phoenix, N. Y. Chest-protectors	17,892	May 6	51	812
Mason & Co., E. T., New York, N. Y. Silks and silk handkerchiefs	17,650	Mar. 11	50	1300
Maspero, Carlo, New York, N. Y. Olive-oil	17,398	Jan. 14	50	170
Massachusetts Cotton Mills, Lowell and Boston, Mass. Woven cotton goods	17,981	June 3	51	1472
Massachusetts Cotton Mills, Lowell and Boston, Mass. Woven cotton goods	17,982	June 3	51	1472
Mast, Buford & Burwell Company, St. Paul, Minn. Gang, sulky, and hand plows	18,436	Sept. 16	52	1670
Mathews, Michael, Philadelphia, Pa. Whisky	18,429	Sept. 9	52	1542
Mathews & Co., J. W., Newburg, N. Y. Canned meats, fish, fruits, and vegetables	18,294	Aug. 12	52	908
McClure, Owen. (See Callaway and McClure.)				
McCormick & Co., Baltimore, Md. Fruit flavors	18,356	Aug. 26	52	1230
McCormick, Edward J., New York, N. Y. Dental rubber	18,339	Aug. 26	52	1230
McCormick, Sallie E., Lancaster, Pa. Blood-purifier entirely of vegetable origin	17,783	Apr. 15	51	302
McDaid, George D. (See Olney and McDaid.)				
McDonald, Anna H., Albany, N. Y. Face-bleaching ointment	18,410	Sept. 9	52	1542
McEwan, John, London, England. Tea	18,283	Aug. 12	52	908
McGarrity, James, Montreal, Canada. Remedy for piles	18,480	Sept. 30	52	1954
McGiffert & Wands, Newburg, N. Y. Laundry-soap	18,302	Aug. 12	52	908

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Name, residence, and title.	No.	Date.	Official Gazette.	
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McGiffert & Wands, Newburg, N. Y. Soap	18,709	Dec. 16	53	1576
McGloin, Miranda, New York, N. Y. Sewing-machines	17,600	Feb. 25	50	994
McIntyre, H. W., Vina, Cal. Brandy	17,709	Mar. 25	50	1596
McKee & Brothers, Pittsburg, Pa. Lamp-chimneys	18,345	Aug. 26	52	1230
McKee & Brothers, Pittsburg, Pa. Lamp-chimneys	18,470	Sept. 30	52	1954
McKey & Co., Joseph, St. Paul, Minn. Ready-made clothing and hats and caps for men, boys, and children	18,250	July 29	52	610
McKnight, Joseph H., Wichita, Kans. Pills, powders, and bitters	17,979	June 3	51	1472
McLean & Company, Limited, London, England. Cement for building purposes	18,701	Dec. 16	53	1576
McMechen & Son, George K., Wheeling, W. Va. Canned goods	17,961	May 27	51	1310
McWilliams, Rozell Y., New Orleans, La. Bitters	18,201	July 22	52	462
Mecke & Co., New York, N. Y. Flour	17,954	May 27	51	1310
Medford Fancy Goods Company, Newark, N. J., and New York, N. Y. Dog furnishings	18,303	Aug. 12	52	908
Medina, Joaquin A., New York, N. Y. Lager-beer	17,978	June 3	51	1472
Mehlem, Franz A., Bonn, Germany. Glassware and crockery	18,657	Dec. 2	53	1202
Meierdiercks & Sons, J. A., New York, N. Y. Sardines	18,536	Oct. 14	53	142
Meierdiercks & Sons, J. A., New York, N. Y. Salt herring	18,537	Oct. 14	53	142
Meiners, Gustave, Hoboken, N. J. Balance-staffs for watches	17,518	Feb. 11	50	714
Mellier Drug Company, St. Louis, Mo. Tonic and general stimulant	17,784	Apr. 15	51	302
Mennen, Gerhard, Newark, N. J. Infant toilet-powder	17,620	Mar. 4	50	114
Merchant & Co., Philadelphia, Pa. Metal roofing-plate	17,737	Apr. 8	51	140
Merchants Oil Co., Cleveland, Ohio. Lubricating-oil	18,194	July 22	52	462
Merck, E., New York, N. Y. Antibacterials, aseptics, antiseptics, and antizymotics	18,323	Aug. 19	52	1066
Mergenthaler Printing Company, New York and Brooklyn, N. Y. Machines for producing type-bars	18,297	Aug. 12	52	908
Merrill & Soule, Syracuse, N. Y. Canned meats, poultry, fish, vegetables, and fruits	18,013	June 10	51	1624
Merriam & Co., G. & C., Springfield, Mass. Dictionaries	18,449	Sept. 23	52	1812
Merriam, Eurosas D. (See Cobb and Merriam.)				
Merrill, Daniel D., Jr., St. Paul, Minn. Metallic pens	18,503	Oct. 7	53	2
Merritt Manufacturing Company, Springfield, Mass. Type-writing machines	17,677	Mar. 18	50	1452
Merwin, Hulbert & Co., New York, N. Y. Rifles	18,478	Sept. 30	52	1954
Metcalf & Co., Theodore, Boston, Mass. Yermumery	18,011	June 10	51	1624
Metcalf & Co., Theodore, Boston, Mass. Lime-water preparations	18,716	Dec. 16	53	1576
Metropolitan Watch Company, New York, N. Y. Watch-insulators	18,171	July 15	52	312
Metropolitan Watch Company, New York, N. Y. Watch-cases	18,267	Aug. 5	52	756
Metropolitan Watch Company, New York, N. Y. Watch-cases	18,644	Nov. 18	53	926
Meyberg, Maude, New York, N. Y. Face bleach or wash	17,678	Mar. 18	50	1452
Meyer Brothers Drug Company, St. Louis and Kansas City, Mo., and Dallas, Tex. Bourbon whisky	17,519	Feb. 11	50	714
Meyer & Co., C., Baltimore, Md. Canned fruits and vegetables	18,450	Sept. 23	52	1812
Meyerhoff & Eichengrün, Philadelphia, Pa. Underwear and overalls	17,651	Mar. 11	50	1300
Michener & Co., J. H., Philadelphia, Pa. Lard and hog and beef products	17,549	Feb. 18	50	844
Michener & Co., J. H., Philadelphia, Pa. Lard	17,726	Apr. 1	51	2
Michigan Carbon Works, Detroit, Mich. Glue, gelatine, and similar products	18,571	Oct. 28	53	436
Millen & Sons, Warner's, N. Y. Cements	18,053	June 17	51	1788
Miller Brewing Company, Fred, Milwaukee, Wis. Lager-beer	17,893	May 6	51	812
Miller, Charles B., Philadelphia, Pa. Chocolates, desiccated cocoanut, jellies, and candies	17,379	Jan. 7	50	2
Miller, Edmund W., Boston, Mass. Boots and shoes	18,471	Sept. 30	52	1954
Miller & Flinn, New York, N. Y. Book-paper	18,022	June 10	51	1624
Miller, Francis H. (See Bower and Miller.)				
Miller Grate Company, Cleveland, Ohio. Grates for fire-places	17,828	Apr. 29	51	628
Miller, Hoffman & Co., Syracuse, N. Y. Beeswax candles	18,501	Nov. 4	53	606
Miller, Lippincott & Co., Baltimore, Md. Ammoniated superphosphate for fertilizers	18,268	Aug. 5	52	756
Miller Lock Company, Philadelphia, Pa. Locks	18,355	Aug. 26	52	1230
Milliograph Co., Washington, D. C. Reproducing drawings and writings	18,751	Dec. 30	53	1890
Mills & Gray, Chicago, Ill. Cigars	17,905	May 13	51	972
Mills & Gray, Chicago, Ill. Cigars	17,906	May 13	51	972
Mincer, Barnhart, Marion, Ohio. Eyeglasses and spectacles	17,829	Apr. 29	51	628
Miner, William H., San Francisco, Cal. Baking-powder	18,469	Sept. 30	52	1954
Minneapolis Flour Manufacturing Company, Minneapolis, Minn. Wheat-flour	17,929	May 20	51	1136
Mir, Gabriel C., Havana, Cuba. Remedy for burns, scalds, and similar ailments, and for external use	18,346	Aug. 26	52	1230
Moffatt Medicine Co., Dr. J., Chicago, Ill. Suppositories for uterine diseases	18,421	Sept. 9	52	1542
Montgomery, George L., New York, N. Y. Sheetings and drillings	18,616	Nov. 11	53	762
Montgomery, George L., New York, N. Y. Sheetings and drillings	18,617	Nov. 11	53	762
Montgomery, George L., New York, N. Y. Sheetings and drillings	18,618	Nov. 11	53	762
Montgomery, George L., New York, N. Y. Sheetings and drillings	18,619	Nov. 11	53	762
Montgomery, George L., New York, N. Y. Sheetings and drillings	18,620	Nov. 11	53	762
Moore, George E., New York, N. Y. Medicine for purifying the blood	17,399	Jan. 14	50	170
Moore & Sons Company, Samuel L., Elizabeth, N. J. Propeller-wheels	17,520	Feb. 11	50	714
Morey, Thomas P., Bangor, Me. Dental preparation	18,487	Oct. 7	53	2
Morgan's Sons Company, Enoch, New York, N. Y. Scouring compound	18,501	Oct. 7	53	2
Morgan's Sons Company, Enoch, New York, N. Y. Scouring compound	18,502	Oct. 7	53	2
Morley Brothers, East Saginaw, Mich. Light or shelf hardware	17,652	Mar. 11	50	1300
Morningstar & Co., Charles, New York, N. Y. Corn-starch	18,150	July 8	52	164
Morris, William W., Pittsburg, Pa. Chewing-gum	17,380	Jan. 7	50	2
Moses, Sohn & Oppenheimer, New York, N. Y. Pantaloon for men and boys	17,762	Apr. 15	51	302
Mottin, George, Weehawken, N. J. Broad silk and silk ribbons	17,964	May 27	51	1310
Mountain Sage Medicine Company, Hutchinson, Kans. Medical compounds for the cure of fevers	17,400	Jan. 14	56	170
Murphy Bros., Jamestown, Ohio. Cough-sirup	18,679	Dec. 9	53	1412
Murphy, John F., New Orleans, La. Remedies for diseases of the feet	18,660	Dec. 2	53	1262
Murray, William, Detroit, Mich. Gin bitters	18,040	June 17	51	1788
Musser, Joseph, Lewisburg, Pa. Hosiery	18,720	Dec. 23	53	1744
Mykrantz, Howard B., Kansas City, Mo. Flavoring-sirup for soda-water	18,208	July 22	52	462
N. J. Car Spring and Rubber Company, Jersey City, N. J. Hydraulic hose and machine belting	17,710	Mar. 20	50	1596
Namendorf Bros., St. Louis, Mo. Umbrellas, parasols, and canes	18,472	Sept. 30	52	1954
Namore, Henry L., Sharon, Mass. Harness-pads	17,454	Jan. 23	50	440
Nash, Whiton & Co., New York, N. Y. Salt	18,066	June 24	51	1950
National Electric Manufacturing Company, Eau Claire, Wis. Incandescent-lighting machinery	18,645	Nov. 18	53	926
Neave & Co., J. R., Fordingbridge, county of Hants, England. Farinaceous food	17,621	Mar. 4	50	1136
Nee-Ska-Ra Mineral Spring Company, Milwaukee, Wis. Mineral water	18,330	Aug. 19	52	1066
Nelson, Charles, Brooklyn, N. Y. Toy torpedoes	18,065	June 24	51	1950
Neuss, Hesselstein & Co., New York, N. Y. Cotton goods	18,426	Sept. 9	52	1542
New Departure Bell Company, Bristol, Conn. Call-bells, alarm-bells, and door-bells	17,455	Jan. 28	50	440
New Jersey Car Spring and Rubber Company, Jersey City, N. J. Hydraulic fire-hose and machine-beltng	18,706	Dec. 16	53	1576

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New Jersey Car Spring and Rubber Company, Jersey City, N. J. Hydraulic hose and machine-belt	18,744	Dec. 30	53	1890
New York and Rudolstadt Pottery Company, New York, N. Y. Useful and artistic pottery	18,473	Sept. 30	52	1954
New York Belting and Packing Company, New York, N. Y. Rubber hose, belting, packing, and mechanical rubber goods	18,673	Dec. 2	53	1262
New York Condensed Milk Company, New York, N. Y. Condensed milk	18,023	June 10	51	1624
New York Wood Fibre Company, Belvidere, N. J., and New York, N. Y. Wood-pulp pails	18,090	June 24	51	1950
Newell Brothers Manufacturing Company, Springfield, Mass. Buttons covered with pure-dye sewing-silk braid	18,451	Sept. 23	52	1812
Newell Brothers Manufacturing Company, Springfield, Mass. Buttons covered with pure-dye sewing-silk braid	18,452	Sept. 23	52	1812
Newland, George F., Detroit, Mich. Games and toys	17,753	Apr. 8	51	160
Newman, Frank V., and R. A. Kinkle, New York, N. Y. Tooth-brushes	17,381	Jan. 7	50	2
Nonantum Worsted Company, Newton and Boston, Mass. Soaps, powders, cream, paste, and lotions for the toilet	17,878	May 6	51	811
Norris, Alfred E., Philadelphia, Pa. Whisky	18,177	July 15	52	312
North American Provision Company, Chicago, Ill. Hog and beef products	18,387	Sept. 2	52	1374
Northup, Willet, Chicago, Ill. Medical appliance for the cure of catarrh	17,763	Apr. 15	51	302
Norwood Manufacturing Company, Norwood, N. Y. Packages and bundles of kindling-wood	17,711	Mar. 25	50	1596
Nusbaum & Co., Chicago, Ill. Corsets	18,365	Aug. 26	52	1230
Nye Medical and Chemical Syndicate, Bill C., Bradford, Pa. Blood purifiers and alteratives	18,412	Sept. 9	52	1542
O'Mara, William T., Cleveland, Ohio. Lubricating-oils	17,679	Mar. 18	50	1452
O'Meara, John U., Washington, D. C. Coin-operated machines	18,156	July 8	52	164
Occidental Chemical Co., Nashville, Tenn., and Dallas, Tex. Line of remedies classified upon a temperamental standard	18,621	Nov. 11	53	762
Oculine Manufacturing Co., New York, N. Y. Eye-lotions and cosmetics	18,721	Dec. 23	53	1744
Ohio Valley Coffee Company, Parkersburg, W. Va. Parched and ground coffee	18,601	Nov. 4	53	606
Ohlmeyer, Hermann, New York, N. Y. Cereals	18,422	Sept. 9	52	1542
Olney, Arthur R., and G. D. McDaid, Clinton, Iowa. Liniment	18,361	Aug. 26	52	1230
Omohundro, Thomas E., Baltimore, Md. Overalls	17,967	June 3	51	1471
Omohundro, Thomas E., Baltimore, Md. Men's shirts	17,933	June 3	51	1472
Omohundro, Thomas E., Baltimore, Md. Men's shirts	17,984	June 3	51	1472
Omohundro, Thomas E., Baltimore, Md. Men's overalls, pantaloons, and shirts	18,211	July 22	52	462
Openhym & Sons, William, New York, N. Y. Velvets	18,331	Aug. 19	52	1066
Openhym & Sons, William, New York, N. Y. Velvets and velveteens	18,764	Dec. 30	53	1890
Osbon, Bradley S., New York, N. Y. Veterinary balsam	17,401	Jan. 14	50	170
Osbon, Bradley S., New York, N. Y. Balsam for external and internal uses	17,402	Jan. 14	50	170
Ostheimer, Alfred J., Philadelphia, Pa. Fumigating compound or pastiles	17,362	Jan. 7	50	2
Ostheimer Brothers, Philadelphia, Pa. Perfumery	17,738	Apr. 8	51	160
Ozone Manufacturing Co., New York, N. Y. Ozone-water	18,633	Nov. 18	53	926
Palica, Frank J., Racine, Wis. Trunks	18,157	July 8	52	164
Palmer, Ada J., Chicago, Ill. Flavoring extract and articles of food, confectionery, and beverages containing the same	17,601	Feb. 25	50	994
Palmer, Frederick A., New York, N. Y. Wire mattresses	18,043	June 17	51	1788
Palmer, Solon, New York, N. Y. Perfumes, toilet-soaps, and preparations for the hair, skin, and teeth	17,680	Mar. 18	50	1452
Paris Medicine Company, Paris, Tenn., and St. Louis, Mo. Sirup of amorphous quinine	18,195	July 22	52	462
Paris Medicine Company, Paris, Tenn., and St. Louis, Mo. Chill-tonics	18,362	Aug. 26	52	1230
Parr, Walter. (See Smith and Parr.)				
Parrish Bros., Baltimore, Md. Baking-powder	17,653	Mar. 11	50	1300
Parry & Co., A. N. Amesbury, Mass. Adjustably-seated pleasure vehicles	18,481	Sept. 30	52	1954
Partridge, Alonzo P. and M. I., St. Paul, Minn. Certain named medicines	17,916	May 13	51	972
Partridge, Mary I. (See Partridge, Alonzo P. and M. I.)				
Peruvian Medicine Co., Cincinnati, Ohio. Remedy for diseases of the brain, nerves, and muscles	18,087	June 24	51	1950
Peterson Novelty Manufacturing Company, Paterson, N. J. Fasteners for shades, maps, and like objects mounted on rollers	17,654	Mar. 11	50	1300
Paul, John C., Chicago, Ill. Polish for metals	18,703	Dec. 16	53	1576
Peabody, James V., Tilton, N. H. Medicine for certain named diseases	17,456	Jan. 28	50	440
Pearson, Cyril A., New York, N. Y. Serial	17,655	Mar. 11	50	1300
Pearse Son & Co., Thos., Darlington, England. Whisky	18,572	Oct. 28	53	436
Peck, Barton L., Detroit, Mich. Lubricating compound	18,750	Dec. 30	53	1890
Perez, Rico y Villamil, Havana, Cuba. Cigars	18,675	Dec. 2	53	1262
Perez, Rico y Villamil, Havana, Cuba. Cigars	18,676	Dec. 2	53	1262
Perry & Company, Limited, Birmingham and London, England. Paper, envelopes, blotters, pens, pencils, sealing-wax, ink, and rubber bands	18,702	Dec. 16	53	1576
Peruvian Medicine Co., Cincinnati, Ohio. Remedy for diseases of the blood, liver, and kidneys	18,142	July 8	52	164
Peterman, William, New York, N. Y. Poison for insects	17,437	Jan. 28	50	440
Peters, Sarah, Cornwall, Pa. Medicinal tonics	18,651	Nov. 25	53	1096
Pettibone, Wells & Co., Chicago, Ill. Wood-bound blank-books	17,458	Jan. 28	50	440
Pfaudler Vacuum Fermentation Company, Rochester, N. Y. Lager-beer	18,231	July 29	52	610
Pfister & Vogel Leather Company, Milwaukee, Wis. Uncut leather and leather worked up into foot-wear	17,681	Mar. 18	50	1450
Phelps Publishing Company, Springfield, Mass. Newspapers	18,031	June 17	51	1788
Phelps Publishing Company, Springfield, Mass. Newspapers	18,032	June 17	51	1788
Philadelphia Rubber Works, Philadelphia, Pa. Devulcanized rubber from waste-rubber goods	18,692	Dec. 9	53	1412
Phillips Co., Charles C., Philadelphia, Pa. Paints and varnishes	17,945	May 27	51	1310
Phillips Co., Charles C., Philadelphia, Pa. Paints, stains, and varnishes	18,113	July 1	52	2
Photo Packet Pure Tea Co., London, England. Tea	17,656	Mar. 11	50	1302
Pickering & Sons, Joseph, Sheffield, England. Preparation for whitening and coloring buckskin leather	18,578	Nov. 4	53	606
Pickering & Sons, Joseph, Sheffield, England. Polishing-soap	18,661	Dec. 2	53	1262
Pickering & Sons, Joseph, Sheffield, England. Polishing-soap	18,663	Dec. 2	53	1262
Pickering & Sons, Joseph, Sheffield, England. Polishing soap and paste	18,664	Dec. 2	53	1262
Pinault, Marie J., Boston, Mass. Toilet lotions	18,324	Aug. 19	52	1066
Pioneer Silk Company, Paterson, N. J., and Allentown, Pa. Ribbons	18,269	Aug. 5	52	756
Piper, John H., New York, N. Y. Materials for polishing woods, metals, and the like goods	17,830	Apr. 29	51	628
Platt & Washburn Refining Company, New York, N. Y. Lubricating and wool oils and lubricating-grease	17,534	Feb. 11	50	714
Poirrier, Alcide F., Paris, France. Analgesic preparations	18,413	Sept. 9	52	1542
Polline Manufacturing Co., Peoria, Ill. Starch polish	18,398	Sept. 2	52	1374
Potts Pipe Fittings Co., Isaac B., Columbus, Ohio. Pipe-couplings	17,831	Apr. 29	51	628
Potts Pipe Fittings Co., Isaac B., Columbus, Ohio. Pipe-couplings	17,832	Apr. 29	51	628
Poulterer & Co., E. F., Philadelphia, Pa. Malt liquors	18,680	Dec. 9	53	1412
Powell & Bennett, New York, N. Y. Tea	17,754	Apr. 8	51	160

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Powell & Bro., Philadelphia, Pa. Seamless socks and stockings	18,284	Aug. 12	52	908
Powell & Bro., Philadelphia, Pa. Seamless socks and stockings	18,285	Aug. 12	52	908
Prange, Leo, Brooklyn, N. Y. Buttons of jet and metal	17,383	Jan. 7	50	2
Preller & Co., G., Bordeaux, France. Bordeaux wine	18,427	Sept. 9	52	1542
Price Baking Powder Company, Chicago, Ill. Fruit coloring and flavoring extracts	17,603	Feb. 25	50	994
Price, John B., Detroit, Mich. Linen paper	18,167	July 15	52	312
Primrose, George L., Syracuse, N. Y. Files	17,989	June 3	51	1472
Procter & Gamble, Hamilton County, Ohio. Soap	17,420	Jan. 21	50	308
Procter & Gamble, Hamilton County, Ohio. Soap	17,421	Jan. 21	50	308
Procter & Gamble, Hamilton County, Ohio. Soap	17,550	Feb. 18	50	844
Procter & Gamble, Hamilton County, Ohio. Soap	17,551	Feb. 18	50	844
Procter & Gamble, Hamilton County, Ohio. Soap	17,552	Feb. 18	50	844
Procter & Gamble, Hamilton County, Ohio. Soap	17,553	Feb. 18	50	844
Procter & Gamble, Hamilton County, Ohio. Soap	17,657	Mar. 11	50	1300
Procter & Gamble, Hamilton County, Ohio. Soap	17,658	Mar. 11	50	1300
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,796	Apr. 22	51	482
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,803	Apr. 22	51	482
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,804	Apr. 22	51	482
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,805	Apr. 22	51	482
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,806	Apr. 22	51	482
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,807	Apr. 22	51	482
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,808	Apr. 22	51	482
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,854	May 6	51	811
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,855	May 6	51	811
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,856	May 6	51	811
Procter & Gamble, Cincinnati, Ohio. Soap for laundry and general purposes	17,879	May 6	51	811
Purdy, Martha P., Brooklyn, N. Y. Remedy for whooping-cough	17,571	Feb. 18	50	844
Pyrogravure Company, Hoboken, N. J. Engraved lumber	17,951	May 27	51	1310
Quigley, William C., Richwood, Ohio. Flour	18,488	Oct. 7	53	2
Rademaker, Charles J., Louisville, Ky. Antiseptic	18,650	Nov. 25	53	1096
Ransom & Randolph, Toledo, Ohio. Razors	17,942	May 27	51	1310
Ransom & Randolph, Toledo, Ohio. Razors	18,144	July 8	52	164
Ratto, Gaspar R., Chicago, Ill. Flavoring mixture for beverages	18,428	Sept. 9	52	1542
Raynolds & Co., C. T., New York, N. Y. Paints	18,172	July 15	52	312
Read Fertilizer Company, New York, N. Y. Fertilizers	18,737	Dec. 23	53	1744
Red Seal Castor Oil Company, St. Louis, Mo. Medicinal quality of castor-oil	17,682	Mar. 18	50	1452
Reed & Barton Corporation, Taunton, Mass. Sterling silver-ware	18,232	July 29	52	610
Reed, James L., Clarksville, Tex. Certain named medicines	17,712	Mar. 25	50	1596
Reimers, Reimer, Moline, Ill. Cigars	18,254	Aug. 5	52	756
Reiset & Co., Frederic, New York, N. Y. Preserved fruits	17,554	Feb. 18	50	844
Renz & Henry, Louisville, Ky. Tonic and alterative medicine	17,535	Feb. 11	50	714
Retiger, Allen, Company, Paterson, N. J. Broad silks and silk dress goods	18,372	Sept. 2	52	1374
Revere Rubber Company, Boston, Mass. Rubber belting, hose, and packing	17,604	Feb. 25	50	994
Reymar & Co., Middletown, N. Y. Washing-powder	18,414	Sept. 9	52	1542
Reynolds, A. L. & J. J., New York, N. Y. Cheese	17,968	June 3	51	1471
Reynolds, James T., Easton, Md. Washing-powder	17,493	Feb. 4	50	564
Rheinstrom Bros., Cincinnati, Ohio. Liqueurs	18,187	July 15	52	312
Rheinstrom Bros., Cincinnati, Ohio. Blackberry cordial	18,202	July 22	52	462
Rheinstrom Bros., Cincinnati, Ohio. Blackberry brandy	18,295	Aug. 12	52	908
Rhodes, William H., Chicago, Ill. Post-hole digger	18,136	July 8	52	164
Rice & Co., F. R., St. Louis, Mo. Cigars	18,279	Aug. 5	52	756
Rice & Co., F. R., St. Louis, Mo. Cigars	18,316	Aug. 19	52	1066
Rice & Hutchins, Boston, Mass. Boots and shoes of all kinds	17,824	Apr. 29	51	628
Rice & Hutchins, Boston, Mass. Boots, shoes, and slippers	18,304	Aug. 12	52	908
Rice & Hutchins, Boston, Mass. Boots, shoes, and slippers	18,305	Aug. 12	52	908
Rich Company, Limited, E. C., New York, N. Y., and Boston, Mass. Candies and confections	18,607	Nov. 11	53	762
Rich Company, Limited, E. C., New York, N. Y., and Boston, Mass. Jellies, relishes, sauces, condiments, and prepared foods	18,608	Nov. 11	53	762
Richard, John C., New York, N. Y. Base-balls	17,683	Mar. 18	50	1452
Richard, John C., New York, N. Y. Base-balls	17,739	Apr. 8	51	160
Richards Medicine Co., A. B., Sherman, Tex. Tonic remedy for chills and fever and the like diseases	17,622	Mar. 4	50	1136
Richards, Samuel W., New York, N. Y. Corsets	17,940	May 20	51	1136
Richford Chemical Co., Richford, Vt. Tonic bitters and remedy for nervousness	17,494	Feb. 4	50	564
Richmond, Samuel A., Tuscola, Ill. Remedy for nervous diseases	17,915	May 13	51	972
Richmond, Samuel A., Tuscola, Ill. Remedy for epilepsy and other nervous diseases	18,714	Dec. 16	53	1576
Riddle, Peter, New York, N. Y. Washing compounds	17,785	Apr. 15	51	302
Rieman & Co., Baltimore, Md. Refined or leaf lard	17,555	Feb. 18	50	844
Riley, George, Fayetteville, Ark. Remedy for hog and chicken cholera	18,123	July 1	52	2
Riley, Martin, East Portland, Oreg. Tonics and other proprietary medicines	18,579	Nov. 4	53	606
Ringler & Company, George, New York, N. Y. Lager-beer	18,178	July 15	52	312
Rivero, Martinez & Co., Havana, Cuba. Cigars	17,659	Mar. 11	50	1300
Rivero, Martinez & Co., Havana, Cuba. Cigars	17,660	Mar. 11	50	1300
Robbins, Henry, Watertown, Mass. Compound for removing stains, grease, &c., from the skin and for other toilet purposes	17,786	Apr. 15	51	302
Robinson, James A., New York, N. Y. Cotton goods	17,522	Feb. 11	50	714
Robinson, James A., New York, N. Y. Cotton goods	17,661	Mar. 11	50	1300
Robitsek & Co., H., New York, N. Y. Gloves	17,572	Feb. 18	50	844
Robitsek & Co., H., New York, N. Y. Boots, shoes, and slippers	17,991	June 3	51	1472
Rockey & Baltzy, New York, N. Y. Compound for throat and lung troubles	18,765	Dec. 30	53	1890
Rockwell Fur Company, Newark, N. J., New York and Albany, N. Y., Boston, Mass., Philadelphia, Pa., Chicago, Ill., St. Paul, Minn., London, England, Paris, France, Leipzig and Berlin, Germany, and Geneva, Switzerland. Furs and skins used for wearing-apparel	18,773	Dec. 30	53	1890
Roclofs & Co., Henry H., Philadelphia, Pa. Men's hats	18,399	Sept. 2	52	1374
Roesen, William F., Jefferson City, Mo. Carbonated (aerated) beverages	18,188	July 15	52	312
Roessler & Hasslacher Chemical Company, New York, N. Y. Material for insulating against the escape of electricity	17,880	May 6	51	811
Roessler & Hasslacher Chemical Company, New York, N. Y. Material for insulating against the escape of electricity	18,017	June 10	51	1624
Roessler & Hasslacher Chemical Company, New York, N. Y. Dye-stuffs	18,522	Oct. 14	53	142
Rogers & Brother, Waterbury, Conn., and New York, N. Y. Knives, forks, spoons, and other articles of flat ware	18,693	Dec. 9	53	1412
Rogers Copying Company, Limited, London and Liverpool, England. Chemical preparation for use in copying documents	18,270	Aug. 5	52	756

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Rogers Fence Company, Springfield, Ohio. Lawn-mowers.....	17,881	May 6	51	811
Rogers & Irvin, New York, N. Y. Pills.....	17,787	Apr. 15	51	302
Rogers & Moore, Enal, Ga. Remedy for cancerous sores and diseases of the blood.....	18,143	July 8	52	164
Rolfes & Co., New York, N. Y. Buttons.....	18,385	Sept. 2	52	1374
Roof, Clarence M., New York, N. Y. Whisky.....	18,168	July 15	52	312
Root, Stephen E., Rochester, N. H. Remedy for certain named diseases.....	18,296	Aug. 12	52	908
Rose & Co., F., New York, N. Y. Starch and starch-gum.....	18,504	Oct. 7	53	2
Rosenfeld & Co., E., Baltimore, Md. Night-robes.....	18,453	Sept. 23	52	1812
Rosenheimer, Julius T., New York, N. Y. Powdered medicine for catarrh.....	18,158	July 8	52	164
Ross, Thomas, Columbus, Ohio. Soap and soap-powders for laundry and toilet purposes.....	18,271	Aug. 5	52	756
Roskam, Gerstley & Co., Philadelphia, Pa. Whisky.....	18,054	June 17	51	1788
Roth Grocery Company, Adam, St. Louis, Mo. Coffee.....	18,640	Nov. 18	53	926
Rothschild & Co., V. Henry, New York, N. Y. Shirts.....	17,623	Mar. 4	50	1136
Roxite Company, New York, N. Y. Composition for electric insulators and other articles.....	17,459	Jan. 28	50	440
Rozzelle, E. G. C., Syracuse, N. Y. Certain proprietary medicines, ointments, and lotions.....	18,560	Oct. 28	53	436
Rumph, George B., and L. J. Carlile, Titusville, Fla. Insecticide.....	18,474	Sept. 30	52	1954
Ruppert & Co., A., New York, N. Y. Tonic for the skin.....	17,523	Feb. 11	50	714
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,582	Nov. 4	53	606
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,583	Nov. 4	53	606
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,584	Nov. 4	53	606
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,585	Nov. 4	53	606
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,586	Nov. 4	53	606
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,587	Nov. 4	53	606
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,588	Nov. 4	53	606
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,704	Dec. 16	53	1576
Russell & Morgan Printing Company, Cincinnati, Ohio. Playing-cards.....	18,705	Dec. 16	53	1576
Russia Cement Company, Gloucester, Mass. Liquid glue and mucilage.....	17,713	Mar. 25	50	1596
Rutan & Co., C. B., West Orange, N. J., and New York, N. Y. Hats for men, women, and boys.....	18,766	Dec. 30	53	1890
Rüther & Bendixen, San Francisco, Cal. Table-bitters.....	17,882	May 6	51	811
Ryals, Willie M., Lumber City, Ga. Injections and lotions for venereal diseases.....	18,044	June 17	51	1788
Ryder, Alfred V., New York, N. Y. Wheat-flour.....	18,639	Nov. 18	53	926
Saline County Plaster Company, Salina and Gypsum City, Kans. Cement, plaster, finish, calcimine, and plaster-of-paris.....	18,129	July 1	52	2
Salt & Co., Thomas, Burton, county of Stafford, England. Malt liquors.....	18,093	July 1	52	2
Sammons, William S., Washington, D. C. Baking-powder.....	18,215	July 22	52	462
Samper & Co., S., New York, N. Y. Kerosene-oil.....	18,094	July 1	52	2
Samuels, Asser J., Amsterdam, Netherlands. Bicycles, tri-cycles, and other velocipedes.....	17,946	May 27	51	1310
Sanche, Hercules, Detroit, Mich. Instruments or appliances for the cure of disease.....	17,809	Apr. 22	51	482
Sanche, Hercules, Detroit, Mich. Instruments or appliances for the cure of disease.....	17,810	Apr. 22	51	482
Sanche, Hercules, Detroit, Mich. Instruments or appliances for the cure of disease.....	17,811	Apr. 22	51	482
Sanche, Hercules, Detroit, Mich. Instruments or appliances for the cure of disease.....	18,024	June 10	51	1624
Santha Tea Company, (limited,) London, England. Tea or coffee or preparations thereof.....	17,755	Apr. 8	51	160
Saunders, Charles H., Philadelphia, Pa. Butter, cheese, eggs, and lard.....	17,496	Feb. 4	50	564
Sayre, Theodore H. (See Whitcomb and Sayre.).....				
Schendel & Co., Charles, New York, N. Y. Cigars.....	18,088	June 24	51	1950
Scherck & Co., New York, N. Y. Champagne.....	18,400	Sept. 2	52	1374
Schiffelin & Co., W. H., New York, N. Y. Medical drugs.....	17,917	May 13	51	972
Schiele & Co., Lewis, New York, N. Y. Corsets.....	18,685	Dec. 9	53	1412
Schiele & Co., Lewis, New York, N. Y. Corsets.....	18,686	Dec. 9	53	1412
Schiele & Co., Lewis, New York, N. Y. Corsets.....	18,772	Dec. 30	53	1890
Schlayer, Christian, Philadelphia, Pa. Liniment.....	18,198	July 22	52	462
Schlumberger, Robert, Vienna, Austria-Hungary. Vöslau wine.....	18,124	July 1	52	2
Schlumberger, Robert, Vienna, Austria-Hungary. Vöslau wine.....	18,125	July 1	52	2
Schlumberger, Robert, Vienna, Austria-Hungary. Vöslau wine.....	18,126	July 1	52	2
Schlumberger, Robert, Vienna, Austria-Hungary. Vöslau wine.....	18,127	July 1	52	2
Schmidt & Co., E., Baltimore, Md. Certain named medical remedies.....	18,183	July 15	52	312
Schmidt, John G., Philadelphia, Pa. Domestic calf-skins.....	18,507	Oct. 7	53	2
Schneider & Bisdorf, Hamilton, Ohio. Salve for the cure of skin diseases.....	17,684	Mar. 18	50	1452
Schneider, Ernest R., Augusta, Ga. Distilled liquors and wines.....	18,519	Oct. 14	53	142
Schnell, Albert, St. Louis, Mo. Milk and artificial milk.....	18,191	July 22	52	462
Schnizler, Emil, Philadelphia, Pa. Remedy for rheumatism, gout, and neuralgia.....	18,531	Oct. 14	53	142
Schoenheit, Augustus, San José, Cal. Preparation for bladder and kidney troubles and mucous and seminal discharges.....	17,460	Jan. 28	50	440
Schoenhofen Brewing Company, Peter, Chicago, Ill. Lager-beer.....	17,461	Jan. 28	50	440
Schoenhofen Brewing Company, Peter, Chicago, Ill. Lager-beer.....	17,521	Feb. 11	50	714
Schoenhofen Brewing Company, Peter, Chicago, Ill. Lager-beer.....	17,602	Feb. 25	50	994
Schott Saddlery Co., J. B., Quincy, Ill. Sweat-pads for harness and the like.....	17,833	Apr. 29	51	628
Schröder, John H. v., San Francisco, Cal. Dried prunes.....	18,454	Sept. 23	52	1812
Schnetz, Renziehausen & Co., Pittsburg, Pa. Whisky.....	17,624	Mar. 4	50	1136
Schülke & Mayr, Hamburg, Germany. Disinfectants.....	18,717	Dec. 16	53	1576
Schumann & Sons, C. W., New York, N. Y. Jewelry, watches, silver and plated ware, bronzes, and opera-glasses.....	18,025	June 10	51	1624
Schweinburg, Emil, New York, N. Y. Corsets.....	17,907	May 13	51	972
Scotfield, Shurmer & Teagle, Cleveland, Ohio. Illuminating-oil.....	18,233	July 29	52	610
Scott, Adam, Wilmington, Ohio. Horse-collar pads.....	17,918	May 13	51	972
Scott & Bowne, New York, N. Y. Cod-liver oil.....	17,960	May 27	51	1310
Scott, Richard C., near Liverpool, county of Lancaster, England. Soap, starch, bluing, and bleaching-powders.....	17,948	May 27	51	1310
Searby, Zeilin & Co., San Francisco, Cal. Insecticide.....	18,598	Nov. 4	53	606
Seeger & Guernsey Company, New York, N. Y. Cyclopedias of the manufactures and products of the United States.....	18,406	Sept. 9	52	1542
Seely Manufacturing Company, Detroit, Mich. Orchid flower perfumes.....	18,128	July 1	52	2
Selchow, Elisha G., New York, N. Y. Games played with boards, dice, and counters.....	17,924	May 20	51	1136
Senftner, Robert, Brooklyn, N. Y. Medicine to cure rheumatism.....	17,625	Mar. 4	50	1136
Sessinghaus Milling Company, St. Louis, Mo. Wheat-flour.....	18,689	Dec. 9	53	1412
Shaan, Robert F., New York, N. Y. Cotton velvet.....	18,648	Nov. 25	53	1096
Shaker Soap Company, Columbus, Ohio. Laundry-soap.....	17,497	Feb. 4	50	564
Shaker Soap Company, Columbus, Ohio. Laundry-soap.....	18,655	Nov. 25	53	1096
Shaker Soap Company, Columbus, Ohio. Laundry-soap.....	18,665	Dec. 2	53	1262
Sharp & Dohme, Baltimore, Md. Medicinal tablets.....	18,196	July 22	52	462
Sharp & Dohme, Baltimore, Md. Liquid ergot of rye.....	18,197	July 22	52	462
Sheppard, John A., New York, N. Y. Varnishes.....	18,518	Oct. 14	53	142
Sheppard & Porcher, Charleston, S. C. Rice.....	18,042	June 17	51	1788
Shorman Bros. & Co., Chicago, Ill. Tea.....	17,384	Jan. 7	50	2

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Shrimpton & Sons, Limited, Alfred, New York, N. Y. Brass pins	18,530	Oct. 14	53	142
Sibley & Holmwood, Buffalo, N. Y. Chewing-gum and candies	17,883	May 6	51	811
Sidway, Leverett B., Chicago, Ill. Asparagus	18,151	July 8	52	164
Sierra Chemical Co., San Francisco, Cal. Remedy for kidney and liver complaint	18,041	June 17	51	1788
Sigsbee Manufacturing Company, Ayer, Mass. Ladies' and children's under-garments	18,145	July 8	52	164
Silicon Textile Roofing Company, Boston, Mass. Roofing fabric	17,498	Feb. 4	50	564
Silver, William H., New York, N. Y. Coffee and tea pots	17,728	Apr. 1	51	2
Simington, Elizabeth, Dickens, Iowa. Remedy for the cure of blood diseases	18,505	Oct. 7	53	2
Simmons Medicine Company, A. C., Jr., Sherman, Tex. Medicine for diseases of the liver and for chills	18,624	Nov. 18	53	926
Simons, Bro. & Co., Philadelphia, Pa. Umbrella and cane heads, thimbles, cups, table-ware, and napkin-rings	17,987	June 3	51	1472
Simplex Electrical Co., Boston, Mass. Insulated conducting-wire	18,551	Oct. 28	53	436
Simplex Electrical Co., Boston, Mass. Insulated conducting-wire	18,552	Oct. 28	53	436
Sinclair & Co., T. M., Cedar Rapids, Iowa. Lard	17,503	Feb. 4	50	564
Sinclair & Co., T. M., Cedar Rapids, Iowa. Hams, shoulders, rolls, bacon, and lard	17,524	Feb. 11	50	714
Sinclair & Co., T. M., Cedar Rapids, Iowa. Breakfast bacon	17,525	Feb. 11	50	714
Sinclair & Co., T. M., Cedar Rapids, Iowa. Hams, shoulders, rolls, bacon, and lard	17,526	Feb. 11	50	714
Sinclair & Co., T. M., Cedar Rapids, Iowa. Hams	17,527	Feb. 11	50	714
Singer Manufacturing Company, New York, N. Y. Sewing-machines	17,985	June 3	51	1472
Singer & Wheeler, Peoria, Ill. Beer made of hops and malt	17,423	Jan. 21	50	308
Skinner Manufacturing Company, William, Holyoke and Boston, Mass., New York, N. Y., and Chicago, Ill. Silk and silk and cotton fabrics	17,626	Mar. 4	50	1136
Sleepy Eye Roller Mill Co., Sleepy Eye, Minn. Wheat-flour	18,547	Oct. 21	53	280
Sleight, Margaret A., Denver, Colo. Medicinal tea	17,834	Apr. 29	51	628
Sloan, Earl S., Boston, Mass. Medicines for certain diseases of men and animals	18,234	July 29	52	610
Smidt & Co., W. H., New York, N. Y. Shoe-lacing hooks	18,306	Aug. 12	52	908
Smith & Co., H. D., Cincinnati, Ohio. Chewing-gum, candy, and other confections	18,623	Nov. 18	53	926
Smith & Co., William E., New York, N. Y. Cheese	17,499	Feb. 4	50	564
Smith, Don C., Los Angeles, Cal. Preparations for the hair	17,835	Apr. 29	51	628
Smith, Frances V. D., Croton Falls, N. Y. Cough remedies and blood-purifying compounds	18,045	June 17	51	1788
Smith, Hogg & Gardner, New York, N. Y., and Boston, Mass. Cotton or wool and cotton and wool fabrics	17,714	Mar. 25	50	1596
Smith, Hogg & Gardner, New York, N. Y., and Boston, Mass. Cotton or wool and cotton and wool fabrics, except pile fabrics	17,715	Mar. 25	50	1596
Smith, Hogg & Gardner, New York, N. Y., and Boston, Mass. Cotton or wool and cotton and wool fabrics	17,716	Mar. 25	50	1596
Smith, James T., Donaldsonville, La. Anodyne medicine	17,556	Feb. 18	50	844
Smith, Orlando F., and W. Parr, Washington, D. C. Liniment for external treatment of rheuma- tism	18,287	Aug. 12	52	908
Smith & Peelle, New York, N. Y. Game consisting of a winding track and balls for rolling on the same	18,014	June 10	51	1624
Smith & Son, James, Ashwood Bank, county of Worcester, England. Side-threading needles	17,605	Feb. 25	50	994
Smith, Walter M., New York, N. Y. Liniment	17,573	Feb. 18	50	844
Smith, Waters & Havens, Chicago, Ill. Boots, shoes, slippers, hosiery, and insoles	17,686	Mar. 18	50	1452
Smith, William B., Baltimore, Md. Deviled crabs and crab-meat	17,424	Jan. 21	50	308
Smith, William J., Denver, Colo. Compounds for preventing and removing scale in boilers	18,161	July 8	52	164
Smola, Charles, Chicago, Ill. Smoking and chewing tobacco	17,606	Feb. 25	50	994
Snellenburg & Co., N., Philadelphia, Pa. Men's clothing and furnishing goods	17,500	Feb. 4	50	564
Snook & Halbe, New York, N. Y. Table-sauce	18,162	July 8	52	164
Snow, Miles W., Hartford, Conn. Medicinal tonic in pills, tablets, and suppositories	17,788	Apr. 15	51	302
Snyder & Co., Mary M., Creston, W. Va. Hair-restorative	18,325	Aug. 19	52	1066
Société Anonyme la Céramique, Limoges, France. Porcelain, crockery, earthenware, faience, or glass	17,717	Mar. 25	50	1596
Sommer Bros., Hawkinsville, Ga. Remedy for wounds	18,248	July 29	52	610
Sommers Manufacturing Company, J. A., Hamilton, Ohio. Overalls, pantaloons, and shirts	18,130	July 1	52	2
Sords, Thomas V., Cleveland, Ohio. Remedies for diseases of the throat and lungs	18,288	Aug. 12	52	908
Southern Pines Chewing Gum Co., Kingston, N. C. Chewing-gum	18,475	Sept. 30	52	1954
Southward, Arthur E. (See Harrington and Southward.)				
Southworth Company, Mittleague, Mass. Writing-paper	18,602	Nov. 4	53	606
Spalding & Bros., A. G., Chicago, Ill., and New York, N. Y. Fishing-tackle	17,685	Mar. 18	50	1452
Spingarn, Louis, New York, N. Y. Medicinal mixture for gonorrhoea, gleet, and all urinary trou- bles	18,225	July 22	52	462
Spooner, Alonzo W., Port Hope, Ontario, Canada, and Rochester, N. Y. Babbitt metal	17,662	Mar. 11	50	1300
Sparger Brothers, Mount Airy, N. C. Chewing-tobacco	18,506	Oct. 7	53	2
Stackhouse, John, Philadelphia, Pa. Remedy for catarrh	18,718	Dec. 16	53	1576
Standard Cartridge Company, Chicago, Ill. Shotgun-cartridges	18,272	Aug. 5	52	756
Standard Medicine Company, Boston, Mass. Nerve foods or remedies for nervous exhaustion	18,392	Sept. 2	52	1374
Standard Whip Company, Westfield, Mass. Whips	18,455	Sept. 23	52	1812
Star Manufacturing Company, Atlanta, Ga. Prepared flour	17,627	Mar. 4	50	1136
Star Manufacturing Company, Easton, Pa. Axle-grease	18,494	Oct. 7	53	2
Stavert, Zigomala & Co., Bradford, England. Drilling	17,504	Feb. 4	50	564
Stavert, Zigomala & Co., Bradford, county of York, England, and New York, N. Y. Cotton-warp, silk-warp, and all-wool dress-goods	17,528	Feb. 11	50	714
Steck, George, New York, N. Y. Pianos	17,462	Jan. 28	50	440
Steiner & Curnen, New York, N. Y. Base-halls, bats, caps, and belts	17,505	Feb. 4	50	564
Stemmler & Co., T. W., New York, N. Y.; Paris, France, and London, England. Hosiery, shirts, drawers, corsets, and neck-wear	17,403	Jan. 14	50	170
Stern Brothers, New York, N. Y. Corsets	17,756	Apr. 8	51	160
Stern, G. & G., London, England. Soap	17,557	Feb. 18	50	844
Stern, G. & G., London, England. Pine essence for external use in disease	18,710	Dec. 16	53	1576
Stern, G. & G., London, England. Digestive table-salt	18,738	Dec. 23	53	1744
Stewart, Alexander J., New York, N. Y. Stationary solid white crockery wash-tubs and frames	17,574	Feb. 18	50	844
Stewart & Co., New York, N. Y. Stationary solid white crockery wash-tubs	17,404	Jan. 14	50	170
Stewart, Francis G., St. Louis, Mo. Veterinary remedies	17,990	June 3	51	1472
Storer, Maria L., Cincinnati, Ohio. Pottery-ware	17,575	Feb. 18	50	844
Stransky & Co., New York, N. Y. Enameled sheet-metal wares for culinary and household use	18,203	July 22	52	462
Strong, Cobb & Co., Cleveland, Ohio. Cigars	18,407	Sept. 9	52	1542
Strouse & Bros., Baltimore, Md. Outer clothing for men, boys, and children	18,363	Aug. 26	52	1230
Suasnavar, José L., New York, N. Y. Remedy for the small-pox	18,715	Dec. 16	53	1576
Suero, George C., Baltimore, Md. Bottled lager-beer	17,836	Apr. 29	51	628
Sultan Drug Company, St. Louis, Mo. Cardiac tonics and remedies for heart diseases	18,116	July 1	52	2
Swain & Co., John F., Lynn, Mass. Children's leather boots and shoes	17,607	Feb. 25	50	994
Swain, John F., Lynn, Mass. Boots and shoes	17,463	Jan. 28	50	440

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
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Swan & Finch, New York, N. Y. Lubricating-oils.....	18,159	July 8	52	164
Swan, George E., Beaver Dam, Wis. Certain mineral water, fruit phosphate, ginger ale, birch beer, and seltzer water.....	17,729	Apr. 1	51	2
Swanson, Charles A., Jamestown, N. Y. Vegetable compound for certain named diseases.....	18,199	July 22	52	462
Sweet Water Mill Company, Sweet Water, Tenn. Wheat-flour.....	17,687	Mar. 18	50	1452
Sweet Water Mill Company, Sweet Water, Tenn. Wheat-flour.....	17,688	Mar. 18	50	1452
Swift, Billings & Co., New York, N. Y. Wheat-flour.....	17,927	May 20	51	1136
Swift & Company, Chicago, Ill. Lard.....	18,307	Aug. 12	52	908
Sylvan Remedy Co., Peoria, Ill. Cough and kidney cure.....	18,529	Oct. 14	53	142
Taft, George H., Grafton, Mass. Bottom polish or finish for outsoles of boots and shoes.....	17,464	Jan. 28	50	440
Tamagno, Oscar, New York, N. Y. Olive-oil, rape-seed oil, and other oils for burning and salad purposes.....	17,425	Jan. 21	50	308
Tanito Company, Stroudsburg, Pa. Emery-wheels and grinding machinery in which they are used.....	17,764	Apr. 15	51	302
Tanite Company, Stroudsburg, Pa. Emery-wheels, &c.....	17,884	May 6	51	811
Tapley & Co., Amos P., Boston, Mass. Boots and shoes.....	17,837	Apr. 29	51	628
Tate & Co., Malden, Mass. Wire picture and sash cord and bonnet and flower wire.....	17,385	Jan. 7	50	2
Terry, Franklin S., Chicago, Ill. Electric batteries.....	18,482	Sept. 30	52	1954
Tetley & Co., Joseph, London, England. Tea.....	17,929	May 20	51	1136
Tetley & Co., Joseph, London, England. Tea.....	17,930	May 20	51	1136
Tetley & Co., Joseph, London, England. Tea.....	17,931	May 20	51	1136
Tetley & Co., Joseph, London, England. Tea.....	17,932	May 20	51	1136
Thalheimer, Gates, Syracuse, N. Y. Baking-powder.....	18,131	July 1	52	2
Tharp, James, Washington, D. C. Whisky.....	17,366	Jan. 7	50	2
Thielen, John, Oskosh, Wis. Stomach-bitters.....	18,674	Dec. 2	53	1262
Thomas, John K., Youngstown, Ohio. Cream-cheese.....	18,057	June 17	51	1768
Thompson, George L., Chicago, Ill. Hair-curlers provided with a comb.....	17,789	Apr. 15	51	302
Thomson & Co., New York, N. Y. Champagne.....	17,426	Jan. 21	50	308
Tide Water Oil Company, New York, N. Y. Refined petroleum-oil.....	18,219	July 22	52	462
Tilford, Robert W. (See Bagley and Tilford.)				
Tillmann, Frederick, Jr., San Francisco, Cal. Canned fruits.....	17,529	Feb. 11	50	714
Timm, Simon H., New York, N. Y. Remedial compounds for nervous, blood, and other diseases.....	18,160	July 8	52	164
Timms, Walter B., New York, N. Y. Canned goods and relishes.....	17,730	Apr. 1	51	2
Timms, Walter B., New York, N. Y. Canned fish, meat, vegetables, and fruit.....	17,757	Apr. 8	51	160
Timms, Walter B., New York, N. Y. Canned foods and relishes.....	17,941	May 20	51	1136
Timms, Walter B., New York, N. Y. Canned vegetables, fruit, fish, and corn.....	18,164	July 8	52	164
Toch Brothers, New York, N. Y. White lead.....	17,731	Apr. 1	51	2
Toch Brothers, New York, N. Y. Tinters for mortar or plaster compounds.....	18,415	Sept. 9	52	1542
Tomlinson, D. Dodge, San José, Cal. Embrocation.....	17,740	Apr. 8	51	160
Tomlinson Dead Shot and Quick Relief Oil Co., Le Mars, Iowa. Cure for catarrh and lung and liver troubles.....	18,625	Nov. 18	53	926
Tone Bros., Des Moines, Iowa. Baking-powder.....	17,387	Jan. 7	50	2
Tone Bros., Des Moines, Iowa. Ginger, mustard, allspice, cloves, pepper, and cinnamon.....	17,558	Feb. 18	50	844
Towle Syrup Company, St. Paul, Minn. Maple-syrup.....	17,812	Apr. 22	51	482
Traiser, Henry, Boston, Mass. Cigars.....	17,628	Mar. 4	50	1136
Trujillo & Sons, Diego L., Key West, Fla., and New York, N. Y. Cigars.....	18,561	Oct. 28	53	436
Turner, Allen W., Macon, Ga. Chewing and smoking tobacco, cigars, and cigarettes.....	18,326	Aug. 19	52	1066
Turner, Benjamin B., London, England. Soap.....	18,423	Sept. 9	52	1542
Turner & Co., C. W., St. Paul, Minn. Canned fresh oysters.....	18,483	Sept. 30	52	1954
Turner, Frazier Mercantile Company, St. Joseph, Mo. Canned oysters.....	18,026	June 10	51	1624
Turner, Joshua J., London, England. Hats, caps, and helmets.....	18,774	Dec. 30	53	1890
Unequaled Silk Manufacturing Company, Paterson, N. J., and New York, N. Y. Silk ribbons and silk dress goods.....	18,476	Sept. 30	52	1954
Union Bag and Paper Company, Chicago, Ill. Paper bags.....	18,388	Sept. 2	52	1374
Union Bottling Company, New York, N. Y. Carbonated beverages.....	18,204	July 22	52	462
Union Brewing Company, Rochester, N. Y. Malt liquors.....	18,298	Aug. 12	52	908
Union Cycle Manufacturing Company, Highlandville, Mass. Bicycles.....	17,608	Mar. 4	50	1136
Union Distilling Company, Cincinnati, Ohio. Gin.....	18,003	June 3	51	1472
Union Metallic Cartridge Company, Bridgeport, Conn. Cartridge-shells and primers.....	18,251	July 29	52	610
United Asbestos Company, (limited), London, England. Cleaning and polishing soap.....	17,997	June 3	51	1472
United States Volta Electric Battery Company, Portland, Me., and New York, N. Y. Battery for electric lighting and power purposes.....	18,437	Sept. 16	52	1670
Ursem, Louis, Chicago, Ill. Medicine for the cure of fistula.....	17,813	Apr. 22	51	482
Valette, Gabriel, Paris, France. Solid glue.....	18,260	Aug. 5	52	756
Valette, Gabriel, Paris, France. Glue.....	18,393	Sept. 2	52	1374
Van Dyk Manufacturing Company, Rutherford, N. J., and New York, N. Y. Facial soap and powder.....	18,609	Nov. 11	53	762
Van Norman, Lillian, Palenville, N. Y. Medicated foods and condition-powders for veterinary use.....	17,969	June 3	51	1471
Van Syckle, A. J., St. Mary's, Kans. Condition-powders to cure hog-cholera.....	18,690	Dec. 9	53	1412
Van Vleet & Co., Memphis, Tenn. Astringents, expectorants, vermifuges, liniments, and hair-restoratives.....	18,347	Aug. 26	52	1230
Vapor Baking Powder Co., Troy, Ohio. Baking-powder.....	17,427	Jan. 21	50	308
Vaughn & Co., T. L., Winston, N. C. Plug and twist chewing-tobacco, cigars, and cigarettes.....	18,018	June 10	51	1624
Velline Soap Manufacturing Company, Norfolk, Va. Hard soap.....	18,286	Aug. 12	52	908
Vernon, S. E. and M., New York, N. Y. Tablets, blank-books, &c.....	17,428	Jan. 21	50	308
Vickery, Hattie L., Bellevue, Washington. Compound for the cure of diseases of a dysenteric nature.....	17,663	Mar. 11	50	1300
Vogel & Brothers, William, Brooklyn, N. Y. Oilers.....	18,508	Oct. 7	53	2
Wade, Harry R., Toledo, Ohio. Cuff-fasteners.....	17,718	Mar. 25	50	1596
Wagner Company, Martin, Baltimore, Md. Oysters, fruits, and vegetables.....	17,980	June 3	51	1472
Wagner, William W., McKeesport, Pa. Laundry-soap.....	18,477	Sept. 30	52	1954
Walker & Co., James H., Chicago, Ill. Sheetings.....	18,091	June 24	51	1950
Walsh, William T., New York, N. Y. Hats and caps.....	18,658	Dec. 2	53	1262
Wampole & Co., Henry K., Philadelphia, Pa. Specific for rheumatism, gout, and allied affections.....	17,839	Apr. 29	51	628
Wampole & Co., Henry K., Philadelphia, Pa. Hypnotic medicine.....	17,885	May 6	51	811
Ward, Jessie M., and C. H. Darlington, Philadelphia, Pa. Toilet-deodorants.....	17,993	June 3	51	1472
Warner Manufacturing Company, Freeport, Ill. Certain named articles of hardware.....	17,814	Apr. 22	51	482
Warren Linoline and Gasoline Works, Limited, Warren, Pa. Paint-oils and varnishes.....	18,666	Dec. 2	53	1262
Washburn's Flouring Mills Company, C. C., Minneapolis, Minn. Flour.....	17,689	Mar. 18	50	1452
Washburn's Flouring Mills Company, C. C., Minneapolis, Minn. Flour.....	17,690	Mar. 18	50	1452
Washburn's Flouring Mills Company, C. C., Minneapolis, Minn. Flour.....	17,691	Mar. 18	50	1452
Washburn's Flouring Mills Company, C. C., Minneapolis, Minn. Flour and other products from wheat.....	17,692	Mar. 18	50	1452
Washburn's Flouring Mills Company, C. C., Minneapolis, Minn. Flour.....	17,693	Mar. 18	50	1452

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Washburn's Flouring Mills Company, C. C., Minneapolis, Minn. Flour	17,694	Mar. 18	50	1452
Washburn's Flouring Mills Company, C. C., Minneapolis, Minn. Flour	18,712	Dec. 16	53	1576
Water Lily Kollar and Kuff Company, Detroit, Mich. Collars and cuffs	17,576	Feb. 18	50	844
Waterbury Watch Company, Waterbury, Conn. Watches	18,668	Dec. 2	53	1262
Waterhouse, Frederick A., Albany, N. Y. Baking-powder	18,028	June 10	51	1624
Waterhouse, Rufus, New York, N. Y. Tennis and outing sashes	18,100	July 1	52	2
Watkins, William W., Kansas City, Mo. Liniment	17,919	May 13	51	972
Watson, Henry B., Glen Cove, N. Y. Medicinal remedy for sea-sickness and nausea	17,405	Jan. 14	50	170
Watt, Henry C., Philadelphia, Pa. Furniture-polish	17,840	Apr. 29	51	628
Waukenhose Company, Boston, Mass., and New York, N. Y. Hosiery	17,995	June 3	51	1472
Webb, Henry C., New York, N. Y. Wines	17,841	Apr. 29	51	628
Webb Manufacturing Company, Nashville, Tenn. Liniments	17,955	May 27	51	1310
Webb Manufacturing Company, Nashville, Tenn. Condition-powders	17,959	May 27	51	1310
Webb Manufacturing Company, Nashville, Tenn. Liniment	18,752	Dec. 30	53	1890
Webster Piano Company, New York, N. Y. Pianos	18,610	Nov. 11	53	762
Webster Piano Company, New York, N. Y. Pianos	18,611	Nov. 11	53	762
Weeks, Hiram W., Philadelphia, Pa. Stove-polish	18,634	Nov. 18	53	926
Weeks, William H., New York, N. Y. Anti-fouling paint for boat-bottoms	18,424	Sept. 9	52	1542
Weiler, Charles, Philadelphia, Pa. Lager-beer	18,684	Dec. 9	53	1412
Wells, Walter S., New York, N. Y. Water-proof composition for dressing leather	17,842	Apr. 29	51	628
Wentz, Fisher & Hoen, Hagerstown, Md. Canned fruits and vegetables	17,732	Apr. 1	51	2
Werner, John F., Charleston, S. C. Biscuits, crackers, and cakes	17,664	Mar. 11	50	1300
Westcott Chuck Company, Oneida, N. Y. Lath-chucks	17,719	Mar. 25	50	1596
Western Paint Co., Cincinnati, Ohio. Prepared paints	17,338	Jan. 7	50	2
Western Paint Co., Cincinnati, Ohio. White lead	17,465	Jan. 28	50	440
Weyman, Benjamin F., Pittsburg, Pa. Smoking-tobacco	18,430	Sept. 16	52	1670
Wheeler, Frederick M., New York, N. Y. Surface, jet, and other steam condensers	17,909	May 13	51	972
Whitcomb, Parker R., and T. H. Sayre, New York, N. Y. Remedy for throat and lung diseases	18,489	Oct. 7	53	2
Whitcomb, Parker R., and T. H. Sayre, New York, N. Y. Cod-liver oil	18,490	Oct. 7	53	2
White Cycle Company, Westborough, Mass. Lubricating-oils	17,996	June 3	51	1472
White, William W., Dayton, Ohio. Writing-paper	17,720	Mar. 25	50	1596
Whitehead Brothers, New York, N. Y. Remedies for dyspepsia and malaria	17,501	Feb. 4	50	564
Whitehouse & Sons, Cornelius, Limited, Bridgetown Cannock, county of Stafford, England. Augers	18,276	Aug. 5	52	756
Whiting Paper Company, Holyoke, Mass. Writing and book paper	18,146	July 8	52	164
Whiting Paper Company, Holyoke, Mass. Writing and book paper	18,635	Nov. 18	53	926
Whitman Brothers, New York, N. Y. Cotton-seed oil for culinary purposes	17,988	June 3	51	1472
Whitney, Henry A., Woonsocket, R. I. Medicinal wafers for bronchial troubles	18,754	Dec. 30	53	1890
Whitny, Marian L., Stockton, Cal. Liniment for external and internal use	17,886	May 6	51	811
Whittaker & Sons, Francis, St. Louis, Mo., East St. Louis, Ill., and Wichita, Kans. Bacon	18,691	Dec. 9	53	1412
Wilkes-Barré Lace Manufacturing Company, Wilkes-Barré, Pa., and New York, N. Y. Lace-curtains	18,274	Aug. 5	52	756
Wiest & Co., P. C., York, Pa. Candy	17,957	May 27	51	1310
Wilcox, Crittenden & Co., Middletown, Conn. Paper-weights	17,943	May 27	51	1310
Wilkins, Caroline J., Denver, Colo. Balm having both cosmetic and remedial qualities	17,908	May 13	51	972
Williams & Humbert, London, England. Sherry wine	18,328	Aug. 19	52	1066
Williams, Richard S., New York, N. Y. Dental goods and materials of all kinds	18,549	Oct. 21	53	280
Willimantic Linen Company, Hartford and Willimantic, Conn. Book-sewing thread	17,765	Apr. 15	51	302
Willimantic Linen Company, Hartford and Willimantic, Conn. Book-sewing thread	17,766	Apr. 15	51	302
Wills, Edward T., and D. B. Macdonald, Detroit, Mich. Flavoring-sirup for soda-fountains	17,721	Mar. 25	50	1596
Wilms, George L., Jersey City, N. J. Remedy for hay-fever	18,711	Dec. 16	53	1576
Wilson & Fenimore, Bristol, Pa. Embossed-leather window-shades	17,994	June 3	51	1472
Wilson, Walter S. (See Enricht, Drake, Wilson, and Chase.)				
Windt, Harry de, London, England. Medicine for headache, nervousness, sea-sickness, and nausea	18,051	June 17	51	1788
Winkelmann & Brown Drug Company, Baltimore, Md. Headache cure	17,467	Jan. 28	50	440
Wire Buckle Suspender Co., Williamsport, Pa., and New York, N. Y. Suspenders and braces	18,181	July 15	52	312
Wirtz, William, New York, N. Y., and Newark, N. J. Malt beverages	18,568	Oct. 28	53	436
Whitcher & Emery, Boston, Mass. Shoe-laces	17,466	Jan. 28	50	440
Witting, August, Chemnitz, Saxony, Germany. Hosiery	17,469	Jan. 28	50	440
Witting, August, Chemnitz, Saxony, Germany. Hosiery	17,470	Jan. 28	50	440
Wolf & Randolph, Philadelphia, Pa. Shoe-blackening	18,511	Oct. 7	53	2
Wood, Alice L. V., Minneapolis, Minn. Powder for the face	17,389	Jan. 7	50	2
Wood & Co., William, Philadelphia, Pa. Woven skirtings	17,665	Mar. 11	50	1300
Wood, Francis F., New York, N. Y. Milk and cream	17,502	Feb. 4	50	564
Wood & Sons, J. R., New York, N. Y. Solid gold rings	17,530	Feb. 11	50	714
Woodbury, Horace S., Boston, Mass. Wines and alcoholic liquors	18,027	June 10	51	1624
Woods, Joseph W., Boston, Mass. Colored cotton fabrics, including cotton printed, dyed, and woven in colors	18,275	Aug. 5	52	756
Woodward, Roland E., Chicago, Ill. Prophylactic for use in microbial diseases	18,180	July 15	52	312
Woodworth & Sons, C. B., Rochester, N. Y. Perfumery	17,616	Mar. 4	50	1136
Woodworth & Sons, C. B., Rochester, N. Y. Perfumery	18,722	Dec. 23	53	1744
Woodbridge & Co., R. A., Baltimore, Md. Guano	17,429	Jan. 21	50	308
Woolner, Adolph, Jr., New York, N. Y., and New Haven, Conn. Distilled spirits	17,468	Jan. 28	50	440
Woolner, Adolph, Jr., New Haven, Conn. Compressed yeast	18,652	Nov. 25	53	1096
Worcester Royal Porcelain Company, (limited,) Worcester, county of Worcester, England. Porcelain goods and pottery	17,953	May 27	51	1310
Worthington, Richard, New York, N. Y. Printed books	18,753	Dec. 30	53	1890
Worthy Paper Company, Mittineague, Mass. Writing-paper	17,559	Feb. 18	50	844
Worthy Paper Company, Mittineague, Mass. Writing-paper	17,560	Feb. 18	50	844
Wright Medicine Company, Charles, Detroit, Mich. Rheumatic sirup	18,169	July 15	52	312
Wright Medicine Company, Charles, Detroit, Mich. Rheumatic and strengthening plaster	18,184	July 15	52	312
Young Brothers, New York, N. Y. Hats and caps	17,695	Mar. 18	50	1452
Young & Larrabee, Syracuse, N. Y. Crackers or biscuits	18,596	Nov. 4	53	606
Yneca Manufacturing Co., Cleveland, Ohio. Chewing-gum	17,910	May 13	51	972
Zellstoffabrik Waldhof, Waldhof, near Mannheim, Germany. Wood pulp for the manufacture of paper	18,205	July 22	52	462
Zöhrlaut Leather Company, Herman, Milwaukee, Wis. Leather	17,887	May 6	51	812

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Aberle, Jac, Cleveland, Ohio. "Dr. Aberle's Coffee Tonic"	6,377	Nov. 25	53	1096
Allcock, Samuel, Redditch, county of Worcester, England. "Redditch." (For fish-hooks)	6,162	Apr. 8	51	160
Allen, George W., Philadelphia, Pa. "Hard Pressed." (For felt hats)	6,340	Oct. 7	53	2
American Biscuit and Manufacturing Company, Chicago, Ill., and New Orleans, La. "Wafers." (For biscuits)	6,337	Sept. 30	52	1954
American Federation of Labor, Pittsburg, Pa. "Broom Makers' Union No. 5131 American Federation of Labor." (For brooms)	6,322	Sept. 9	52	1542
American Varnish Company, Chicago, Ill. "Granite Finish." (For varnish)	6,320	Sept. 2	52	1374
Andrae, Huldreich, Newark, N. J. "Emerald Green Ink"	6,112	Feb. 4	50	564
Andrae, Huldreich, Newark, N. J. "Andrae's Ever Green Ink"	6,155	Apr. 1	51	2
Anhaeusser, Herman, Cleveland, Ohio. "The Anhaeusser Malt Tonic"	6,357	Nov. 4	53	606
Ashbridge & Co., Philadelphia, Pa. "Nerve and Headache Salt"	6,229	June 3	51	1472
Arnett, Elliott. (See Sullivan, Evans, Arnett, and Williams.)				
Arnett, Elliott, G. Williams, and D. W. Garred, Louisa, Ky. "Arnett's Kentucky Horse and Cattle Powders"	6,391	Dec. 9	53	1412
Avera & Co., J. R., Quitman, Ga. "This Admirable Preparation." (For diseases of the urinary organs)	6,239	June 3	51	1472
Baker, Phillip, Philadelphia, Pa. "Baker's Shoe and Harness Grease"	6,118	Feb. 11	50	714
Bangert, Louis. (See Batten and Bangert.)				
Barron, Stephen E., Cleveland, Ohio. "Absolute Parasite Exterminator." (For a remedy for poisonous blood diseases)	6,351	Oct. 28	53	436
Batten, George, and L. Bangert, Montclair, N. J. "Bangert's Tasteless Castor Oil"	6,236	June 3	51	1472
Baur, Charles M. Vom, New York, N. Y. "Häkelgarn." (For yarn)	6,251	June 17	51	1788
Baur, Charles M. Vom, New York, N. Y. "Häkelgarn." (For yarn)	6,252	June 17	51	1788
Baur, Charles M. Vom, New York, N. Y. "Häkelgarn." (For yarn)	6,253	June 17	51	1788
Baur, Charles M. Vom, New York, N. Y. "Häkelgarn." (For yarn)	6,254	June 17	51	1788
Bergmann, Anton, Boerne, Tex. "Bergmann's Screw Worm Ointment"	6,178	Apr. 29	51	628
Binkley, David, Nappanee, Ind. "Distemper Cure." (For medicine for horses)	6,143	Mar. 11	50	1300
Bisdorf, Peter. (See Schneider and Bisdorf.)				
Bixler, Samuel H. C., Greencastle, Pa. "Dr. Bixler's Blood and Liver Regulator"	6,130	Feb. 18	50	844
Bold, Louis H., and C. Jareckie, New York, N. Y. "Bold's Tooth Powder."	6,181	May 6	51	812
Borsum Bros., New York, N. Y. "Borsum's Putz Liquid Polish"	6,119	Feb. 11	50	714
Boston Chemical Company, Boston, Mass. "Ozonos." (For disinfectants)	6,113	Feb. 4	50	564
Boucher, Louis M., and H. Gilbert, Manville, R. I. "Louis M. Boucher's Cholera Cure"	6,325	Sept. 16	52	1670
Brear, Samuel D., Winona, Minn. "Brear's Extracts of Roots and Fruits." (For a remedy for rheumatism, &c.)	6,144	Mar. 11	50	1300
Brewster, Martha E., Norwich, Conn. "Mrs Brewster's Hair Grower and Dressing"	6,140	Mar. 4	50	1136
Brown, Frank, Pittsburg, Pa. "Soluble French Soap."	6,274	July 15	52	312
Brown, Frank, Pittsburg, Pa. "French Liquid Soap Powder."	6,275	July 15	52	312
Burnham, Harriett M., Melrose, Mass. "Harriett M. Burnham's Rheumatic Cure"	6,263	July 8	52	164
Bush, Arthur P., and E. A. Talbot, Boston, Mass. "Bnsh's Liquid Beef"	6,381	Nov. 25	53	1096
Bushsee Bros., Taunton, Mass. "Bushsee's Glass Polish"	6,241	June 10	51	1624
Buxton, Frank E., Boston, Mass. "Dr. Buxton's Cough Syrup"	6,373	Nov. 18	53	926
California Fig Syrup Company, Reno, Nev.; San Francisco, Cal.; Louisville, Ky.; and New York, N. Y. "Syrup of Figs." (For a medicine.)	6,292	July 29	52	610
California Fig Syrup Company, Reno, Nev.; San Francisco, Cal.; Louisville, Ky.; and New York, N. Y. "Syrup of Figs." (For a medicine.)	6,293	July 29	52	610
California Fig Syrup Company, Reno, Nev.; San Francisco, Cal.; Louisville, Ky.; and New York, N. Y. "Syrup of Figs."	6,297	Aug. 5	52	756
Calver, George W. H., near Columbus, N. J. "Jersey Calf Cure for the Cure of Offensive Diarrhoea, Scours, Cholera or Dysentery"	6,163	Apr. 8	51	160
Camp, Warren W., Peoria, Ill. "Prof. W. W. Camp's Hog Invigorating Powder and Cholera Preventive"	6,218	May 20	51	1136
Cannon, D. C., Norfolk, Va. "Cannon's Lithiated Alkaline Elixir of Phytolacca." (For a cure for rheumatism)	6,264	July 8	52	164
Cannon, Obadah J., Americus, Ga. "O. J. Cannon's Cancer Cure"	6,230	June 3	51	1472
Carr, Josephine, Brooklyn, N. Y. "Only Those Bearing This Stamp Guaranteed." (For base balls)	6,334	Sept. 23	42	1812
Casey, F. M., Mount Vernon, N. Y. "Casey's." (For an adhesive plaster)	6,279	July 22	52	462
Cassard & Son, G., Baltimore, Md. "Banha de Porco." (For lard)	6,300	Aug. 12	52	908
Chase & Co., R. G., Geneva, N. Y. "The Geneva." (For grape-vines)	6,358	Nov. 4	53	606
Cleveland Baking Powder Company, New York, N. Y. "Cleveland's Superior Baking Powder"	6,255	June 24	51	1950
Clevenger Hair Balsam Co., Minneapolis, Minn. "Clevenger's Indian Hair Balsam"	6,360	Nov. 4	53	606
Colburn, Kittie, San Francisco, Cal. "California Ketchup"	6,099	Jan. 7	50	2
Conday, Paul, Pittsburg, Pa. "Conday's Superior Extract of Root Beer."	6,109	Jan. 28	50	440
Conday, Paul, Pittsburg, Pa. "Conday's Extract of Wild Cherry. The American Cough Medicine"	6,126	Feb. 18	50	844
Corbit, Harry I., Brooklyn, N. Y. "Half Dollar Box of Chemicals"	6,286	July 29	52	610
Coxe & Co., Charles L., New York, N. Y. "Dr. Rowland's Rheumatic Cure"	6,237	June 3	51	1472
Crane, Oliver, Brooklyn, N. Y. "Crane's Infallible Rheumatic Remedy"	6,388	Dec. 2	53	1262
Crompton & Bros., James R., Bury, county of Lancaster, England. "One Ream Containing 480 Sheets." (For paper)	6,131	Feb. 25	50	994
Crompton & Bros., James R., Bury, county of Lancaster, England. "Grass Bleached Tissue." (For paper)	6,132	Feb. 25	50	994
Crystal Gelatine Co., Salem and Boston, Mass. "Boston Crystal Gelatine"	6,284	July 29	52	610
Crystal Springs Manufacturing Company, Boston, Mass. "A Pure Gluten Food for Infants and Invalids"	6,265	July 8	52	164
Cumberledge, Samuel G., and John U. Garver, Carthage, Mo. "Famous Fig Tonic."	6,148	Mar. 18	50	1452
Curtis, George S., Peabody, Mass. "Curtis' Spruce Balsam." (For medicine)	6,387	Dec. 2	53	1262
Curtis, Mary A., San Francisco, Cal. "M. A. Curtis' Herb Ointment"	6,179	Apr. 29	51	628
Curtis, Mary A., San Francisco, Cal. "M. A. Curtis' 'Herb Ointment'"	6,226	May 27	51	1310
Davenport, Daniel F., Americus, Ga. "Davenport's Bearsfoot and Sarsaparilla"	6,145	Mar. 11	50	1300
Davis, George H., Philadelphia, Pa. "Davis' St Vitus Dance Specific"	6,280	July 22	52	462

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Day, Walter L., New York, N. Y. "Day's Dyspepsia Disks." (For a medicine)	6,222	May 27	51	1310
Diamond Laboratory Company, Naugatuck, Conn. "Marshmallow Throat and Lung Tablets"	6,227	May 27	51	1310
Diamond Laboratory Company, Naugatuck, Conn. "Marshmallow Lotion." (For the skin)	6,228	May 27	51	1310
Diamond Laboratory Company, Naugatuck, Conn. "Marshmallow Cream." (For a medicinal preparation)	6,307	Aug. 19	52	1066
Diamond Laboratory Company, Naugatuck, Conn. "Marshmallow Skin Soap"	6,317	Sept. 2	52	1374
Dirksen, Luise, Brooklyn, N. Y. "Dirksen's Dead Drops." (For insecticide and disinfectant)	6,180	Apr. 29	51	628
Doliber-Goodale Co., Portland, Me., and Boston, Mass. "Melhn's Food for Infants and Invalids"	6,107	Jan. 21	50	308
Draper, William P., Springfield, Mass. "Draper's Improved Persian Cream"	6,367	Nov. 11	53	762
Drevet Manufacturing Company, New York, N. Y. "Glycozone." (For a medical remedy)	6,290	July 29	52	610
Drown, Frederick E., Pawtucket, R. I. "Drown's Bleaching Kier and Process of Bleaching"	6,306	Aug. 19	52	1066
Dwelle, Emmet C., Penn Yan, N. Y. "Unfermented Wine & Beef"	6,156	Apr. 1	51	2
Dyke, Samuel C., Akron, Ohio. "Dyke's American Agate Marbles"	6,123	Feb. 11	50	714
Dyke, Samuel C., Akron, Ohio. "Dyke's American Agate Marbles"	6,124	Feb. 11	50	714
Dyke, Samuel C., Akron, Ohio. "Dyke's Fancy Colored Marbles"	6,133	Feb. 25	50	994
Eilers, John J., Sterling, Nebr. "Eilers' Stomach Bitters"	6,397	Dec. 30	53	1890
Electric Cutlery Company, Newark, N. J. "The Lamont Combination Razor Strop"	6,282	July 22	52	462
Elliot, John, Indianapolis, Ind. "Medicated Food"	6,287	July 29	52	610
Ellis, David R., Chicago, Ill. "The Ellis Oil Filter"	6,294	July 29	52	610
Ely, Charles S., Milton, Pa. "Positivus Catarrh Remedy"	6,378	Nov. 25	53	1096
Emley, Charles A., Wrightstown, N. J. "Emley Teaberry Cordial"	6,247	June 17	51	1788
Emley, Charles A., Wrightstown, N. J. "Emley's Mint Tonic"	6,248	June 17	51	1788
Emley, Charles A., Wrightstown, N. J. "Emley's Liniment"	6,261	July 1	52	2
Evans, Charles. (See Sullivan, Evans, Arnett, and Williams.)				
Evans, W. T. (See Sullivan, Evans, Arnett, and Williams.)				
Excelsior Springs Company, Kansas City, Mo. "Ferro-Manganese Water"	6,335	Sept. 23	42	1812
Fenstermaker, Charles D., Philadelphia, Pa. "Chemical and Vegetable Preparation." (For illuminating purposes)	6,134	Feb. 25	50	994
Filbert, William S., Womelsdorf, and E. Groff, Bernville, Pa. "Groff & Filbert's Cattle Cleaner or Lice Destroyer"	6,151	Mar. 25	50	1596
Follmer, Herman, Jersey City, N. J. "Follmer's Crystal Eye Medicine"	6,316	Sept. 2	52	1374
French, Richards & Co., Philadelphia, Pa. "White Mnsk." (For perfumery)	6,392	Dec. 16	53	1576
Galena Axle Grease Company, Galena, Ill. "The Superior." (For axle grease)	6,150	Mar. 25	50	1596
Gardner, Lesser, Stanfordsville, N. Y. "Gardner's Hot Drops"	6,209	May 13	51	972
Gardner, Lesser, Stanfordsville, N. Y. "Lesser Gardner's Cough Balsam"	6,210	May 13	51	972
Garred, D. W. (See Arnett, Williams, and Garrod.)				
Garver, John U. (See Cumberledge and Garver.)				
Geneva Magnetic Water Company, Washington, D. C., and Geneva, N. Y. "Geneva Magnetic Mineral Springs"	6,299	Aug. 5	52	756
Gilbert, Hyacinthe. (See Boucher and Gilbert.)				
Goshen Pharmaceutical Company, Goshen, Ind. "Coca Glycerite Suppositories"	6,323	Sept. 9	52	1542
Graen & Co., C. W., Fort Scott, Kans. "Graen's Dandruff Lotion"	6,105	Jan. 14	50	170
Greth, Julius P., New Bedford, Mass. "A Remedial Lotion"	6,370	Nov. 11	53	762
Groff, Elias. (See Filbert and Groff.)				
Hall, Edwin A., Jacksonville, Fla. "Dr. Hall's Cough Balsam"	6,238	June 3	51	1472
Ham Manufacturing Company, C. T., Rochester, N. Y. "Side-Spring Tubular Lantern"	6,152	Mar. 25	50	1596
Hanco Brothers & White, Philadelphia, Pa. "Phenol Sodique"	6,120	Feb. 11	50	714
Hanford, George C., Syracuse, N. Y. "Celery Cure or Nerve Food"	6,363	Nov. 11	53	762
Hannis Distilling Company of Philadelphia & Baltimore, Baltimore, Md. "Pure Rye Whisky"	6,157	Apr. 1	51	2
Hanrath, Fred R., Cleveland, Ohio. "Aconite." (For medicinal tinctures)	6,167	Apr. 15	51	302
Hanrath, Fred R., Cleveland, Ohio. "Lohelia." (For medicinal tinctures)	6,182	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Sticta." (For medicinal tinctures)	6,183	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Podophyllum P." (For medicinal tinctures)	6,184	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Cactus." (For medicinal tinctures)	6,185	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Phytolacca." (For medicinal tinctures)	6,186	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Pulsatilla." (For medicinal tinctures)	6,187	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Drosera." (For medicinal tinctures)	6,188	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Macrotys." (For medicinal tinctures)	6,189	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Cuprum." (For medicinal tinctures)	6,190	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Apocynum." (For medicinal tinctures)	6,191	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Carbo Veg." (For medicinal tinctures)	6,192	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Gelseninum." (For medicinal tinctures)	6,193	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Baptisia." (For medicinal tinctures)	6,194	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Bryonia." (For medicinal tinctures)	6,195	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Nux Vomica." (For medicinal tinctures)	6,196	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Apis." (For medicinal tinctures)	6,197	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Ipecacuanha." (For medicinal tinctures)	6,198	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Veratrum." (For medicinal tinctures)	6,199	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Viburnum." (For medicinal tinctures)	6,200	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Rhus." (For medicinal tinctures)	6,201	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Chelidonium." (For medicinal tinctures)	6,202	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Belladonna." (For medicinal tinctures)	6,203	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Collinsouia." (For medicinal tinctures)	6,204	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Eryngium." (For medicinal tinctures)	6,205	May 6	51	812
Hanrath, Fred R., Cleveland, Ohio. "Eunonymus." (For medicinal tinctures)	6,326	Sept. 16	52	1670
Hanrath, Fred R., Cleveland, Ohio. "Epilobium." (For medicinal tincture)	6,327	Sept. 16	52	1670
Hanrath, Fred R., Cleveland, Ohio. "Dioscorea Vil." (For medicinal tincture)	6,328	Sept. 16	52	1670
Hanrath, Fred R., Cleveland, Ohio. "Asclepias." (For medicinal tincture)	6,329	Sept. 16	52	1670
Hanrath, Fred R., Cleveland, Ohio. "Hamamelis." (For medicinal tincture)	6,330	Sept. 16	52	1670
Hanrath, Fred R., Cleveland, Ohio. "Chionanthus." (For medicinal tincture)	6,331	Sept. 16	52	1670
Hanrath, Fred R., Cleveland, Ohio. "Digitalis." (For medicinal tincture)	6,332	Sept. 16	52	1670
Hanrath, Fred R., Cleveland, Ohio. "Caulophyllum." (For medicinal tincture)	6,333	Sept. 16	52	1670
Hart Rheumatic Remedy Company, Buffalo, N. Y. "Dr. Hart's Family Pills"	6,353	Oct. 28	53	436
Heck, E. P., Altamont, N. Y. "Bitter Sweet Salve"	6,106	Jan. 14	50	170
Henry, George C., Burlington, Iowa. "Henry's Mississippi Soap"	6,127	Feb. 18	50	844
Higgins, Charles M., Brooklyn, N. Y. "General Writing Ink"	6,173	Apr. 22	51	482
Higgins, Charles M., Brooklyn, N. Y. "Draftsmen's Mucilage"	6,174	Apr. 22	51	482
Higgins, Charles M., Brooklyn, N. Y. "Wrapping Mucilage"	6,175	Apr. 22	51	482
Hochstadter Co., New York, N. Y. "Leipziger Burgunder Wein Bitter"	6,298	Aug. 5	52	756
Homer, John, Newburyport, Mass. "Homer's Egg-Shape Suppository Mould." (For medical purposes)	6,364	Nov. 11	53	762
Howe, F. C., Sterling, Nebr. "Howe's Diphtheria and Sore Throat Cure"	6,359	Nov. 4	53	606
Hoyt, Clarence W. (See Wardwell and Hoyt.)				
Hunsaker, Andrew J., Wetaug, Ill. "Hunsaker's Liniment"	6,348	Oct. 21	53	280

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Hunter, J. F. (See Williams, Hunter, and Stevenson.)				
Inghram, Jesse, Pittsburg, Pa. "Two Bags of Blue and a Fine Dixon's Lead Pencil"	6,164	Apr. 8	51	160
Jacobs, Frederic L., Asheville, N. C. "Neilson's Diarrhoea Cure"	6,221	May 27	51	1310
James & Co., J. W., Brady's Bend, Pa. "Dr. James' Cherry Tar Syrup"	6,211	May 13	51	972
James & Co., J. W., Brady's Bend, Pa. "Dr. James' Soothing Syrup Cordial"	6,244	June 17	51	1788
James & Co., J. W., Brady's Bend, Pa. "Dr. James' Stomach Bitters"	6,266	July 8	52	164
Jareckie, Charles. (See Bold and Jareckie.)				
Jayne & Son, D. Philadelphia, Pa. "Jayne's Concentrated Sanative Pills"	6,256	June 24	51	1950
Johnson, B. J., Anna, Ill. "White Ointment Eye Salve"	6,128	Feb. 18	50	844
Johnson, J. W., Nelsonville, Ohio. "Red Liniment"	6,121	Feb. 11	50	714
Jungkurth, Herman F. (See Jungkurth, Theodore F. and H. F.)				
Jungkurth, Theodore F. and H. F., Lithopolis, Ohio. "Premium Stove Polish"	6,114	Feb. 4	50	564
Kahler, John, Chicago, Ill. "J. Kahler & Co.'s Mineral Knife Polish"	6,268	July 8	52	164
Kantorowicz, Hartwig, Posen, Berlin, and Hamburg, Germany. "Bitters Coca"	6,309	Aug. 26	52	1230
Keeley Company, Lester E., Dwight, Ill. "Dr. L. E. Keeley's Double Chloride of Gold Cure for the Tobacco Habit"	6,273	July 15	52	312
Kellogg, James C., Elizabeth, N. J. "French Ultramarine Washblue"	6,146	Mar. 11	50	1300
Kennedy, Duncan S., Towanda, Pa. "Kennedy's Blood Medicine"	6,368	Nov. 11	53	762
Kern, Ellie, South Bend, Ind. "Kern's Safest and Best Hair Tonic and Invigorator"	6,115	Feb. 4	50	564
Kincaid, Sarah J., Clay Center, Nebr. "Kincaid's Complexion Beautifier"	6,276	July 15	52	312
King, Charles R., Lampasas, Tex. "Dr. King's Royal Germetuer." (For a medicine)	6,100	Jan. 7	50	2
King & Co., J. B., New York, N. Y. "Diamond Brand." (For plaster-of-paris)	6,303	Aug. 12	52	908
Kister, Benjamin J., Lehigh, Pa. "Kister's New Process." (For fertilizers)	6,141	Mar. 4	50	1136
Kline, M., Corning, Iowa. "M. Kline's Iowa Washing Powder"	6,147	Mar. 11	50	1300
Krower, Alfred. (See Lorsch and Krower.)				
L'Amblée, John H., Chicago, Ill. "L'Amblée's Alphabet Puzzle"	6,217	May 20	51	1136
Lake View Printing Company, Boston, Mass. "Pins"	6,288	July 29	52	610
Lamb, Thomas, Newark, England. "Tonicque-Amer (de Savoie)"	6,338	Sept. 30	52	1954
Lamereaux, Jules, Montgomery, La. "Lamereaux' Antiseptic"	6,385	Dec. 2	53	1262
Lawson, Manasseh J., Philadelphia, Pa. "Instructions for Using M. J. Lawson's Safety Coin Mailing Case for Mailing all sums in Coin under One Dollar"	6,384	Dec. 2	53	1262
Lazell, Dalley & Co., New York, N. Y. "Lazell's Ly-co-dine Toilet Powder"	6,311	Aug. 26	52	1230
Leas, Solomon, East Berlin, Pa. "Leas' Stable Liniment"	6,158	Apr. 1	51	2
Leavy, William, Kansas City, Mo. "Hand Made, By Union Labor, Timmers' Union No. 2, Kansas City, Mo."	6,336	Sept. 23	52	1812
Leser, Jacob, Austin, Tex. "Boston Drummer." (For bar soap)	6,206	May 6	51	812
Leuschner, Paul, Detroit, Mich. "Paul Leuschner's Pure Norwegian Cod Liver Oil"	6,346	Oct. 14	53	142
Lewis, William T., Lowell, Mass. "W. T. Lewis' The American Blue"	6,232	June 3	51	1472
Lichty, Norman, Des Moines, Iowa. "Hot Springs Eczema Powder"	6,285	July 29	52	610
Lincoln, Robert B., and J. K. Shattuck, Boston, Mass. "Remedy for Rheumatism, Neuralgia and all Kindred Ailments"	6,231	June 3	51	1472
Linger, Christian, Milwaukee, Wis. "Dr. C. Linger's All Healing Oil"	6,159	Apr. 1	51	2
Linney, C. H., Maquoketa, Iowa. "The Practical Fruit and Vegetable Preserver." (Compound for preserving)	6,302	Aug. 12	52	908
Longfield, Joshua, New York, N. Y. "Longfield's Sauce"	6,342	Oct. 14	53	142
Lowry, Elizabeth R., Philadelphia, Pa. "Washing Fluid"	6,349	Dec. 9	53	1412
Lorsch, Albert, and A. Krower, New York, N. Y. "Sumatra Gem." (For imitation diamonds)	6,149	Mar. 18	50	1452
Lyons, Frederick W., and E. Ziegler, Jersey City, N. J. "Anti-Chap Skin Soap"	6,310	Aug. 26	52	1230
Magee, John A., Lawrence, Mass. "Magee's Emulsion of Pure Cod Liver Oil in Combination with Extract of Malt and Hypophosphites of Lime and Soda"	6,216	May 20	51	1136
Manahan, Margaret E., New York, N. Y. "Ebony Sheathing." (For paper)	6,344	Oct. 14	53	142
Manahan, Margaret E., New York, N. Y. "A Brand." (For sheathing-paper)	6,349	Oct. 21	53	280
Mary & Haas, St. Louis, Mo. "Mississippi Jeans Pants"	6,259	July 1	52	2
McBride, Arthur C., Charleston, S. C. "Toilet Embrocation"	6,142	Mar. 4	50	1136
McBride, Arthur C., Charleston, S. C. "Cod Liver Oil with the Hypophosphites of Lime and Soda"	6,343	Oct. 14	53	142
McCormick, Sallie E., Lancaster, Pa. "Blood Purifier and Rheumatic Cure"	6,225	May 27	51	1310
McKesson, John, Jr., New York, N. Y. "Exalgine." (For a certain chemical compound)	6,135	Feb. 25	50	994
Medina, Joaquin A., Brooklyn, N. Y. "Budweiser Beer"	6,245	June 17	51	1788
Merritt, E. H., New York, N. Y. "Dr. Pendlebury's Wonderful Pectoral Cough Cure"	6,379	Nov. 25	53	1096
Merritt, E. H., New York, N. Y. "Dr. Pendlebury's Wonderful Pectoral Cough Cure"	6,380	Nov. 25	53	1096
Miller, William, Brantford, Kans. "William Miller's Chicken and Turkey Cholera Remedy"	6,269	July 8	52	164
Mound City Paint & Color Co., St. Louis, Mo. "Mound City Co's Combined Filler and Stain"	6,108	Jan. 21	50	308
Moyen, Joseph, Haverhill, Mass. "Mrs. L. Moyen's Pile Salve"	6,110	Jan. 28	50	440
Mulligan, James H., Springfield, Ohio. "La Grippe Cough Drops"	6,153	Mar. 25	50	1596
Murray, Mary E., Chicago, Ill. "Almond Nut Salve"	6,304	Aug. 12	52	908
Murray, Mary E., Chicago, Ill. "Almond Nut Cream." (For the skin)	6,305	Aug. 12	52	908
Nash, Whiton & Co., New York, N. Y. "Salt is not Salt"	6,257	June 24	51	1950
Nicodemus, Charles A., Baltimore, Md. "Nicodemus's Liquid Yeast"	6,233	June 3	51	1472
Noyes Manufacturing Company, P. J., Lancaster, N. H., and Boston, Mass. "Noyes Granular Effervescent Magnesia Sulphate"	6,395	Dec. 16	53	1576
Ochsner & Meerman, Cleveland, Ohio. "Golden Liquid Metal Polish"	6,260	July 1	52	2
Ogden, Charles E., London, England. "Arnold's Chemical Writing Fluid"	6,295	Aug. 5	52	756
Omohundro, T. E., Baltimore, Md. "Men's Shirts"	6,234	June 3	51	1472
Omohundro, T. E., Baltimore, Md. "Men's Shirts"	6,235	June 3	51	1472
Omohundro, T. E., Baltimore, Md. "Giant." (For overalls)	6,324	Sept. 9	52	1542
Omohundro, Thomas E., Baltimore, Md. "J. O. & Co's." (For men's overalls, pantaloons, and shirts)	6,281	July 22	52	462
Oxnard, William A., Holbrook, Mass. "Dr. Swan's Lung and Cough Balsam"	6,355	Nov. 4	53	606
Pearson, Julius D., Sheridan, Ind. "Dr. Pearson's German Lung Tonic"	6,347	Oct. 14	53	142
Peckham's Sons, A. C., St. Louis, Mo. "Calisaya Tonic Bitters"	6,383	Nov. 25	53	1096
Petersen Bros. & Co., Chicago, Ill. "New Elm Strong Bakers." (For flour)	6,160	Apr. 1	51	2
Plows, Edward, Chicago, Ill. "Plows' Cake Frosting"	6,361	Nov. 4	53	606
Pollard, Frederick E., Worcester, Mass. "Pollard's Engraved Headings"	6,161	Apr. 1	51	2
Pomeroy, Henry R., and E. E. Stout, Indianapolis, Ind. "Pomeroy's Communitated Celery"	6,352	Nov. 25	53	1096
Price Baking Powder Company, Chicago, Ill. "Dr. Price's Cream Baking Powder Most Perfect Made"	6,101	Jan. 7	50	2
Price Baking Powder Company, Chicago, Ill. "Dr. Price's Fruit Coloring"	6,102	Jan. 7	50	2
Pruitt, Joel T., L. E. Hunter, and G. J. Peake, Lebanon, Ky. "Pruitt's Liniment"	6,246	June 17	51	1788
Pugh, William W., New Birmingham, Tex. "Zymotic Specific No. 4"	6,233	May 27	51	1310
Reinhold, Simon, Reading, Pa. "Reinhold's China Drops"	6,129	Feb. 18	50	844
Rice & Sons, A. D., Portville, N. Y. "Hop Balsam." (For cough medicine)	6,371	Nov. 11	53	762
Richford Chemical Co., Richford, Vt. "Doc. E. Ford's Stiffener"	6,116	Feb. 4	50	564
Rickerby, Alfred M., Brooklyn, N. Y. "Bass & Co., Pale Ale & Guinness's Extra Foreign Stout"	6,393	Dec. 16	53	1576

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Rickerby, Alfred M., Brooklyn, N. Y. "Abottleofmixedbass." (For ale)	6,398	Dec. 30	53	1890
Rochester Medical Co., Rochester, N. Y. "Rochester Salve"	6,314	Aug. 26	52	1230
Rockey, Walter S., & A. B. Baltzly, New York, N. Y. "Rockey & Baltzly's Compound Syrup of Wild Cherry & Tolu"	6,352	Oct. 28	53	436
Rogers, Sullivan W., Harwich, Mass. "Sanative Powder"	6,168	Apr. 15	51	302
Ross, Hal C. (See Turner and Ross.)				
Rowsey, Henrietta F., Toledo, Ohio. "Dr. W. T. Rowsey's Never Failing Whooping Cough Remedy"	6,296	Aug. 5	52	756
Russ Co., S. A., South Bend, Ind. "S. A. Russ' Bleaching Blue for Clothes—The Best in Use"	6,262	July 1	52	2
Rush, Edwin F., Chicago, Ill. "Dr. Rush's Medicated Skin Powder"	6,365	Nov. 11	53	762
Sammons, William S., Washington, D. C. "Mason's Baking Powder"	6,283	July 29	52	610
Sanderson, Robert, Putney, N. Y. "Lake Kenka Grapes"	6,366	Nov. 11	53	762
Schmidt & Co., Mrs. L., New York, N. Y. "Mrs. L. Schmidt & Cos. Healing Liniment"	6,301	Aug. 12	52	908
Schneider, John, and P. Bisderf, Hamilton, Ohio. "Maple Salve"	6,169	Apr. 15	51	302
Schreiber, John D., Allentown, Pa. "Schreiber's Cough Balsam."	6,277	July 15	52	312
Schreiber, John D., Allentown, Pa. "Schreiber's Tonic"	6,289	July 29	52	610
Schreiber, Philip J., Dayton, Ohio. "Unguentum Medic. et Chirurg."	6,154	Mar. 25	50	1596
Schwarz, Jeanetta, New York, N. Y. "Mrs. Schwarz' Salve"	6,165	Apr. 8	51	160
Segrest, Lewis F., Philadelphia, Pa. "One Minute Toothache Cure"	6,372	Nov. 18	53	926
Shattuck, James K. (See Lincoln and Shattuck.)				
Shillite Company, John, Cincinnati, Ohio. "Extra Value Sheeting"	6,291	July 29	52	610
Singer & Wheeler, Peoria, Ill. "Kaiser." (For beer)	6,139	Feb. 25	50	994
Sliter, William J., Harpersville, N. Y. "Wm. J. Sliter's Celebrated Cancer Cure"	3,345	Oct. 14	53	142
Sloan, Earl S., Boston, Mass. "Sloan's Chill and Fever Remedy"	6,270	July 15	52	312
Sloan, Earl S., Boston, Mass. "Sloan's Nerve and Bone Liniment"	6,271	July 15	52	312
Sloan, Earl S., Boston, Mass. "Sloan's Quick Cure for Saddle and Collar Galls"	6,272	July 15	52	312
Sloan, Earl S., Boston, Mass. "Sloan's Hoof Ointment"	6,312	Aug. 26	52	1230
Sloan, Earl S., Boston, Mass. "Sloan's Condition Powders for Horses and Cattle"	6,313	Aug. 26	52	1230
Sloan, Earl S., Malden and Boston, Mass. "Sloan's Improved Green Ointment"	6,356	Nov. 4	53	606
Smith, Emmons S., and E. J. Wardwell, Washington, D. C. "Washington, D. C., 1890." (For silver and silver-plated ware)	6,207	May 6	51	812
Smith, Emmons S., and E. J. Wardwell, Washington, D. C. "Washington, D. C." (For silver and silver-plated ware)	6,208	May 6	51	812
Smith, John W., Boston, Mass. "Cactus Balm Hair Grower"	6,318	Sept. 2	52	1374
Smith, John W., Boston, Mass. "Cactus Balm Skin Cure"	6,319	Sept. 2	52	1374
Smith, Mary V., Baltimore, Md. "Chesapeake Terrapin Meat"	6,401	Dec. 30	53	1890
Smith & Son, James, Ashwood Bank, county of Worcester, England. "Jas. Smith & Son, Fil-Tenax Side-Threading Needles"	6,136	Feb. 25	50	994
Soler, Elias, New York, N. Y. "Depurative Guardias"	6,339	Sept. 30	52	1954
Southworth, Amory C., Sandwich, Mass. "Vegetable Canker Destroyer." (For a medicine)	6,224	May 27	51	1310
St. Louis Honey Wine Co., St. Louis, Mo. "Honey Wine"	6,339	Dec. 9	53	1412
Stackhouse, John, Philadelphia, Pa. "Stackhouse's Family Cough Syrup"	6,212	May 13	51	972
Stackhouse, John, Philadelphia, Pa. "Stackhouse's Liver and Anti-Malaria Pills"	6,215	May 20	51	1136
Stanton, George W., Baltimore, Md. "Mineralized Hydrocarbon & Vegetable Compound." (For lighting and heating purposes)	6,103	Jan. 7	50	2
Stark, William F., New York, N. Y. "The Standard Automatic Safety Punch." (For check-punching machines)	6,137	Feb. 25	50	994
Stephens, A. F., St. Joseph, Mo. "Dr. Stephens' Alternative"	6,350	Oct. 21	53	280
Stephens, A. F., St. Joseph, Mo. "Woman's Relief. The great Panacea for Diseases of Women"	6,362	Nov. 4	53	606
Stephens, Alfred F., St. Joseph, Mo. "Dr. Stephen's Buckeye Cough Cure"	6,362	Dec. 2	53	1262
Stevenson, G. M. (See Williams, Hunter, and Stevenson.)				
Stewart Drug Company, St. Louis, Mo. "Stewart's Headache Powders"	6,249	June 17	51	1788
Stewart Drug Company, St. Louis, Mo. "Stewart's Stock Remedy"	6,250	June 17	51	1788
Stewart Drug Company, St. Louis, Mo. "Stewart's Hoof Oil"	6,287	July 8	52	164
Stewart, Francis G., St. Louis, Mo. "Stewart's Healing Powder." (For veterinary use)	6,240	June 3	51	1472
Stout, Edward E. (See Pomeroy and Stout.)				
Stuart, Ezra A., Kidder, Mo. "Stuarts Bone and Nerve Liniment"	6,315	Aug. 26	52	1230
Sullivan, H. C., C. and W. T. Evans, E. Arnett, and G. Williams, Louisa, Ky. "Arnett's Hog Cholera Cure"	6,122	Feb. 11	50	714
Swope, G. E., Newville, Pa. "Swope's Peerless Cough Remedy"	6,400	Dec. 30	53	1890
Talbot, Edward A. (See Bush and Talbot.)				
Talcott, Elizabeth K., Boston, Mass. "Talcotts Mount." (For photographic and other pictures)	6,170	Apr. 15	51	302
Thompson, Amund G., Chicago, Ill. "Thompson's Wild Cherry Phosphate." (For a tonic)	6,369	Nov. 11	53	762
Thompson, Fred S., Chicago, Ill. "Thompson's Brazilian Belt Cement"	6,104	Jan. 7	50	2
Tough, Rutherford & Co., Baltimore, Md. "Oleine Carriage Oil"	6,166	Apr. 8	51	160
Truitt, J. F., Bridgeport, N. J. "Truitts Vegetable Lozenge. The great cure for Dyspepsia"	6,242	June 10	51	1624
Turner, George T., Philadelphia, Pa. "Chemical & Vegetable Combination." (For an illuminating compound)	6,219	May 20	51	1136
Turner, Philo A., and H. C. Ross, Pittsburg, Pa. "Glycerite of Menthol, Neuralgia, Headache, and Toothache Cure"	6,220	May 27	51	1310
Underhill, S. E., Huron, S. D. "Underhill's Eczema Ointment"	6,354	Oct. 28	53	436
Underwood & Co., John, New York, N. Y. "Underwood's Improved Compressed Duplicating Ink"	6,341	Oct. 7	53	2
Underwood & Co., John, New York, N. Y. "Underwood's Black Copying Ink Ribbon"	6,399	Dec. 30	53	1890
Union Bag and Paper Company, Chicago, Ill. "Improved Square." (For Paper bags)	6,321	Sept. 2	52	1374
Valentine & Company, New York, N. Y. "Valentine's Superfine Coach-Painters' Red"	6,171	Apr. 15	51	302
Van Dyke Brothers, Philadelphia, Pa. "Cream of Almonds." (For the toilet)	6,396	Dec. 16	53	1576
Vaughan, James S., Houston, Va. "Vaughan's Burn Cure"	6,176	Apr. 22	51	482
Ward, Seth, Princeton, Ind. "Ward's Improved Back Band Hooks"	6,258	June 24	51	1950
Wardwell, Edward J. (See Smith and Wardwell.)				
Wardwell, Isaac F., and C. W. Hoyt, Stamford, Conn. "Dr. Trowbridge's Dandelion Pills"	6,138	Feb. 25	50	994
Waterhouse, Frederick A., Albany, N. Y. "Thypure Baking Powder"	6,243	June 10	51	1624
Weaver, Henry B., Burlington, N. J. "Violet." (For a toilet preparation for the face and hands)	6,117	Feb. 4	50	564
Webster & Co., Warren, Philadelphia, Pa. "Economizer." (For apparatus for economically using steam for feed-water heaters, &c)	6,213	May 13	51	972
Webster & Co., Warren, Philadelphia, Pa. "Utilizer." (For apparatus for utilizing exhaust steam for feed-water heaters, &c)	6,214	May 13	51	972
Webster, Eliza, Atlantic City, N. J. "Madame Webster's Cream." (For the complexion)	6,125	Feb. 11	50	714
Wiedemann, George, Newport, Ky. "Geo. Wiedemann's Bohemian Beer"	6,177	Apr. 22	51	482
Williams, A. L., North Lewisburg, J. F. Hunter and G. M. Stevens, Bellefontaine, Ohio. "Magnesio Calcium Salts."	6,111	Jan. 28	50	440
Williams, Gideon. (See Arnett, Williams, and Garred.)				
Williams, Gideon. (See Sullivan, Evans, Arnett, and Williams.)				
Williams, Richard S., New York, N. Y. "Standard Gold Cylinders, Style O." (For dental purposes)	6,376	Nov. 18	53	926

Alphabetical list of registrants of labels—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Wilmington Dental Manufacturing Company, Philadelphia, Pa. "Dr. Welch's Amalgam"	6,374	Nov. 18	53	926
Wilmington Dental Manufacturing Company, Philadelphia, Pa. "Dr. Welch's Gold and Platina Alloy." (For dental purposes)	6,375	Nov. 18	53	926
Wilms, George L., Jersey City, N. J. "Peshalls' Remedy for Hay Fever"	6,394	Dec. 16	53	1576
Wise & Co., Butler, Ohio. "Wise & Co's Premium Barley Coffee"	6,172	Apr. 15	51	302
Wright Medicine Company, Charles, Detroit, Mich. "Hibbard's Rheumatic and Strengthening Plaster."	6,278	July 15	51	312
Young, Alexander T., Marine City, Mich. "Home Remedies for the Prevention and Cure of the Ills common to Man and Beast"	6,402	Dec. 30	53	1890
Youngkin, John A. and J. S., Sweet Home, Tex. "Youngkin Brothers Screw Worm Exterminator"	6,308	Aug. 19	52	1066
Youngkin, Josiah S. (See Youngkin, J. A. and J. S.)				
Ziegler, Edward. (See Lyons and Ziegler.)				

DISCLAIMERS.

Name, residence, and invention.	No.	Filed.	Official Gazette.	
			Vol.	Page.
Gill, Jabez H., Philadelphia, Pa.; disclaimer filed by patentee. Machine for heading cartridge-shells	241,962	May 24, 1890	51	1472
Hyatt, I. Smith and J. W., Newark, N. J.; disclaimer filed by assignee. Manufacturing solidified collodion	156,352	Mar. 27, 1890	51	160
Martel, Adelard F., Montreal, Canada; disclaimer filed by assignee. Coin-controlled hand-power testers	386,206	Oct. 6, 1890	53	280
Miller, William A., Springdale, Ark.; disclaimer filed by patentee. Whiffletree	417,573	Jan. 27, 1890	50	714
Scribner, Charles E., Chicago, Ill.; disclaimer filed by assignee. Multiple switch-board test-circuits	374,907	Dec. 9, 1890	53	1576

ALPHABETICAL LIST OF INVENTIONS.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Specification.	Drawing.	Volume.	Page.
Abacus	C. Neuhaus	422,612	Mar. 4	371	92	50	1207
Abdominal brace and supporter	T. S. Hall	425,784	Apr. 15	2054	547	51	417
Abdominal supporter	H. E. Rogers	433,370	July 29	3617	933	52	731
Abdominal support. Electro-magnetic	M. E. Thomas	420,840	Feb. 4	605	155	50	678
Abrading and polishing material, &c. Apparatus for agitating	J. J. Niland	420,243	Jan. 28	2429	646	50	507
Abrading-cylinder	L. D. Forbes	425,376	Apr. 8	1437	{ 384 385 }	51	287
Abrasive strips. Apparatus for molding	Q. W. and I. E. Booth	428,298	May 20	1934	486	51	1267
Abrasive surfaces. Tool for dressing	G. G. Crowell	426,490	Apr. 29	3140	824	51	648
Accident-case	F. King	435,310	Aug. 26	2898	768	52	1343
Accordion	J. T. Henderson	419,168	Jan. 7	780	206	50	162
Accordion	E. Kalbe	429,763	June 10	994	243	51	1674
Accordion	J. F. Stratton	437,059	Sept. 23	2679	700	52	1909
Accordions. Reed-plate for	E. Pries	437,906	Oct. 7	351	102	53	68
Account and record holding case and correlative sheet, card, or ticket. }	C. M. Wilson	423,850	Mar. 18	2234	{ 590 591 }	50	1576
Acid and methyl alcohol. Obtaining acetic	F. C. Alkier	431,243	July 1	321	.....	52	65
Acid compound of dimethyl meta-amidophenol. Carbonic-	R. Guelm and J. Schmid	427,565	May 13	817	.....	51	983
Acid compound of meta-amidophenol. Carbonic-	R. Guelm and J. Schmid	427,564	May 13	816	.....	51	983
Acid. Making acetic	I. A. F. Bang and M. C. A. Ruffin	432,926	July 22	2936	752	52	591
Acid-proof retaining-vessel	O. A. Enholm	438,312	Oct. 14	923	266	53	193
Acid Rosinduline monosulpho-	C. Schraube	428,530	May 20	2267	.....	51	1572
Acid. Rosinduline sulpho-	C. Schraube	431,404	July 1	564	.....	52	115
Acid. Tower for condensing	C. Graham	436,414	Sept. 16	1618	426	52	1698
Acoustical instruments. Combined mouth and nose piece for	H. C. Denning	435,055	Aug. 26	2513	664	52	1271
Actuating mechanism. System of	J. H. Dixon	432,158	July 15	1764	453	52	358
Adding and recording machine	D. E. Felt	411,233	Nov. 25	2611	{ 676 677 }	53	1132
Adding and subtracting machine	J. H. Schnarrenberger	418,930	Jan. 7	442	{ 108 109 }	50	92
Adding-machine	H. Cook	430,001	June 10	1354	335	51	1743
Adding-machine	D. I. Craig	434,251	Aug. 12	1224	318	52	1005
Adding-machine	W. M. Fitzwater	432,393	July 15	2111	542	52	422
Adding-machine	W. E. Fleming	435,819	Sept. 2	680	{ 181 182 }	52	1506
Adding-machine	C. W. Fowler	437,889	Oct. 7	325	96	53	64
Adding-machine	G. B. Fowler	432,266	July 15	1923	492	52	387
Adding-machine	W. A. Guzman	427,567	May 13	818	205	51	983
Adding-machine	W. Lang	431,365	July 1	506	125	52	102
Adding-machine	J. F. Mays	424,932	Apr. 1	768	204	51	149
Adding-machine	W. C. Mills	421,745	Feb. 18	1925	506	50	946
Adding-machine	J. H. Schnarrenberger	439,431	Oct. 28	2747	732	53	540
Adding-machine	W. Siddall	419,368	Jan. 14	1087	{ 287 288 }	50	230
Adding-machine	P. G. Troné	422,853	Mar. 4	716	184	50	1275
Adding-machine	D. B. Vance and J. W. Brevard	421,455	Feb. 18	1507	391	50	866
Adding-machine	E. E. Witter	423,364	Mar. 11	1517	399	50	1432
Addresses or labels to wrappers, envelopes, or publications. Attaching	J. D. Robertson	430,787	June 24	2647	649	51	2011
Addressing-machine	H. P. Gerhardt and A. Gould	430,184	June 17	1643	{ 409 410 }	51	1809
Addressing-machine	M. Siersdorfer	423,185	Mar. 11	1256	327	50	1383
Adjustable chair	J. P. Hindman	435,224	Aug. 26	2752	727	52	1318
Adjustable chair	E. Pyncheon	443,197	Dec. 23	2581	{ 663 664 }	53	1792
Adjustable chair	K. Stieler	421,018	Feb. 11	890	230	50	741
Adjustable chair or stool	J. Briggs	428,664	May 27	2479	630	51	1330
Adjustable joint for display-frames	C. W. Huntington	437,650	Sept. 30	3621	946	52	2099
Adjustable pattern for drafting garments	H. A. Curry	438,607	Oct. 21	1419	{ 383 384 }	53	285
Adjustable pattern for drafting garments	M. Lennart	441,369	Nov. 25	2819	728	53	1171
Adjustable screen and window-shade fixture. Combined	T. Choepé	443,315	Dec. 23	2776	{ 711 712 }	53	1827
Adjustable table	R. S. Carr	427,223	May 6	303	78	51	871
Adjusting device	J. B. Bennett	425,486	Apr. 15	1610	429	51	330
Advertisements. Apparatus for displaying	C. O. Radde	442,274	Dec. 9	1004	265	53	1466
Advertisements, &c. Device for exhibiting	N. E. Hamilton	424,882	Apr. 1	692	183	51	134
Advertiser's reply-coupon	A. O. Kittredge	443,141	Dec. 23	2464	630	53	1766
Advertising and discount coupon book, sheet, or card	C. A. Slocum	430,044	June 10	1431	356	51	1757
Advertising and distributing apparatus	H. D. Pursell	424,354	Mar. 25	2999	797	50	1729
Advertising apparatus. Automatic	R. Gornall	435,118	Aug. 26	2605	{ 688 689 }	52	1288

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Advertising article	W. L. Force	441,149	Nov. 25	2449	635	53	1105
Advertising-automaton for store-windows	G. Music	420,351	Jan. 28	2582	686	50	535
Advertising-card holder	S. A. Bromberg	435,352	Aug. 26	2972	788	52	1356
Advertising-catalogue	E. Lunkenheimer	430,430	June 17	2059	507	51	1890
Advertising device	L. M. Devore	439,866	Nov. 4	353	91	53	676
Advertising device	G. Quarrie	438,179	Oct. 14	778	212	53	156
Advertising device	H. A. Snyder	428,423	May 20	2126	534	51	1547
Advertising device	H. A. Snyder	439,329	Oct. 28	2589	691	53	511
Advertising device	R. W. Swann	429,070	May 27	3098	799	51	1451
Advertising device	C. Van Graafeiland	433,222	July 29	3414	887	52	690
Advertising device	J. B. Williamson	433,841	Aug. 5	600	156	52	873
Advertising device. Street-car and other	B. Dubinski	419,602	Jan. 14	1417	{ 379 380 }	50	297
Advertising medium. Scenic	J. House	435,064	Aug. 26	2528	668	52	1274
Advertising or display device	A. Dahlstrom	429,893	June 10	1193	296	51	1711
Advertising-rack	M. E. Demarest	421,252	Feb. 11	1221	316	50	805
Advertising show-case	E. Graf	421,699	Feb. 18	1869	490	50	936
Advertising-sign	E. and F. Smith	440,779	Nov. 18	1839	473	53	979
Advertising-sign. Flashing-light	F. J. Mitchell	422,219	Mar. 4	659	169	50	1363
Advertising-vehicle	C. Stülpnagel	432,776	July 22	2719	696	52	549
Aerated beverages. Apparatus for charging receptacles with	G. Matthews	422,959	Mar. 11	910	238	50	1317
Aerated liquids from founts or reservoirs. Apparatus for drawing	T. Ferguson	435,489	Sept. 2	165	46	52	1406
Aerial machine	S. Cairncross	432,860	July 22	2835	{ 726 727 }	52	572
Aeriform fluids. Device for mixing	W. E. Murrin	421,603	Feb. 18	1737	455	50	910
Aerostat	M. H. Baldwin	423,980	Mar. 25	2449	{ 650 651 }	50	1624
Aging liquors	J. A. H. Hasbrouck	418,792	Jan. 7	201	49	50	44
Aging wine	G. H. Malter	433,131	July 29	3285	845	52	663
Aging wines. Apparatus for	L. Wagoner	429,826	June 10	1089	268	51	1691
Agricultural boiler	D. W. Bovee	420,330	Jan. 28	2551	675	50	530
Agricultural boiler	I. Shoudy, Jr., and L. L. Miller	434,209	Aug. 12	1158	301	52	992
Agricultural implement	J. Arnold	419,027	Jan. 7	573	{ 144 145 }	50	121
Agricultural implement	H. L. Cameron	422,718	Mar. 4	519	132	50	1235
Agricultural implement	J. L. Laughlin	420,727	Feb. 4	417	111	50	646
Agricultural implements. Guiding attachment for	C. Packard	421,885	Feb. 18	2129	558	50	984
Agricultural-machine seat	G. Banks	420,430	Feb. 4	4	1	50	565
Agricultural machines, &c. Seat for	C. Benesh	418,077	Jan. 7	15	5	50	5
Agricultural machinery. Frame for	C. M. Carnahan	437,392	Sept. 30	3238	844	52	2021
Air-accumulator	W. F. Merryman	441,119	Nov. 18	2392	620	53	1085
Air. Apparatus for oxygenating and carbureting	C. Fiesse	433,336	July 29	3572	922	52	722
Air automatic brake. Straight	A. R. Boluss	435,791	Sept. 2	635	{ 167 168 }	52	1497
Air-brake	C. R. Daellenbach	442,019	Dec. 2	610	{ 164 165 }	53	1382
Air-brake	L. Guillemet	437,300	Sept. 30	3080	887	52	1991
Air-brake	T. J. Hogan	433,127	July 29	3277	{ 844 845 }	52	662
Air-brake	T. J. Hogan	433,594	Aug. 5	228	60	52	800
Air-brake	T. J. Hogan	433,595	Aug. 5	231	61	52	801
Air-brake	F. Lansberg	439,528	Oct. 28	2885	768	53	567
Air-brake	W. E. Maher	433,737	Aug. 5	433	111	52	840
Air-brake	O. B. Martin	437,218	Sept. 30	2953	{ 772 773 }	52	1967
Air-brake	E. F. Roberts	433,040	July 29	3143	808	52	636
Air-brake	W. H. Walker	438,038	Oct. 7	567	155	53	108
Air-brake	G. B. Williams	441,526	Nov. 25	3068	789	53	1219
Air-brake apparatus. Pressure-indicator for	H. H. Westinghouse	421,641	Feb. 18	1792	468	50	920
Air-brake. Automatic	J. B. Stewart	420,121	Jan. 28	2220	588	50	470
Air-brake. Automatic	G. B. Williams	431,303	July 1	406	102	52	83
Air-brake. Automatic	G. B. Williams	431,790	July 8	1192	{ 298 299 }	52	241
Air-brake coupling	W. A. and B. S. H. Harris	442,621	Dec. 16	1555	402	53	1583
Air-brake mechanism	H. S. Hopper	430,024	June 10	1394	{ 347 348 }	51	1751
Air-brake pumps. Automatic governor for	G. W. Burbank, G. W. Bill, and W. H. Ramseyer	428,299	May 20	1936	487	51	1208
Air-brake releasing attachment	G. B. Williams. (Reissue)	11,124	Nov. 18	2397	621	53	1086
Air-brake system. Automatic	H. Guelts. (Reissue.)	11,070	Apr. 15	2344	622	51	472
Air-brakes. Piston-throw indicator for	F. Robinson	437,800	Oct. 7	197	60	53	39
Air-brakes. Pressure-recorder for	C. A. Schroyer	426,144	Apr. 22	2621	688	51	534
Air-brakes. Releasing attachment for	G. B. Williams	431,304	July 1	411	102	52	84
Air-compressor	E. Hill	439,876	Nov. 4	371	96	53	680
Air-compressor	A. C. Rand and F. A. Halsey	421,611	Feb. 18	1748	{ 458 459 }	50	912
Air-compressor. Automatic	J. W. Eloheimo	435,034	Aug. 26	2480	656	52	1265
Air-compressor. Compound steam	A. P. Massey	433,951	Aug. 12	760	198	52	915
Air-current governor	S. P. Smith	426,628	Apr. 29	3342	876	51	687
Air-current governor	S. P. Smith	426,649	Apr. 29	3373	885	51	692
Air-cushion	W. B. White	441,269	Nov. 25	2674	694	53	1144
Air. Device for indicating the condition of the	H. J. Winterlich	429,078	May 27	3118	803	51	1455
Air. Device for medicating	W. R. Macdonald	441,573	Nov. 25	3144	808	53	1234
Air-engine	A. Brock	434,422	Aug. 19	1500	{ 391 392 }	52	1067
Air-engine	J. Ericsson	431,729	July 8	1103	275	52	225
Air-engine	A. Schmid and J. C. Beckfeld	421,525	Feb. 18	1617	416	50	886
Air-feeding device	J. Burns	429,228	June 3	180	43	51	1506
Air-flue gate	H. B. Dewey	434,627	Aug. 19	1815	{ 474 475 }	52	1132
Air governor or brake	F. Briggs	437,280	Sept. 30	3055	800	52	1987
Air. Machine for separating solid particles from	R. R. Watters	424,042	Mar. 25	2540	678	50	1641

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Air. Means for humidifying, drying, warming, or cooling	R. Lofthouse	424,118	Mar. 25	2646	705	50	1662
Air medicating, compressing, and administering apparatus.	J. C. Kennedy	422,802	Mar. 4	636	163	50	1259
Air-moistening apparatus	E. Körting	425,329	Apr. 8	1370	366	51	276
Air-moistening apparatus	E. Mertz	424,652	Apr. 1	331	86	51	65
Air-moistening apparatus	W. R. Renalds	432,837	July 22	2805	718	52	566
Air-moistening apparatus	C. N. Swift	420,317	Jan. 28	2533	671	50	526
Air-moistening apparatus	C. N. Swift	420,318	Jan. 28	2534	671	50	526
Air-moistening apparatus	W. V. Wallace	436,762	Sept. 16	2172	571	52	1803
Air-moistening apparatus	W. V. Wallace	443,155	Dec. 23	2491	637	53	1771
Air moistening, drying, warming, or cooling apparatus.	R. Lofthouse	424,320	Mar. 25	2940	783	50	1719
Air-motor	W. Scantlebury	442,400	Dec. 9	1195	310	53	1501
Air or other gases. Apparatus for compressing	E. F. Clarke	428,456	May 20	2170	546 } 547 }	51	1254
Air-ozoneing apparatus	J. C. Kennedy	430,387	June 17	1999	494	51	1878
Air-purifying apparatus	B. S. Benson	438,464	Oct. 14	1205	327	53	237
Air-purifying apparatus	G. Sobotka	443,300	Dec. 23	2745	704	53	1822
Air. Reheating device for compressed	W. L. Judson	420,878	Feb. 4	667	173	50	690
Air-ship	C. E. Bechtel	429,373	June 3	414	98	51	1550
Air-ship	C. G. E. Hennig	430,343	June 17	1938	474 } 475 }	51	1865
Air-ship	J. J. Pokorny	424,822	Apr. 1	607	159	51	117
Air-ship. Navigable	P. W. Nahl	439,421	Oct. 28	2730	728	53	537
Air to motors. Means for supplying compressed	G. L. McCarten and F. C. McNally	421,418	Feb. 18	1457	377	50	856
Air-wetting apparatus	A. Petit	418,746	Jan. 7	127	31	56	28
Alarm:							
See Anchor-alarm.	Elevator-alarm.						
Bilge-water alarm.	Fire-alarm.						
Boiler-alarm.	Fire and burglar alarm.						
Burglar-alarm.	Gas-pipe alarm.						
Burglar and fire alarm.	Heat-alarm.						
Burglar or automatic alarm.	High and low water alarm.						
Burglar or other alarm.	Low-water alarm.						
Burglar or other alarm.	Low-water boiler-alarm.						
Clock-alarm.	Mill-elevator alarm.						
Door-alarm.	Railway-alarm.						
Electric alarm.	Safety-alarm.						
	Time-alarm.						
	Water-alarm.						
Alarm	J. Catz	419,924	Jan. 21	1915	505	50	402
Alarm-lock	C. Accioli de Azeredo Basto	422,695	Mar. 4	492	125 } 126 }	50	1230
Alarm-lock	J. Ashworth	433,640	Aug. 5	291	77, 78	52	813
Alarm-lock	P. Francis	427,411	May 6	584	146	51	927
Alarm-lock	E. Harmon	419,769	Jan. 21	1666	442 } 443 }	50	351
Alarm-lock	G. J. Keller	422,421	Mar. 4	86	23	50	1153
Alarm-lock	G. J. Keller	423,328	Mar. 11	1470	385	50	1423
Alarm-lock	G. J. Keller	424,886	Apr. 1	700	185 } 186 }	51	135
Alarm-lock	R. G. Vassar	420,256	Jan. 28	2459	650	50	510
Alarm-lock	R. G. Vassar	420,397	Jan. 28	2647	702	50	547
Album	W. Bergner	436,117	Sept. 9	1150	300	52	1600
Album	C. Jaeger	432,410	July 15	2129	547	52	426
Album	C. Jaeger	432,411	July 15	2130	547	52	426
Album	T. Kelly	440,479	Nov. 11	1334	345	53	875
Album and support for the same.	B. Branner	440,462	Nov. 11	1306	338	53	869
Album-clasp	A. C. Hafely	436,132	Sept. 9	1170	305 } 306 }	52	1604
Album-clasp	J. C. Koch	433,007	July 29	3085	792	52	625
Album. Easel.	T. Kelly	436,243	Sept. 9	1340	350	52	1637
Album. Musical	I. Von Auw	428,795	May 27	2686	682	51	1371
Album or picture-exhibitor	E. S. Glover	421,266	Feb. 11	1239	320	50	808
Album stand or holder	E. S. Glover	421,267	Feb. 11	1242	321	50	808
Album. Photograph.	J. Sutter	439,044	Oct. 21	2112	567	53	415
Alcohol. Process of and apparatus for manufacturing	G. Guignard and A. Hédouin	436,735	Sept. 16	2115	557	52	1793
Alcohol, &c. Process of and apparatus for rectifying and distilling	E. A. Barbet	436,764	Sept. 16	2176	572	52	1803
Alcohol. Purifying crude	G. Guignard	432,198	July 15	1821		52	369
Alkali and glycerine from spent soap-lye. Recovering	E. D. Mellen	422,140	Feb. 25	2494	659	50	1061
Alkali. Apparatus for recovering	H. Burgess	438,772	Oct. 21	1690	454	53	334
Alkali. Apparatus for recovering	G. Seiler	420,835	Feb. 4	594	152	50	676
Alkaline carbonates and acetone. Making	F. W. A. Frerichs	430,734	June 24	2555		51	1992
Alloy	E. Golay	420,598	Feb. 4	243		50	612
Alloy	I. H. Johannes	443,943	Dec. 30	3755		53	2025
Alloy	W. V. Shelton	423,281	Mar. 11	1408		50	1410
Alloy. Anti-friction	S. Singley	429,157	June 3	72		51	1486
Alloy. Anti-friction	S. Singley	429,158	June 3	72		51	1486
Alloy. Anti-friction	S. Singley	429,249	June 3	209		51	1512
Alloy. Steel	R. Hadfield	436,497	Sept. 16	1742		52	1723
Alloys. Manufacturing iron and steel	H. Marbeau	419,274	Jan. 14	937		50	199
Alloys of metal of the aluminium group. Manufacturing	G. A. Faurie	432,698	July 22	2595		52	525
Almanac or calendar	Z. C. Patten	431,281	July 1	378	95	52	77
Almond-blanching machine	C. L. Dexter	421,681	Feb. 18	1843	481	50	930
Altar bread or wafers. Apparatus for cutting.	P. H. Horau	443,766	Dec. 30	3488	894	53	1974
Alum cake. Making	H. W. Shepard	443,685	Dec. 30	3361		53	1949
Aluminium plates. Manufacture of compound	C. H. Land	440,952	Nov. 18	2126	551	53	1033
Aluminium chloride. Purifying	H. Y. Castner	422,500	Mar. 4	198	54	50	1174
Aluminum. Electro-depositing	J. A. Jeançon	436,295	Sept. 23	2452		52	1865

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Aluminum. Making	C. Netto	431,912	July 8	1372	347	52	277
Amalgamator	J. B. Brewster	441,089	Nov. 18	2343	{ 606 607 }	53	1075
Amalgamator	H. Cook	431,441	July 1	631	158	52	127
Amalgamator	E. D. Roth	427,442	May 6	634	159	51	937
Amalgamator	S. L. Townsend	431,294	July 1	394	99	52	81
Amalgamator	C. W. Tremain	429,823	June 10	1084	266	51	1690
Ammeter	M. M. Garver	425,069	Apr. 8	981	{ 263 264 }	51	198
Ammeter and voltmeter	G. Pfannkuche	434,032	Aug. 12	868	229	52	935
Ammonia engine. Aqua-	J. H. Campbell	427,401	May 6	561	141	51	922
Ammonia-engines. Apparatus for securing the ab-	C. H. Campbell	427,397	May 6	549	140	51	920
sorption of exhaust ammonia-gas from							
Ammonia-soda apparatus	J. P. Barnum. (Reissue)	11,135	Dec. 23	3045	783	53	1881
Ammonia-still	F. Kaiser	442,625	Dec. 16	1560	403	53	1584
Ammonia-still	G. Stroh and G. Osius	435,464	Sept. 2	121	35	52	1398
Ammonium nitrate. Making	E. Carez	435,240	Aug. 26	2839		52	1334
Ammunition-charger	A. D. Moulton and D. F. Crofut	422,243	Feb. 25	2661	703	50	1092
Ammunition from the magazines of vessels to guns	H. Schneider	419,289	Jan. 14	964	254	50	204
in the turrets. Apparatus for transporting							
Ampère meter	G. A. Frei	423,606	Mar. 18	1857	490	50	1504
Amusement apparatus	F. Hall	438,315	Oct. 14	987	267	53	194
Amusement. Apparatus for public	F. and E. W. Barratt	419,490	Jan. 14	1259	{ 335 336 }	50	265
Anchor	C. J. Wheaton	430,793	June 24	2657	651	51	2013
Anchor	J. T. Williams	439,921	Nov. 4	441	114	53	694
Anchor-alarm and tide tell-tale	J. W. Jones	423,166	Mar. 11	1231	320	50	1378
Anchor attachment	H. L. Moule	427,347	May 6	486	124	51	908
Anchor for buildings	W. D. Baker	436,767	Sept. 23	2185	575	52	1813
Anchor. Post	J. D. Smith	431,857	July 8	1305	327	52	264
Anemoscope	J. Maret	419,608	Jan. 14	1425	382	50	299
Anemoscope. Recording	C. B. Adams	420,219	Jan. 28	2387	{ 634 635 636 }	50	499
Angle-irons. Machine for straightening	P. Heeson	420,576	Feb. 4	211	54, 55	50	605
Animal catching and holding device	G. S. Long	433,356	July 29	3597	928	52	727
Animal-hitching device	H. Cole	422,381	Mar. 4	36	9	50	1142
Animal-shears	W. S. Bechtol and W. T. Bessonette	421,024	Feb. 11	897	232	50	743
Animal-shears	D. F. McDonald	430,669	June 24	2454	598	51	1973
Animal-shears	R. Monday	435,044	Aug. 26	2498	{ 660 661 }	52	1269
Animal-shears	C. M. Palmer	432,432	July 15	2156	555	52	432
Animal-trap	H. C. Anderson	434,751	Aug. 19	2021	528	52	1170
Animal-trap	G. M. Andrews	438,133	Oct. 14	709	194	53	143
Animal-trap	A. W. Cardozo	421,066	Feb. 11	962	248	50	755
Animal-trap	M. S. Crismore	436,217	Sept. 9	1301	339	52	1629
Animal-trap	S. Dennis	437,179	Sept. 30	2902	755	52	1957
Animal-trap	R. Eads, E. Gerson, and A. J. Eads	434,434	Aug. 19	1520	306	52	1071
Animal-trap	M. Fowler	441,755	Dec. 2	201	53	53	1302
Animal-trap	C. Hall	429,521	June 3	630	155	51	1592
Animal-trap	T. M. Hovell	426,668	Apr. 29	3396	{ 592 593 }	51	697
Animal-trap	W. A. Jameson	419,587	Jan. 14	1387	372	50	292
Animal-trap	C. R. Jenne	442,228	Dec. 9	938	248	53	1453
Animal-trap	H. E. Kelley	419,453	Jan. 14	1212	321	50	255
Animal-trap	H. E. Kelley	424,792	Apr. 1	564	150	51	110
Animal-trap	H. E. Kelley	433,245	July 29	3445	890	52	697
Animal-trap	J. C. Kerns	432,139	July 15	1737	446	52	354
Animal-trap	J. A. Latta	425,136	Apr. 8	1079	286	51	217
Animal-trap	W. S. Lovell	441,677	Dec. 2	72	19	53	1276
Animal-trap	E. L. McClain	431,122	July 1	133	35	52	28
Animal-trap	W. T. Mellon and J. A. Best	443,970	Dec. 30	3801	969	53	2034
Animal-trap	M. S. Miller	432,493	July 15	2258	584	52	453
Animal-trap	W. Pead	443,975	Dec. 30	3809	971	53	2036
Animal-trap	E. A. Ray	442,737	Dec. 16	1770	458	53	1624
Animal-trap	M. W. Russell	422,253	Feb. 25	2675	706	50	1094
Animal-trap	C. S. Shaw	428,966	May 27	2939	754	51	1422
Animal-trap	M. G. Shaw	440,336	Nov. 11	1090	279	53	828
Animal-trap	E. E. Shooter	420,021	Jan. 21	2060	543	50	429
Animal-trap	C. W. Smith	431,856	July 8	1304	326	52	26
Animal-trap	B. Spitznagle	426,873	Apr. 29	3713	970	51	759
Animal-trap	H. G. Stone	435,779	Sept. 2	619	164	52	1494
Animal-trap	A. T. Sullivan	433,377	July 29	3626	935	52	732
Animal-trap	J. M. Waddell	432,743	July 22	2659	680	52	538
Animal-trap	F. White and F. J. Murphy	436,643	Sept. 16	1979	519	52	1765
Animal-trap	F. White and F. J. Murphy	442,845	Dec. 16	1944	501	53	1659
Animals. Mouth-opener for	J. D. Halfpenny	442,180	Dec. 9	866	231	53	1440
Ankle-joint	H. C. Wintermute	434,618	Aug. 19	1802	470	52	1129
Ankylosis. Apparatus for treatment of	J. E. Ruebsam	439,255	Oct. 28	2461	659	53	487
Annealing-furnace	E. A. Harvey	423,049	Mar. 11	1049	272	50	1343
Annealing steel castings and steel forgings	W. Sellers	429,775	June 10	1006	{ 247 248 }	51	1677
Annunciator	J. Finck	418,868	Jan. 7	329	80	50	69
Annunciator	F. E. Fisher	442,029	Dec. 2	631	170	53	1386
Annunciator	R. P. Garsed	428,810	May 27	2704	686	51	1374
Annunciator	R. P. Garsed	430,735	June 24	2556	{ 625 626 }	51	1992
Annunciator	C. W. Holtzer	441,304	Nov. 25	2734	708	53	1155
Annunciator	C. E. Scribner	423,494	Mar. 18	1713	451	50	1478
Annunciator	T. H. Shipway and J. R. Dowdell	421,439	Feb. 18	1486	385	50	862
Annunciator	A. F. Stanley	438,390	Oct. 14	1096	298	53	216
Annunciator	C. W. Stinson	426,693	Apr. 29	3443	902	51	705
Annunciator. Automatic electric	J. W. Luthe and A. E. Jeavons	435,440	Sept. 2	92	26	52	1393
Annunciator. Automatic electrical	B. F. Shafer	422,981	Mar. 11	951	249	50	1325

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Annunciator-call. Electric	W. S. Paca	426,307	Apr. 22	2848	750	51	581
Annunciator-drop. Electrical	M. Hynes	425,078	Apr. 8	995	266	51	201
Annunciator. Electric	J. D. Bishop	429,599	June 10	753	181	51	1627
Annunciator. Electrical	J. W. Luthe and A. E. Jeavons	443,834	Dec. 30	3598	925	53	1996
Annunciator. Electrical	A. F. Parks	421,508	Feb. 18	1591	411	50	881
Annunciator. Electro-magnetic	C. J. Hamilton	422,773	Mar. 4	590	151	50	1249
Annunciator for call-boxes. Visual	P. Seiler	421,882	Feb. 18	2125	557	50	983
Ant-trap	J. L. Stillman	423,190	Mar. 11	1262	328	50	1384
Anti-corrosive and anti-fouling compound	M. E. Dejonge	441,291	Nov. 25	2707		53	1150
Anti-corrosive compounds. Manufacturing	P. Helbig and H. Bertling	439,150	Oct. 28	2281		53	453
Anti-friction box	E. B. Lako	442,289	Dec. 9	1026	271	53	1469
Anti-friction composition	S. Singley	429,248	June 3	209		51	1512
Anti-friction compound	H. B. Devlan	434,016	Aug. 12	846		52	930
Anti-friction wheel	C. G. Deming	427,301	May 6	419	108	51	893
Anti-interfering device	C. F. Powell	438,086	Oct. 7	641	175	53	123
Anti-rattler and shaft-support. Combined	H. Carpenter	422,376	Mar. 4	25	8	50	1141
Antimony fluorides. Making	O. O. B. Froelich	431,044	July 1	26		52	7
Anvil	J. O'Brien	429,149	June 3	63	16	51	1484
Anvil and vise. Combined	W. E. Canedy	426,362	Apr. 22	2929	770	51	598
Anvil and vise. Combined	B. S. Davis	426,990	Apr. 29	3871	1012	51	789
Anvil and vise. Combined	C. Fisher	425,602	Apr. 15	1781	477	51	363
Anvil attachment	C. M. King	426,280	Apr. 22	2810	738	51	573
Anvil-clamp	W. Way	428,890	May 27	2959	759	51	1425
Anvil. Farrier's	G. C. Carpenter	437,355	Sept. 30	3173	829	52	2008
Anvil-mold	T. W. Vane	419,088	Jan. 7	659	172	50	139
Anvil-mold	T. W. Vane	441,080	Nov. 18	2330	603	53	1073
Apron	A. A. Chadwick	431,332	July 1	449	111	52	92
Arbor	G. U. Meyer	441,887	Dec. 2	401	106	53	1343
Arbor	G. U. Meyer	441,889	Dec. 2	403	106	53	1344
Arc light	J. Dulait	424,866	Apr. 1	672	177	51	130
Arc light	J. J. Wood	426,405	Apr. 22	3006	789	51	613
Arc-light circuits. Regulation of	D. Higham	432,310	July 15	1995	509	52	400
Archery-bow	D. M. Holmes	428,912	May 27	2864	732	51	1407
Arches for ceilings, stair-cases, &c. Construction of tiled	R. Guastavino	430,122	June 17	1564	389	51	1793
Architectural purposes. Composition of matter for	G. West	422,171	Feb. 25	2540		50	1069
Architectural purposes. Composition of matter for	G. West	422,270	Feb. 25	2701		50	1099
Argand burner	L. J. Atwood	435,130	Aug. 26	2622	694	52	1292
Argand burner	L. P. Converse	419,418	Jan. 14	1163	309	50	245
Arm. Artificial	W. C. Ulmer and T. E. McNamara	423,840	Mar. 18	2219	585	50	1573
Arm-rest	G. B. Steinhauer	443,839	Dec. 30	3603	926	53	1997
Arm-rest. Adjustable	E. J. Brandt	432,786	July 22	2736	701	52	552
Arm-rest and table. Portable	J. M. Fish	434,559	Aug. 19	1705	446	52	1110
Armature	R. L. Cohen	423,026	Mar. 11	1006	264	50	1335
Armature	C. D. Jenney	422,419	Mar. 4	83	22	50	1155
Armature	E. Wagemann	432,500	July 15	2265	585	52	455
Armature-body	C. A. Lieb	441,246	Nov. 25	2632	682	53	1137
Armature coil-guards. Blank for	W. S. Belding	433,392	July 29	3644	940	52	736
Armature. Dynamo	A. Schmid	434,206	Aug. 12	1156	300	52	992
Armature for dynamo-electric machines	N. H. Edgerton	432,748	July 22	2667	682	52	539
Armature for dynamo-electric machines	O. A. Enholm	432,387	July 15	2100	540	52	420
Armature for dynamo-electric machines and motors	F. B. Rae	437,663	Sept. 30	3642	951	52	2103
Armature for dynamos, &c.	W. S. Belding	433,391	July 29	3641	939	52	736
Armature for dynamos, &c.	A. Schmid	428,289	May 20	1918	482	51	1205
Armature for dynamos, &c.	G. A. Washburn	422,863	Mar. 4	742	189	50	1279
Armature for electric machines	J. C. Wray	422,681	Mar. 4	471	121	50	1226
Armature for electric meters	O. B. Shallenberger	426,335	Apr. 22	2884	759	51	589
Armatures for dynamo-electric machines. Making	T. A. Edison	435,690	Sept. 2	490	130	52	1469
Armatures. Winding dynamo	C. E. L. Brown	441,391	Nov. 25	2859	738	53	1179
Armpit-shield	G. M. Sigsbee	428,534	May 20	2273	577	51	1274
Art-panels, &c. Constructing	E. A. Galindo	443,651	Dec. 30	3303	851	53	1939
Artillery. Mounting for field	T. Nordenfelt	424,496	Apr. 1	88	24, 25	51	20
Artist's chair	E. E. De Kalb	431,338	July 1	460	113	52	94
Artist's easel	W. A. Gardner	440,225	Nov. 11	917	235	53	799
Artist's easel and case. Combined	J. A. Crandall	436,303	Sept. 9	1426	372	52	1655
Artist's kit	I. P. Favor	424,608	Apr. 1	257	68	51	52
Artist's kit	H. M. Lord	426,290	Apr. 22	2822	742	51	576
Asbestos. Treating	I. L. Roberts	442,335	Dec. 9	1102		53	1483
Ash and cigar receptacle. Combined	J. Wiesbauer	441,913	Dec. 2	440	118	53	1351
Ash and garbage receptacle	P. Norton and J. H. McClure	434,196	Aug. 12	1134	295	52	988
Ash and garbage receptacle	F. K. Plumbly	419,472	Jan. 14	1241	329	50	261
Ash-ejector. Steam	J. F. Pankhurst	438,173	Oct. 14	771	210	53	155
Ash-lifter	H. D. Wendt	436,280	Sept. 9	1391	362	52	1648
Ash-pit gravity-trap	E. T. Harris	439,146	Oct. 28	2276	611	53	452
Ashes from steamboats or other vessels. Means for discharging	R. Stone	420,613	Feb. 4	263	70	50	616
Asphaltum. Refining crude	R. Alexander	435,198	Aug. 26	2719	718	52	1311
Assorting-machine	S. B. Smallwood	425,705	Apr. 15	1946	517	51	396
Assorting-screen. Adjustable	A. Stehle	436,615	Sept. 16	1925	506	52	1755
Atmospheric engine	F. M. Wideman	439,222	Oct. 28	2405	646	53	477
Atomizer	J. Buckley	440,002	Nov. 4	576	152	53	721
Atomizer	R. W. Coffee	437,569	Sept. 30	3515	917	52	2078
Atomizer	O. E. O. Hoell	436,580	Sept. 16	1887	496	52	1748
Atomizer	P. J. McElroy	433,954	Aug. 12	766	199	52	916
Atomizer	G. Schlauch	435,458	Sept. 2	114	32	52	1397

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &g	Vol.	Page.
Atomizer.....	J. Schoettl.....	442,785	Dec. 16	1836	475	53	1638
Atomizer.....	J. F. Windolph.....	423,198	Mar. 11	1270	331	50	1386
Atomizer for toilet-fans.....	N. Wickliffe.....	435,197	Aug. 26	2718	718	52	1311
Atomizers or other devices. Air forcing and compressing apparatus for.....	F. J. Mitchell.....	435,043	Aug. 26	2497	660	52	1268
Attrition-mill.....	H. A. Duc, Jr.....	429,679	June 10	869	211	51	1649
Auger.....	F. I. Hoeffe.....	430,344	June 17	1939	475	51	1866
Auger.....	P. Miller.....	424,565	Apr. 1	200	55	51	41
Auger-bit.....	S. H. Jennings.....	433,683	Aug. 5	361	92	52	826
Auger-bits. Die for forming.....	J. Bailey.....	419,622	Jan. 21	1451	389	50	310
Auger. Earth.....	W. Eagleston.....	431,455	July 1	651	163	52	131
Auger. Earth.....	A. V. Hartle.....	432,705	July 22	2604	665	52	527
Auger-handle.....	C. Howbridge.....	435,751	Sept. 2	573	153	52	1485
Auger-handle.....	H. L. Pratt.....	438,860	Oct. 21	1845	490	53	363
Auger. Post-hole.....	W. B. Beagle.....	419,949	Jan. 21	1892	497	50	397
Auger. Post-hole.....	G. Fry.....	438,760	Oct. 21	1674	449	53	331
Auger. Post-hole.....	M. Peters.....	427,009	Apr. 29	3898	1017	51	794
Auger. Well-boring.....	G. Meader.....	419,055	Jan. 7	614	158	50	129
Auger. Wood.....	H. Loftie.....	421,293	Feb. 11	1277	330	50	815
Augers. Die for forming.....	S. A. Leonard.....	440,484	Nov. 11	1344	347	53	877
Autographic register.....	W. Assheton.....	422,872	Mar. 4	754	192 193	50	1281
Autographic register.....	W. Assheton.....	429,495	June 3	601	147	51	1587
Autographic register.....	F. Bentel.....	438,835	Oct. 21	1801	480	53	355
Automatic clamp.....	T. E. Moon.....	432,543	July 22	2339	604	52	477
Automatic gate.....	A. Edwards.....	440,996	Nov. 18	2188	565	53	1045
Automatic lubricator.....	F. O. Blackwell.....	435,085	Aug. 26	2557	674	52	1280
Automatic lubricator.....	W. Nottberg and C. Schmitt.....	424,343	Mar. 25	2986	794	50	1727
Automatic pressure lubricator.....	J. P. Kealy.....	421,003	Feb. 11	871	225 226	50	738
Automatic regulator.....	J. Kilshaw.....	430,582	June 17	2285	561	51	1932
Automatic sprinkler.....	J. Clapp.....	425,753	Apr. 15	2014	537	51	409
Automatic sprinkler.....	J. Clapp.....	439,864	Nov. 4	351	91	53	676
Automatic sprinkler.....	A. T. Gifford.....	435,998	Sept. 9	957	251	52	1565
Automatic sprinkler.....	C. C. Johnson.....	423,608	Mar. 18	1869	493	50	1506
Automatic sprinkler.....	V. Lapham.....	433,477	Aug. 5	56	17	52	767
Automatic sprinkler.....	A. F. Nagle.....	428,053	May 13	1560	394 395	51	1126
Automatic sprinkler.....	A. F. Nagle.....	432,166	July 15	1775	546	52	361
Automatic ventilator.....	M. D. Furey and E. Thomas.....	432,395	July 15	2113	543	52	423
Awning.....	W. B. Allen.....	419,580	Jan. 14	1378	369	50	290
Awning.....	J. C. Stockton.....	425,062	Apr. 15	2335	619	51	469
Awning.....	T. W. and B. T. Wood.....	427,287	May 6	402	104	51	890
Awning-operating mechanism.....	M. Chalupsky.....	424,270	Mar. 25	2846	761	50	1701
Awning-rope reel.....	C. M. Fisk.....	425,313	Apr. 8	1352	361	51	271
Awning slide or runner.....	H. C. Rector.....	441,021	Nov. 18	2221	574	53	1051
Awning. Window.....	B. F. Mosher.....	420,604	Feb. 4	251	68	50	613
Ax.....	O. L. De Forest.....	438,990	Oct. 21	2040	545	53	402
Ax. hammer and maul. Combined.....	C. H. Williams.....	426,894	Apr. 29	3740	977	51	764
Ax-head.....	J. M. Holladay.....	419,523	Jan. 14	1305	349	50	274
Ax-head.....	F. L. Hufford.....	424,205	Mar. 25	2764	737	50	1685
Ax-helve.....	H. Hall, Jr.....	441,408	Nov. 25	2889	745	53	1185
Ax or edge tool.....	L. Ricard.....	421,868	Feb. 18	2108	553	50	970
Ax or wedge for splitting wood.....	D. E. Blacke.....	427,961	May 13	1427	360	51	1099
Ax-polls. Machine for forming.....	J. U. Hubbard.....	427,649	May 13	999	251	51	1018
Ax. Wood-chopping.....	O. King.....	427,088	May 6	97	26	51	831
Axle.....	F. Kruegermann.....	429,726	June 10	937	231	51	1663
Axle and hub. Wagon.....	E. W. Cooke.....	442,353	Dec. 9	1131	295	53	1489
Axle and skein.....	M. A. Johnson.....	437,398	Sept. 30	3245	845 846	52	2022
Axle and spring clip. Combined.....	W. L. Bush.....	424,092	Mar. 25	2610	696	50	1655
Axle attachment.....	W. F. Black.....	431,504	July 1	720	182	52	145
Axle bearing. Car.....	W. J. Brewer.....	439,341	Oct. 28	2609	695	53	515
Axle-bearing. Self-oiling.....	J. S. Patten.....	422,150	Feb. 25	2511	663	50	1064
Axle-bearing. Self-oiling.....	J. S. Patten.....	443,974	Dec. 30	3808	971	53	2035
Axle bearing. Vehicle.....	H. Barney.....	423,717	Mar. 18	2046	539	50	1539
Axle-box.....	H. M. Goodman.....	442,520	Dec. 9	1395	356	53	1542
Axle-box.....	J. M. Knaus.....	437,122	Sept. 23	2782	726	52	1929
Axle-box.....	O. C. Knipe.....	424,317	Mar. 25	2934	782	50	1717
Axle-box.....	A. Robbins.....	420,357	Jan. 28	2589	688	50	536
Axle-box.....	F. C. Rojo.....	435,124	Aug. 26	2615	692	52	1291
Axle-box.....	F. P. Smith.....	442,089	Dec. 2	722	194	53	1404
Axle box and journal-bearing. Car.....	E. W. Cooke.....	442,354	Dec. 9	1132	295	53	1489
Axle box. Car.....	E. Best.....	426,904	Apr. 29	3750	980	51	766
Axle box. Car.....	E. Best.....	437,375	Sept. 30	3216	839	52	2016
Axle box. Car.....	R. Brewer.....	431,871	July 8	1325	332	52	267
Axle box. Car.....	E. W. Cooke.....	442,351	Dec. 9	1129	294	53	1488
Axle box. Car.....	A. L. Humphrey.....	441,762	Dec. 2	213	56	53	1305
Axle box. Car.....	W. M. Leckie.....	427,880	May 13	1308	330	51	1077
Axle box. Car.....	W. M. Shipp, Jr.....	419,799	Jan. 21	1715	455 456	50	361
Axle box. Car.....	D. Weir.....	442,562	Dec. 9	1461	375	53	1555
Axle box. Carriage.....	T. F. N. Finch.....	434,824	Aug. 19	2123	556	52	1191
Axle box. Carriage.....	A. G. Hill.....	432,199	July 15	1822	469	52	370
Axle-box for vehicles.....	H. M. Goodman.....	442,521	Dec. 9	1396	356	53	1542
Axle-box lid.....	G. K. Kelsea.....	433,987	Aug. 12	815	213	52	924
Axle-box lid. Car.....	W. S. F. Dillon.....	439,346	Oct. 28	2615	697	53	516
Axle box lid. Car.....	G. W. Morris.....	423,795	Mar. 18	2158	570	50	1561
Axle-box lid. Car.....	W. Pennock.....	428,944	May 27	2903	743	51	1415
Axle-box lids. Die for making car.....	W. Pennock.....	436,187	Sept. 9	1255	327	52	1619
Axle-box. Railway-car.....	J. Donnelly, W. McLaren, and A. Trask.....	420,778	Feb. 4	490	128	50	659
Axle-boxes. Device for trimming die-forged.....	W. J. Parmelee.....	430,540	June 17	2224	546	51	1920
Axle-boxes. Die for forging.....	W. J. Parmelee.....	430,539	June 17	2222	545	51	1920

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Axle-boxes. Dust-guard for.	T. H. Symington	432,649	July 22	2499	642	52	507
Axle boxes. Dust-guard for car.	A. L. Cushman	437,643	Sept. 30	3612	945	52	2097
Axle boxing. Car.	W. T. Trissal	427,640	May 13	921	231	51	1003
Axle. Car.	F. J. Hoyt	420,624	Feb. 4	283	75	50	619
Axle. Car.	J. M. May	420,307	Jan. 28	2521	669	50	524
Axle. Car.	J. Mulligan	442,817	Dec. 16	1893	488	53	1649
Axle. Car.	W. F. Sherman	429,325	June 3	340	80	51	1536
Axle. Carriage.	A. G. Hill	424,203	Mar. 25	2761	736	50	1684
Axle-check for vehicles	D. C. Funcheon	424,549	Apr. 1	178	50	51	37
Axle-cutting device	C. A. Thompson	425,192	Apr. 8	1175	311	51	238
Axle. Electric-car	E. Peckham	420,545	Feb. 4	165	41	50	596
Axle for harvester-trucks	G. H. Williamson	424,398	Mar. 25	3091	821	50	1749
Axle for railway-cars. Divided	G. E. Chase	441,133	Nov. 25	2423	628	53	1103
Axle-forging apparatus	W. J. Parmelee	430,541	June 17	2225	546	51	1920
Axle-journal-box. Car.	W. O. Dunbar	427,303	May 6	421	109	51	894
Axle-journals. Packing-ring for.	J. Loesewitz	421,505	Feb. 18	1587	410	50	880
Axle-lubricator	W. J. Faul	419,430	Jan. 14	1179	314	50	248
Axle-lubricator	M. J. McArthur	438,817	Oct. 21	1767	473	53	350
Axle-lubricator	R. H. Parker	421,886	Feb. 18	2130	558	50	984
Axle-lubricator	J. N. Pringle	434,358	Aug. 12	1383	363	52	1037
Axle-lubricator	J. J. Stever	439,207	Oct. 28	2382	640	53	472
Axle lubricator and wrench.	C. Smith	441,074	Nov. 18	2321	601	53	1071
Axle lubricator. Car.	I. Barker	439,094	Oct. 28	2201	590	53	440
Axle lubricator. Car.	A. L. Cushman	421,351	Feb. 11	1363	353	50	830
Axle lubricator. Car.	A. L. Cushman	437,394	Sept. 30	3240	844	52	2021
Axle lubricator. Car.	W. H. Daniels	422,011	Feb. 25	2303	609	50	1026
Axle lubricator. Car.	J. B. Glover	420,783	Feb. 4	496	130	50	660
Axle lubricator. Car.	H. M. Goodman	419,604	Jan. 14	1420	381	50	298
Axle lubricator. Car.	H. M. Goodman	431,967	July 8	1459	370	52	294
Axle lubricator. Car.	H. M. Goodman	433,404	July 29	3660	945	52	740
Axle lubricator. Car.	J. R. Hosier	427,994	May 13	1471	373	51	1108
Axle-machine	S. Harris	437,029	Sept. 23	2643	691	52	1902
Axle-mounting	M. A. Andrews	432,109	July 15	1682	432	52	343
Axle-nut.	F. D. Bliss	427,825	May 13	1212	305	51	1059
Axle-nut.	O. Hansen	425,786	Apr. 15	2055	548	51	418
Axle-nut.	J. J. Schadt	425,635	Apr. 15	1842	492	51	376
Axle nut and washer. Vehicle.	J. L. Sullivan	423,191	Mar. 11	1262	329	50	1384
Axle nut. Carriage.	A. Folsom	443,828	Dec. 30	3592	923	53	1994
Axle nut. Carriage.	I. Sharf	443,117	Dec. 23	2419	617	53	1759
Axle nut. Carriage.	T. A. Wheeler	439,598	June 17	2313	568	51	1937
Axle. Railway-car	J. A. Mahood	441,014	Nov. 18	2210	571	53	1049
Axle. Railway-car	C. W. Wolfe and T. H. Campbell	427,816	May 13	1202	302	51	1057
Axle. Self-lubricating.	T. F. Weaver	427,451	May 6	646	162	51	939
Axle. Self-lubricating vehicle.	C. F. Milburn	438,778	Oct. 21	1698	455	53	337
Axle. Self-oiling	H. M. Goodman	422,764	Mar. 4	578	149	50	1247
Axle. Self-oiling car.	R. P. Sholl	424,731	Apr. 1	456	121	51	90
Axle. Self-oiling car.	A. A. Weber	426,886	Apr. 29	3730	974	51	762
Axle-set	W. F. Nightingale	429,245	June 3	206	51	51	1511
Axle-skein	T. De La Mare	435,407	Sept. 2	46	15	52	1384
Axle-skein	G. M. Farnsworth	436,827	Sept. 23	2302	606	52	1836
Axle-skeins. Making	J. Herby	441,098	Nov. 18	2358	611	53	1078
Axle. Vehicle.	J. G. Brenner	424,169	Mar. 25	2716	724	50	1675
Axle. Vehicle.	L. S. Brown	433,432	July 29	3704	956	52	749
Axle. Vehicle.	L. M. Doddridge	427,466	May 6	665	167	51	944
Axle. Vehicle.	C. A. Grant	423,923	Mar. 25	2364	629	50	1608
Axle. Vehicle.	J. A. Johnson and T. G. Mandt.	423,776	Mar. 18	2127	561	50	1555
Axle. Vehicle.	W. Jones	421,002	Feb. 11	870	225	50	738
Axle. Vehicle.	W. Jones	428,107	May 20	1644	417	51	1153
Axle. Vehicle.	J. G. Kenyon	430,317	June 17	1896	465	51	1858
Axle. Vehicle.	T. C. Munz	420,730	Feb. 4	422	112	50	647
Axle. Vehicle.	W. H. Rogers	430,438	June 17	2068	510	51	1891
Axle. Vehicle.	F. R. Swalley	427,636	May 13	916	230	51	1002
Axle. Vehicle.	J. Tilton	437,263	Sept. 30	3026	794	52	1981
Axle. Vehicle.	F. Ulrich	424,585	Apr. 1	229	62	51	47
Axle. Wagon.	H. G. Mitchell	429,385	June 3	436	103	51	1554
Axle. Wagon.	J. F. Stevens	423,831	Mar. 18	2206	582	50	1571
Axles. Anti-friction bearing for car.	L. W. Hardy	439,654	Nov. 4	46	13	53	615
Axles. Anti-friction device for car.	C. B. Emery and C. Brigham	419,428	Jan. 14	1177	313	50	248
Axles. Apparatus for forging car.	S. T. Wellman	422,557	Mar. 4	279	71	50	1189
Axles. Apparatus for the manufacture of	H. Aiken	426,653	Apr. 29	3277	886	51	693
Axles. Apparatus for trimming the fins from die-forged	W. J. Parmelee	434,068	Aug. 12	927	244	52	947
Axles. Journal-box for car.	W. O. Dunbar	421,485	Feb. 18	1554	401	50	875
Axles. Machine for turning.	P. K. Hughes	442,119	Dec. 9	773	208	53	1421
Axles. Manufacturing	H. Aiken	426,652	Apr. 29	3376	885	51	693
Axles of vehicles. Machine for oiling the	C. T. Phillips	428,945	May 27	2905	744	51	1415
Baby chair and walker. Combined	O. Jacob	434,713	Aug. 19	1973	512	52	1160
Baby-jumper	F. E. Lyon	420,943	Feb. 11	783	203	50	721
Baby-jumper	D. C. Sheeley	430,324	June 17	1907	467	51	1860
Baby-jumper and swinging receptacle. Convertible	I. N. Franklin	439,648	Nov. 4	38	11	53	614
Baby-walker	A. Burkholder	428,452	May 20	2164	544	51	1254
Baby-walker	A. C. and S. Davidson and G. A. Barber	432,378	July 15	2083	535	52	418
Baby-walker	M. Hoyer	443,853	Dec. 30	3617	931	53	2000
Baby-walker	A. Rosenthal	427,116	May 6	146	38	51	840
Baby walker and protector.	J. S. Irvine	438,478	Oct. 14	1221	331	53	240
Back-support and shoulder-brace	M. E. Thomas	437,698	Oct. 7	342	100	53	66
Badge	J. De Young and S. Andrews	430,730	June 24	2551	624	51	1992
Badges, &c. Picture-holding attachment for	O. W. Beunett	425,201	Apr. 8	1187	315	51	240

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bag:							
See Clothes-pin bag.	Paper bag.						
Double bag.	Saddle-bag.						
Feed-bag.	Street-cleaning bag.						
Mail-bag.	Telescoping bag.						
Nose-bag.	Traveling-bag.						
Bag and twine holder	C. A. Marshall	431,604	July 8	879	218	52	183
Bag-fastener	T. F. Emans	443,040	Dec. 16	2265	581	53	1723
Bag-fastener	J. F. Shultz	443,298	Dec. 23	2742	704	53	1821
Bag filler and holder	D. G. Stone	430,355	June 17	1957	481	51	1869
Bag-holder	C. W. Allen	432,966	July 29	3018	775	52	611
Bag-holder	C. Angus and J. R. Nangle	421,648	Feb. 18	1802	470	50	922
Bag-holder	O. Asselin	426,981	Apr. 29	3853	1007	51	785
Bag-holder	H. B. Chase and J. L. Seaton	431,648	July 8	960	240	52	199
Bag-holder	A. J. Hesner	421,075	Feb. 11	974	250	50	757
Bag-holder	A. P. O'Brien	442,537	Dec. 9	1415	361	53	1545
Bag-holder	I. B. Tryon	440,073	Nov. 4	670	178	53	739
Bag-holder	H. D. Woodbridge	433,114	July 29	3258	838	52	658
Bag-holder	A. Young	435,474	Sept. 2	135	38	52	1401
Bag holder and spreader	C. Bolander	426,906	Apr. 29	3753	980	51	767
Bag-holder and truck	J. H. Reckord	434,805	Aug. 19	2097	549	52	1185
Bag-holder and truck	E. C. Wilkinson	422,274	Feb. 25	2705	712	50	1099
Bag-lock	H. K. Harker	442,884	Dec. 16	2025	520	53	1674
Bag-lock	F. F. Ingram	437,760	Oct. 7	136	43	53	28
Bag-lock	J. F. Mains	432,539	July 22	2335	602	52	475
Bag-lock	E. Oldenbusch	441,439	Nov. 25	2940	757	53	1195
Bag-lock	A. W. Scheuber	436,268	Sept. 9	1375	358	52	1644
Bag-stapling machine	R. H. Little	433,247	July 29	3448	891	52	697
Bags acid-proof. Making	J. A. Lighthall	439,880	Nov. 4	380	...	53	681
Bags. Catch for chatelaine or similar	L. B. Prahar	423,630	Mar. 18	1920	505	50	1516
Bags. Clasp or locking mechanism for travelers	R. D. Tucker	427,641	May 13	922	231	51	1003
Bags. Finger-lock for chatelaine	D. M. Read	442,392	Dec. 9	1183	307	53	1499
Bags or pouches. Clip for retaining the springs within the mouths of self-closing	G. B. Adams	419,745	Jan. 21	1631	434	50	344
Bags. Snap-catch for	D. M. Read	442,331	Dec. 9	1096	287	53	1482
Bagasse-drier	M. Espinosa	423,140	Mar. 11	1192	311	50	1369
Bagatelle-board	G. W. Nash	436,488	Sept. 16	1733	457	52	1721
Bagatelle-board	J. H. Singer	424,141	Mar. 25	2678	712	50	1668
Baggage check and seal. Combined	W. W. Campbell	426,582	Apr. 29	3271	858	51	673
Bagging. Machine for winding	S. Odenheimer	420,354	Jan. 28	2585	687	50	535
Bail and ear therefor. Detachable	L. N. Lusk	443,100	Dec. 23	2390	611	53	1754
Bail-ear for cake-baskets, &c.	J. E. White	443,213	Dec. 23	2605	670	53	1796
Bail-lock	C. A. Bryant	420,491	Feb. 4	93	22	50	582
Bait. Spinning	J. Sturrock and G. D. Macdougald	430,491	June 17	2150	528	51	1907
Bake-pan	W. L. Veley	434,688	Aug. 19	1938	503	52	1153
Bake-pan	W. Wainright	429,551	June 3	680	166	51	1602
Bake-pan	L. E. Wiley	428,792	May 27	2683	680	51	1370
Baker	F. J. Rost	427,797	May 13	1178	296	51	1052
Baking apparatus	T. N. Barnes	435,723	Sept. 2	534	142	52	1478
Baking or roasting pan	J. E. Blackburn	419,493	Jan. 14	1262	337	50	266
Baking-pan	G. W. Lisk	432,315	July 15	2004	512	52	401
Baking-pan	E. R. Stasch	424,370	Mar. 25	3032	804	50	1736
Baking-powder	H. D. Thatcher	422,464	Mar. 4	152	...	50	1165
Baking powder or preparation	C. A. Catlin	439,267	Oct. 28	2481	...	53	490
Baking, roasting, and frying pan. Combined	G. S. Rossler	422,156	Feb. 25	2520	666	50	1066
Balance	A. J. Gaston	437,379	Sept. 30	3221	840	52	2017
Balance-escapement	C. E. Emery	443,165	Dec. 23	2504	641	53	1774
Balance-escapement	S. Riefler	443,684	Dec. 30	3360	863	53	1949
Bale cover. Cotton	W. Orr	443,619	Dec. 30	3248	834	53	1928
Bale cover. Cotton	W. Orr	443,620	Dec. 30	3251	835	53	1929
Bale-covering	W. Glover	431,048	July 1	32	...	52	8
Bale-fastener	J. M. Ford	435,218	Aug. 26	2745	725	52	1316
Bale-press	A. E. Cummins	429,188	June 3	122	28	51	1494
Bale-tie	J. W. Griswold	420,497	Feb. 4	101	24	50	583
Bale-tie	J. B. Harris	443,045	Dec. 16	2270	582	53	1724
Bale-tie	J. Hentz	439,657	Nov. 4	48	14	53	616
Bale-tie	L. R. Lantz	430,864	June 24	2772	680	51	2034
Bale-tie-making machine	C. B. Brainard	419,917	Jan. 21	1903	501	50	399
Baling cotton	H. Rembert	441,022	Nov. 18	2221	574	53	1052
Baling-press	A. Allen	420,588	Feb. 4	239	59	50	609
Baling-press	G. B. Allen	443,172	Dec. 23	2516	644	53	1776
Baling-press	Z. J. Anderson	426,900	Apr. 29	3746	978	51	765
Baling-press	G. W. Arnold	421,472	Feb. 18	1530	396	50	870
Baling-press	J. W. Brown and A. A. Gehrt	434,760	Aug. 19	2036	532	52	1173
Baling-press	J. W. Brown and A. A. Gehrt	434,761	Aug. 19	2037	532	52	1174
Baling-press	J. W. Brown and A. A. Gehrt	434,762	Aug. 19	2040	533	52	1174
Baling-press	W. Bullard	424,046	Mar. 25	2546	679	50	1642
Baling-press	P. K. Dederick	419,646	Jan. 21	1489	398	50	318
Baling-press	P. K. Dederick	440,790	Nov. 18	1856	478	53	982
Baling-press	P. K. Dederick	440,791	Nov. 18	1857	478	53	982
Baling-press	J. T. and C. A. Deets	431,109	July 1	118	30	52	25
Baling-press	G. Ertel	433,278	July 29	3492	901	52	707
Baling-press	A. A. Gehrt	425,419	Apr. 15	1504	403	51	310

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Baling-press	A. A. Gehrt	434,775	Aug. 19	2059	538	52	1178
Baling-press	A. A. Gehrt	438,540	Oct. 14	1308	354	53	258
Baling-press	H. C. Hall	420,536	Feb. 4	155	38	50	594
Baling-press	D. B. Hendricks	431,166	July 1	200	50	52	42
Baling-press	J. W. Hunter	433,469	Aug. 5	49	15	52	766
Baling-press	M. C. Jackson	429,240	June 3	200	50	51	1510
Baling-press	H. Kile	437,120	Sept. 23	2780	725	52	1929
Baling-press	O. B. Kinnard	431,471	July 1	674	169	52	136
Baling-press	W. S. Livengood	422,236	Feb. 25	2646	699 700	50	1089
Baling-press	A. Mattijetz	422,138	Feb. 25	2490	658 659	50	1060
Baling-press	G. A. Nelson	433,629	Aug. 5	276	73	52	810
Baling-press	J. A. Reeder	430,352	June 17	1950	478	51	1868
Baling-press	W. S. Reeder	437,242	Sept. 30	2987	781 782	52	1974
Baling-press	H. V. and C. F. Scattergood	422,320	Feb. 25	2779	731	50	1114
Baling-press	N. P. Slate	430,490	June 17	2148	528	51	1906
Baling-press	J. A. Smith	424,367	Mar. 25	3024	802	50	1734
Baling-press	G. W. Soulé	419,227	Jan. 14	874	230 331	50	187
Baling-press	G. W. Soulé	437,257	Sept. 30	3016	791 792	52	1979
Baling-press	A. H. Spencer	422,847	Mar. 4	709	182	50	1273
Baling-press	T. Tebow	423,976	May 27	2953	758	51	1424
Baling-press	A. Wickey	421,462	Feb. 18	1516	393	50	868
Baling-press	A. Wickey	424,840	Apr. 1	633	166 167	51	122
Baling-press	A. Wickey	439,335	Oct. 28	2600	693	53	513
Baling-press	C. Woult	431,958	July 8	1444	366	52	291
Baling-press for hay, &c	R. G. Ellsworth	433,857	Aug. 5	619	762	52	878
Baling-presses. Follower-operating mechanism for.	A. Allen	419,813	Jan. 21	1736	459 460	50	365
Baling-presses. Power device for.	T. M. and N. Cass	433,887	Aug. 5	668	173	52	887
Baling-presses. Power device for.	H. W. Nott	421,107	Feb. 11	1018	360	50	766
Ball:							
See Pipe-ball.	Pipe-welding ball.						
Ball-and-socket joint for pipes	T. Flesher	438,148	Oct. 14	736	202	53	148
Ball-bat	E. Kinst	430,388	June 17	2001	494	51	1878
Ball-catcher's mitten	J. W. Saner	434,120	Aug. 12	1023	265	52	966
Ball-court	L. C. Walker	437,267	Sept. 30	3030	794	52	1982
Ball seater and capper combined	J. W. Jarver	427,224	May 6	304	78	51	871
Balls. Machine for making	W. H. Wright	439,715	Nov. 4	131	35	53	633
Balling-machine	E. E. Biederman	425,092	Apr. 8	1011	271	51	204
Balling machine. Sliver-	G. J. Terrance	430,900	June 24	2825	693 694	51	2044
Balling machine. Twine-	A. C. Miller	443,103	Dec. 23	2396	612	53	1755
Ballot	L. C. Lindeman	431,600	July 8	875	217	52	183
Ballot and ballot-holder. Mechanical.	K. Dougan	440,547	Nov. 11	1446	373	53	895
Ballot-box	M. M. McIlvain, J. C. Gese, and H. F. Pickett.	425,238	Apr. 8	1235	328	51	250
Ballot-box. Canceling and registering	L. M. Foster	434,061	Aug. 19	1886	492 493	52	1145
Ballot-holder	K. Dougan	440,545	Nov. 11	1439	371	53	894
Balloets. Compartment for secretly marking	T. R. Graham	424,416	Mar. 25	3120	829	50	1754
Balusters, &c. Joint or fastening for.	W. H. Burch	422,712	Mar. 4	511	130	50	1234
Band:							
See Sand-band.							
Band-cutter	A. and M. Stansel	443,875	Dec. 30	3642	938	53	2005
Band-cutter and feeder	W. H. Alston	429,876	June 10	1169	289 290	51	1707
Band-cutter and feeder	C. Carlson	430,600	June 17	2315	569	51	1938
Band-cutter and feeder	W. Close	429,014	May 27	3011	773	51	1435
Band-cutter and feeder	R. E. Dorton	439,490	Oct. 28	2832	754 755	53	556
Band-cutter and feeder	C. M. Emeis	442,964	Dec. 16	2146	551	53	1698
Band-cutter and feeder	W. Holliday	430,954	June 24	2899	713	51	2058
Band-cutter and feeder	W. H. Izard	439,277	Oct. 28	2499	699 700	53	493
Band-cutter and feeder	E. B. Karn	422,839	Mar. 4	699	180	50	1271
Band-cutter and feeder	G. H. Lasar	440,865	Nov. 18	1978	510	53	1005
Band-cutter and feeder	J. B. McCutcheon	424,334	Mar. 25	2968	791	50	1724
Band-cutter and feeder	E. H. Morris	435,942	Sept. 9	876	229 230	52	1550
Band-cutter and feeder	W. Plowright	423,629	Mar. 18	1919	505	50	1516
Band-cutter and feeder	M. Rynan	427,272	May 6	381	99	51	885
Band-cutter and feeder	M. A. Smith	426,077	Apr. 22	2513	663 664	51	512
Band-cutter and feeder	A. Wemple and G. W. Smith	423,582	Mar. 18	1833	483	50	1499
Band-cutter and feeder. Combined	E. J. Vraalstad	420,129	Jan. 28	2236	592	50	473
Band-cutting and feeding mechanism	R. E. Dorton and H. L. Earle	439,489	Oct. 28	2829	754	53	556
Band-cutting fork	A. Plattner	438,765	Oct. 21	1682	451	53	333
Band. Safety-	C. B. Simpson	442,243	Dec. 9	957	253	53	1458
Band-tie	J. R. McLaren, Jr.	427,355	May 6	496	127	51	909
Band-twister	G. H. Howe	430,650	June 24	2416	588 589	51	1965
Bands, rings, &c., by electricity. Manufacture of	E. Thomson	432,656	July 22	2518	647	52	510
Bandage	J. Teufel	421,635	Feb. 18	1787	467	50	919
Bandage. Medical	J. Wainwright	430,048	June 10	1437		51	1758
Bandage. Suspensory	A. Dent	436,518	Sept. 16	1769	467	52	1728
Bandage-winder	C. L. Bellamy	437,554	Sept. 30	3498	913	52	2074
Bangle	J. P. Howard	428,339	May 20	1995	502	51	1220
Banjo	B. B. Bradbury	443,159	Dec. 23	2497	639	53	1772

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Banjo.....	C. M. Chapman.....	440,012	Nov. 4	587	{ 155 156 }	53	723
Banjo.....	A. C. Fairbanks.....	423,231	Mar. 11	1315	342	50	1394
Banjo.....	A. C. Fairbanks.....	443,510	Dec. 30	3078	793	53	1896
Banjo.....	C. J. Kelly.....	437,604	Sept. 30	3561	929	52	2086
Banjo attachment.....	W. N. Burkard.....	441,930	Dec. 2	466	124	53	1356
Banjo attachment.....	B. H. Kennard, Jr.....	421,173	Feb. 11	1113	286	50	784
Banjo attachment.....	D. Veitch.....	434,535	Aug. 19	1669	436	52	1102
Banjo tail-piece.....	G. Van Zandt.....	433,970	Aug. 12	794	207	52	920
Bank-tellers. Device for the protection of.....	L. P. Johnson and C. J. R. Bergstrom.	441,668	Dec. 2	58	16	53	1273
Bar:							
See Bicycle handle-bar.	Grate-bar.						
Bracket-bar.	Harvester cutter-bar.						
Car draw-bar.	Loom-pattern bar.						
Case-hardened bar.	Metallic glazing-bar.						
Claw-bar.	Mowing-machine finger-bar.						
Crow-bar.	Railway-switch bar.						
Cutter-bar.	Sash-bar.						
Draw-bar.	Type-bar.						
Finger-bar.	Type-writing-machine type-bar.						
Fire-bar.	Velocipede handle-bar.						
Furnace grate-bar.							
Gate-bar.							
Barber's appliance.....	A. C. Dugan and H. W. Schoff.....	428,203	May 20	1769	447	51	1176
Barber's appliance.....	A. C. Osberne.....	427,241	May 6	338	87	51	877
Barber's chair.....	C. W. Fischer and A. J. Rollert.....	437,487	Sept. 30	3390	888	52	2054
Barber's chair.....	C. A. Knecht and H. Schlesinger.....	431,593	July 8	865	215	52	180
Barber's chair.....	E. E. Peck.....	441,806	Dec. 2	275	74	53	1318
Barber's chair.....	A. J. Rollert.....	437,456	Sept. 30	3348	876	52	2044
Barber's chair attachment.....	G. W. Archer.....	436,327	Sept. 16	1469	383	52	1671
Barbers' chairs. Registering attachment for.....	J. P. Meyer.....	424,992	Apr. 8	864	229	51	176
Bark. Machine for rossing.....	F. H. and A. E. Stearns.....	431,154	July 1	178	45	52	37
Bark-mill.....	G. T. McLauthlin.....	432,550	July 22	2352	{ 606 607 }	52	479
Barley-cleaning machine.....	R. A. Baumgartner.....	433,160	July 29	3325	860	52	672
Barley-fork.....	J. P. Radley.....	423,573	Mar. 18	1820	479	50	1497
Barrel.....	W. Heiser.....	421,570	Feb. 18	1685	436	50	899
Barrel.....	C. E. Parks.....	441,694	Dec. 2	98	26	53	1281
Barrel. Ash.....	J. S. Rice and E. B. Whittier.....	424,355	Mar. 25	3000	797	50	1729
Barrel-blanks. Machine for cutting gores in.....	J. W. Philip.....	424,891	Apr. 1	603	{ 158 159 }	51	116
Barrel-closure.....	H. C. Strout.....	436,161	Sept. 9	1215	316	52	1611
Barrel-closure.....	H. C. Strout.....	438,030	Oct. 7	559	153	53	106
Barrel-closure.....	H. C. Strout.....	442,923	Dec. 16	2091	537	53	1687
Barrel-compressing machine.....	M. A. Hamilton.....	439,273	Oct. 28	2492	668	53	492
Barrel-cover.....	J. J. O'Connor.....	420,309	Jan. 28	2523	669	50	524
Barrel-cover.....	Z. Woodworth.....	429,671	June 10	861	209	51	1647
Barrel-elevator.....	W. H. Pierson.....	431,006	June 24	2984	733	51	2074
Barrel-filler.....	M. Siersdorfer.....	423,577	Mar. 18	1825	481	50	1498
Barrel-follower.....	Z. Woodworth.....	422,482	Mar. 4	175	48	50	1169
Barrel-hanger.....	O. Pedersen.....	443,147	Dec. 23	2476	632	53	1768
Barrel-head.....	J. A. Campbell.....	422,008	Feb. 25	2300	608	50	1025
Barrel-head fastener.....	S. W. Alexander.....	419,097	Jan. 7	672	176	50	141
Barrel-head wedge.....	J. A. Campbell.....	439,928	Nov. 4	453	118	53	696
Barrel-heading machine.....	W. Glader.....	439,241	Oct. 28	2441	655	53	483
Barrel-heading machine.....	J. J. Mulvaney, Jr.....	437,785	Oct. 7	172	53	53	35
Barrel-heater.....	L. Sherman.....	423,496	Mar. 18	1715	452	50	1479
Barrel-hoop.....	A. J. Bigelow and H. D. Northrup.....	419,492	Jan. 14	1261	336	50	265
Barrel-hoop.....	J. M. Conway.....	441,645	Dec. 2	25	7	53	1267
Barrel-hoop.....	J. F. Rich.....	431,916	July 8	1378	349	52	278
Barrel-horse. Collapsible.....	E. A. Davis.....	420,776	Feb. 4	486	127	50	658
Barrel-lining.....	A. Zinsser.....	427,721	May 13	1049	.....	51	1027
Barrel-machine.....	H. J. Gilbert.....	427,071	May 6	60	{ 17 18 19 }	51	821
Barrel-making machine.....	C. W. O. Erichsen.....	427,504	May 6	718	180	51	954
Barrel-rack.....	D. L. Berry and J. Wheeler.....	430,562	June 17	2252	553	51	1925
Barrel rack and truck. Combined.....	S. J. Weathers.....	436,619	Sept. 16	1931	507	52	1756
Barrel-roller.....	J. Goodrich.....	420,053	Jan. 28	2109	557	50	447
Barrel-setting-up machine.....	J. Parker.....	426,850	Apr. 29	3682	{ 959 960 }	51	752
Barrel-stand.....	H. H. Fisk.....	439,815	Nov. 4	274	69	53	661
Barrel-stand.....	C. E. Franks.....	434,018	Aug. 12	848	223	52	930
Barrel-stand.....	S. R. Mace.....	420,306	Jan. 28	2520	668	50	524
Barrel-stand.....	G. P. Pearson and J. A. Foster.....	438,486	Oct. 14	1230	334	53	243
Barrel. Ventilated.....	A. W. Ballou.....	433,510	Aug. 5	102	28	52	776
Barrel. Ventilating.....	J. F. East.....	429,021	May 27	3020	776	51	1437
Barrel-washer.....	W. T. Edds.....	424,102	Mar. 25	2627	700	50	1658
Barrel-washing machine.....	U. and H. E. Eberhardt.....	443,751	Dec. 30	3465	{ 887 888 }	53	1970
Barrel-washing machine.....	W. J. McLeod.....	434,607	Aug. 19	1780	465	52	1125
Barrels, &c. Closure for.....	L. L. Frierson.....	431,940	July 8	1413	359	52	285
Barrels. Composition for lining.....	M. E. Spefford.....	437,258	Sept. 30	3021	.....	52	1980
Barrels. Device for locking and tapping beer or other.....	D. Johnson.....	435,933	Sept. 9	863	226	52	1548
Barrels, &c. Furnace or appliance for burning or drying.....	G. A. Oncken.....	433,876	Aug. 5	652	169	52	884
Barrels. Machine for windlassing and trussing.....	W. B. Geddes.....	437,686	Oct. 7	15	5	53	6
Barrels. Making.....	H. J. Gilbert.....	427,230	May 6	314	{ 80 81 82 }	51	873
Barrow-wheel.....	J. P. Haigh.....	430,942	June 24	2887	710	51	2056
Base-ball cover.....	B. F. Shibe.....	442,147	Dec. 9	824	{ 220 221 }	53	1431

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Base-ball curver.....	J. H. Burns	443,036	Dec. 16	2260	580	53	1721
Base-ball game.....	W. Schmitges	439,899	Nov. 4	411	107	53	688
Base-ball mask.....	B. L. Blair	432,970	July 29	3022	776	52	612
Base-ball score-card.....	A. Hunter	441,415	Nov. 25	2900	748	53	1188
Base-ball score keeper.....	F. Collyer	423,027	Mar. 11	1007	265	50	1335
Basement and sidewalk construction.....	P. H. Jackson	437,895	Oct. 7	336	98, 99	53	65
Basin. Catch.....	F. Niesen	433,134	July 29	3290	847	52	664
Basin clamp. Wash.....	W. L. Silvester.....	435,715	Sept. 2	525	139	52	1477
Basin cover. Catch.....	A. J. Bayley	425,198	Apr. 8	1183	314	51	239
Basin cover. Catch.....	G. G. Campbell.....	430,620	June 24	2359	577	51	1954
Basin. Settling.....	C. Delafield.....	424,542	Apr. 1	160	46	51	34
Basin, sink, bath-tub, &c.....	W. Bunting, Jr.....	433,718	Aug. 5	408	{ 104 105 }	52	835
Basin top and trap. Catch.....	R. Smith	440,067	Nov. 4	662	176	53	737
Basin trap. Wash.....	W. E. Delehanty	427,752	May 13	1111	278	51	1040
Basin. Wash.....	E. Hammann	422,523	Mar. 4	229	60	50	1179
Basin. Wash.....	J. P. Putnam	434,402	Aug. 12	1456	379	52	1052
Basin. Wash.....	H. C. Weedon	440,211	Nov. 11	889	229	53	793
Basin-waste.....	H. M. Weaver	432,658	July 22	2522	647	52	511
Basin, waste, overflow, and trap fitting.....	J. J. Wade	418,831	Jan. 7	264	65	50	56
Basins. Device for ejecting water or other liquids from containing-tanks to.....	J. Penney	428,943	May 27	2902	743	51	1415
Basins, &c. Discharge attachment for wash.....	J. W. Reid	439,687	Nov. 4	93	25	53	626
Basins in stationary wash-stands. Device for securing.....	J. Gaghan	423,028	May 27	3028	778	51	1439
Basins. Mat for bar wash.....	J. T. Keane	442,626	Dec. 16	1562	403	53	1584
Basins. Overflow and waste for set.....	C. A. Blessing	432,222	July 15	1855	476	52	375
Basins. Safety-plug for wash.....	D. F. Jones	426,939	Apr. 29	3794	991	51	774
Basins. Sewer-gas excluder for wash.....	F. B. Herbert	427,323	May 6	449	116	51	900
Basins. Waste-pipe connection for.....	E. S. McClellan.....	441,691	Dec. 2	95	25	53	1281
Basket.....	L. A. Brown	421,368	Feb. 11	1386	358	50	834
Basket.....	M. H. Tighman	440,446	Nov. 11	1285	332	53	864
Basket. Berry.....	G. H. Brown	423,412	Mar. 18	1590	418	50	1454
Basket-closure.....	G. Gorton	435,823	Sept. 2	685	183	52	1507
Basket-cover.....	W. H. Chilman	443,568	Dec. 30	3168	814	53	1913
Basket-cover fastener.....	J. F. Donley	443,710	Dec. 30	3398	873	53	1956
Basket-cover fastener.....	J. T. Robison	431,400	July 1	562	141	52	114
Basket. Covered.....	W. Hall	441,006	Nov. 18	2202	569	53	1048
Basket. Feed.....	J. H. Williams	432,006	July 8	1515	384	52	304
Basket. Folding bottle.....	G. Schlereth and M. Katzenberg.....	430,255	June 17	1765	438	51	1832
Basket. Fruit.....	W. H. Cadwell	440,136	Nov. 11	769	202	53	768
Basket. Fruit.....	W. A. Clark	418,684	Jan. 7	25	7	50	7
Basket. Metallic.....	P. L. Jones	420,577	Feb. 4	212	55	50	606
Basket. Portable ash.....	E. J. Lincoln	420,559	Feb. 4	187	48	50	601
Basket-stand. Reversible.....	E. J. Herrick, M. G. Randall, and W. R. Meech.....	419,169	Jan. 7	781	206	50	162
Basket. Wire-and-slat.....	M. A. Hamilton	436,917	Sept. 23	2494	652	52	1872
Bat. Cricket.....	W. and J. B. Heighington.....	442,046	Dec. 2	659	178	53	1391
Bath:							
See Blotter-bath. Needle-spray and shower bath.....							
Electrical-bath. bath.....							
Electrical and vapor Plunger, needle-spray, and shower bath.....							
Electrical spray and Shower-bath.....							
vapor bath. Spray-bath.....							
Electroplating-bath. Vapor-bath.....							
Foot-bath. Vapor face-bath.....							
Bath-heater.....	J. L. Brandt	432,596	July 22	2410	621	52	490
Bath-tub.....	B. F. Goodrich	420,599	Feb. 4	243	65	50	612
Bath-tub and wash-stand.....	W. S. Carpenter	437,479	Sept. 30	3379	885	52	2051
Bath-tub. Folding.....	E. H. Grant	428,480	May 20	2207	557	51	1260
Bath-tub. Portable.....	E. S. Lafferty.....	438,628	Oct. 21	1449	391	53	291
Bath-tub. Portable.....	J. A. Linden	428,252	May 20	1853	465	51	1193
Bath-tub seat.....	E. Schoonmaker	424,730	Apr. 1	454	121	51	90
Bath-tub with folding wash-basin.....	W. J. Robinson	431,285	July 1	381	96	52	78
Bath-tubs. Combined supply, overflow, &c., for.....	F. A. Wells	418,776	Jan. 7	177	43	50	39
Bath-tubs. Overflow and waste for.....	C. A. Blessing	438,465	Oct. 14	1207	327	53	237
Bath-tubs. Stand or overflow pipe for.....	J. Barrett.....	443,310	Dec. 23	2767	709	53	1825
Bathing apparatus.....	C. De Choubersky	420,146	Jan. 28	2264	{ 599 600 }	50	478
Bathing apparatus.....	E. Nolden	423,801	Mar. 18	2166	573	50	1563
Bathing apparatus.....	I. M. Swank and A. C. Cosner.....	427,377	May 6	520	133	51	914
Bathing purposes. Ship for.....	K. Gerson	431,226	July 1	297	73	52	60
Batteries. Apparatus for charging and discharging secondary.....	W. S. Johnson	420,906	Feb. 4	715	{ 184 185 }	50	698
Batteries. Apparatus for transferring electric-car.....	F. G. Corning	434,579	Aug. 19	1730	{ 453 454 }	52	1115
Batteries. Apparatus for transferring electric-car.....	F. G. Corning	434,580	Aug. 19	1732	{ 454 455 }	52	1116
Batteries. Apparatus for transferring electric-car.....	F. G. Corning	434,581	Aug. 19	1735	455	52	1116
Batteries. Apparatus for transferring electric-car.....	F. G. Corning	434,863	Aug. 19	2178	{ 570 571 }	52	1202
Batteries. Apparatus for transferring electric-car.....	F. G. Corning	439,237	Oct. 28	2435	{ 653 654 }	53	482
Batteries. Automatic switch for regulating the power of electric.....	G. B. Pennock	422,438	Mar. 4	107	29	50	1157
Batteries. Device for unloading, recharging, and re-loading electric-car.....	J. C. Chamberlain	427,459	May 6	656	{ 164 165 }	51	941
Batteries. Device for unloading, recharging, and re-loading electric-car storage.....	J. C. Chamberlain	433,851	Aug. 5	613	159	52	876
Batteries. Forming porous pots for voltaic.....	C. R. Goodwin	431,968	July 8	1460	370	52	294
Batteries. Means for charging and using secondary.....	T. A. Edison	435,687	Sept. 2	486	129	52	1468
Batteries. Mechanism for transferring electric-car.....	F. G. Corning	434,582	Aug. 19	1737	{ 455 456 }	52	1116
Batteries. Porous cell for galvanic.....	G. H. Felt	429,897	June 10	1199	297	51	1712

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Batteries. Porous cup for galvanic.....	C. A. Hussey.....	439,516	Oct. 28	2868	763	53	564
Batteries. Preparing active material for secondary..	C. Sorley.....	423,091	Mar. 11	1112		50	1354
Batteries. Regulation and control of storage.....	S. C. C. Currie.....	438,145	Oct. 14	730	{ 200 201	53	147
Batteries. Transferring.....	W. B. Cleveland.....	425,493	Apr. 15	1619	432	51	332
Battery: <i>See</i> Diffusion-battery. Secondary battery. Dry battery. Secondary electric bat- Electric battery. tery. Electric body-bat- Storage-battery. tery. Thermal battery. Faradic battery. Thermo-electric battery. Galvanic battery. Voltaic battery. Medical battery.							
Battery-carbon.....	C. G. Armstrong.....	418,837	Jan. 7	279	68	50	59
Battery-cell.....	H. E. Waite.....	432,681	July 22	2561	656	52	519
Battery compound.....	E. M. G. Hewett.....	435,421	Sept. 2	62		52	1387
Battery connection. Electric.....	H. J. Brewer.....	441,130	Nov. 25	2419	627	53	1099
Battery connector. Secondary.....	J. K. Pumpelly.....	434,199	Aug. 12	1138	295	52	989
Battery cut-out. Secondary.....	H. E. Dey.....	418,701	Jan. 7	77	17	50	17
Battery cut-out. Secondary.....	H. E. Dey.....	418,702	Jan. 7	78	18	50	17
Battery plate. Secondary.....	J. B. Entz and W. A. Phillips.....	421,916	Feb. 25	2177	571	50	1003
Battery plate. Secondary.....	W. B. Hollingshead.....	434,669	Aug. 19	2193	574	52	1204
Battery plate. Secondary.....	G. A. Johnson.....	420,234	Jan. 28	2409	641	50	504
Battery plate. Secondary.....	W. P. Kookogey.....	422,533	Mar. 4	242	63	50	1182
Battery plate. Secondary.....	T. P. Whittier.....	436,050	Sept. 9	1041	270	52	1582
Battery plate. Secondary.....	A. E. Woolf.....	439,850	Nov. 4	330	85	53	672
Battery plate. Secondary.....	A. E. Woolf.....	440,216	Nov. 11	895	{ 230 231	53	794
Battery plates. Forming secondary.....	H. E. Dey.....	418,703	Jan. 7	79	18	50	18
Battery plates. Forming secondary.....	H. G. Morris.....	432,834	July 22	2802	717	52	565
Battery plates. Making secondary.....	W. P. Kookogey.....	432,672	July 22	2543	652	52	515
Battery plates. Making secondary.....	D. Pepper, Jr.....	434,458	Aug. 19	1552		52	1078
Battery plates. Making storage.....	W. Morrison and L. Schmidt.....	439,416	Oct. 28	2717	725	53	535
Battery plates. Treating secondary.....	C. Sorley.....	419,727	Jan. 21	1604		50	339
Battery plates. Treatment of storage.....	C. Sorley.....	422,457	Mar. 4	144		50	1164
Battery separator. Secondary.....	W. P. Kookogey.....	433,174	July 29	3346	895	52	676
Battery solution. Galvanic.....	E. M. Burt.....	428,888	May 27	2829		51	1399
Battery solution. Galvanic.....	G. H. Felt.....	429,698	June 10	1300		51	1711
Battery system. Pulsating current.....	C. J. Van Depoele.....	436,375	Sept. 9	1381	360	52	1645
Battery-terminals. Connecting device for.....	R. N. and J. C. Chamberlain.....	423,310	Mar. 11	1443	376	50	1417
Battery-zinc.....	A. J. MacDonald.....	410,173	Nov. 11	832		53	781
Battery-zincs. Preparing.....	J. H. Mason.....	428,684	May 27	2525		51	1339
Battling. Compressing and baling cotton- Beach. Means for making.....	H. Rembert.....	429,640	June 10	809	197	51	1638
Battling. Compressing and baling cotton- Beach. Means for making.....	J. Sutherland.....	421,631	Feb. 18	1781	466	50	918
Beaded-machine rod.....	T. C. Belding.....	433,437	Aug. 5	7	2	52	758
Beads of enamel. Apparatus for the manufacture of.....	D. Swarovski.....	423,579	Mar. 18	1828	482	50	1498
Beam. Composite.....	H. C. Hodges.....	420,201	Jan. 28	2359	627	50	494
Beam or girder.....	G. W. Dithridge.....	426,559	Apr. 29	3237	848	51	666
Beam or girder.....	G. W. Dithridge.....	430,840	June 24	2734	670	51	2027
Beam or sill.....	G. W. Dithridge.....	426,558	Apr. 29	3237	848	51	666
Beam or sill.....	G. W. Dithridge.....	426,560	Apr. 29	3238	849	51	666
Beam or sill.....	G. W. Dithridge.....	426,561	Apr. 29	3239	849	51	667
Beams to walls and truss and girder beams. Anchor- ing.....	G. C. Whitlock.....	433,657	Dec. 30	3310	853	53	1940
Bean-puller.....	L. P. Thomas.....	431,127	July 1	139	36	52	29
Bearing. Adjustable.....	B. V. Nordberg and C. M. Conradson.....	430,143	June 17	1592	396	51	1799
Bearing. Anti-friction.....	S. W. Ashmead.....	426,701	Apr. 29	3455	905	51	708
Bearing. Anti-friction.....	B. Beaupre.....	427,538	May 13	777	193	51	975
Bearing. Anti-friction.....	W. J. Brewer.....	437,561	Sept. 30	3505	914	52	2076
Bearing. Anti-friction.....	T. R. Ferrall.....	430,119	June 17	1561	388	51	1793
Bearing. Anti-friction.....	L. K. Jewett.....	427,693	May 13	1007	{ 253 251	51	1020
Bearing. Anti-friction.....	L. K. Jewett.....	440,711	Nov. 18	1723	442	53	957
Bearing. Anti-friction.....	J. N. Mileham.....	438,442	Oct. 14	1170	316	53	230
Bearing. Anti-friction.....	B. Millhauser.....	420,951	Feb. 11	788	205	50	722
Bearing. Anti-friction.....	T. Tripp.....	439,283	Oct. 28	2512	673	53	496
Bearing. Arbor.....	J. Cuthbertson.....	422,298	Feb. 25	2752	725	50	1108
Bearing. Ball.....	H. Howard.....	439,877	Nov. 4	372	96	53	680
Bearing. Ball.....	T. M. Kenney.....	437,997	Oct. 7	500	141	53	94
Bearing. Ball.....	C. F. Lavender.....	422,232	Feb. 25	2635	698	50	1087
Bearing. Ball.....	C. A. Lieb.....	438,320	Oct. 14	995	{ 269 270	53	196
Bearing. Ball.....	G. F. Simonds.....	434,472	Aug. 19	1570	{ 408 409	52	1081
Bearing. Ball.....	G. F. Simonds.....	434,473	Aug. 19	1572	409	52	1082
Bearing. Ball.....	G. F. Simonds.....	434,474	Aug. 19	1574	410	52	1083
Bearing. Ball.....	G. F. Simonds.....	434,475	Aug. 19	1576	{ 410 411	52	1083
Bearing. Ball.....	G. F. Simonds.....	434,476	Aug. 19	1578	{ 411 412	52	1084
Bearing. Ball.....	G. F. Simonds.....	434,477	Aug. 19	1580	{ 413 414	52	1084
Bearing. Ball.....	G. F. Simonds.....	434,479	Aug. 19	1584	{ 414 415	52	1085
Bearing. Ball.....	G. F. Simonds.....	434,480	Aug. 19	1586	415	52	1086
Bearing. Ball.....	G. F. Simonds.....	434,481	Aug. 19	1588	415	52	1086
Bearing. Ball.....	G. F. Simonds.....	434,482	Aug. 19	1589	416	52	1087
Bearing. Ball.....	G. F. Simonds.....	434,483	Aug. 19	1590	{ 416 417	52	1087
Bearing. Ball.....	G. F. Simonds.....	434,484	Aug. 19	1592	{ 417 418	52	1088
Bearing. Ball.....	R. T. Torkelson.....	428,577	May 20	2341	594	51	1286

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bearing-boxes. Automatic adjuster for	H. L. Hopkins	441,797	Dec. 2	265	71	53	1316
Bearing-boxes. Machine for making wrought-metal.	P. H. Fontaine	442,430	Dec. 9	1246	322	53	1512
Bearing. End-thrust	O. B. Peck	433,143	July 29	3301	852	52	667
Bearing for draw-in spindles. Anti-friction	J. Stark	422,259	Feb. 25	2683	708	50	1096
Bearing. Leather	C. Willert and W. L. Zeiger	430,159	June 17	1611	401	51	1802
Bearing. Propeller-shaft	W. Z. Gaffield	431,690	July 8	1044	261	52	212
Bearing. Roller	E. W. Cooke	442,356	Dec. 9	1135	296	53	1490
Bearing. Roller	E. W. Cooke	442,358	Dec. 9	1138	296	53	1490
Bearing. Roller	E. W. Cooke	442,359	Dec. 9	1139	297	53	1490
Bearing. Self-adjusting	J. A. Freeman and D. Donald	432,608	July 22	2426	625	52	493
Bearing-surfaces. Composition for	K. W. Hedges	441,556	Nov. 25	3117		53	1229
Bearing. Thrust	R. C. Smith	425,263	Apr. 8	1272	340	51	257
Bearing. Wheel	W. F. Hoyt	442,118	Dec. 9	772	208	53	1421
Bearings. Roll for roller	J. W. Hyatt	428,492	May 20	2218	561	51	1262
Beater	L. B. Gregg	434,635	Aug. 19	1838	420	52	1136
Beating-machine	J. H. Burnham	429,114	June 3	9	3, 4	51	1474
Beating-out machine	B. W. Hill	438,810	Oct. 21	1744	468	53	345
Bed	W. J. Cristman	425,409	Apr. 15	1494	401	51	308
Bed and binder therefor. Spring	F. J. Maier	427,777	May 13	1144	287	51	1047
Bed and cabinet. Combined folding	E. Skinner	441,590	Nov. 25	3169	817	53	1239
Bed and dresser. Folding	A. and M. Lain	426,286	Apr. 22	2818	740	51	575
Bed and dressing-case. Combined folding	I. C. Smith	433,773	Sept. 2	603	161	52	1491
Bed and lounge. Combined	H. Burgess	443,389	Dec. 23	2885	742	53	1850
Bed and other similar articles. Folding	F. A. Müller	439,973	Nov. 4	531	140	53	710
Bed apparatus. Invalid	F. M. Collins	440,471	Nov. 11	1321	{ 341 342 }	53	872
Bed. Animal	H. Stevenson	424,143	Mar. 25	2681	713	50	1668
Bed-bottom	D. M. Bone	442,008	Dec. 2	593	{ 160 161 }	53	1379
Bed-bottom	E. A. Cleveland	440,393	Nov. 11	1190	307	53	848
Bed-bottom	O. S. Foster	441,652	Dec. 2	34	10	53	1269
Bed-bottom and brace. Adjustable	P. G. Gestford, Jr.	427,168	May 6	225	57	51	855
Bed-bottom spring	G. W. Fishing	440,628	Nov. 18	1585	408	53	931
Bed-bottom. Spring	B. E. Leckron	435,231	Aug. 26	2761	729	52	1319
Bed-bottom. Spring	B. E. Leckron and A. Castanien	438,006	Oct. 7	511	143	53	97
Bed-bottom. Spring	J. P. Leggett	434,794	Aug. 19	2079	543	52	1182
Bed-bottom. Spring	T. E. O'Brien	442,236	Dec. 9	948	250	53	1456
Bed-bottom. Spring	T. E. O'Brien	442,237	Dec. 9	949	251	53	1456
Bed-bottom. Spring	A. F. Purefoy	440,324	Nov. 11	1073	276	53	825
Bed-bottom. Spring	J. Rose	419,218	Jan. 14	862	226	50	184
Bed-bottom. Spring	G. B. Smith	438,956	Oct. 21	1982	529	53	389
Bed-bottom. Spring	W. Schlmitt	428,637	May 27	2433	619	51	1323
Bed-bottom-stretching mechanism	J. J. Loomis	420,304	Jan. 28	2517	668	50	523
Bed-bottoms. Attachment for spring	O. S. Foster	441,653	Dec. 2	35	10	53	1269
Bed-covering	W. T. Doremus	429,894	June 10	1195	297	51	1712
Bed. Folding	A. G. Anderson and F. G. Hansen	438,132	Oct. 14	708	193	53	143
Bed. Folding	F. Bennett	428,368	May 20	2039	513	51	1229
Bed. Folding	J. David	428,200	May 20	1765	446	51	1175
Bed. Folding	G. A. Garland	439,348	Oct. 28	2618	698	53	516
Bed. Folding	H. A. Gore	437,151	Sept. 23	2851	741	52	1940
Bed. Folding	H. S. Hale	431,657	July 8	974	243	52	202
Bed. Folding	J. P. Hayes, F. Ansley, and W. Eschenbrenner	442,725	Dec. 16	1751	453	53	1620
Bed. Folding	E. E. Herrinton	425,378	Apr. 8	1441	386	51	288
Bed. Folding	A. E. Jacobson	428,212	May 20	1784	450	51	1179
Bed. Folding	H. W. Ladd	441,569	Nov. 25	3135	{ 805 806 }	53	1233
Bed. Folding	J. Müller	438,743	Oct. 21	1650	442	53	326
Bed. Folding	L. Oppenheim	436,723	Sept. 16	2100	553	52	1790
Bed. Folding	D. J. Powers	439,683	Nov. 4	88	23	53	625
Bed. Folding	F. Schneek	419,288	Jan. 14	963	254	50	204
Bed. Folding	G. F. Smith and W. H. Bachman	437,053	Sept. 23	2672	698	52	1908
Bed. Folding	C. J. Sundback	431,825	July 8	1253	{ 313 314 }	52	253
Bed. Invalid	D. T. Fox	430,635	June 24	2385	582	51	1959
Bed. Invalid	A. J. Goodwin	420,197	Jan. 28	2354	625	50	493
Bed-lounge	W. E. Buser	418,971	Jan. 7	495	123	50	104
Bed-lounge	T. D. Hanchett	424,980	Apr. 8	850	{ 225 226 }	51	173
Bed-lounge	A. Morris	431,002	June 24	2977	730	51	2073
Bed-lounge	W. M. Rickert	442,394	Dec. 9	1185	308	53	1500
Bed-lounge. Child's	A. Morris	439,083	Oct. 21	2180	585	53	429
Bed-lounge. Folding	F. E. Morris	441,251	Nov. 25	2638	684	53	1138
Bed or other folding articles. Sofa	L. Meierowitz	420,206	Jan. 28	2366	{ 628 629 }	50	496
Bed or stretcher. Portable	A. S. Tomkins	419,572	Jan. 14	1368	{ 366 367 }	50	287
Bed-pan	M. L. Abraham	421,467	Feb. 18	1524	395	50	869
Bed-pan	B. A. Dugot	443,593	Dec. 30	3210	826	53	1921
Bed-pan	A. L. Frennd	435,058	Aug. 26	2517	665	52	1272
Bed-pan. Surgical	R. G. Bryans	422,290	Feb. 25	2735	721	50	1105
Bed-screen. Folding	J. J. Griffith	418,946	Jan. 7	465	{ 115 116 }	50	97
Bed-slat lock	W. T. Wilson	438,722	Oct. 21	1600	429	53	318
Bed-slat support	F. X. Coté	433,767	Aug. 5	488	127	52	851
Bed-slat support	J. B. Howell	434,132	Aug. 12	1043	269	52	969
Bed. Sofa	R. Lehmann	430,427	June 17	2055	506	51	1889
Bed. Sofa	C. Newhouse and L. Hansen	428,177	May 20	1735	439	51	1169
Bed. Spring	D. H. Jeffery	426,022	Apr. 22	2438	{ 644 645 }	51	497
Bed. Spring	G. E. Miller	422,030	Feb. 25	2326	614	50	1030
Bed. Spring	W. A. Yates	440,937	Nov. 18	2101	545	53	1029
Bed-spring	E. W. Locke	442,003	Dec. 2	688	185	53	1397
Bed-warmer	J. Kinney	431,813	July 8	1238	309	52	250

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Beds. Automatic leg for folding.	F. Bennett.	427,293	May 6	410	106	51	891
Beds, &c. Manufacturing spring.	J. G. Smith.	422,845	Mar. 4	707	50	1273	
Beds or lounges. Head and shoulder rest for.	W. Oxley.	428,938	May 27	2896	740	51	1413
Beds. Removable siding for.	C. H. Blauken.	421,656	Feb. 18	1812	474	56	924
Bedbug-trap.	M. A. Linder and C. A. Carlson.	431,815	July 8	1240	309	52	251
Bedclothes-clamp.	O. R. Haight.	426,011	Apr. 22	2425	641	51	495
Bedclothes. Clamp for holding.	R. X. McArthur.	420,083	Jan. 28	2156	370	56	457
Bedclothes-fastener.	A. E. Birdsall.	443,742	Dec. 30	3448	885	53	1966
Bedclothes-fastener.	C. Reuter and J. L. Schruben.	443,006	Dec. 16	2209	568	53	1712
Bedclothes-holder.	M. L. Rapelye.	438,639	Oct. 21	1465	395	53	294
Bedclothes holder. Adjustable.	T. Wicks.	433,312	July 29	3541	914	52	716
Bedding-clamp.	C. H. Truax.	437,877	Oct. 7	311	92	53	61
Bedstead.	W. F. Bernstein.	422,704	Mar. 4	501	128	56	1232
Bedstead.	C. E. Clark.	420,187	Jan. 28	2335	617	50	490
Bedstead.	A. J. Goodwin.	419,118	Jan. 7	698	124	56	147
Bedstead.	G. McDonald.	437,314	Sept. 30	3104	813	52	1995
Bedstead.	M. C. Scherer.	438,244	Oct. 14	877	238	53	174
Bedstead attachment.	E. E. Arnold.	427,533	May 13	770	192	51	973
Bedstead attachment.	J. B. Hill and W. D. Gohn.	442,775	Dec. 16	1823	472	53	1636
Bedstead attachment.	E. F. Walker.	434,307	Aug. 12	1308	340	52	1022
Bedstead brace or stay.	N. H. Slaughter.	441,037	Nov. 18	2248	582	53	1057
Bedstead. Cabinet.	W. P. Tracy.	422,555	Mar. 4	277	70	56	1189
Bedstead. Cabinet folding.	B. Poulson.	432,073	July 15	1626	417	52	332
Bedstead. Cabinet or folding.	W. P. Tracy.	439,444	Oct. 28	2764	736	53	543
Bedstead-fastener.	T. H. Watson.	427,645	May 13	930	233	51	1004
Bedstead. Folding.	D. Argerbright.	433,845	Aug. 5	604	157	52	874
Bedstead. Folding.	A. M. F. Billingslea.	425,399	Apr. 15	1476	396	51	304
Bedstead. Folding.	H. A. Gore.	437,150	Sept. 23	2850	741	52	1940
Bedstead. Folding.	G. W. Rodecap.	434,887	Aug. 19	2235	586	52	1212
Bedstead. Folding.	F. N. Potter.	439,554	Oct. 28	2923	777	53	574
Bedstead-guard.	L. E. Meyer.	421,103	Feb. 11	1014	259	50	765
Bedstead. Hospital.	F. L. Bryant.	434,174	Aug. 12	1105	286	52	983
Bedstead. Invalid.	C. W. Hamlin.	431,189	July 1	232	58, 59	52	49
Bedstead. Invalid.	O. A. Howe.	426,669	Apr. 29	3398	893	51	698
Bedstead, lounge, sofa, &c. Combined.	M. Langhorne.	426,026	Apr. 22	2444	646	51	498
Bedstead. Metallic cot.	G. M. Lortz.	431,602	July 8	877	217	52	183
Bedstead. Portable.	F. H. B. Babbe.	434,552	Aug. 19	1696	444	52	1108
Bedstead-slat lock.	D. L. Hartsfield.	435,178	Aug. 26	2691	710	52	1305
Bedsteads. Extension for.	J. A. Belsher.	432,505	July 22	2273	589	52	463
Bee-hive.	U. Baird.	424,844	Apr. 1	637	167	51	123
Bee-hive.	L. V. Hopkins.	427,993	May 13	1470	373	51	1108
Bee-hive.	A. J. Pennock.	442,687	Dec. 16	1652	425	53	1603
Bee-hive.	W. D. Penneck.	425,047	Apr. 8	950	254	51	192
Bee-hive.	J. B. Wilcox.	419,809	Jan. 21	1732	458	50	364
Bee-swarm.	H. Alley.	430,104	June 17	1541	383	51	1789
Bee-swarm.	F. D. Lacy.	437,123	Sept. 23	2783	726	52	1930
Bee-swarm.	N. C. Petrie.	437,451	Sept. 30	3342	874	52	2042
Beef tray and meat-rack. Corned.	A. Rodmann.	426,958	Apr. 29	3820	998	51	779
Beer. Apparatus for the pasteurization of.	T. Evans.	425,310	Apr. 8	1349	360	51	270
Beer. Apparatus for treating.	C. Häfner.	425,421	Apr. 15	1505	404	51	310
Beer-brewing apparatus.	M. Byrne.	440,464	Nov. 11	1308	338	53	869
Beer-cooler.	G. E. Runyan.	439,764	Nov. 4	52	52	53	648
Beer-coolers. Buck for.	F. T. Cladek.	435,282	Aug. 26	2841	752	52	1334
Beer-coolers. Device for preventing the escape of cold air from.	W. A. Ehrmanntraut.	437,583	Sept. 30	3532	921	52	2081
Beer-cooling apparatus.	M. Hanford.	426,805	Apr. 29	3615	943	51	739
Beer-cooling apparatus.	J. Peter.	436,635	Sept. 16	1960	514	52	1762
Beer-drawing device.	F. Batter.	433,614	Aug. 5	257	68	52	806
Beer for market. Preparing ruh.	A. J. Metzler.	436,537	Sept. 16	1822	52	52	1735
Beer-glasses. Opening and closing device for.	K. Peters.	431,390	July 1	551	137	52	112
Beer. Making.	A. J. Metzler.	436,535	Sept. 16	1820	52	52	1735
Beer. Manufacturing.	A. J. Metzler.	436,534	Sept. 16	1818	52	52	1735
Beer. Manufacturing.	A. J. Metzler.	436,536	Sept. 16	1821	52	52	1735
Beer. Pasteurization of.	W. Kuhn.	418,872	Jan. 7	334	81, 82	50	70
Beheading block and ax.	W. Hanlon.	420,995	Feb. 11	857	221	50	735
Bell.	G. W. Goff.	419,767	Jan. 21	1664	442	50	350
Bell.	L. M. Pinolet.	423,697	Mar. 18	2024	534	50	1545
Bell.	B. E. Vaughn.	439,614	Oct. 28	3025	802	53	595
Bell.	J. L. Watrous.	436,448	Sept. 16	1676	441	52	1709
Bell. Alarm.	J. Allen and S. Goulden.	428,198	May 20	1763	446	51	1175
Bell. Alarm.	T. M. Bales.	442,937	Dec. 16	2112	543	53	1691
Bell and annunciator. Mechanical call.	A. Roseburg.	423,345	Mar. 11	1489	390	50	1427
Bell and burglar-alarm. Combined door.	G. F. Whitlock and F. Redfield.	440,383	Nov. 11	1161	300	53	842
Bell and engine-indicator for pilot-houses of steam-vessels.	W. E. Hadlock.	426,009	Apr. 22	2421	640	51	494
Bell. Call.	B. S. Cowles.	426,777	Apr. 29	3572	932	51	731
Bell. Call.	A. F. Rockwell.	426,330	Apr. 22	2880	758	51	588
Bell-cord attachment.	G. A. La Fever.	443,396	Dec. 23	2895	744	53	1852
Bell-cord attachment.	W. Tyler.	437,062	Sept. 23	2685	702	52	1910
Bell-cord coupling.	H. G. Kennedy.	440,094	Nov. 4	697	186	53	745
Bell. Door.	C. A. Emme.	418,975	Jan. 7	498	124	50	105
Bell. Door.	C. A. Emme.	433,724	Aug. 5	416	106	52	836
Bell. Door.	J. Rocheleau.	425,908	Apr. 15	2238	593	51	451
Bell. Door.	J. Rocheleau.	429,643	June 10	818	199	51	1640
Bell. Door.	F. Sanderson.	428,636	May 27	2431	619	51	1323
Bell. Door.	F. Sanderson.	432,285	July 15	1955	500	52	394
Bell. Door.	J. H. Shaw and A. A. Page.	436,588	Sept. 16	1896	498	52	1749
Bell. Door.	W. L. Upson.	432,344	July 15	2035	524	52	408
Bell. Door.	H. C. Williams.	438,789	Oct. 21	1713	459	53	339
Bell. Electric.	C. B. Beers and W. B. Tuttle.	442,473	Dec. 9	1311	339	53	1525
Bell. Electric.	P. B. Delany.	431,181	July 1	223	56	52	46

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Bell. Electric	A. F. Stanley	423,707	Mar. 18	2034	537	50	1538
Bell. Electro-magnetic	J. Geary	436,410	Sept. 16	1612	425	52	1698
Bell. Gong	E. C. Barton	429,299	June 3	296	70	51	1526
Bell. Gong door	J. P. Connell	423,414	Mar. 18	1592	418	50	1455
Bell mechanism. Door	A. F. Rockwell	430,040	June 10	1424	{ 353 354 }	51	1756
Bell mechanism. Door	A. F. Rockwell	431,918	July 8	1380	350	52	278
Bells. Push-button for door	H. F. Eberts	425,870	Apr. 15	2186	581	51	442
Bells. Striking mechanism for door	E. E. Herrinton	419,150	Jan. 7	748	198	50	156
Belt and appliances. Electric	R. E. Williams	434,746	Aug. 19	2013	{ 525 526 }	52	1168
Belt and sash. Combined	A. Hellenberg	429,910	June 10	1216	301	51	1716
Belt-clasp	S. V. Knapp	438,130	Oct. 7	702	190	53	135
Belt-controller	F. W. Mallett	419,531	Jan. 14	1316	351	50	276
Belt-coupling	F. C. Ihde	423,769	Mar. 18	2116	558	50	1553
Belt-coupling	A. Post	424,023	Mar. 25	2515	669	50	1636
Belt. Driving	F. Clouth	421,246	Feb. 11	1215	314	50	803
Belt. Driving	C. H. Douglas	441,359	Nov. 25	2805	724	53	1168
Belt. Electric	L. D. Ashbrook	437,079	Sept. 23	2713	700	52	1915
Belt. Electric	J. F. Fields	439,347	Oct. 28	2616	697	53	516
Belt. Electric	C. H. Grimley	419,013	Jan. 7	548	137	50	116
Belt. Electric	J. L. Pratt	443,226	Dec. 23	2627	675	53	1800
Belt. Electric	A. J. Sheffield	420,740	Feb. 4	433	115	50	649
Belt. Electric	M. Wadleigh	421,457	Feb. 18	1510	392	50	866
Belt. Electro-galvanic	A. Dow	427,468	May 6	668	167	51	944
Belt. Electro-medical	W. J. Shelton	424,827	Apr. 1	613	161	51	118
Belt-fastener	E. L. Budlong	431,103	July 1	100	28	52	24
Belt-fastener	W. L. Kinsley	434,636	Aug. 19	1839	480	52	1136
Belt-fastener	C. S. Lockwood	419,590	Jan. 14	1393	373	50	292
Belt-fastener	S. H. Morrall	430,068	June 24	2453	598	51	1972
Belt-fastener	H. G. Parsons and W. A. Brown	428,130	May 20	1679	425	51	1158
Belt-fastener	L. T. Potter	435,949	Sept. 9	888	233	52	1552
Belt-fastener	G. W. Southwick	431,175	July 1	214	53	52	44
Belt-fastener	W. Tattersalls	442,740	Dec. 16	1773	459	53	1624
Belt-fastener	C. R. Welde	432,104	July 15	1675	430	52	342
Belt fastener. Driving	M. Tuquet, M. Boudard, and C. H. Crawley	436,678	Sept. 16	2040	533	52	1777
Belt-fastener tool	J. Lendberg	426,942	Apr. 29	3797	992	51	775
Belt-fastening	E. B. Stimpson	422,062	Feb. 25	2376	628	50	1039
Belt-gearing	C. W. Wall	418,775	Jan. 7	176	42	50	39
Belt-keeper	R. F. Hamilton and J. Wodiska	435,930	Sept. 9	859	226	52	1547
Belt. Link driving	J. A. J. Shultz	425,704	Apr. 15	1945	516	51	396
Belt loops. Manufacture of waist	W. B. North	421,752	Feb. 18	1935	509	50	948
Belt. Napkin	E. M. Preston	423,572	Mar. 18	1819	479	50	1497
Belt. Ore-separator	G. Conkling	423,906	Mar. 25	2334	615	50	1603
Belt. Outing	J. Hirschfeld	439,244	Oct. 28	2444	656	53	484
Belt-replacer	F. Balderson	429,372	June 3	413	98	51	1549
Belt-rest	W. R. Fee	426,638	Apr. 29	3359	881	51	690
Belt-shifter	J. C. Jackson and H. Whitcomb	430,345	June 17	1940	475	51	1866
Belt-shifter	J. C. Jackson and H. Whitcomb	442,227	Dec. 9	937	247	53	1453
Belt-shifter	G. H. Remington	421,515	Feb. 18	1599	413	50	883
Belt-shifter	G. C. Roberts	425,459	Apr. 15	1572	421	51	323
Belt-shifter	J. M. Sailer	439,692	Nov. 4	98	26	53	627
Belt-shifting and brake apparatus. Combined	J. Thomson	427,449	May 6	644	161	51	939
Belt-stretcher	P. J. Gloeckner	420,782	Feb. 4	495	129	50	660
Belt-stretcher	B. Meier	436,797	Sept. 23	2248	592	52	1826
Belt-stretcher	B. F. Morningstar	420,462	Feb. 4	62	13	50	576
Belt-stretching machine	A. E. Ellinwood	438,286	Oct. 14	945	255	53	186
Belt-stretching machine	A. E. Peterson	431,074	July 1	69	17	52	16
Belt-stretching machine	A. E. Peterson	442,135	Dec. 9	800	{ 215 216 }	53	1426
Belt-tightener	C. Corl and A. P. Porr	442,514	Dec. 9	1381	353	53	1539
Belt-tightener	W. King	442,057	Dec. 2	679	183	53	1395
Belt-tightener	A. Pollock	439,790	Nov. 4	240	61	53	655
Belt. Tug-of-war	R. Reach	437,822	Oct. 7	231	71	53	46
Belts. Device for controlling the air about running	A. J. Robertson	438,644	Oct. 21	1472	397	53	295
Belts, girths, &c. Tool for tightening	J. Eagan	427,304	May 6	425	110	51	894
Belts. Machine for folding abrasive	G. A. Fullerton	432,030	July 15	1559	{ 397 398 }	52	319
Belts over their pulleys. Apparatus for throwing	H. T. Neszler	429,861	June 10	1144	283	51	1702
Belts. Tension device for	A. G. Anderson	429,877	June 10	1170	290	51	1707
Belts upon pulleys. Apparatus for replacing	P. J. Holloway	440,862	Nov. 18	1975	509	53	1004
Belts upon pulleys. Device for placing	H. A. Schenierle	433,825	Aug. 5	580	151	52	870
Belting	T. W. Emery	420,779	Feb. 4	492	129	50	659
Belting	T. Gingras	419,432	Jan. 14	1181	314	50	249
Belting. Compound	W. C. and C. Edge	419,650	Jan. 21	1494	400	50	319
Belting. Leather	G. Brigger	443,352	Dec. 23	2833	728	53	1840
Belting. Machine	G. F. Page	439,282	Oct. 28	2511	673	53	496
Belting. Manufacturing flat woven gut	J. Griffin	429,270	June 3	233	51	1517	
Belting. Woven fabric for machine	J. P. Maddox	427,700	May 13	1017	256	51	1022
Bench							
See Husking-bench. Wash-bench.							
Saw-filing bench. Work-bench.							
Bench-clamp	R. H. Strong	426,341	Apr. 22	2893	762	51	591
Bench-dog	A. A. Tower	418,771	Jan. 7	171	41	50	38
Bench-hook	G. A. Colton	438,096	Oct. 7	656	178	53	127
Bench-hook	H. D. Lanfair	438,890	Oct. 21	1890	502	53	372
Bending machine	J. S. Stevenson	430,898	June 24	2823	692	51	2044
Bending rods for bit-braces. Machine for	L. C. Wilcox	425,157	Apr. 8	1116	297	51	224
Bending tool. Rail	J. R. James	426,277	Apr. 22	2806	737	51	573
Benzine-can	C. Wagner	420,320	Jan. 28	2536	672	50	527
Berry-picker	C. H. Carpenter and I. Briggs	425,299	Apr. 8	1337	356	51	268
Berth for vessels	K. C. Munson	431,385	July 1	544	{ 135 136 }	52	110

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Berth-guard	J. A. Green	424,881	Apr. 1	692	183	51	134
Berth. Ship's	D. F. McDonald	430,670	June 24	2455	599	51	1973
Berths. Curtain-rod for car-	H. H. Sessions	440,657	Nov. 18	1627	420	53	939
Bessemer-converter nozzles. Machine for making	C. W. Vaughn	426,084	Apr. 22	2525	666	51	513
Bevel	J. S. Brooks	432,367	July 15	2064	531	52	413
Bevel	W. Quayle	442,592	Dec. 9	1505	387	53	1565
Bevel	G. M. Redway	443,539	Dec. 30	3122	803	53	1904
Bevel	J. A. Traut	422,852	Mar. 4	715	183	50	1274
Bevel-cutting machine. Card-board.	W. H. Christie and C. Keck	422,726	Mar. 4	528	135	50	1247
Bevel, gage, and trammel. Combined	R. P. Jensen	421,500	Feb. 18	1581	408	50	879
Bevel-protractor	E. E. Harrington	428,750	Oct. 21	1661	445	53	329
Beverage-carbonizer	C. W. Gibson	422,203	Feb. 25	2589	685	50	1079
Beverage-shaking apparatus	C. A. Tatum	422,462	Mar. 4	150	40	50	1165
Beverages. Foam for carbonated.	G. C. Henry	419,671	Jan. 21	1533	.....	50	325
Beverages. Preparing carbonated.	G. C. Henry	436,782	Sept. 23	2212	.....	52	1818
Bib	C. C. Webber	439,736	Nov. 4	161	41	53	639
Bib or cock	W. L. Riauhard	433,999	Aug. 12	827	217	52	926
Bicycle	A. D. Barker	434,234	Aug. 12	1199	312	52	1000
Bicycle	R. H. Blackledge	435,477	Sept. 2	140	39, 40	52	1402
Bicycle	F. H. Bolte	443,815	Dec. 30	3567	914	53	1990
Bicycle	G. H. Chappell	441,627	Nov. 25	3232	834	53	1252
Bicycle	A. H. Clark	420,036	Jan. 28	2089	551	50	443
Bicycle	J. A. Crandall	436,305	Sept. 9	1428	372	52	1655
Bicycle	H. E. Danzenbaker	440,944	Nov. 18	2113	548	53	1031
Bicycle	C. R. Davenport	420,145	Jan. 28	2264	549	50	478
Bicycle	E. Döring and F. A. Siegert	424,864	Apr. 1	669	176	51	129
Bicycle	J. B. Dunlop	441,649	Dec. 2	31	9	53	1268
Bicycle	G. B. Durkee	439,129	Oct. 28	2250	605	53	448
Bicycle	S. M. Fay	424,870	Apr. 1	680	179	51	131
Bicycle	W. A. Fleming	443,938	Dec. 30	3747	958	53	2024
Bicycle	H. C. Goodrich	437,191	Sept. 30	2915	759	52	1960
Bicycle	G. Harriott	439,400	Oct. 28	2699	719	53	531
Bicycle	G. M. Hendee	423,249	Mar. 11	1340	349	50	1399
Bicycle	H. F. Hiller	422,781	Mar. 4	602	154	50	1252
Bicycle	N. N. Horton	431,895	July 8	1355	342	52	273
Bicycle	N. N. Horton	436,239	Sept. 9	1332	348	52	1635
Bicycle	F. B. Hunt	443,482	Dec. 23	3093	780	53	1878
Bicycle	F. B. Hunt	443,721	Dec. 30	3415	877	53	1959
Bicycle	J. Jett	433,172	July 29	3342	865	52	675
Bicycle	C. L'Éplattenier	438,684	Oct. 21	1528	412	53	305
Bicycle	J. L. Leeper	420,578	Feb. 4	213	55	50	606
Bicycle	J. L. Leeper	420,579	Feb. 4	215	56	50	606
Bicycle	W. J. Lloyd and W. Priest	426,191	Apr. 22	2687	706	51	546
Bicycle	J. B. McCune and J. L. Yost	424,994	Apr. 8	870	230	51	177
Bicycle	J. W. Montgomery	438,935	Oct. 21	1949	519	53	383
Bicycle	W. S. Reed	426,855	Apr. 29	3689	962	51	753
Bicycle	C. D. Rice	425,390	Apr. 8	1461	391	51	293
Bicycle	F. Schrader	420,922	Feb. 4	742	190	50	704
Bicycle	A. W. Thomas	422,549	Mar. 4	269	68	50	1187
Bicycle	T. J. Thorp	436,844	Sept. 23	2333	614	52	1442
Bicycle	R. T. Torkelson	426,402	Apr. 22	2994	785	51	611
Bicycle	S. Watts	441,728	Dec. 2	155	42	53	1292
Bicycle	J. L. Yost and C. J. Moore	420,756	Feb. 4	452	120	50	653
Bicycle	O. J. Ziegler and W. A. Hance	431,308	July 1	418	103	52	85
Bicycle attachment	W. Dabbs	436,103	Sept. 16	1599	422	52	1696
Bicycle-bearing	L. F. Carstensen	422,723	Mar. 4	524	134	50	1236
Bicycle-bearing	R. S. Crawford	421,557	Feb. 18	1668	432	50	896
Bicycle-bearing	F. S. Hodgman	420,722	Feb. 4	409	109	50	645
Bicycle-brake	J. A. Hems	425,789	Apr. 15	2059	549	51	418
Bicycle brake-lock	T. J. Glover	437,591	Sept. 30	3545	925	52	2083
Bicycle-fork	J. J. McErlain	421,748	Feb. 18	1930	507	50	947
Bicycle handle-bar	G. D. and W. F. Kendall	440,312	Nov. 11	1060	273	53	823
Bicycle-head	H. G. Barr	433,760	Aug. 5	477	123	52	818
Bicycle-lock	E. Backus	436,453	Sept. 16	1682	443	52	1711
Bicycle-lock	M. Butler	438,526	Oct. 14	1290	349	53	254
Bicycle-lock	G. R. Fuller	441,949	Dec. 2	499	133	53	1362
Bicycle-lock	T. J. Glover	431,457	July 1	653	163	52	132
Bicycle-lock	K. Parke	436,800	Sept. 23	2256	595	52	1827
Bicycle-lock	Q. A. Smith	441,857	Dec. 2	360	95	53	1335
Bicycle-pedal	C. E. Duryea	432,126	July 15	1718	442	52	350
Bicycle-pedals. Toe-clip for.	W. G. Rankin	425,697	Apr. 15	1936	514	51	394
Bicycle-saddle	S. W. Babbitt	435,385	Sept. 2	5	1, 2	52	1376
Bicycle-saddle	A. L. Garford	431,573	July 8	835	208	52	174
Bicycle-saddle	R. B. Hain	420,009	Jan. 21	2045	339	50	426
Bicycle. Safety	G. B. Durkee	439,128	Oct. 28	2249	605	53	448
Bicycle. Safety	W. J. Edwards	442,871	Dec. 16	1990	510	53	1668
Bicycle-seat attachment	R. S. Greenwood	441,485	Nov. 25	3012	776	53	1208
Bicycle-seat. Child's	J. H. Sager	442,207	Dec. 9	908	241	53	1447
Bicycle-stand	H. J. Curtis	431,740	July 8	1123	280	52	229
Bicycle-staud	G. C. Towie	418,829	Jan. 7	262	64	50	56
Bicycle-support	W. H. King	439,879	Nov. 4	377	99	53	681

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Bicycle-support.....	G. Mortson.....	418,923	Jan. 7	432	106	50	90
Bicycle-tires. Machine for forming.....	G. Nauman.....	421,423	Feb. 18	1463	379	50	857
Bicycle-wheels and putting on rubber tires. Machine for setting up.....	F. Armstrong.....	422,689	Mar. 4	482	123	50	1228
Bicycles. Locking device for.....	F. E. Wittlig.....	432,920	July 22	2922	749	52	589
Bicycles. Luggage-carrier for.....	A. B. Barkman.....	442,938	Dec. 16	2113	544	53	1691
Bicycles. Luggage-carrier for.....	R. C. Wall.....	438,720	Oct. 21	1596	428 429	53	317
Bicycles. Package-holder for.....	F. Lynam.....	441,679	Dec. 2	74	20	53	1276
Bier.....	T. W. Lofton.....	434,717	Aug. 19	1977	514	52	1161
Bilge-water alarm.....	J. W. Jones.....	427,873	May 13	1290	326	51	1074
Bill-board.....	J. McKeage.....	425,621	Apr. 15	1815	485	51	370
Billiard-balls, combs, &c. Composition of matter for making.....	J. H. Patterson.....	426,513	Apr. 29	3167	.....	51	653
Billiard-counters. Button for.....	P. M. De Vitt.....	440,945	Nov. 18	2115	549	53	1031
Billiard-cue and chalk-holder.....	J. F. Barber.....	437,746	Oct. 7	107	33	53	23
Billiard-cue dresser.....	J. S. Gold.....	422,204	Feb. 25	2590	665	50	1079
Billiard-cue tip.....	C. Rausch.....	432,330	July 15	2021	520	52	405
Billiard-cues. Clamp for attaching tips to.....	F. A. Leavitt.....	419,205	Jan. 14	840	221	50	180
Bin: See Flour-bin.							
Binary fluid.....	G. H. Holgate.....	421,076	Feb. 11	974	250	50	757
Binder.....	G. W. Henry.....	431,350	July 1	479	119	52	97
Binder.....	L. G. Rubel.....	434,160	Aug. 12	1086	280	52	978
Binder.....	H. Thomas.....	426,608	Apr. 29	3308	868	51	680
Binder for official documents.....	J. F. Fitzgerald.....	433,337	July 29	3574	922	52	723
Binder. Paper.....	T. W. Kelley.....	434,393	Aug. 12	1440	376	52	1049
Binder. Self.....	H. A. J. Rieckert.....	429,958	June 10	1279	317 318	51	1728
Binder. Temporary.....	G. A. Blackburn and D. J. Brimm.....	443,954	Dec. 30	3769	962 963	53	2028
Binder. Temporary.....	J. A. Burke.....	433,559	Aug. 5	174	46	52	790
Binder. Temporary.....	C. B. Clark.....	443,667	Dec. 30	3328	857	53	1943
Binder. Temporary.....	T. Faifer.....	443,985	Dec. 30	3832	976	53	2040
Binder. Temporary.....	M. Higgins.....	438,289	Oct. 14	952	257	53	187
Binder. Temporary.....	W. J. Kerp.....	436,356	Sept. 16	1516	395 396	52	1680
Binder. Temporary.....	W. Lumley.....	432,537	July 22	2331	602	52	475
Binder. Temporary.....	D. Moynahan.....	427,350	May 6	489	126	51	908
Binder. Temporary.....	T. S. Murphy, Jr., and W. H. Davidson.....	440,110	Nov. 4	722	191	53	750
Binder. Temporary.....	J. G. Noble.....	420,089	Jan. 28	2169	571	50	459
Binder. Temporary.....	J. H. Stewart.....	434,811	Aug. 19	2105	552	52	1187
Binders, &c. Case for the canvas coverings of.....	W. M. Wykoff.....	425,646	Apr. 15	1857	496	51	378
Binding-clip for paper, &c.....	H. H. Ballard.....	430,331	June 17	1923	471	51	1862
Binding-clips. Opening-instrument for.....	H. H. Ballard.....	439,994	Nov. 4	560	148	53	717
Binding-post.....	J. F. Munsie.....	426,204	Apr. 22	2709	710	51	551
Binding-post.....	G. J. Scott.....	434,892	Aug. 19	2242	588	52	1213
Binnacle. Adjusting.....	G. W. Merrill.....	438,777	Oct. 21	1697	455	53	336
Bird bath-tub.....	A. Bilek.....	422,179	Feb. 25	2552	675	50	1072
Bird-cage.....	F. M. Gilbert.....	436,475	Sept. 16	1718	453	52	1718
Bird-cage screen.....	M. G. Leonard.....	429,196	June 3	138	33	51	1497
Bird-trap.....	B. Walton.....	418,965	Jan. 7	489	122	50	103
Biscuit-machine apron-duster.....	W. Lawrence.....	418,728	Jan. 7	106	25	50	23
Bisulphite solutions. Apparatus for producing.....	T. P. Burgess.....	432,692	July 22	2584	662	52	522
Bisulphites. Apparatus for producing.....	C. Cornwell.....	432,604	July 22	2422	624	52	492
Bit: See Auger-bit. Drenching-bit. Bridle-bit. Horse-bit. Caking-bit. Plane-bit. Check-bit.							
Bit and reamer. Combined.....	J. Grubbs.....	422,771	Mar. 4	588	151	50	1249
Bit-brace.....	L. C. Wilcox.....	428,984	May 27	2963	760	51	1436
Bit-brace. Ratchet.....	J. Zirkelback.....	438,338	Oct. 14	1019	277	53	201
Bit-braces and tool-holders. Jaws of.....	W. H. McCoy.....	421,420	Feb. 18	1460	378	50	857
Bit-stock.....	L. L. Davis.....	432,180	July 15	1791	461	52	364
Bit-stocks. Ratchet attachment for.....	T. C. Long.....	436,827	Apr. 29	3651	951	51	746
Bits. Die for making.....	J. Swan.....	422,546	Mar. 4	203	67	50	1186
Bitters.....	P. Hebert.....	443,236	Dec. 23	2644	.....	53	1803
Bituminous rock, &c. Apparatus for reducing.....	J. B. Jardine.....	428,251	May 20	1852	465	51	1192
Bituminous rock, asphalt, &c. Apparatus for reducing, laying, and rolling.....	J. B. Jardine.....	443,441	Dec. 9	1262	326	53	1515
Bituminous rock. Heating apparatus for dissolving.....	J. Rice.....	422,630	Mar. 4	404	100	50	1415
Bituminous rock. Machine for reducing.....	W. Meakin.....	424,815	Dec. 16	1890	487	53	1648
Blackboard-partition.....	J. G. Wilson.....	419,810	Jan. 21	1733	458 459	50	364
Blackboards. Composition for.....	C. R. Ruttkar.....	429,063	May 27	3092	.....	51	1450
Blackboards. Crayon-rack for.....	J. S. Erwin.....	419,510	Jan. 14	1287	344	50	270
Blackening and brushing machine. Boot and shoe.....	W. S. Badger.....	432,008	July 15	1523	387	52	312
Blackening and shoe-brush holding device.....	H. N. Siedler.....	442,690	Dec. 16	1657	426	53	1803
Blackening-box holder.....	H. E. Smyser.....	438,900	Oct. 21	1902	505	53	373
Blackening-cabinet.....	G. E. and G. L. Bogart.....	439,831	Nov. 4	301	76	53	667
Blackening-case.....	C. F. Demme.....	443,825	Dec. 30	3590	922	53	1994
Blackening-case and chair. Combined.....	F. D. Allison.....	426,090	Apr. 22	2534	668	51	515
Blackening-dauber. Fountain.....	T. J. Ream.....	423,444	Mar. 18	1636	430	50	1463
Blackening. Leather.....	J. J. Baulch, F. C. Steele, W. J. Lees, and J. F. Evans.....	432,853	July 22	2827	.....	52	570
Blackening machine. Edge.....	C. F. Leighton.....	441,012	Nov. 18	2207	570	53	1049
Blackening. Spreader for liquid.....	A. R. Gustafson.....	420,785	Feb. 4	499	130	50	661
Blackening-stand.....	M. Hanson.....	443,441	Dec. 23	2959	761	53	1863
Blackening-stand. Boot.....	R. D. Fannon.....	425,027	Apr. 8	922	245	51	187
Blackening-stand. Portable.....	G. W. Browne.....	426,234	Apr. 22	2750	720	51	560
Blacksmith's buttress.....	D. H. Fridley and H. M. Nester.....	434,560	Aug. 19	1707	446	52	1110
Blacksmith's tongs.....	J. T. Spencer.....	427,127	May 6	160	42	51	843

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Blank and file for placing it thereon	W. Jandus and J. McCarthy	424,001	Mar. 25	2481	{ 660 661	50	1630
Blanket-holder	J. B. Whitbeck	439,988	Nov. 4	554	146	53	716
Blast cupola-furnace	E. F. Eurich	424,104	Mar. 25	2629	701	50	1658
Blast-furnace filling contrivance	A. E. Brown	432,788	July 22	2739	{ 701 702	52	552
Blasting	W. Hartley	442,678	Dec. 16	1636	421	53	1600
Blasting	J. A. Kurtz	431,747	July 8	1130	281	52	230
Blasting-car	A. R. Shannon	431,289	July 1	388	98	52	79
Blasting rock	L. D. Conner	423,908	Mar. 25	2336	615	50	1604
Bleaching apparatus	F. E. Drown	441,946	Dec. 2	492	{ 131 132	53	1360
Bleaching-powder and caustic soda. Making	J. D. Pennoek and J. A. Bradburn	423,408	May 20	2111	.....	51	1243
Bleaching wax	W. Bruening	421,904	Feb. 25	2161	567	50	999
Blind	T. E. Armistead	425,723	Apr. 15	1976	{ 525 526	51	402
Blind	J. Naylor, Jr	428,570	May 20	2325	590	51	1273
Blind. Inside	C. Robinson	435,669	Sept. 2	456	121	52	1462
Blind or shutter. Window	J. Cabus	422,063	Feb. 25	2383	630	50	1040
Blind. Sliding window	G. Poppert	430,403	June 17	2025	499	51	1883
Blind. Sliding window	G. Poppert	432,329	July 15	2020	519	52	404
Blind-stop	T. T. Beebe	441,464	Nov. 25	2986	769	53	1203
Blind-stop	M. L. Hall	430,386	June 17	1850	454	51	1848
Blind-stop	B. W. Hoxie	430,956	June 24	2903	714	51	2059
Blind-stop	A. Pugsley	433,306	July 29	3534	912	52	714
Blind-stop	V. G. Schreck	441,587	Nov. 25	3167	816	53	1238
Blind-stop	A. Volk	433,058	July 29	3168	815	52	640
Blind. Venetian	J. A. Baldwin	420,000	Jan. 21	2032	536	50	424
Blind. Ventilating	F. C. D'Arros and J. C. Righter	421,165	Feb. 11	1105	284	50	753
Blind. Window	J. P. Clark, Jr	440,238	Nov. 11	934	241	53	802
Blind. Window	E. Hantsche, Jr	421,047	Feb. 11	935	242	50	750
Blind. Window	E. Hantsche, Jr	425,542	Apr. 15	1689	451	51	346
Block:							
See Beheading-block.	Hoisting-block.						
Brake-block.	Meat-block.						
Brush-block.	Paving-block.						
Building-block.	Pillow-block.						
Car-block.	Potter's block.						
Ceiling-block.	Printer's block.						
Ceiling fuse-block.	Printing-block.						
Chock-block.	Pulley-block.						
Cross-over block.	Snatch-block.						
Curbing-block.	Snatch and tackle block.						
Engraver's block.	Stereotype-block.						
Feed-block.	Toy building-block.						
Fuel-block.	Traveling block.						
Fuse-block.	Wagon-block.						
Hat-block.	Wire-block.						
Blocks, tiles, &c. Machine for ornamenting	E. G. Durant	423,915	Mar. 25	2347	618	50	1605
Blood. Instrument for the transfusion of	E. E. Allen	424,944	Apr. 8	789	211	51	161
Blood. Instrument for the transfusion of	E. E. Allen	425,015	Apr. 8	904	239	51	183
Blooms Apparatus for drawing and charging	J. Morgan, Jr	437,819	Oct. 7	234	{ 68 69 70	53	45
Blooms. Manufacture of	W. Eynon and W. Seaman	441,474	Nov. 25	2997	772	53	1205
Blotter	C. Galle	443,205	Dec. 23	2593	666	53	1794
Blotter	H. S. Wait	441,516	Nov. 25	3051	{ 785 786	53	1216
Blotter-bath	W. M. and L. H. Levey	433,527	Aug. 5	124	36	52	781
Blotter-bath	F. M. Priestley	434,567	Aug. 19	1717	449	52	1112
Blotter. Rotary	E. E. Park	434,135	Aug. 12	1046	270	52	970
Blotter-support	F. H. Cutler	421,390	Feb. 18	1424	369	50	850
Blotting-pad	T. T. Luscombe	441,498	Nov. 25	3032	.....	53	1212
Blow-pipe	L. M. Mathews	442,194	Dec. 9	890	236	53	1444
Blow-pipe	W. R. and J. J. Rawlings	424,024	Mar. 25	2515	669	50	1636
Blow-pipe regulator. Compound	E. W. Presbrey	438,488	Oct. 14	1233	334	53	243
Blow-tester. Coin-controlled	J. M. Akers	436,819	Sept. 23	2288	603	52	1834
Blow-tester. Coin-controlled	J. P. O'Brien and H. Cooper	437,382	Sept. 30	3224	{ 840 841	52	2018
Blower	H. H. Barclay	430,796	June 24	2661	653	51	2014
Blower. Air	E. E. Furney	422,202	Feb. 25	2588	685	50	1079
Blower and drier for furnaces. Steam	W. McCoy	419,539	Jan. 14	1326	354	50	279
Blower and exhauster for air or other gases	C. Fiesse	431,571	July 8	833	207	52	174
Blower. Fan	M. Williams	424,696	Apr. 1	402	105	51	79
Blower for stoves. Adjustable	F. Keifel	424,559	Apr. 1	190	52	51	39
Blower. High-pressure	J. Longworth	435,506	Sept. 2	190	52	52	1412
Blower, pump, engine, &c.	H. Skinner	419,723	Jan. 21	1600	{ 427 428	50	388
Blower, pump, engine, and meter	H. Skinner	423,497	Mar. 13	1716	452	50	1479
Blower-support	J. H. Cook	433,402	Sept. 2	41	14	52	1383
Blue. Laundry	G. R. B. Kempton	426,504	Apr. 29	3156	.....	51	651
Board:							
See Bagatelle-board.	Miter-board.						
Bill-board.	Multiple switch-board.						
Bulletin-board.	Piano sounding-board.						
Center-board.	Pitch-board.						
Cloth-board.	Shoveling-board.						
Drawing-board.	Sign-board.						
End-board.	Spring-board.						
Game-board.	Switch-board.						
Ironing-board.	Train-board.						
Key-board.	Wash-board.						
Board-cutting machine	J. B. Burrell	439,321	Oct. 28	2580	688	53	509
Board of trade	E. S. Reed	426,546	Apr. 29	3217	843	51	662

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Boards. Machine for splitting, surfacing, and matching	E. F. Autenreith	440,802	Nov. 18	1873	482	53	985
Boat:							
<i>See</i> Metal boat.	Torpedo and gun boat.						
Ship's boat.	Tow-boat.						
Stone-boat.							
Boat	O. R. Ingersoll	421,170	Feb. 11	1109	285	50	784
Boat	B. Jarrell	428,213	May 20	1785	450	51	1179
Boat	W. H. Patton	424,817	Apr. 1	596	157	51	115
Boat	G. W. Schermerhorn	429,649	June 10	827	{ 201 202 }	51	1641
Boat-lowering apparatus	T. S. Hosford	426,449	Apr. 29	3077	807	51	635
Boat or canoe chair	T. H. Chubb	441,534	Nov. 25	3084	792	53	1223
Boat raising and lowering device	J. Stevens	431,534	July 1	773	193	52	154
Boat-saving apparatus	H. G. Cady	438,059	Oct. 7	600	{ 163 164 }	53	114
Boat-seat	J. J. O'Leary	430,218	June 17	1705	424	51	1821
Boats. Device for securing ferry	F. S. Rudge	425,634	Apr. 15	1840	492	51	375
Boats, ships, &c. Guard for	S. B. Goff	438,917	Oct. 21	1925	512	53	378
Bobbin	S. D. Keene	427,877	May 13	1294	327	51	1075
Bobbin. Flanged	J. H. Wilson and J. Greenwood	427,719	May 13	1046	262	51	1027
Bobbin-head cover	J. Hegeman	431,227	July 1	298	74	52	60
Bobbin or spool	G. Pendleton, Jr.	426,644	Apr. 29	3366	882	51	691
Bobbin-winding machine	J. W. Foster	436,521	Sept. 16	1774	468	52	1729
Bobbin-winding machine	C. S. Strowbridge	438,783	Oct. 21	1704	458	53	338
Bobbin-winding mechanism	C. Dancel	420,441	Feb. 4	15	5	50	568
Boekin for attaching buttons	J. R. Smith	430,405	June 17	2027	499	51	1883
Body-brace. Spring	R. Ray	443,113	Dec. 23	2413	616	53	1758
Body-ventilator	J. E. Butts	431,764	July 8	1150	287	52	234
Boiler:							
<i>See</i> Agricultural boiler.	Sectional boiler.						
Coffee or tea boiler.	Stand-boiler.						
Compound boiler.	Steam-boiler.						
Feed-boiler.	Tubular boiler.						
Fruit-boiler.	Vertical boiler.						
Hot-water boiler.	Wash-boiler.						
Lined boiler.	Water-jacketed boiler.						
Locomotive-boiler.	Water-tube boiler.						
Range-boiler.							
Boiler	L. B. Battin	422,221	Feb. 25	2721	716	50	1102
Boiler	D. Best	436,933	Sept. 23	2515	{ 658 659 }	52	1876
Boiler	J. Bromich	438,057	Oct. 7	597	162	53	114
Boiler	J. Christiansen	435,353	Aug. 26	2974	789	52	1357
Boiler	J. J. Hogan	425,425	Apr. 15	1515	406	51	313
Boiler	S. H. Jennings	430,856	June 24	2756	675	51	2031
Boiler	J. E. Leighton	431,599	July 8	873	217	52	182
Boiler	C. H. Ross	421,194	Feb. 11	1148	293	50	790
Boiler	C. Sprague	440,284	Nov. 11	1014	260	53	815
Boiler	T. L. Sturtevant	422,994	Mar. 11	965	254	50	1327
Boiler	T. L. and T. J. Sturtevant	422,995	Mar. 11	966	{ 254 255 }	50	1328
Boiler	C. O. Toole	432,456	July 15	2202	568	52	442
Boiler	C. E. Wakeman	435,989	Sept. 9	946	248	52	1563
Boiler-alarm	D. Focer	431,885	July 8	1343	{ 338 339 }	52	271
Boiler appliance	C. D. Dodge	435,214	Aug. 26	2741	{ 723 724 }	52	1315
Boiler-bearing	T. B. Merrill	432,950	July 22	2985	766	52	599
Boiler-bottom	J. McGinnis	439,761	Nov. 4	198	51	53	647
Boiler chambers or of fines. External wall of steam-	G. H. Sellers	430,811	June 24	2696	{ 660 661 }	51	2020
Boiler-cleaner	F. W. Hornish	426,019	Apr. 22	2433	{ 643 644 }	51	496
Boiler-cleaner. Automatic	G. R. Ford	426,795	Apr. 29	3604	940	51	736
Boiler-cleaner. Automatic	D. Myers	423,943	Mar. 25	2387	635	50	1612
Boiler-feed. Safety	W. B. Culver	436,284	Sept. 9	1398	364	52	1649
Boiler-feeder	C. B. Bosworth	442,097	Dec. 9	739	200	53	1415
Boiler-feeder	P. J. Kelly	436,564	Sept. 16	1853	498	52	1742
Boiler-feeder	J. E. Marcy and H. A. Jones	433,576	Aug. 5	199	53	52	795
Boiler-feeder and feed-water heater	F. M. La Boiteaux	440,109	Nov. 4	720	191	53	749
Boiler feeder and regulator	R. H. Kersey	439,749	Nov. 4	177	46	53	642
Boiler feeder. Automatic steam-	B. Devlin	439,484	Oct. 28	2819	751	53	554
Boiler feeder. Steam	C. A. I. Babendreier	437,551	Sept. 30	3493	{ 911 912 }	52	2073
Boiler fitting. Kitchen or stand	T. A. Swann	426,150	Apr. 22	2629	690	51	535
Boiler fine. Steam	W. Cook	426,922	Apr. 29	3772	985	51	770
Boiler for hot-water heating	A. Blondin	440,300	Nov. 11	1040	267	53	819
Boiler for radiator systems	J. J. Hogan	425,946	Apr. 15	2311	612	51	464
Boiler-furnace	J. S. Harkins	425,072	Apr. 8	986	264	51	199
Boiler-furnace	C. E. Miles	426,037	Apr. 22	2458	649	51	501
Boiler-furnace	E. L. Moore	425,236	Apr. 8	1233	328	51	249
Boiler-furnace	S. Runser	439,753	Nov. 4	183	48	53	644
Boiler-furnace attachment. Steam	R. Marshall	426,599	Apr. 29	3295	865	51	678
Boiler furnace. Marine	F. G. Bates and W. L. Holman	438,907	Oct. 21	1911	508	53	375
Boiler furnace. Steam	J. M. Evans	425,309	Apr. 8	1348	360	51	270
Boiler furnace. Steam	J. Gresty	432,402	July 15	2120	545	52	424
Boiler furnace. Steam	D. M. Hartean and M. Gaffing	432,668	July 22	2536	650	52	514
Boiler furnace. Steam	M. E. Herbert	421,863	Feb. 18	2103	552	50	978
Boiler furnace. Steam	E. O. Holmes	428,609	May 27	2396	609	51	1316
Boiler furnace. Steam	S. P. Holmes and H. Sieben	430,955	June 24	2901	{ 713 714 }	51	2059
Boiler furnace. Steam	A. R. Jones	436,138	Sept. 9	1181	309	52	1605
Boiler furnace. Steam	M. V. Smith	424,829	Apr. 1	617	162	51	119

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Boiler furnace. Steam.....	G. G. Vivian.....	433,837	Aug. 5	597	155	52	872
Boiler furnace. Steam.....	W. S. Walker.....	426,694	Apr. 29	3445	903	51	706
Boiler header. Steam.....	W. E. Kelly.....	423,932	Mar. 25	2373	{ 631 632	{ 50	1610
Boiler-heads. Machine for flanging.....	F. L. Kollberg.....	425,434	Apr. 15	1530	{ 409 410	{ 51	315
Boiler-heads. Machine for flanging.....	F. L. Kollberg.....	426,505	Apr. 29	3156	830	51	651
Boiler-heads. Unwelded lock-brace strap for.....	J. B. Brennan.....	438,522	Oct. 14	1282	317	53	252
Boilerincrustation. Apparatus for preventing steam.....	J. Langstaffe.....	443,508	Dec. 30	3217	827	53	1922
Boiler incrustation. Electric means for preventing.....	A. B. Fauce and S. G. Cabell.....	438,579	Oct. 14	1366	370	53	269
Boiler incrustation. Means for preventing.....	W. B. Bull.....	430,461	June 17	2105	519	51	1897
Boiler indicator. Steam.....	C. W. Moore.....	433,872	Aug. 5	644	167	52	883
Boiler-leveler.....	W. H. and J. L. Freeman.....	428,837	May 27	2749	699	51	1383
Boiler-leveler.....	O. O. Kravik.....	442,777	Dec. 16	1826	473	53	1636
Boiler or pipe covering.....	H. W. Johns.....	433,470	Aug. 5	50	16	52	766
Boiler purifier. Steam.....	W. H. Rushforth.....	419,476	Jan. 14	1246	330	50	262
Boiler safety apparatus. Steam.....	J. Watson.....	436,449	Sept. 16	1677	442	52	1709
Boiler safety attachment.....	J. Watson.....	423,098	Mar. 11	1124	293	50	1356
Boiler-setting.....	D. King.....	423,170	Mar. 11	1238	322	50	1379
Boiler setting. Steam.....	W. U. Fairbairn.....	426,255	Apr. 22	2777	{ 728 729	{ 51	566
Boiler setting. Steam.....	W. O. Jones.....	427,694	May 13	1009	254	51	1020
Boiler smoke-consuming furnace. Steam.....	M. V. Smith.....	440,235	Nov. 11	931	{ 239 240	{ 53	801
Boiler stay-bolt. Steam.....	C. M. Farrar.....	430,181	June 17	1640	409	51	1808
Boiler-stays. Making.....	G. L. McGregor.....	430,672	June 24	2458	599	51	1973
Boiler-tube scraper.....	J. B. Christoffel.....	423,128	Mar. 11	1171	305	50	1366
Boiler-tube scraper and cleaner.....	H. S. Ingalls.....	442,320	Dec. 9	1076	282	53	1479
Boiler-tubes. Apparatus for removing incrustation from.....	J. P. Karr.....	421,135	Feb. 11	1058	272	50	774
Boiler-tubes. Machine for beading the ends of.....	H. Edwards.....	429,263	June 3	225	56	51	1515
Boiler-tubes. Removing incrustation from.....	J. P. Karr.....	420,689	Feb. 4	367	97	50	636
Boiler water-indicator.....	J. L. Campbell.....	429,997	June 10	1348	334	51	1742
Boiler water-level indicator. Steam.....	J. McDonald.....	419,967	Jan. 21	1975	519	50	413
Boiler water-purifier. Locomotive.....	J. B. Barnes.....	436,094	Sept. 9	1107	287	52	1593
Boiler water-regulator.....	W. M. Copeland.....	436,215	Sept. 9	1299	359	52	1628
Boiler with trapped circulation.....	J. J. Hogan.....	425,944	Apr. 15	2305	611	51	463
Boiler with vertical sections.....	J. J. Hogan.....	425,941	Apr. 15	2298	608	51	461
Boilers. Air-heating flame-bed pipe for steam.....	W. E. Ritchie.....	443,334	Dec. 23	2801	720	53	1833
Boilers and salt-making. Purifying water for.....	J. L. Alberger.....	443,186	Dec. 23	2555	656	53	1785
Boilers. Apparatus for firing steam.....	E. Marsh.....	438,080	Oct. 7	634	{ 172 173	{ 53	122
Boilers. Apparatus for preventing incrustation in.....	J. Pollock.....	435,518	Sept. 2	205	57	52	1414
Boilers. Apparatus for regulating steam in.....	A. M. Butz.....	441,745	Dec. 2	180	48	53	1298
Boilers. Apparatus for supplying pure water to steam.....	F. L. McGaban.....	439,788	Nov. 4	236	60, 61	53	654
Boilers. Circulating device for steam.....	J. Keiller.....	432,879	July 22	2367	735	52	578
Boilers. Connecting-box for water-tube.....	C. A. Knight.....	434,601	Aug. 19	1771	463	52	1123
Boilers. Fire and water indicator for steam.....	S. Smith.....	432,773	July 22	2716	695	52	548
Boilers. Method of and apparatus for purifying water for.....	C. Elliot.....	426,718	Apr. 29	3490	913	51	714
Boilers or water-tanks. Apparatus for feeding.....	J. W. Stevens.....	427,633	May 13	912	229	51	1001
Boilers. Scraper for cleaning steam.....	T. Glover and W. Armstrong.....	440,028	Nov. 4	608	161	53	727
Boilers. Steam-drum for sectional steam.....	C. A. Knight.....	438,776	Oct. 21	1696	455	53	336
Boilers. Steam-regulator for hot-water.....	P. Rundquist.....	439,977	Nov. 4	539	142	53	712
Boilers, tanks, &c. Stay-bar for.....	C. E. Schafer.....	437,458	Sept. 30	3351	877	52	2044
Boilers. Water-front attachment for.....	J. T. Charest.....	422,070	Feb. 25	2385	{ 630 631	{ 50	1040
Boilers. Water-strainer for steam.....	M. H. Detrick.....	443,220	Dec. 23	2616	673	53	1798
Boilers, &c., with lead. Lining.....	G. R. Noble.....	427,892	May 13	1324	.....	51	1080
Bolster-beam.....	E. W. MacKenzie-Hughes.....	432,476	Mar. 18	1686	445	59	1473
Bolster guide. Spring.....	G. M. Hughes.....	429,449	June 3	524	126	51	1573
Bolster-plate.....	D. Kelley and J. J. Cox.....	430,291	June 17	1855	455	51	1849
Bolster-spring.....	B. C. Seaton.....	429,651	June 10	831	202	51	1642
Bolster-standard.....	C. A. Masterson.....	440,176	Nov. 11	835	215	53	782
Bolt:							
See Car-platform guard-bolt. Lock or latch bolt.							
Centrifugal bolt. Railway-splice-bar bolt.							
Finger-guard bolt. Shaking-bolt.							
Fish-plate bolt. Shaking and revolving bolt.							
Flour-bolt. Spring-bolt.							
King-bolt. T-bolt.							
Lock-bolt. Whiffletree-bolt.							
Bolt.....	D. Austermuhl, Jr.....	423,109	Mar. 11	1142	296	50	1359
Bolt.....	J. Berkey.....	442,941	Dec. 16	2116	545	53	1692
Bolt.....	W. T. Kenyon.....	429,630	June 10	799	195	51	1636
Bolt.....	G. S. Lacey.....	426,389	Apr. 22	2980	780	51	608
Bolt.....	G. S. Smith.....	437,054	Sept. 23	2674	699	52	1908
Bolt.....	F. W. Wallace.....	443,418	Dec. 23	2923	752	53	1857
Bolt cutter-head.....	W. H. Wilson.....	435,991	Sept. 9	948	248	52	1564
Bolt cutter. Rotary-shear stay.....	E. Hay.....	434,597	Aug. 19	1765	462	52	1122
Bolt cutter. Stay.....	O. Johnson.....	429,571	June 3	708	172	51	1608
Bolt-cutting machine.....	E. Goldthwait.....	432,033	July 15	1564	399	52	320
Bolt-extractor.....	C. C. Warren.....	433,380	July 29	3629	936	52	733
Bolt-fastener.....	F. X. and C. C. Owesney.....	421,965	Feb. 25	2239	589	50	1014
Bolt-heading device.....	E. Huhnner.....	427,324	May 6	450	116	51	900
Bolt-heading dies.....	C. S. Seaton.....	424,136	Mar. 25	2673	711	50	1667
Bolt-heading machine.....	S. F. Green.....	424,975	Apr. 8	840	224	51	171
Bolt-heading machine.....	B. S. Meader.....	433,483	Aug. 5	66	20	52	769
Bolt-heading machine.....	F. Mutimer.....	420,915	Feb. 4	733	188	50	702
Bolt-heading machine.....	F. Mutimer.....	442,074	Dec. 2	704	189	53	1400
Bolt-holder.....	E. Baer.....	429,786	June 10	1025	251	51	1679
Bolt-holder.....	C. L. Edwards.....	438,992	Oct. 21	2043	546	53	402

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Bolt-holder.....	C. A. Maurer.....	429,633	June 10	803	195	51	1636
Bolt-locking device.....	C. I. Penrose.....	442,455	Dec. 9	1282	331	53	1519
Bolt or rivet clipper.....	J. W. Stokes and F. J. Perrett.....	433,914	Aug. 5	699	181	52	893
Bolt pointing and threading machine.....	A. J. Braun.....	427,732	May 13	1061	{ 266 267 }	51	1030
Bolt-severing machine. Stay.....	R. W. Bayley.....	438,793	Oct. 21	1718	461	53	340
Bolt-threading machine.....	L. T. Bowman.....	432,972	July 29	3025	{ 777 778 }	52	613
Bolt-threading machine. Revolving-turret.....	J. A. Becher.....	419,174	Jan. 14	794	209	50	171
Bolt-trimming machine.....	F. Mutimer.....	427,437	May 6	628	158	51	936
Bolt-work. Automatic.....	O. E. Pillard.....	420,563	Feb. 4	191	49.50	50	602
Bolts. Die for making screw.....	C. D. Rogers.....	440,331	Nov. 11	1083	278	53	827
Bolts. Machine for cutting threads on.....	J. C. Williams.....	434,898	Aug. 19	2259	592	52	1217
Bolts. Machine for simultaneously threading a plurality of.....	R. P. Curtis.....	437,291	Sept. 30	3069	{ 804 805 }	52	1990
Bolts. Nut-locking washer for.....	S. H. B. Cochrane.....	435,345	Aug. 26	2959	785	52	1354
Bolting and separating machine.....	P. A. Tafel.....	426,879	Apr. 29	3720	972	51	760
Bolting-reel.....	W. Cook and J. R. Gent.....	430,836	June 24	2725	668	51	2025
Bolting-reel.....	J. B. Dobson.....	424,100	Mar. 25	2623	699	50	1657
Bolting-reel.....	J. B. Dobson.....	429,339	June 3	363	86	51	1540
Bolting-reel.....	M. W. Leonhardt.....	436,247	Sept. 9	1348	351	52	1638
Bolting-reel.....	L. Lindsay.....	433,575	Aug. 5	198	52.53	52	794
Bolting-reel.....	R. A. Stubbs.....	427,277	May 6	387	101	51	886
Bolting-reel.....	J. Swan.....	430,761	June 24	2611	{ 639 640 }	51	2003
Bone-black-drying apparatus.....	G. Engel.....	438,577	Oct. 14	1362	369	53	269
Bonnet. Child's.....	J. Heller.....	423,053	Mar. 11	1057	274	50	1344
Bonnet. Sun.....	N. L. Butler.....	440,005	Nov. 4	580	153	53	721
Book.....	G. T. Dunn.....	438,067	Oct. 7	613	167	53	117
Book.....	R. E. Frey.....	436,496	Sept. 16	1740	460	52	1723
Book.....	W. N. Gunderson.....	442,222	Dec. 9	930	246	53	1452
Book.....	H. D. Honey.....	436,753	Sept. 16	2168	570	52	1802
Book.....	D. M. Smyth.....	438,389	Oct. 14	1094	298	53	215
Book. Abstract.....	W. A. Madison.....	433,249	July 29	3453	891	52	698
Book and advertising medium. Scrap.....	A. H. Tift.....	438,744	Oct. 21	1651	442	53	327
Book and binding therefor.....	W. R. Crawford.....	429,889	June 10	1185	294	51	1710
Book and holder. Combined account.....	J. H. Patterson.....	425,455	Apr. 15	1564	419	51	322
Book and index. Combined.....	A. J. Newbury.....	433,208	July 29	3394	877	52	685
Book and index. Combined.....	R. M. Rigby.....	434,724	Aug. 19	1984	516	52	1162
Book and index. Combined.....	R. R. Vernon.....	433,259	July 29	3466	895	52	701
Book and manifold blotter. Combined account.....	F. R. Miller.....	427,182	May 6	241	62	51	859
Book and paper rack.....	W. S. Mendenhall.....	431,373	July 1	522	130	52	105
Book and slate. Combined.....	W. T. Jamison.....	440,037	Nov. 4	628	166	53	731
Book and tally-sheet. Poll.....	H. M. Geiger.....	434,825	Aug. 19	2125	556	52	1191
Book attachment.....	T. F. Gregg.....	432,700	July 22	2597	664	52	525
Book-backing machine.....	A. Mahm.....	427,434	May 6	622	156	51	935
Book-backing machine.....	C. Weltner.....	437,066	Sept. 23	2689	703	52	1911
Book-binder's and printer's dry-pressing, sheet-tying, smashing, and tableting machine.....	J. W. Jones.....	427,426	May 6	606	{ 151 152 }	51	931
Book-binder's gathering-machine.....	H. Mattill.....	428,685	May 27	2525	641	51	1339
Book-binding.....	A. C. Bausman.....	441,275	Nov. 25	2683	697	53	1146
Book-binding.....	N. Lull.....	436,042	Sept. 9	1032	268	52	1580
Book-binding.....	H. G. Razall.....	443,332	Dec. 23	2797	719	53	1883
Book-binding.....	R. A. W. Winzenburg.....	443,588	Dec. 30	3204	824	53	1920
Book-binding machine.....	A. Bredenberg.....	428,741	May 27	2610	662	51	1355
Book-binding machine.....	J. J. Sullivan.....	427,931	May 13	1380	349	51	1090
Book. Blank.....	F. R. Wells.....	440,783	Nov. 18	1844	475	53	979
Book-case.....	E. Hoyt, Jr.....	433,345	July 29	3584	924	52	724
Book-case.....	I. C. Kiggins.....	439,782	Nov. 4	228	59	53	653
Book-case and desk. Knockdown.....	L. S. Hayes.....	431,695	July 8	1051	263	52	214
Book-case and student's table.....	W. J. Mecoy.....	443,713	Dec. 30	3403	874	53	1957
Book. Cash.....	W. A. Madison.....	433,248	July 29	3453	891	52	698
Book. Check.....	L. J. Evans.....	420,150	Jan. 28	2270	602	50	479
Book. Check.....	J. Knauber.....	419,857	Jan. 21	1812	479	50	379
Book. Check.....	C. C. Richardson.....	426,547	Apr. 29	3219	844	51	662
Book. Check or other like.....	O. E. Purdy.....	443,296	Dec. 23	2738	703	53	1821
Book. Combined receipt and record.....	H. Loewenbach.....	421,412	Feb. 18	1451	376	50	855
Book. Combined receipt and record.....	H. Loewenbach.....	436,983	Sept. 23	2577	674	52	1888
Book. Copy.....	E. P. Doran.....	436,126	Sept. 9	1162	303	52	1603
Book. Coupon account.....	D. F. Parker.....	443,973	Dec. 30	3807	971	53	2035
Book-cover.....	G. M. Bowen.....	425,291	Apr. 8	1318	353	51	265
Book-cover.....	G. Cornwall.....	431,876	July 8	1332	335	52	268
Book-cover.....	M. H. Spear.....	441,114	Nov. 18	2384	618	53	1083
Book-cover for educational purposes.....	E. Eggleston.....	428,899	May 27	2839	722	51	1401
Book cover. Memorandum.....	G. McKibbin.....	440,233	Nov. 11	928	238	53	801
Book-covers. Machine for pasting backing-tape on.....	E. N. Martineau.....	429,173	June 3	100	24	51	1491
Book-cutting machine.....	E. Girtanner.....	427,170	May 6	227	57.58	51	856
Book. Duplicating check.....	D. Nice.....	420,353	Jan. 28	2584	687	50	535
Book for indexes.....	T. J. Moore and E. A. Warren.....	443,196	Dec. 23	2581	663	53	1792
Book. Guide and route.....	O. E. Melichar.....	424,226	Mar. 25	2947	785	50	1720
Book-holder.....	B. F. Dennis.....	427,558	May 13	807	203	51	982
Book-holder.....	W. F. Holloway.....	441,561	Nov. 25	3121	802	53	1230
Book-holder.....	L. W. Noyes.....	440,816	Nov. 18	1898	488	53	989
Book-holder. Folding.....	W. F. Holloway.....	441,560	Nov. 25	3120	801	53	1230
Book index and casing.....	G. A. Pratt.....	422,971	Mar. 11	938	246	50	1322
Book. Invoice or scrap.....	H. D. Honey.....	437,493	Sept. 30	3399	890	52	2055
Book. Manifold memorandum.....	C. E. Cosby.....	442,362	Dec. 9	1142	298	53	1491
Book. Manifold memorandum.....	W. W. O'Hara.....	442,328	Dec. 9	1091	286	53	1481
Book. Manifold memorandum or sales.....	R. Lanham.....	440,044	Nov. 4	635	{ 168 169 }	53	732
Book. Manifold order.....	J. S. McDonald.....	431,071	July 1	65	16	52	15
Book. Manifold blank.....	G. H. Randall.....	424,489	Apr. 1	93	26	51	21
Book-mark.....	E. W. Harding.....	432,038	July 15	1572	402	52	322
Book-mark and leaf-holder. Combined.....	W. C. Martineau.....	432,189	July 15	1808	465	52	367

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Book-marker.....	H. V. and F. W. Lanchester.....	422,423	Mar. 4	87	23	50	1154
Book or parcel carrier.....	S. Fry.....	423,380	Mar. 11	1539	404	50	1436
Book. Order.....	H. A. Foster.....	443,189	Dec. 23	2559	657	53	1786
Book-pad-trimming machine.....	A. M. Safford.....	426,685	Apr. 29	3426	{ 898 299 }	51	702
Book. Pocket memorandum.....	A. F. Conant.....	426,776	Apr. 29	3571	932	51	730
Book-protector.....	B. Wolf.....	424,241	Mar. 25	2811	751	50	1695
Book-rack.....	A. Pauli.....	443,866	Dec. 30	3632	935	53	2003
Book. Receipt and record.....	H. Loewenbach.....	443,776	Dec. 30	3500	898	53	1976
Book-rest.....	W. Dawson.....	431,036	July 1	12	3	52	5
Book-rest.....	F. A. Powell.....	422,443	Mar. 4	111	30	50	1158
Book. Sample.....	A. L. Ringo.....	442,395	Dec. 9	1187	308	53	1500
Book. Scrap.....	E. G. Thorp.....	423,836	Mar. 18	2212	584	50	1572
Book-shelf. Roller.....	E. H. Babbitt.....	420,898	Feb. 4	704	181	50	696
Book-shelf. Roller.....	J. D. Edwards.....	439,869	Nov. 4	360	72	53	677
Book. Shipping receipt.....	J. Howe.....	436,786	Sept. 23	2920	585	52	1820
Book-stand.....	J. W. and C. T. Knipp.....	443,966	Dec. 30	3795	967	53	2033
Book-stapling machine.....	F. P. Rosback.....	435,614	Sept. 2	365	{ 99 100 }	52	1444
Book. Student's copy.....	H. C. Spencer.....	435,051	Aug. 26	2508	662	52	1270
Book-support.....	B. R. Green.....	436,704	Sept. 16	2075	546	52	1785
Book-support.....	C. W. Nelson and J. A. Levisay.....	419,870	Jan. 21	1842	484	50	386
Book-support.....	J. Strippel.....	430,813	June 24	2698	661	51	2020
Book-trimming machine.....	C. Seybold.....	442,295	Dec. 9	1032	{ 272 273 }	53	1471
Books. Attaching hangers to.....	I. Fine.....	439,643	Nov. 4	33	9	53	613
Books. Binding for.....	H. S. Miles and P. Haas.....	421,595	Feb. 18	1724	450	50	907
Books. Bound volume of.....	A. C. Fletcher.....	425,790	Apr. 29	3594	938	51	735
Books. Device for securing extra leaves in.....	J. T. McKean.....	440,831	Nov. 18	1928	495	53	995
Books. Machine for manufacturing backs for blank.....	E. P. Donnell and J. Mills.....	433,235	July 29	3430	886	52	693
Books. Machine for securing hangers to the corners of.....	J. W. Collier.....	443,498	Dec. 30	3062	788	53	1893
Books. Means for binding.....	J. Lendy.....	430,318	June 17	1897	465	51	1858
Books or other articles. Coin-operated holder for.....	C. H. Bayley.....	426,098	Apr. 22	2550	670	51	519
Books, pamphlets, &c. Adjustable binder for.....	A. Ross.....	442,206	Dec. 9	906	241	53	1446
Books. Suspension-link for.....	J. H. Brown.....	429,301	June 3	239	71	51	1527
Boomerang-thrower.....	M. Cummins.....	429,230	June 3	183	44	51	1507
Boot.....	J. F. Shaw.....	424,138	Mar. 25	2675	712	50	1667
Boot.....	I. C. Swartley.....	439,045	Oct. 21	2113	567	53	416
Boot and shoe cleaning and polishing machine.....	J. Cardona.....	419,244	Jan. 14	899	236	50	192
Boot and leggin. Combined.....	E. Gorrill.....	431,348	July 1	478	118	52	97
Boot-blanks. Machine for forming felt.....	A. E. Hardy.....	421,275	Feb. 11	1256	324	50	811
Boot-calk.....	A. J. Armstrong.....	442,003	Dec. 2	588	159	53	1378
Boot. Gaiter.....	J. Schroeder.....	422,840	Mar. 4	702	180	50	1272
Boot-jack.....	L. Bommer.....	434,653	Aug. 19	1877	490	52	1142
Boot-jack.....	R. B. Dezell.....	427,675	May 13	972	245	51	1013
Boot-jack.....	H. W. Farley.....	418,976	Jan. 7	500	125	50	105
Boot-jack.....	R. E. Heth.....	432,941	July 22	2955	758	52	595
Boot-leg supporter.....	H. G. Booz.....	438,466	Oct. 14	1209	327	53	238
Boot or shoe.....	W. B. Arnold.....	418,779	Jan. 7	184	44	50	41
Boot or shoe.....	B. G. McSwyny.....	440,409	Nov. 11	1214	313	53	853
Boot or shoe.....	W. B. Minahan.....	418,922	Jan. 7	431	105	50	90
Boot or shoe.....	W. A. Neely.....	431,123	July 1	135	35	52	29
Boot or shoe.....	L. M. Nute.....	431,990	July 8	1492	377	52	300
Boot or shoe.....	L. Vanalstine.....	425,353	Apr. 8	1400	373	51	281
Boot or shoe clasp.....	C. C. Hazelton.....	432,041	July 15	1578	404	52	323
Boot or shoe heel.....	C. A. Erdman.....	435,136	Aug. 26	2632	696	52	1294
Boot or shoe heel.....	W. H. Melaney.....	430,586	June 17	2294	564	51	1933
Boot or shoe heel fastening.....	J. Duerk.....	421,168	Feb. 11	1108	285	50	784
Boot or shoe last.....	L. Sacks and H. Richmond.....	443,199	Dec. 23	2584	664	53	1793
Boot or shoe nailing machine.....	T. Brining.....	439,235	Oct. 28	2429	{ 651 652 653 }	53	481
Boot or shoe nailing machine.....	P. Clifford and J. Coupal.....	440,394	Nov. 11	1191	{ 307 308 }	53	848
Boot or shoe nailing machine.....	W. S. Fitzgerald.....	433,281	July 29	3497	{ 902 903 904 }	52	708
Boot or shoe nailing machine.....	J. N. Severance.....	434,998	Aug. 26	2426	{ 641 642 }	52	1255
Boot or shoe polishing machine.....	H. Pederson.....	439,179	Oct. 28	2326	624	53	462
Boot or shoe rubbing-in machine.....	T. Gaquin, Jr., and W. F. Nott.....	442,250	Dec. 9	967	255	53	1459
Boot or shoe seams. Staying.....	H. P. Preston.....	430,544	June 17	2230	547	51	1921
Boot or shoe sole.....	W. H. Melaney.....	430,234	June 17	1729	430	51	1825
Boot or shoe sole.....	J. S. Williams.....	441,730	Dec. 2	159	42	53	1293
Boot or shoe sole cutting machine.....	C. A. Gilman.....	443,515	Dec. 30	3082	794	53	1897
Boot or shoe sole protector.....	A. F. Schurr.....	442,241	Dec. 9	954	252	53	1457
Boot or shoe soles. Machine for laying channel-flaps of.....	W. Gordon.....	426,374	Apr. 22	2943	774	51	601
Boot or shoe stretcher.....	D. A. Gage and T. Cheetham.....	425,605	Apr. 15	1786	479	51	364
Boot or shoe tree.....	H. G. Locke.....	427,698	May 13	1015	255	51	1021
Boot or shoe tree.....	F. L. Stone and A. R. Wellman.....	441,115	Nov. 18	2385	618	53	1083
Boot or shoe treeing machine.....	C. A. Sumner.....	420,501	Feb. 4	106	26	50	584
Boot or shoe upper.....	T. E. Woodley.....	423,709	Mar. 18	2037	537	50	1538
Boot or shoe. Ventilated.....	J. A. Johnson.....	434,341	Aug. 12	1356	354	52	1032
Boot or shoe ventilator.....	P. Welander.....	418,966	Jan. 7	490	122	50	103
Boot or shoe welt machine.....	H. C. Pretty.....	427,610	May 13	881	222	51	994
Boot or shoe. Welted.....	M. L. Keith.....	442,897	Dec. 16	2049	526	53	1678
Boot scraper and cleaner.....	L. B. Gibson.....	443,437	Dec. 23	2953	760	53	1862
Boot-tree.....	J. H. Burbank.....	440,788	Nov. 18	1852	477	53	981
Boot-tree.....	W. H. Farnham.....	436,079	Sept. 9	1088	281	52	1590
Boot-tree.....	N. Gillard and H. Loewer.....	441,657	Dec. 2	40	11	53	1270
Boot-tree.....	P. J. Herrick.....	437,815	Oct. 7	221	67	53	44
Boot-tree.....	A. M. Moore.....	420,308	Jan. 28	2522	669	50	524
Boot-tree.....	A. R. Wellman.....	441,116	Nov. 18	2387	619	53	1083

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Boot-tree	A. R. Wellman	441,117	Nov. 18	2388	619	53	1084
Boot-treering machine	G. W. Copeland and J. E. Crisp ..	438,681	Oct. 21	1521	{ 410 411 412 }	53	304
Boot-treering machine	A. B. Fowler	442,033	Dec. 2	636	172	53	1387
Boot-treering machine	A. B. Fowler	442,034	Dec. 2	639	{ 172 173 }	53	1388
Boots and shoes. Rack for holding	S. L. Saunders	440,439	Nov. 11	1276	330	53	863
Boots. Device for drying	W. G. Coffin	426,111	Apr. 22	2570	676	51	523
Boots. Gilding-machine for	G. H. Putnam	442,915	Dec. 16	2075	533	53	1684
Boots. Manufacture of india-rubber	C. F. Parker	425,454	Apr. 15	1562	419	51	322
Boots or shoes. Blacking and burnishing	W. W. Crooker	438,470	Oct. 14	1212	328	53	238
Boots or shoes. Combined metallic shank and counter for	O. W. Easton	430,733	June 24	2554	625	51	1992
Boots or shoes. Composition for the soles of	W. A. Burrows	431,646	July 8	956	.....	52	198
Boots or shoes. Lasting	G. W. Wiley	439,550	Sept. 16	1836	484	52	1738
Boots or shoes. Machine for cementing soles to	V. F. Lake	425,544	Apr. 15	1691	452	51	346
Boots or shoes. Machine for fitting soles onto	W. Avery	426,752	Apr. 29	3540	924	51	724
Boots or shoes. Manufacture of	G. W. Day	424,862	Apr. 1	666	176	51	129
Boots or shoes. Manufacture of	G. W. Wiley	436,551	Sept. 16	1838	484	52	1739
Boots or shoes. Metallic plate for	E. Duerden and J. Cheetham ..	425,758	Apr. 15	2022	538	51	411
Boots or shoes. Pull-strap for	C. W. Shippee	435,981	Sept. 9	932	245	52	1560
Booth. Portable wooden	H. A. Isberg	442,979	Dec. 16	2168	538	53	1703
Boring and drilling tool	C. Croll	429,261	June 3	222	55	51	1515
Boring and mortising machine	O. W. Young	427,818	May 13	1204	{ 303 304 }	51	1057
Boring and turning machine	F. H. Robinson	420,665	Feb. 4	335	87, 88	50	629
Boring and turning mill	E. D. Mackintosh	440,319	Nov. 11	1067	274	53	824
Boring and turning mill	F. W. Taylor	429,162	June 3	80	19, 20	51	1487
Boring-bar puppet	F. W. Taylor	428,703	May 27	2551	647	51	1344
Boring-machine	F. L. Bryant	443,666	Dec. 30	3325	857	53	1943
Boring-machine	J. J. Decker	426,365	Apr. 22	2931	{ 770 771 }	51	598
Boring-machine	C. H. Irwin, F. Mill, and J. E. Hitch	427,325	May 6	452	117	51	900
Boring-machine	H. A. Mmer	433,577	Aug. 5	201	53, 54	52	795
Boring-machine. Blind-stile	W. C. and J. A. Aycock	423,110	Mar. 11	1142	296	50	1360
Boring-machine. Three-spindle	J. H. Mickler	421,417	Feb. 18	1456	377	50	856
Boring-machines. Foot attachment for	A. Wavra	443,701	Dec. 30	3387	869	53	1954
Boring-mill	J. J. Knowlton	430,293	June 17	1258	456	51	1850
Boring-tool	T. Lea	421,176	Feb. 11	1116	286	50	785
Boring-tool. Combined	M. Wood	421,218	Feb. 11	1178	302	50	796
Boring-tool holder	L. Prillwitz	430,148	June 17	1599	398	51	1800
Bottle. Acid	E. Hart	423,683	Mar. 18	1995	526	50	1531
Bottle and bottle-stopper	E. M. Sanger	439,693	Nov. 4	100	26	53	627
Bottle and stopper therefor	F. H. Moyer	435,975	Sept. 9	923	243	52	1558
Bottle-cap	R. Whitaker	433,840	Aug. 5	599	155	52	873
Bottle-cap. Mustard	G. Norton	433,209	July 29	3395	877	52	686
Bottle-case	J. Glass	442,971	Dec. 16	2154	554	53	1700
Bottle-case. Druggist's	G. A. Rosen	425,523	Apr. 15	1665	444	51	341
Bottle-corking machine	E. Ermold	427,258	May 6	359	{ 92 93 94 }	51	881
Bottle-crate	L. M. Nemon	442,535	Dec. 9	1413	361	53	1545
Bottle. Desk, toilet, and display	T. H. Palmer	438,016	Oct. 7	528	148	53	100
Bottle-disk	A. L. Bernardin	443,891	Dec. 30	3667	944	53	2009
Bottle. Dose-measuring	H. S. Herrick	442,088	Dec. 2	721	193	53	1404
Bottle-fastening	T. B. Howe	422,415	Mar. 4	76	21	50	1151
Bottle-filling device	C. Ritter and A. W. Stange ..	437,000	Sept. 23	2600	680	52	1893
Bottle-filling machine	W. R. Dannals	440,916	Nov. 18	2064	{ 533 534 }	53	1021
Bottle-filling machine	W. H. Comstock	425,650	Apr. 15	1879	502	51	383
Bottle-filling machine	J. J. de Kinder and H. Roemer ..	430,526	June 17	2205	542	51	1917
Bottle-finishing machine	C. F. and C. Leng	423,482	Mar. 18	1691	446	50	1474
Bottle holder. Nursing	J. von Huppmann-Valbella ..	442,585	Dec. 9	1496	355	53	1563
Bottle-holding device	J. A. Comstock	435,401	Sept. 2	40	14	52	1383
Bottle. Hot-water	A. McTernan	425,692	May 27	2533	644	51	1341
Bottle. Ink	A. E. Dain	425,554	May 20	2302	585	51	1279
Bottle-lock	A. W. Noack, Jr.	420,918	Feb. 4	737	189	50	703
Bottle-making machine	G. A. Fullerton	426,497	Apr. 29	3147	{ 826 827 828 }	51	649
Bottle. Mucilage	E. R. Cahoone	430,619	June 24	2358	577	51	1954
Bottle. Mucilage	W. R. Cole	424,539	Apr. 1	155	44	51	33
Bottle. Mucilage	W. F. Litch	430,481	June 17	2134	325	51	1904
Bottle. Mucilage	W. F. Litch	434,189	Aug. 12	1123	292	52	986
Bottle-neck. Cork-holding	T. T. Graham and J. Monheimer ..	422,127	Feb. 25	2480	655	50	1058
Bottle-neck-finishing machine	C. Leng	423,214	May 20	1786	450	51	1179
Bottle-necks. Tool for forming	H. L. Phillips	442,258	Dec. 9	980	258	53	1461
Bottle. Nursing	H. N. Graves and R. S. Hyer ..	430,195	Jan. 28	2351	624	50	492
Bottle. Nursing	J. W. McKinnon	438,937	Oct. 21	1953	520	53	384
Bottle. Nursing	J. W. Rose and C. C. Balston ..	420,965	Feb. 11	813	211	50	727
Bottle-opener	J. A. Traut	431,086	July 1	83	21	52	19
Bottle-packing case	E. G. Cherbonnier	441,228	Nov. 25	2580	668	53	1130
Bottle receptacle and stopper	W. A. Hansburg and F. Henkel ..	427,862	May 13	1266	320	51	1069
Bottle receptacle and stopper. Combined	F. Henkel	426,811	Apr. 29	3625	946	51	741
Bottle-seals, &c. Machine for inserting wire loops in	W. Painter	438,712	Oct. 21	1582	{ 425 426 }	53	314
Bottle-stopper	E. W. Abbe	423,978	Mar. 25	2446	649	50	1623
Bottle-stopper	A. Cohenius	435,207	Aug. 26	2735	721	52	1314
Bottle-stopper	A. E. Dain	420,676	Feb. 4	349	92	50	632
Bottle-stopper	J. A. Edes	418,706	Jan. 7	82	19	50	18
Bottle-stopper	O. Eick	431,767	July 8	1157	288	52	235
Bottle-stopper	C. H. Fox and M. Hegele	428,248	May 20	1848	464	51	1192
Bottle-stopper	C. C. Haley	430,285	June 17	1848	453	51	1848

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Bottle-stopper.....	F. Henkel.....	427,864	May 13	1268	321	51	1070
Bottle-stopper.....	J. Z. Hughes.....	436,058	Sept. 9	1050	273	52	1583
Bottle-stopper.....	W. B. Langan.....	423,481	Mar. 18	1690	446	50	1474
Bottle-stopper.....	H. W. Libbey.....	426,826	Apr. 29	3651	951	51	746
Bottle-stopper.....	H. W. Libbey.....	430,132	June 17	1576	392	51	1796
Bottle-stopper.....	M. J. McHugh.....	443,971	Dec. 30	3803	969	53	2034
Bottle-stopper.....	P. Miles.....	421,957	Feb. 25	2232	587	50	1012
Bottle-stopper.....	G. H. Oliver and E. L. Brooks.....	429,579	June 3	721	175	51	1610
Bottle-stopper.....	W. H. Page.....	440,649	Nov. 18	1617	416	53	938
Bottle-stopper.....	W. Painter.....	438,709	Oct. 21	1579	424	53	314
Bottle-stopper.....	J. N. Rhoads.....	425,550	Apr. 15	1700	454	51	348
Bottle-stopper.....	A. Roemer and F. W. Roll.....	436,569	Sept. 16	1861	490	52	1743
Bottle-stopper.....	W. L. Roorbach and G. W. Tucker.....	429,482	June 3	581	142	51	1583
Bottle-stopper.....	J. M. Schofield.....	419,477	Jan. 14	1247	330	50	262
Bottle-stopper.....	H. B. Stewart.....	428,425	May 20	2127	535	51	1246
Bottle-stopper.....	H. B. Stewart.....	441,448	Nov. 25	2952	761	53	1198
Bottle-stopper and applicator.....	W. V. Bennetts, J. M. Lewis, and S. A. Hatch.....	442,743	Dec. 16	1777	459	53	1625
Bottle-stopper and fastener.....	C. G. Inlay.....	427,576	May 13	836	209	51	986
Bottle stopper and pouring-nozzle. Ink.....	E. H. Alling.....	432,924	July 22	2933	752	52	591
Bottle stopper-carrier.....	H. Blake.....	427,729	May 13	1058	265	51	1029
Bottle-stopper extractor.....	W. Painter.....	438,710	Oct. 21	1580	424	53	314
Bottle-stopper fastener.....	J. S. Berger.....	442,940	Dec. 16	2115	544	53	1692
Bottle-stopper fastener.....	F. W. Folger.....	420,493	Feb. 4	96	23	50	582
Bottle-stopper fastener.....	W. Painter.....	438,711	Oct. 21	1581	425	53	314
Bottle-stopper fastening.....	J. J. Heim.....	421,402	Feb. 18	1437	373	50	852
Bottle stopper. Ink or other.....	J. W. Carter.....	421,667	Feb. 18	1828	478	50	927
Bottle-stopper. Locking.....	W. W. Gupitill.....	441,240	Nov. 25	2624	681	53	1135
Bottle-stopper. Valved.....	E. Heyer.....	434,782	Aug. 19	2066	540	52	1179
Bottle-stoppers. Machine for applying or attaching.....	F. W. Folger.....	420,494	Feb. 4	97	23	50	582
Bottle-stopping apparatus.....	H. Haselhorst and J. O. Vogel.....	441,242	Nov. 25	2627	681	53	1135
Bottle tip. Mucilage.....	W. H. Underwood.....	421,363	Feb. 11	1379	357	50	833
Bottle. Tooth-powder.....	W. H. Bayles.....	435,912	Sept. 9	837	221	52	1543
Bottle-vending machine.....	E. M. Statler.....	427,806	May 13	1187	298 299	51	1054
Bottle-washer.....	C. H. Murphey.....	424,894	Apr. 1	715	190 191	51	138
Bottle-washing machine.....	G. E. D. Baldwin.....	420,899	Feb. 4	705	182	50	697
Bottle-washing machine.....	S. L. Gillett.....	434,628	Aug. 19	1816	475	52	1132
Bottle-washing machine.....	T. Saunders.....	439,898	Nov. 4	409	106	53	687
Bottle-washing machine.....	A. von Schade.....	425,643	Apr. 15	1853	495	51	378
Bottle-washing machine.....	J. F. Wittmann.....	419,486	Jan. 14	1255	333 334 336	50	264
Bottle-wiring mechanism.....	H. La Casse and S. Wile.....	443,194	Dec. 23	2571	661 662	53	1789
Bottle-wrapper.....	C. W. Bell.....	429,184	June 3	115	27	51	1494
Bottles. Apparatus connected with filling and corking.....	D. Wickham.....	422,867	Mar. 4	746	190	50	1280
Bottles. Apparatus for controlling and registering the delivery of.....	R. Jewell.....	443,365	Dec. 23	2850	733	53	1843
Bottles, &c. Apparatus for manufacturing.....	J. Henning.....	419,441	Jan. 14	1196	317	50	252
Bottles. Attachment for preventing the refilling of.....	C. M. Caughy.....	430,172	June 17	1625	406	51	1806
Bottles. Drink-registering attachment for.....	H. C. Barker.....	421,091	Feb. 11	999	256	50	762
Bottles. Drinking-cup attachment for.....	W. E. Powell.....	423,275	Mar. 11	1398	364	50	1408
Bottles, &c. Fastening device for.....	D. N. Martin.....	427,590	May 13	856	215	51	990
Bottles. Making.....	J. B. and R. Johns.....	432,412	July 15	2131	547	52	426
Bottles. Means for preventing the fraudulent refilling of.....	P. B. Noel.....	431,148	July 1	169	43	52	36
Bottles. Mechanism for the manufacture of packing for.....	E. J. Stewart.....	430,325	June 17	1909	468	51	1860
Bottles. Tool for driving combined stoppers and pouring-nozzles into.....	E. H. Alling.....	439,618	Nov. 4	1	1	53	607
Bottles. Tool for forming the necks of.....	W. Painter.....	443,728	Dec. 30	3428	880	53	1962
Bottling apparatus. Rotating.....	A. Rempen.....	436,999	Sept. 23	2598	679	52	1892
Bottling-machine.....	W. H., Jr., and W. H. Foye, Sr.....	441,477	Nov. 25	3001	773	53	1206
Bottling-machine.....	W. Painter.....	438,708	Oct. 21	1575	424	53	313
Bouquet-holder.....	F. A. Moore and F. Schreyer.....	425,082	Apr. 8	1000	267	51	202
Bouquet-holder.....	R. F. Nelson.....	420,953	Feb. 11	791	206	50	723
Bouquet-holder.....	N. E. Varney.....	425,967	Apr. 15	2343	622	51	472
Bouquet-holder.....	G. B. Willcox.....	436,110	Sept. 9	1142	228	52	1599
Bowl lining. Removable and adjustable water-proof wash.....	F. Reimers.....	430,195	June 17	1656	412	51	1611
Bowling-crease.....	T. H. Roberts.....	425,551	Apr. 15	1701	454	51	349
Box:							
See Anti-friction box.	Electric safety-fuse box.						
Axle-box.	Electric wire distribution box.						
Ballot-box.	Electrical call-box.						
Butter-box.	Express-messenger's box.						
Car journal-box.	Fare-box.						
Casting-box.	File-box.						
Cigar-box.	Fire-box.						
Cigar or tobacco box.	Fire-alarm box.						
Clothes-line and clothes-pin box.	Fire-alarm signal-box.						
Cock-box.	Fly-paper packing-box.						
Coin-actuated box.	Fruit-box.						
Coin-locked box.	Fuse-box.						
Compartment box.	Folding box.						
Contact-box.	Glass-cutting box.						
Core-box.	Grease-box.						
Cotton-box.	Hat or bonnet box.						
Deposit-box.	Jewel-box.						
Dust-box.	Journal-box.						

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Box—Continued.							
See Knockdown box.	Safety deposit box.						
Letter-box.	Salt-box.						
Locomotive sand-box.	Sand-box.						
Loom-shuttle box.	Sector-shaped box.						
Lunch-box.	Sheet-metal box.						
Mail-box.	Shipping-box.						
Mailing-box.	Shov-box.						
Match-box.	Signal-box.						
Miner's combination-box.	Signaling-box.						
Miter-box.	Smoke-box.						
Musical-box.	Spool-box.						
Oiling-box.	Stiffing-box.						
Packing-box.	Switch-box.						
Paint-tube box.	Telegraph alarm-box.						
Paper box.	Telephone toll-box.						
Parcel and letter box.	Tool-box.						
Pencil-box.	Toy musical box.						
Pigeon-hole box.	Tumbling-box.						
Powder-box.	Vent-box.						
Puzzle-box.	Wagon-box.						
Refrigerator-box.	Waste-box.						
	Watch-movement box.						
	Water and gas box.						
	Work-box.						
Box	I. Fox	440,147	Nov. 11	784	206	53	771
Box	M. Heinemann	426,810	Apr. 29	3624	946	51	741
Box	D. M. Somers	421,059	Feb. 11	953	245	50	753
Box	C. A. Worsley	434,855	Aug. 19	2163	567	52	1199
Box-bending brake	H. Born	437,829	Oct. 7	241	74	53	48
Box-binding machinery	J. E. Chapman	431,249	July 1	329	81	52	66
Box-clamp	R. H. Blair	432,855	July 22	2829	725	52	571
Box-closure	G. W. Banker	430,106	June 17	1543	383	51	1789
Box-closure	A. M. Brainard	439,632	Nov. 4	19	5	53	610
Box-closure	J. C. W. Stanley and L. B. Wrightson.	443,120	Dec. 23	2423	618	53	1760
Box-corner nail	H. H. Brown and W. M. Bold	433,443	Aug. 5	13	4	52	759
Box-corners. Machine for securing	H. Campbell	427,670	May 13	963	{ 242 243 }	51	1011
Box-cover	S. S. Goldman	420,196	Jan. 28	2352	625	50	493
Box-edge joint	T. Overgaard	436,149	Sept. 9	1197	313	52	1608
Box-fastener	J. N. Anderson	427,723	May 13	1051	263	51	1028
Box-fastener	G. W. Banker	418,672	Jan. 7	10	3	50	4
Box-fastener	C. W. Beebler	423,303	Mar. 11	1435	374	50	1416
Box-fastener	J. Davy and J. T. Dufan	429,510	June 3	618	152	51	1590
Box-fastener	R. W. Gillespie	441,548	Nov. 25	3107	797	53	1227
Box-fastener	H. Gillette	420,597	Feb. 4	242	64	50	612
Box-fastener	C. E. Hams	426,803	Apr. 29	3613	943	51	739
Box-fastener	J. B. Hoagland	423,155	Mar. 11	1215	316	50	1374
Box-fastener	W. S. Marshall	442,903	Dec. 16	2058	528	53	1680
Box-fastener	J. E. Mergott	428,726	May 27	2589	656	51	1351
Box-fastener	J. Robinson	421,762	Feb. 18	1947	512	50	950
Box-fastener	J. F. Suffecool	438,756	Oct. 21	1669	448	53	330
Box-fastener	F. R. Taylor	422,850	Mar. 4	713	183	50	1274
Box-fastener	G. Walder	435,597	Sept. 2	332	92	52	1439
Box-fastener	H. S. Wright	428,992	May 27	2972	762	51	1428
Box-handle	W. H. Hart	420,062	Jan. 28	2130	562	50	451
Box-lid	W. D. Harrison	435,541	Sept. 2	246	68	52	1422
Box-lifter	F. P. Morrison	423,621	Mar. 18	1893	498	50	1511
Box-lifter	H. B. Platen and W. W. Bennett	432,765	July 22	2706	692	52	546
Box-loop	G. L. Crandal	419,643	Jan. 21	1480	397	50	316
Box-making machine	M. E. Brigham	424,953	Apr. 8	801	{ 215 216 440 441 }	51	163
Box-making machine	F. Lundgren	434,545	Aug. 19	1684	441	52	1105
Box-making machine	J. Mohs	441,104	Nov. 18	2366	{ 613 614 }	53	1080
Box-making machine	K. Richter	434,526	Aug. 19	1654	433	52	1099
Box-nailing machine	J. Casey	431,964	July 8	1452	{ 367 368 369 }	52	293
Box-opener	J. W. Deaton	437,177	Sept. 30	2900	755	52	1956
Box or canister	S. E. Cornell	428,272	May 20	1886	475	51	1199
Box-ornamenting machine	T. Remus	430,883	June 24	2798	6-6	51	2039
Box-stapling machine	C. Beck	441,051	Nov. 18	2269	{ 588 589 590 }	53	1061
Box-stay	M. Loewenthal	431,068	July 1	58	14	52	13
Box-stay machine	J. A. Horton	442,582	Dec. 9	1489	{ 383 384 }	53	1561
Box-staying machine	E. M. Richardson	428,952	May 27	2912	746	51	1417
Box-staying machines. Die for	F. H. Beach	442,792	Dec. 16	1849	478	53	1641
Box-strap	S. C. Cary	441,227	Nov. 25	2578	667	53	1129
Box-strap	S. C. Cary	441,353	Nov. 25	2797	723	53	1167
Box-strap	J. Mahady	432,538	July 22	2334	602	52	475
Box-straps. Making coiled metal	S. C. Cary	441,355	Nov. 25	2800	723	53	1167
Box-straps. Method of and machine for making metal	S. C. Cary	441,354	Nov. 25	2798	723	53	1167
Box-straps. Reel for metal	S. C. Cary	441,356	Nov. 25	2801	{ 723 724 }	53	1167
Box-toe	W. B. Arnold	421,064	Feb. 11	960	247	50	755
Box-trimming machine	E. Dietz	440,697	Nov. 18	1694	436	53	951
Box with two compartments	C. P. B. Peck	437,042	Sept. 23	2660	696	52	1906
Boxes. Machine for and process of making	J. Mohs	441,105	Nov. 18	2369	{ 614 615 }	53	1080

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Diag.	Vol.	Page.
Boxes. Machine for applying corner-stays to.....	G. L. Jaeger.....	438,545	Oct. 14	1314	{ 355 356	53	259
Boxes. Machine for applying corner-stays to.....	G. L. Jaeger.....	438,546	Oct. 14	1315	{ 356 357	53	260
Boxes. Machine for applying corner-stays to.....	G. L. Jaeger.....	438,547	Oct. 14	1317	{ 357 358	53	260
Boxes. Machine for applying fastening-strips to	G. L. Jaeger.....	442,526	Dec. 9	1400	{ 357 358	53	1543
Boxes with paper. Machine for covering card-board.	L. P. Bouvier and A. J. Phillips....	422,285	Feb. 25	2727	{ 718 719	50	1104
Brace:							
See Abdominal brace. Piano-string-frame brace.							
Bedstead-brace. Rail-brace.							
Bit-brace. Railway-rail brace.							
Body-brace. Ratchet-brace.							
Car-brace. Shoulder-brace.							
Chair-brace. Surgical brace.							
Hand-brace.							
Brace.....	W. H. Henderson and L. H. Porter.	435,496	Sept. 2	178	49	52	1409
Brace for excavations.....	W. J. Dunn.....	431,689	July 8	1043	261	52	212
Bracelet.....	L. S. Beals.....	428,447	May 20	2156	541	51	1271
Bracelet.....	J. C. Harrington.....	423,605	Mar. 18	1866	492	50	1505
Bracelet.....	A. Kienle.....	429,039	May 27	3056	788	51	1443
Bracelet.....	J. R. Mathewson.....	427,592	May 13	859	215	51	990
Bracelet.....	J. R. Mathewson.....	427,593	May 13	859	215	51	990
Bracelet.....	J. R. Mathewson.....	430,295	June 17	1860	457	51	1850
Bracelet.....	W. Riker.....	421,615	Feb. 18	1756	460	50	913
Bracelet.....	E. Whitney.....	434,220	Aug. 12	1173	304	52	995
Bracelet. Watch.....	T. G. Hull.....	442,377	Dec. 9	1162	303	53	1495
Bracelet and making the same.....	F. Hartje.....	423,246	Mar. 11	1337	348	50	1398
Bracelets, chains, necklaces, &c. Link for.....	A. J. Kerckhoff's.....	421,136	Feb. 11	1060	272	50	774
Bracing and securing device.....	F. W. Shuls.....	440,852	Nov. 18	1963	505	53	1001
Bracket:							
See Clothes-bracket. Gas-bracket.							
Curtain-pole bracket. Gutter-bracket.							
et. Insulator-bracket.							
Curtain-roller bracket. Lamp-bracket.							
Dental bracket. Locomotive-lamp bracket.							
Extension-bracket. Scaffold-bracket.							
Fan-supporting bracket. Shelf-bracket.							
Fence-bracket. Shingling-bracket.							
Gage-bracket. Window-bracket.							
Bracket.....	W. P. Maxim.....	425,182	Apr. 8	1163	306	51	235
Bracket.....	J. J. Naylor.....	420,518	Feb. 4	127	32	50	588
Bracket-bar. Extension.....	O. Schlueter.....	438,190	Oct. 14	792	216	53	159
Bracket-head and bracket.....	J. S. Peden.....	440,899	Nov. 18	2035	524	53	1016
Bracket or shelf.....	B. B. Wright.....	438,280	Oct. 14	937	253	53	184
Braid. Machine for the manufacture of plaited.....	A. M. English.....	433,075	July 29	3191	{ 820 821	52	645
Braid. Stopping device for machines for grading and reeling straw.....	D. Brown.....	425,204	Apr. 8	1192	315	51	241
Braiding and other machines. Let-off device for the spools of.....	H. C. Brunner and H. Hall, Jr.....	425,857	Apr. 15	2169	578	51	438
Braiding-machine.....	H. Lanferty.....	430,346	June 17	1941	{ 475 476	51	1866
Braiding-machine.....	L. W. and N. Lombard.....	429,136	June 3	44	11, 12	51	1480
Braiding-machine feeding attachment.....	D. D. Griffin.....	439,943	Nov. 4	477	125	53	701
Brake:							
See Air-brake. Locomotive and train brake.							
Air automatic brake. Locomotive driver-brake.							
Bicycle-brake. Power-brake.							
Box-bending brake. Pressure automatic brake.							
Car-brake. Railway-brake.							
Car or locomotive brake. Railway-vehicle brake.							
Carriage-brake. Safety-brake.							
Cart-brake. Sled-brake.							
Cornice-machine Sleigh-brake.							
brake. Sled-brake.							
Header-brake. Spread-brake.							
Hemp-brake. Stere-service car-brake.							
Hoisting-machine Track-brake.							
brake. Vehicle-brake.							
Insulated brake. Velocipede-brake.							
Locomotive-brake. Wagon-brake.							
Brake.....	G. Giussani.....	425,670	Apr. 15	1892	{ 505 506	51	385
Brake.....	S. Harris.....	419,015	Jan. 7	557	140	50	117
Brake.....	C. C. Reynolds, H. Hooten, and M. M. Busby.	438,491	Oct. 14	1236	335	53	244
Brake apparatus. Hydraulic.....	J. B. G. A. Canet.....	442,014	Dec. 2	601	{ 162 163	53	1380
Brake-beam.....	J. W. Baker.....	438,462	Oct. 14	1203	326	53	236
Brake-beam.....	H. B. Robischung.....	440,761	Nov. 18	1804	466	53	973
Brake-beam clamp.....	H. B. Robischung.....	430,755	June 24	2602	637	51	2002
Brake-beam connecting-rod.....	C. Feil.....	428,333	May 20	1987	500	51	1218
Brake-beam hanger.....	R. W. Bayley.....	436,297	Sept. 9	1418	370	52	1653
Brake-beam. Metallic.....	S. Fox.....	419,603	Jan. 14	1420	380	50	298
Brake-beam. Truss.....	C. T. Schoen.....	426,075	Apr. 22	2510	662	51	511
Brake-beam. Trussed.....	H. B. Robischung.....	430,756	June 24	2604	637	51	2002
Brake-beam. Trussed.....	H. B. Robischung.....	440,438	Nov. 11	1275	329	53	862

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Brake-beams. Machine for forming metallic	R. W. Bayley	431,545	July 8	794	{ 198 199	{ 52	166
Brake-beams. Strut for	H. B. Robischung	440,117	Nov. 4	734	194	53	752
Brake-block	H. Butts and J. J. Edmonds	425,206	Apr. 8	1194	316	51	241
Brake-block	H. J. Richardson	428,230	May 20	1825	458	51	1187
Brake-cylinder head	G. Westinghouse, Jr.	432,715	July 22	2613	669	52	529
Brake head and shoe	E. K. and J. Clayton	440,542	Nov. 11	1437	370	53	894
Brake-heads to brake-beams. Device for securing	H. B. Robischung	441,195	Nov. 25	2520	651	53	1119
Brake-heads to brake-beams. Device for securing	H. B. Robischung	442,138	Dec. 9	805	217	53	1427
Brake-hose. Electric connector for	W. F. Wamsley and T. McIntosh	427,138	May 6	174	46	51	845
Brake mechanism	R. O. Wood	443,028	Dec. 16	2242	577	53	1718
Brake mechanism. Fluid-pressure automatic	G. Westinghouse, Jr.	425,059	Apr. 8	964	{ 258 259	{ 51	194
Brake-regulator. Automatic	G. Westinghouse, Jr.	440,082	Nov. 4	678	{ 180 181	{ 53	740
Brake-shoe	L. Carl	437,676	Oct. 7	5	2	53	3
Brake-shoe	C. Herron	423,093	Mar. 25	2475	658	50	1629
Brake-shoe	C. Herron	428,305	May 20	1943	488	51	1209
Brake-shoe	W. Lawrence	432,277	July 15	1941	496	52	391
Brake-shoe	N. K. Pearson	424,348	Mar. 25	2991	796	50	1728
Brake-shoe	C. W. Roepper	423,818	Mar. 18	2186	578	50	1567
Brake-shoe	C. W. Roepper	423,810	Mar. 18	2187	578	50	1567
Brake-shoe	C. W. Roepper	423,820	Mar. 18	2188	578	50	1567
Brake-shoe	C. W. Roepper	426,068	Apr. 22	2499	660	51	509
Brake-shoe	W. D. Sargent	426,072	Apr. 22	2504	661	51	510
Brake-shoe	S. J. Williams	423,848	Mar. 18	2229	589	50	1576
Brake-shoe and beam attachment	S. A. Bemis	429,674	June 10	864	209	51	1648
Brake-shoe support	S. A. Bemis	425,974	Apr. 22	2367	627	51	484
Brake-staff support	D. C. Meeker	420,691	Feb. 4	371	98	50	637
Brakes. Means for actuating air	E. D. Graft	436,233	Sept. 9	1321	344	52	1632
Braking and scutching machine	A. and L. L. Bentley	428,663	May 27	2477	630	51	1330
Bran-packer	N. C. Gauntt	442,371	Dec. 9	1155	301	53	1493
Bran-packer	E. M. Thompson	435,467	Sept. 2	124	36	52	1399
Bran-packing machine	S. T. Lockwood	434,669	Aug. 19	1897	{ 495 496	{ 52	1147
Brazing device	J. W. Maddox	423,614	Mar. 18	1881	496	50	1508
Brazing machine	J. C. Ballew	426,358	Apr. 22	2918	768	51	596
Bread, cake, and pie protector	M. W. Boyd	419,177	Jan. 14	799	211	50	172
Bread-cutter	G. W. Langdon	432,628	July 22	2466	634	52	501
Bread. Making malted	J. Montromerie	423,263	Mar. 11	1367	.....	50	1403
Bread-pan	G. P. Mitchell	431,909	July 8	1369	347	52	276
Bread preserver and protector	J. A. Parker	443,637	Dec. 30	3283	846	53	1934
Bread-raiser	W. M. Shelton	420,110	Jan. 28	2206	584	50	467
Breakwater. Floating	J. M. White	436,644	Sept. 16	1980	519	52	1765
Breast-strap, slide, and snap. Combined	B. M. Johnson and J. Reichert	431,589	July 8	862	214	52	180
Breast-strap slides. Manufacture of	E. L. Howe	441,842	Dec. 2	335	89	53	1329
Breastpin	G. K. Webster	440,081	Nov. 4	677	180	53	740
Breweries, &c. Steeping-tank for	J. F. Theurer	437,910	Oct. 7	359	103	53	69
Brewers' use and making the same. Corn product for	H. Bates, Jr.	437,964	Oct. 7	445	.....	53	85
Brewing apparatus	C. Häfner	436,498	Sept. 16	1744	460	52	1723
Brewing. Apparatus for	W. J. Seib	438,328	Oct. 14	1007	273	53	198
Brick and pottery kiln	N. S. Clark	432,601	July 22	2417	623	52	491
Brick. Building	C. Reynhold	429,061	May 27	3090	797	51	1449
Brick. Burning	J. C. Anderson	424,246	Mar. 25	2817	{ 753 754	{ 50	1696
Brick. Burning	J. F. Byers	425,536	Apr. 15	1679	448	51	344
Brick. Cleaning and polishing	B. F. Fay	429,090	May 27	3133	.....	51	1458
Brick. Composition for ornamental	J. C. Anderson	424,252	Mar. 25	2825	.....	50	1697
Brick. Composition for ornamental	J. C. Anderson	424,253	Mar. 25	2825	.....	50	1697
Brick. Composition for ornamental	J. C. Anderson	424,256	Mar. 25	2826	.....	50	1697
Brick-die	J. M. McDonald	422,432	Mar. 4	99	27	50	1156
Brick-drier	P. Arnold	434,313	Aug. 12	1316	{ 343 344	{ 52	1024
Brick-kiln	J. C. Anderson	424,245	Mar. 25	2815	753	50	1695
Brick-kiln	J. C. Anderson	424,248	Mar. 25	2820	{ 754 755	{ 50	1696
Brick-kiln	J. C. Anderson	424,249	Mar. 25	2821	755	50	1696
Brick-kiln	J. C. Anderson	424,250	Mar. 25	2822	755	50	1697
Brick-kiln	J. C. Anderson	441,272	Nov. 25	2677	{ 695 696	{ 53	1145
Brick-kiln	J. M. Bailey	430,724	June 24	2541	621	51	1990
Brick-kiln	P. B. Broughton	434,058	Aug. 12	901	{ 237 238	{ 52	941
Brick-kiln	J. F. Byers	427,550	May 13	792	197	51	978
Brick-kiln	J. T. Cullens	437,577	Sept. 30	3525	920	52	2000
Brick-kiln	W. A. Endaly	437,983	Oct. 7	472	134	53	90
Brick-kiln	J. B. Griswold	420,684	Feb. 4	361	95, 96	50	634
Brick-kiln	H. S. Hallwood	424,474	Apr. 1	46	13	51	12
Brick-kiln	H. S. Hallwood	436,524	Sept. 16	1778	469	52	1729
Brick-kiln	O. Kail	440,041	Nov. 4	632	167	53	731
Brick-kiln	W. Rennie	433,368	July 29	3615	{ 932 933	{ 52	730
Brick-kiln	L. H. Reppell	442,548	Dec. 9	1436	368	53	1550
Brick-kiln	W. L. Rich	440,198	Nov. 11	866	223	53	789
Brick-kiln. Continuous	T. East	438,227	Oct. 14	850	230	53	169
Brick-machine	M. B. Atkinson	434,230	Aug. 12	1191	{ 310 311	{ 52	998
Brick-machine	G. Carnell	419,922	Jan. 21	1912	504	50	401
Brick-machine	G. Carnell	438,986	Oct. 21	2036	543	53	401
Brick-machine	M. Davelaar	422,506	Mar. 4	206	56	50	1176
Brick-machine	R. W. Davies	439,322	Oct. 28	2581	689	53	509
Brick-machine	F. Grant	420,055	Jan. 28	2111	{ 558 559	{ 50	448

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Brick-machine	W. L. Gregg	419,042	Jan. 7	590	{ 150 151	50	125
Brick-machine	W. H. Hall	442,181	Dec. 9	867	{ 232 233	53	1440
Brick-machine	W. Johnson	439,158	Oct. 28	2292	{ 615 616	53	456
Brick-machine	G. W. King	443,321	Dec. 23	2733	714	53	1829
Brick-machine	R. Knickerbocker	431,117	July 1	126	32, 33	52	27
Brick-machine	R. Knickerbocker	427,578	May 13	839	{ 209 210	51	987
Brick-machine	H. E. Long	428,173	May 20	1729	438	51	1168
Brick-machine	J. W. and R. C. Penfield	426,315	Apr. 22	2857	{ 752 753	51	583
Brick-machine	C. W. Raymond	430,752	June 24	2599	636	51	2001
Brick-machine	R. F. Robison	419,972	Jan. 21	1982	521	50	415
Brick-machine	H. H. Stukenberg	443,413	Dec. 23	2916	750	53	1855
Brick-machine	C. W. Vaughn	430,978	June 24	2939	{ 721 722	51	2065
Brick-machine	B. C. White and J. A. Boyd	429,296	June 3	284	68, 69	51	1525
Brick-machine mold	T. Whittaker	434,221	Aug. 12	1174	305	52	995
Brick-machine pitmen. Automatic releasing device for	W. H. Hall	442,372	Dec. 9	1157	301	53	1494
Brick machine. Repress-	R. A. Willett	423,401	Mar. 11	1571	412	50	1442
Brick-machine. Steam	A. Burrell	419,749	Jan. 21	1636	435	50	345
Brick-machines. Automatically-adjustable plunger for	A. F. Cramer	427,972	May 13	1440	364	51	1102
Brick-machines. Hook-bar for the mold-delivery devices of	A. F. Cramer	427,973	May 13	1442	364	51	1102
Brick-machines. Off-bearing belt for	C. Chambers, Jr.	421,385	Feb. 18	1415	366	50	848
Brick. Manufacturing	D. H. Close	430,376	June 17	1983	489	51	1875
Brick. Method of and apparatus for burning	J. C. Anderson	424,247	Mar. 25	2818	754	50	1696
Brick-mold	G. W. Brinham, Jr., and A. Hahn	436,692	Sept. 16	2057	538	52	1781
Brick-mold sander	R. P. Roach	441,978	Dec. 2	540	145	53	1368
Brick-mold-sanding machine	D. H. Close	426,775	Apr. 29	3568	{ 931 932	51	730
Brick or tile	J. Krenig and J. Eburn	429,925	June 10	1234	306	51	1720
Brick or tile cutting machine	F. E. Frey	421,691	Feb. 18	1855	{ 485 486 487	50	933
Brick or tile kiln	B. C. Wickers	438,335	Oct. 14	1015	275	53	200
Brick or tile machine cutter	J. B. Z. Dumais	436,341	Sept. 16	1491	{ 389 390	52	1675
Brick or tile machine cutter	J. B. Z. Dumais	436,342	Sept. 16	1494	390	52	1676
Brick or tile machines. Die for	W. W. Wallace	436,929	Sept. 23	2510	657	52	1875
Brick. Paving-	F. Buettner and F. Orlikowski	426,430	Apr. 29	3053	799	51	630
Brick-press	N. J. Tubbs	430,128	Jan. 28	2234	{ 591 592	50	472
Brick-pressing machine	G. Carnell	420,861	Feb. 4	639	{ 164 165	50	685
Brick-pressing machine	R. W. H. Davis and M. L. Lower	435,171	Aug. 26	2681	708	52	1304
Brick-pressing machine	W. L. Holman	436,894	Sept. 23	2450	{ 640 641	52	1864
Brick-pressing machine	W. Homes	424,204	Mar. 25	2762	737	50	1684
Brick-protector	N. Olson	432,430	July 15	2155	555	52	431
Brick-sanding machine	F. B. Stoltz	421,060	Feb. 11	954	245	50	753
Brick shot	G. C. Alexius	421,804	Feb. 18	2004	529	50	961
Brick, stone, &c. Preservative compound for	L. B. Drake	442,867	Dec. 16	1986	.....	53	1667
Bricks. Enamel for coating	J. Stiel	429,659	June 10	844	.....	51	1644
Bricks, tiles, &c. Machine for re-pressing	B. J. Wilson	430,554	June 17	2241	550	51	1924
Bridge	N. W. McGiffin	443,714	Dec. 30	3404	874	53	1957
Bridge	J. C. Phillips	440,437	Nov. 11	1273	329	53	862
Bridge	W. E. Stearns	419,897	Jan. 21	1878	454	50	393
Bridge approaches. Gate for swinging-	G. B. Howland	434,932	Aug. 26	2336	617	52	1238
Bridge construction	H. E. Mertens	424,427	Mar. 25	3133	832	50	1757
Bridge. Continuous-girder	G. H. Pegram	424,349	Mar. 25	2992	796	50	1728
Bridge detector and lock. Draw	J. T. Hambay	439,063	Oct. 21	2146	576	53	422
Bridge. Draw	G. H. Crafts	433,328	July 29	3564	919	52	720
Bridge. Draw	G. A. Wiedenmayer and S. Bergmann	442,847	Dec. 16	1946	501	53	1659
Bridge. Expanding and contracting	G. Edwards	430,935	June 24	2872	{ 705 706 707	51	2054
Bridge-flooring	C. W. Carman	423,126	Mar. 11	1168	304	50	1365
Bridge-gate	A. W. Buel	432,016	July 15	1538	391	52	316
Bridge-gate	C. Madsen	433,206	July 29	3392	{ 876 877	52	685
Bridge-gate	J. P. Maloney	431,817	July 8	1243	310	52	251
Bridge-gate	J. P. Maloney	433,949	Aug. 12	758	197	52	915
Bridge-gate	C. T. Picard	440,366	Nov. 11	1134	292	53	837
Bridge gate. Draw	J. Millidge and M. L. Johnson	428,927	May 27	2882	737	51	1411
Bridge gate. Draw	A. H. Sasse	438,951	Oct. 21	1977	528	53	388
Bridge-gate. Safety	H. H. Reynolds	437,937	Oct. 7	401	114	53	77
Bridge gate. Swing-	G. R. Ratto	440,368	Nov. 11	1137	{ 292 293	53	837
Bridge gate. Swinging-	P. H. Day	428,079	May 20	1597	{ 405 406	51	1142
Bridge-guard	W. C. Newman	442,133	Dec. 9	796	215	53	1425
Bridge-guard	W. Theis	436,570	Sept. 16	1863	490	52	1743
Bridge. Iron	S. D. Webb and L. R. Haag	438,511	Oct. 14	1267	343	53	249
Bridge. Lift	J. F. Alden	431,101	July 1	104	26, 27	52	23
Bridge. Ponton	S. N. Stewart	423,455	Mar. 18	1652	436	50	1466
Bridge. Ponton	S. N. Stewart	427,446	May 6	640	160	51	938
Bridge-rail joint	R. H. Buckingham	433,616	Aug. 5	258	69	52	807
Bridge. Suspension	R. E. Akers	418,777	Jan. 7	180	43, 44	50	40

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Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Bridge. Suspension.	D. M. Eddy	438,070	Oct. 7	618	168	53	118
Bridge. Suspension.	J. Harper	442,435	Dec. 9	1252	324	53	1513
Bridge. Suspension.	J. O. Hill	428,338	May 20	1993	{ 501 502	{ 51	1219
Bridge. Suspension.	G. Lindenthal	430,428	June 17	2055	506	51	1889
Bridge. Suspension.	G. W. and F. P. Stedman	441,598	Nov. 25	3183	820	53	1241
Bridge. Suspension.	G. M. Wildin	441,862	Dec. 2	370	97	53	1337
Bridge. Truss.	D. F. Lane	424,318	Mar. 25	2936	{ 782 783	{ 50	1718
Bridge. Wire-cable.	G. N. Lantz	436,606	Sept. 16	1914	503	52	1752
Bridge. Wire suspension.	H. C. Carmack	439,741	Nov. 4	167	43	53	640
Bridges. Automatic gate for swing.	H. Strom	435,106	Aug. 26	2587	683	52	1285
Bridges. Construction of.	J. Mitchell	440,490	Nov. 11	1363	351	53	880
Bridges. Tightening apparatus for cable.	G. M. Wildin, J. and R. J. Harper.	424,154	Mar. 25	2697	717	50	1671
Bridle.	J. H. Carlstedt	439,836	Nov. 4	309	77	53	668
Bridle.	J. Gray	426,797	Apr. 29	3607	941	51	737
Bridle.	S. S. Hyde	419,955	Jan. 21	1962	516	50	411
Bridle.	J. H. Rafferty	431,396	July 1	556	139	52	113
Bridle attachment.	C. C. Schwaner	421,016	Feb. 11	888	229	50	741
Bridle-bit.	S. L. Adams, Jr.	428,197	May 20	1762	445	51	1175
Bridle-bit.	J. H. Allen	422,900	Mar. 11	821	213	50	1301
Bridle-bit.	G. A. Belknap	424,258	Mar. 25	2830	757	50	1698
Bridle-bit.	A. Bersch	422,004	Feb. 25	2295	606	50	1025
Bridle-bit.	G. Brockington	428,767	May 27	2646	670	51	1362
Bridle-bit.	C. C. Cole	424,538	Apr. 1	154	44	51	33
Bridle-bit.	A. J. Crose	425,212	Apr. 8	1204	319	51	244
Bridle-bit.	C. H. Horner	412,266	Dec. 9	990	261	53	1464
Bridle-bit.	B. M. Johnson and J. Reichert.	422,529	Mar. 4	236	62	50	1181
Bridle-bit.	O. H. and W. A. Orendorff	441,505	Nov. 25	3041	782	53	1214
Bridle-bit.	C. A. Reade	435,189	Aug. 26	2711	716	52	1309
Bridle-bit.	O. M. Sloat	435,252	Aug. 26	2796	741	52	1326
Bridle-bit.	H. Van Arsdale	422,469	Mar. 4	158	42	50	1166
Bridle-bit.	W. R. M. Wheeler	431,760	July 8	1145	286	52	233
Bridle-bits. T-head mouth-piece for.	G. Meyer	443,533	Dec. 30	3109	800	53	1902
Bridle-blind.	C. M. C. Fleming	435,115	Aug. 26	2602	689	52	1288
Bridle-blinder or winker.	M. S. Starkweather	422,652	Mar. 4	433	108	50	1219
Bridle-iron-bending machine.	J. and M. G. F. Buckley.	441,929	Dec. 2	462	124	53	1355
Bridle or halter.	G. T. Duncan	428,898	May 27	2838	721	51	1401
Bridle or halter attachment.	C. Doring	437,181	Sept. 30	2905	756	52	1957
Bridle safety attachment.	J. Hartmann	421,401	Feb. 18	1437	372	50	852
Bridles. Blind for.	E. Lindblom	422,133	Feb. 25	2485	657	50	1059
Bridles. Overcheck-bit for.	L. T. Crabb	424,703	Aug. 19	1963	509	52	1157
Brine, &c. Apparatus for heating and settling.	P. P. Trueheart and M. S. Kimball.	432,457	July 15	2203	568	52	442
Brine. Purifying.	C. C. Peck	423,049	Mar. 25	2401	638	50	1615
Brines. Purifying.	M. M. Monsanto.	426,633	Sept. 16	1959	—	52	1762
Broiler.	W. C. Perkins.	430,401	June 17	2022	498	51	1883
Broiler.	W. P. Randall.	419,159	Jan. 7	765	203	50	159
Broiler and baker. Combined.	G. Milner	427,519	May 6	742	185	51	959
Broiler or toaster.	W. Brooks.	431,550	July 8	802	200	52	168
Broiler-support.	E. H. Ahrens	439,569	Oct. 28	2942	782	53	578
Brooder.	G. H. Bishop	442,007	Dec. 2	591	100	53	1378
Broom.	J. H. Brinkop	439,470	Oct. 28	2803	746	53	550
Broom.	E. H. Fenton	432,130	July 15	1724	443	52	351
Broom.	J. M. Hendershot	435,304	Aug. 26	2291	766	52	1341
Broom-brush bridle.	J. B. Butenschon	418,941	Jan. 7	457	112	50	96
Broom-catch.	M. Lamont	428,686	May 27	2520	640	51	1338
Broom fastener. Whisk.	H. W. Judevine	423,167	Mar. 11	1233	321	50	1378
Broom-handles. Machine for turning.	R. J. Holmgreen.	422,053	Feb. 25	2361	{ 623 624 625	{ 50	1037
Broom-hanger.	J. F. Draper.	421,683	Feb. 18	1845	482	50	931
Broom-hanger.	R. D. Markham	424,323	Mar. 25	2944	784	50	1719
Broom-hanger.	R. D. Markham	434,603	Aug. 19	1773	464	52	1123
Broom-head.	M. S. Clyde and W. Welsh	428,665	May 27	2480	630	51	1331
Broom-head.	S. H. Williams.	441,271	Nov. 25	2676	695	53	1145
Broom-head clamp.	S. R. Edney	423,744	Mar. 18	2085	550	50	1547
Broom-holder.	H. C. Beckmann	434,819	Aug. 19	2117	555	52	1190
Broom-holder.	T. J. Cook	420,040	Jan. 28	2094	553	50	444
Broom-holder.	J. R. and J. Ferguson	426,529	Apr. 29	3193	838	51	657
Broom-holder.	M. J. Shimer	429,781	June 10	1021	250	51	1678
Broom or whisk.	J. H. McElowney	429,469	June 3	559	136	51	1580
Broom-rack.	W. D. Neely	430,674	June 24	2460	600	51	1974
Broom-splint-making machine. Wood.	G. W. McKim	437,710	Oct. 7	45	14, 15	53	11
Brooms from wood splints. Manufacturing.	G. W. McKim	425,043	Apr. 8	946	253	51	191
Brooms. Wood splint for manufacturing.	G. W. McKim	425,044	Apr. 8	947	253	51	191
Brush.	S. W. Babbitt	419,597	Jan. 14	1410	377	50	296
Brush.	G. A. Barnes	431,866	July 8	1320	{ 330 331	{ 52	266
Brush.	J. M. Beissbarth.	429,839	June 10	1110	274	51	1695
Brush.	J. C. Bonner	421,812	Feb. 18	2012	532	50	962
Brush.	J. N. Hack and N. Alten	440,149	Nov. 11	786	206	53	772
Brush.	C. D. Hughes	435,838	Sept. 2	708	189	52	1512
Brush.	O. Jenness	430,077	June 10	1489	369	51	1769
Brush.	J. A. O'Neil	435,766	Sept. 2	597	159	52	1490
Brush.	O. Pederson	440,114	Nov. 4	728	193	53	751
Brush.	W. A. Quigg	426,213	Apr. 22	2724	713	51	553
Brush.	J. Rich	428,140	May 20	1690	428	51	1161
Brush.	E. M. Ryan	431,487	July 1	699	175	52	140
Brush.	W. A. Selzer	438,864	Oct. 21	1852	492	53	364
Brush.	F. C. Welsh and W. H. Gates	439,914	Nov. 4	432	111	53	692
Brush.	M. Young	423,506	Mar. 18	1726	454	50	1481
Brush and broom.	W. Dickinson	431,183	July 1	226	57	52	47
Brush and making the same.	A. H. Wolcott	430,557	June 17	2245	551	51	1924
Brush and soap. Combined.	J. B. Mitchell	419,275	Jan. 14	939	248	50	199

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				Spec.	Draw.	Vol.	Page.
Brush attachment.....	I. A. Hortman.....	428,491	May 20	2217	560	51	1362
Brush. Bath or flesh.....	E. M. Ryan.....	431,486	July 1	699	175	52	140
Brush. Blacking.....	G. W. Darling.....	437,175	Sept. 30	2898	754	52	1956
Brush. Blacking.....	J. S. Moore.....	440,433	Nov. 11	1267	328	53	861
Brush. Blacking.....	B. S. Peck.....	440,884	Nov. 18	2009	516	53	1011
Brush-block.....	J. Ettig.....	434,179	Aug. 12	1112	288	52	984
Brush. Coiled-wire.....	J. B. Christoffel.....	422,117	Feb. 25	2465	652	50	1055
Brush. Commutator.....	C. Wirt.....	436,964	Sept. 23	2551	668	52	1883
Brush. Electric.....	J. E. Stephens.....	420,611	Feb. 4	259	69	50	615
Brush. Electric bath.....	R. E. Williams.....	428,540	May 20	2279	579	51	1275
Brush-fillings. Tie-plate for.....	S. K. Hawkins.....	431,770	July 8	1162	289	52	236
Brush. Flue.....	E. M. Miller and L. B. Shultz.....	431,526	July 1	761	190	52	152
Brush for blacking or oiling boots.....	A. Smith.....	441,712	Dec. 2	131	35	53	1283
Brush. Fountain.....	W. H. Heinz.....	427,078	May 6	82	21	51	827
Brush. Fountain marking.....	J. B. Harris.....	438,622	Oct. 21	1441	388	53	290
Brush. Fountain scrubbing.....	H. Dixon and H. S. Kopp.....	420,035	Jan. 28	2068	551	50	443
Brush-holder.....	J. M. Riley.....	428,415	May 20	2118	532	51	1244
Brush-holder for electric motors.....	E. A. Sweet.....	437,946	Oct. 7	415	116	53	79
Brush holder. Palette.....	J. F. Way.....	428,239	May 20	1837	460	51	1190
Brush-machine.....	M. Young.....	423,507	Mar. 18	1728	455	50	1481
Brush-machine.....	M. Young.....	423,508	Mar. 18	1729	455 456 457	50	1481
Brush-making machine.....	M. R. Bissell.....	435,268	Aug. 26	2826	748	52	1331
Brush-making machine.....	C. D. Hughes.....	429,921	June 10	1227	304	51	1719
Brush or broom support.....	J. A. Volz.....	441,266	Nov. 25	2671	693	53	1144
Brush or mop head.....	F. B. Davis.....	434,254	Aug. 12	1234	319	52	1007
Brush. Paint or other.....	L. Z. Jenkins.....	431,264	July 1	349	87	52	71
Brush scraper. Mucilage.....	W. C. Phelps.....	433,090	July 29	3221	829	52	650
Brush. Scrubbing.....	J. Ziv and N. Davis.....	438,218	Oct. 14	835	226	53	167
Brush. Shaving.....	W. P. Lefavour.....	422,085	Feb. 25	2407	636	50	1045
Brush. Steel cleaning.....	E. F. Shellabarger.....	437,626	Sept. 30	3592	939	52	2093
Brush. Stippling and stenciling.....	J. I. Hansen.....	438,808	Oct. 21	1742	467	53	345
Brush. Tooth.....	I. Liehtenstein.....	424,716	Apr. 1	431	114	51	85
Brush. Tooth.....	T. G. Wonderly.....	430,909	June 24	2838	697	51	2047
Brush. Whitewash.....	J. W. Oram.....	430,877	June 24	2791	684	51	2038
Brush. Window-cleaning.....	M. S. W. Martinot.....	443,968	Dec. 30	3798	968	53	2033
Brushes. Apparatus for the manufacture of.....	L. Strickel.....	421,531	Feb. 18	1630	420	50	888
Brushes. Fountain attachment for blacking.....	T. J. Ream.....	423,443	Mar. 18	1635	430	50	1463
Brushes, &c. Manufacture of backs and handles for.....	W. M. Welling.....	426,630	Apr. 29	3348	877	51	668
Brushes. Water-shield for window.....	I. Stiner.....	426,744	Apr. 29	3528	921	51	722
Brushing-machine.....	R. T. Palmer, Jr.....	443,179	Dec. 23	2527	647	53	1779
Bubble-pipe.....	A. Lewis.....	432,415	July 15	2136	543	52	427
Buck. Saw.....	M. Jucks.....	418,981	Jan. 7	510	127	50	107
Buckboard.....	J. T. Clarkson.....	429,260	June 3	221	55	51	1515
Bucket and heater therefor. Combined lunch.....	W. Kirkpatrick.....	440,107	Nov. 4	716	190	53	749
Bucket. Feed.....	A. F. Moody.....	428,622	May 27	2415	614	51	1320
Bucket. Milk.....	E. Burrows.....	434,423	Aug. 19	1501	392	52	1067
Bucket. Minnow.....	T. M. Darrah.....	435,211	Aug. 26	2738	722	52	1314
Bucket rope-holder. Well.....	F. Toomey.....	430,409	June 17	2031	500	51	1884
Bucket. Sap.....	W. H. Lines.....	435,437	Sept. 2	84	25	52	1392
Buckets, cans, &c. Cover for.....	J. H. Brinkop.....	432,474	July 15	2229	576	52	448
Buckle.....	H. G. Anguish.....	419,173	Jan. 14	793	209	50	171
Buckle.....	A. Biesen.....	436,167	Sept. 9	1225	319	52	1613
Buckle.....	A. W. Dalton.....	427,839	May 13	1231	311	51	1062
Buckle.....	B. H. Day, Jr.....	438,912	Oct. 21	1918	510	53	376
Buckle.....	R. J. Dearborn.....	422,741	Mar. 4	550	141	50	1241
Buckle.....	F. B. Echlin.....	422,510	Mar. 4	211	57	50	1177
Buckle.....	C. H. Farmer.....	430,470	June 17	2124	522	51	1901
Buckle.....	J. Fischer.....	420,871	Feb. 4	657	171	50	689
Buckle.....	P. L. Gariepee.....	443,511	Dec. 30	3079	792	53	1896
Buckle.....	J. M. Guilbert.....	441,618	Nov. 25	3221	831	53	1250
Buckle.....	J. P. Harris.....	431,946	July 8	1421	361	52	286
Buckle.....	S. E. Harsh.....	428,488	May 20	2213	559	51	1261
Buckle.....	J. Hirschfeld.....	433,005	July 29	3083	791	52	624
Buckle.....	J. R. Kennett.....	440,313	Nov. 11	1061	273	53	823
Buckle.....	E. Latbam.....	430,078	June 10	1490	369	51	1769
Buckle.....	F. H. Loveless.....	429,137	June 3	48	12	51	1481
Buckle.....	J. H. Mabey.....	427,776	May 13	1143	287	51	1047
Buckle.....	E. Marx.....	435,880	Sept. 2	782	208	52	1536
Buckle.....	W. E. T. Merrill.....	440,432	Nov. 11	1267	327	53	861
Buckle.....	J. T. Merritt.....	429,768	June 10	998	245	51	1675
Buckle.....	J. F. Molloy.....	436,501	Sept. 16	1749	462	52	1724
Buckle.....	J. H. Morris.....	427,886	May 13	1317	332	51	1078
Buckle.....	D. Mosman.....	434,720	Aug. 19	1980	515	52	1161
Buckle.....	W. W. Olcott.....	430,785	June 24	2645	649	51	2011
Buckle.....	J. Parker.....	426,678	Apr. 29	3415	896	51	700
Buckle.....	J. Reed.....	439,254	Oct. 28	2460	659	53	487
Buckle.....	M. J. Robinson.....	432,147	July 15	1751	449	52	356
Buckle.....	W. N. Rodgers.....	438,242	Oct. 14	875	237	53	173
Buckle.....	S. Sawyer.....	440,655	Nov. 18	1625	419	53	939
Buckle.....	S. Scheuer.....	419,363	Jan. 14	1082	286	50	228
Buckle.....	D. L. Smith.....	439,436	Oct. 28	2754	734	53	541
Buckle.....	J. A. Trant.....	442,153	Dec. 9	831	222	53	1432
Buckle.....	J. A. Traut.....	443,245	Dec. 23	2654	681	53	1805
Buckle and hame-tug. Trace.....	L. H. Brunemeyer.....	430,108	June 17	1546	384	51	1790
Buckle. Back-band.....	J. R. Bulluck.....	423,667	Mar. 18	1977	521	50	1527
Buckle. Back-band.....	D. B. McCall.....	437,222	Sept. 30	2959	774	52	1968
Buckle. Back-band.....	C. A. Thurmond.....	439,443	Oct. 28	2763	736	53	543
Buckle. Bale-tie.....	R. W. Carroll.....	421,121	Feb. 11	1036	265	50	769
Buckle. Belt.....	C. and E. J. Deitsch.....	434,765	Apr. 1	513	138	51	100
Buckle-guard.....	G. M. Hubbard.....	421,716	Feb. 18	1893	497	50	940
Buckle-guard.....	G. D. Mosher.....	424,721	Apr. 1	436	116	51	86
Buckle-guard.....	S. S. Sargeant.....	426,517	Apr. 29	3171	833	51	654

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 's	Vol.	Page.
Buckle. Harness.	G. A. Paddock	436,186	Sept. 9	1254	327	52	1619
Buckle. Harness.	J. Q. Steele	423,154	May 20	1706	433	51	1164
Buckle. Harness.	J. P. Tillson	431,085	July 1	82	20	52	19
Buckle-shield	F. D. Behrens	442,413	Dec. 9	1223	316	53	1507
Buckle. Shoe.	M. N. Bray and E. M. Pope	421,660	Feb. 18	1816	475	50	925
Buckle. Shoe.	P. Clifford	421,553	Feb. 18	1663	431	50	895
Buckle. Suspender.	S. Baum and V. B. Ulman	432,258	July 15	1904	489	52	385
Buckle. Suspender.	G. Cook	441,285	Nov. 25	2699	700	53	1149
Buckle. Suspender.	W. H. Gurney and J. P. Rummel	426,376	Apr. 22	2948	774	51	601
Buckle. Suspender.	E. A. Hill	435,422	Sept. 2	63	20	52	1387
Buckle. Suspender.	J. Jenkins	442,981	Dec. 16	2172	559	53	1704
Buckle. Suspender.	D. Lippy	421,735	Feb. 18	1913	503	50	944
Buckle. Suspender.	D. Lippy	438,892	Oct. 21	1893	503	53	372
Buckle. Suspender.	J. R. Macmillan	422,088	Feb. 25	2411	638	50	1045
Buckle. Suspender.	W. E. T. Merrill	437,498	Sept. 30	3406	892	52	2057
Buckle. Suspender.	O. Oppenheimer	443,258	Dec. 23	2674	686	53	1609
Buckle. Suspender.	G. B. Pilkington	431,992	July 8	1495	378	52	301
Buckle. Suspender.	F. H. Richards	432,740	July 22	2653	678	52	536
Buckle. Suspender.	F. H. Richards	434,886	Aug. 19	2234	586	52	1212
Buckle. Suspender.	F. H. Richards	435,450	Sept. 2	107	30	52	1395
Buckle. Suspender.	F. H. Richards	435,451	Sept. 2	108	30	52	1396
Buckle. Suspender.	F. H. Richards	435,452	Sept. 2	109	31	52	1396
Buckle. Suspender.	F. H. Richards	435,453	Sept. 2	110	31	52	1396
Buckle. Suspender.	F. H. Richards	435,454	Sept. 2	110	31	52	1396
Buckle. Suspender.	F. H. Richards	435,455	Sept. 2	111	31	52	1396
Buckle. Suspender.	F. H. Richards	435,456	Sept. 2	112	32	52	1397
Buckle. Suspender.	F. H. Richards	436,262	Sept. 9	1364	356	52	1642
Buckle. Trace.	A. Tanquary	425,916	Apr. 15	2248	596	51	453
Buckle. Wedge.	A. Tehnik	426,401	Apr. 22	2993	784	51	611
Buckles. Cast-off for suspender.	F. Kelly	419,528	Jan. 14	1309	350	50	275
Buckles. Making plates for suspender.	F. H. Richards	436,263	Sept. 9	1365	356	52	1642
Bucksaw-frame	N. H. Roberts	424,999	Apr. 8	881	232	51	179
Buffer.	A. W. Rogers	421,763	Feb. 18	1948	512	50	950
Buffer.	A. W. Rogers	421,764	Feb. 18	1950	513	50	950
Buffer.	A. W. Rogers	425,632	Apr. 15	1838	491	51	375
Buffer. Pneumatic	L. D. Riegel	433,657	Aug. 5	321	83	52	818
Bug-trap	C. H. Lawton	433,574	Aug. 5	197	52	52	794
Buggy-bed. Metallic.	W. L. Dearth	426,715	Apr. 29	3487	912	51	713
Buggy-boot	J. K. Loree	434,670	Aug. 19	1903	496	52	1147
Buggy-boot	A. M. Woodmansee and C. B. Kloor	424,588	Apr. 1	234	63	51	48
Buggy-seat	T. H. Wilson	422,359	Feb. 25	2850	752	50	1127
Buggy-seat protector	J. O. Hamaker	425,423	Apr. 15	1514	405	51	312
Buggy-top	D. Conboy	443,846	Dec. 30	3610	928	53	1998
Buggy-top	H. W. Timmons	429,822	June 10	1083	266	51	1690
Buggy-top lowerer	D. Mack	442,812	Dec. 16	1886	486	53	1648
Buggy-top raiser	J. Long	429,728	June 10	940	231	51	1664
Building	J. W. Brook	420,223	Jan. 28	2394	637	50	501
Building	G. Fitch	442,875	Dec. 16	1995	512	53	1669
Building-block	J. C. Anderson	424,255	Mar. 25	2827	756	50	1697
Building-block	E. G. Durant	423,914	Mar. 25	2346	618	50	1605
Building-block	J. M. Farrar	439,641	Nov. 4	31	9	53	612
Building-block	J. J. Schillinger	427,914	May 13	1357	342	51	1086
Building construction	H. D. Bush	438,678	Oct. 21	1518	410	53	304
Building-front	B. T. Mesker	435,761	Sept. 2	588	156	52	1488
Building-front.	B. T. Mesker	437,671	Sept. 30	3652	953	52	2105
Building. Metallic	B. J. La Mothe	431,364	July 1	503	125	52	102
Building. Portable	T. R. Carskadon	435,112	Aug. 26	2596	685	52	1287
Building. Portable or sectional	E. T. Potter	425,250	Apr. 8	1252	334	51	254
Building purposes. Manufacture of plates and slabs for	A. Van Berkel	431,429	July 1	608	157	52	123
Building purposes. Timber seat and tie for	H. A. Goetz	437,592	Sept. 30	3546	926	52	2083
Building. Tornado-proof.	D. Blanchard	439,376	Oct. 28	2663	708	53	524
Buildings. Conductor for flat-roofed	C. Fluor	441,234	Nov. 25	2615	677	53	1133
Buildings. Construction of.	I. D. Smead	426,552	Apr. 29	3325	845	51	664
Buildings. Construction of.	H. B. Walbridge	433,500	Aug. 5	86	25	52	774
Buildings. Facing for walls of.	G. Konigsberg	441,766	Dec. 2	219	57	53	1306
Buildings. Method of and apparatus for supporting and lowering the foundations of	L. P. Friestedt	435,492	Sept. 2	170	47	52	1407
Buildings. Siding for.	G. L. Harvey	423,050	Mar. 11	1050	273	50	1343
Buildings. Structure of.	M. Hellinger	442,375	Dec. 9	1160	302	53	1494
Buildings. System for the isolation of.	G. C. Anthoni	440,938	Nov. 18	2103	546	53	1029
Bulk-head door. Water-tight.	W. Paterson and W. B. Cumming	432,070	July 15	1621	415	52	331
Bullet	W. A. Heisler	421,932	Feb. 25	2202	576	50	1007
Bullet	W. M. Thomas	437,262	Sept. 30	3025	793	52	1981
Bullet-molding dipper.	J. H. Barlow	431,315	July 1	427	106	52	88
Bulletin-board. Base-ball	E. A. Grozier and F. P. Anderson	427,508	May 6	725	181	51	955
Bulletin or advertising apparatus	E. A. Calaban	422,716	Mar. 4	517	132	50	1235
Bulletin or indicator for trains	C. M. Bolton	426,428	Apr. 29	3050	798	51	630
Bundle-carrier	W. R. Baker	440,687	Nov. 18	1672	431	53	948
Bundle-carrier	F. Palm	432,068	July 15	1647	414	52	330
Bundle-tie	A. M. Tucker and C. W. Smith	418,994	Jan. 7	525	131	50	111
Bundle-wrapping press	E. E. Porter	440,195	Nov. 11	860	221	53	747
Bundling-press	E. E. Porter	440,194	Nov. 11	859	221	53	747
Bung	C. A. Raggio	435,713	Sept. 2	522	138	52	1476
Bung and bush	H. J. Jones	441,418	Nov. 25	2905	749	53	1189
Bung and bushing	W. E. Delehaunty	438,801	Oct. 21	1730	464	53	342
Bung and bushing	G. M. Doersch	426,115	Apr. 22	2574	677	51	524
Bung and bushing. Vent.	J. Meyer	433,015	July 29	3098	795	52	627
Bung and spigot combined	C. C. Schwaner and J. F. Kiedaisch	419,716	Jan. 21	1593	425	50	337

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				Spec.	Dr &g.	Vol.	Page.
Bung and vent	A. D. Lewis and C. S. Irish	421,732	Feb. 18	1911	502	50	944
Bung-bushes. Machine for molding	L. T. Bowman	437,968	Oct. 7	450	127	53	86
Bung-extractor	J. B. Sostmann	441,113	Nov. 18	2383	618	53	1083
Bung for pickle-barrels	R. Hoffman	429,448	June 3	523	126	51	1573
Bungs. Tool for crimping metal	E. C. Lewis	426,825	Apr. 29	3649	951	51	746
Binion-protector	C. B. Dadisman	434,979	Aug. 26	2398	635	52	1251
Buoy for oyster-beds	T. Fagan and C. W. Hand	421,686	Feb. 18	1848	483	50	931
Buoys or vessels. Pumping attachment for	W. S. Overton	434,354	Aug. 12	1372	359	52	1035
Bureau, &c.	D. C. Clapp	432,371	July 15	2071	532	52	415
Bureau	J. K. Rishel	422,315	Feb. 25	2773	730	50	1113
Bureau, wash-stand, and writing-desk. Combination	J. Wippler	429,802	June 10	1048	257	51	1683
Burglar-alarm	A. Abrahams	424,243	Mar. 25	2813	752	50	1695
Burglar-alarm	W. J. Ackerman	438,127	Oct. 7	697	189	53	134
Burglar-alarm	L. B. Batten	429,001	May 27	2986	766	51	1431
Burglar-alarm	J. H. Bleco	426,706	Apr. 29	3462	907	51	709
Burglar-alarm	S. Broichgans	430,373	June 17	1979	488	51	1874
Burglar-alarm	C. R. Canterbury	437,772	Oct. 7	153	47	53	32
Burglar-alarm	J. J. Griffith	439,503	Oct. 28	2850	759	53	560
Burglar-alarm	E. Hayward and E. S. Sims	428,774	May 27	2655	673	51	1364
Burglar-alarm	G. H. Hodgkins	429,762	June 10	992	243	51	1674
Burglar-alarm	J. Moran	425,143	Apr. 8	1097	292	51	220
Burglar-alarm	M. J. Newhouse	425,045	Apr. 8	948	253	51	191
Burglar-alarm	C. H. Philpott	420,097	Jan. 28	2183	575	50	462
Burglar-alarm	N. M. Powell	420,697	Feb. 4	376	100	50	638
Burglar-alarm	J. H. Pruitt	432,077	July 15	1634	419	52	334
Burglar-alarm	W. H. Reiff	428,693	May 27	2534	644	51	1341
Burglar-alarm	M. M. Ritch	421,315	Feb. 11	1319	341	50	822
Burglar-alarm	J. Vogel	423,195	Mar. 11	1267	330	50	1385
Burglar-alarm	N. M. Watson	424,387	Mar. 25	3065	814	50	1743
Burglar-alarm	J. Winegarden	430,979	June 24	2941	722	51	2065
Burglar-alarm and door-fastener. Combined	C. K. Donnell	432,987	July 29	3055	785	52	619
Burglar-alarm attachment for alarm-clocks	C. O. Farciot	437,984	Oct. 7	474	134	53	91
Burglar-alarm. Electric	H. C. Shubert	429,817	June 10	1074	264	51	1688
Burglar-alarm. Electrical	F. Pierce	440,115	Nov. 4	729	193	53	751
Burglar-alarms. Circuit-closing hinge for electric	W. M. Bleakley	426,705	Apr. 29	3461	907	51	709
Burglar and fire alarm. Electric	W. Geo	423,753	Mar. 18	2094	553	50	1549
Burglar or automatic fire alarm. Electric	E. R. Wilder	436,030	Sept. 9	999	261	52	1573
Burglar or other alarm	L. F. Lamkin	428,112	May 20	1651	419	51	1154
Burial apparatus	G. H. Clark	441,937	Dec. 2	478	127	53	1358
Burial-casket	B. H. Bennett	427,248	May 6	349	89	51	878
Burial-casket	J. C. Frey	422,880	Mar. 4	778	198	50	1285
Burial-casket	H. M. Reese	426,469	Apr. 29	3104	814	51	641
Burial-casket	J. D. Ripson	420,920	Feb. 4	740	190	50	704
Burial-casket	J. D. Ripson	443,209	Dec. 23	2601	669	53	1795
Burial-casket	J. D. Ripson. (Reissue)	11,075	May 6	764	189	51	963
Burial-casket	E. H. Saxton	430,440	June 17	2070	511	51	1891
Burial-casket lid	C. R. Herrick	437,492	Sept. 30	3398	890	52	2055
Burial-casket lid	J. F. Sammons	419,714	Jan. 21	1591	424	50	336
Burial-casket name-plate	G. W. Learman	422,084	Feb. 25	2407	636	50	1044
Burial-caskets. Padding for	L. G. Kregel	430,964	June 24	2920	717	51	2061
Burls. Machine for making imitation	W. N. Cornell	435,684	Sept. 2	480	127	52	1467
Burner:							
See Argand burner. Lamp-burner.							
Fuel-burner. Lamp or oil burner.							
Gas-burner. Liquid-fuel burner.							
Gas and air burner. Oil-burner.							
Gas-fuel burner. Oil or gas burner.							
Gas or oil burner. Oil or other liquid-fuel burner.							
Gas-stove burner. Petroleum-burner.							
Hay and straw burner. Refuse-burner.							
Hydrocarbon-burner. Sawdust-burner.							
Hydrocarbon-oil burner. Spirit-burner.							
Incandescent burner. Stove-burner.							
Incandescent burner. Sulphur-burner.							
Injector-burner. Vapor-burner.							
Laboratory burner. Vapor-generating burner.							
Burner	A. F. Reinhold	439,560	Oct. 28	2931	779	53	576
Burner	T. Wall	427,383	May 6	520	134	51	916
Burner for petroleum, &c.	G. M. Stone	420,124	Jan. 23	2927	589	50	471
Burners. Apparatus for supplying combustible liquids to	R. Wallwork	422,101	Feb. 25	2435	643	50	1049
Burning coal and hydrocarbon fuel in combination. Apparatus for	A. Mason	438,852	Oct. 21	1833	488	53	361
Burning fuel and utilizing the heat and gases	M. V. Smith	424,828	Apr. 1	615	161	51	119
Burning liquid fuel. Apparatus for	W. M. Abbott	438,790	Oct. 21	1714	459	53	339
Burning trash. Bucket for	W. H. Ryer	427,800	May 13	1181	296	51	1053
Burnisher	W. H. Boles	436,866	Sept. 23	2404	627	52	1854
Burnisher	W. H. Boles	438,601	Oct. 21	1401	380	53	282
Burnisher	S. O. Tuerk	427,937	May 13	1389	351	51	1091
Burnishing-jack	H. F. Reed	439,752	Nov. 4	182	47	53	644
Burnishing-machine	C. J. Addy	419,997	Jan. 21	2029	535	50	423
Burnishing-machine	C. J. Addy	433,387	July 29	3637	938	52	735
Burnishing-machine	J. J. Hays	432,874	July 22	2859	732	52	577
Burnishing-tool holder	S. Ross, Jr.	426,861	Apr. 29	3695	964	51	755
Burr-cylinders. Device for straightening the teeth of	F. O. Groves	438,413	Oct. 14	1136	306	53	223

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Burr-remover	C. J. Andersen and J. Tregoning ..	423,979	Mar. 25	2447	{ 649 650	{ 50	1623
Burr-remover	W. M. Wood	440,682	Nov. 18	1664	430	53	947
Burring-machine	F. G. Sargent	439,194	Oct. 28	2348	{ 631 632	{ 53	466
Bushing and bung. Metallic	F. J. Bates	420,002	Jan. 21	2035	536	50	424
Bushings. Making wooden split	M. O. Reeves	419,558	Jan. 14	1348	361	50	283
Bustle	C. C. Carpenter and M. Phillips ..	419,181	Jan. 14	805	212	50	173
Butcher's implement	W. E. Mullins	426,541	Apr. 29	3211	842	51	661
Butter-hex	G. E. Dumas	443,271	Dec. 23	2693	690	53	1812
Butter-cutter	O. Hashronck, Jr.	437,814	Oct. 7	220	67	53	44
Butter in milk. Device for determining the amount of	J. T. Riley	437,133	Sept. 2	2800	730	52	1933
Butter-jar	D. C. Chadwick	428,040	May 13	1537	389	51	1122
Butter-jar	T. B. Howe	423,928	Mar. 25	2369	630	50	1609
Butter-jar	P. F. Lewis	438,439	Oct. 14	1163	314	53	229
Butter. Making	J. Boyd	429,186	June 3	119	28	51	1494
Butter. Making	J. Boyd	429,187	June 3	120	28	51	1494
Butter. Making	D. McGregory	430,536	June 17	2220	.....	51	1919
Butter-making	L. Guinnip	432,235	July 15	1875	.....	52	379
Butter. Manufacturing	G. H. Hamrick	433,729	Aug. 5	426	.....	52	839
Butter-mold	P. L. Kimball	423,478	Mar. 18	1688	{ 445 446	{ 50	1474
Butter-mold	A. L. Kinnamon and W. S. Dean ..	429,690	June 10	884	215	51	1653
Butter-mold	G. Titus	434,813	Aug. 19	2108	552	52	1188
Butter-package	H. J. Brine	422,005	Feb. 25	2296	606	50	1025
Butter-package	H. J. Brine	425,564	Apr. 15	1719	461	51	352
Butter-package	C. F. Hill	440,156	Nov. 11	804	209	53	776
Butter-package	G. F. Smith	438,195	Oct. 14	797	217	53	160
Butter-purifying apparatus	A. F. Thayer	439,310	Oct. 28	2567	6-5	53	506
Butter. Shipping-package for	W. H. Cadwell	435,204	Aug. 26	2731	721	52	1313
Butter-worker	A. A. Foster	421,130	Feb. 11	1050	{ 269 270	{ 50	772
Butter-worker	A. C. Kingsbury	426,422	Sept. 16	1632	429	52	1701
Butter-worker	G. H. Pounder	442,201	Dec. 9	900	240	53	1445
Button	G. E. Adams	420,650	Feb. 4	322	83	50	627
Button	F. B. Bristol	423,370	Mar. 11	1527	491	50	1434
Button	E. M. Chapman and N. D. Ingram ..	423,984	Mar. 25	2454	652	50	1625
Button	A. I. Crowell	418,689	Jan. 7	31	8	50	8
Button	L. A. Douillet	440,020	Nov. 4	599	158	53	725
Button	N. Geoffroy	435,820	Sept. 2	682	182	52	1507
Button	S. R. Grover	422,882	Mar. 4	781	199	50	1385
Button	S. C. Howard	427,172	May 6	239	58	51	857
Button	N. D. Ingram	437,992	Oct. 7	491	139	53	93
Button	N. D. Ingram and E. M. Chapman ..	422,789	Mar. 4	614	157	50	1254
Button	W. E. Jackson and L. A. Platt	429,530	June 3	652	160	51	1596
Button	R. H. Lewis	426,999	Apr. 29	3-85	1014	51	791
Button	L. J. Maxey	433,087	July 29	3214	825	52	649
Button	D. D. Mumma	427,703	May 13	1020	257	51	1022
Button	C. H. Peck	422,890	Mar. 4	792	203	50	1287
Button	C. M. Platt	422,624	Mar. 4	295	98	50	1212
Button	J. W. Schloss	440,371	Nov. 11	1141	294	53	838
Button	A. J. Shipley	437,003	Sept. 23	2606	681	52	1894
Button	A. J. Shipley	439,903	Nov. 4	417	108	53	689
Button	S. W. Shorey	421,441	Feb. 18	14-9	386	50	862
Button	J. R. Smith	424,733	Apr. 1	457	122	51	91
Button	J. R. Smith	430,406	June 17	2027	500	51	1884
Button	E. Traub and F. Peters	430,306	June 17	1876	461	51	1854
Button	J. A. Traut	437,874	Oct. 7	308	92	53	60
Button	J. H. Wells	438,428	Oct. 14	1151	311	53	226
Button	W. F. Whiting	429,249	Jan. 28	2499	663	50	520
Button	J. Williams and R. Lade	439,920	Nov. 4	439	113	53	694
Button and button-fastener	G. J. Murdock and A. L. Lesher ..	422,962	Mar. 11	914	239	50	1318
Button-attaching machine	C. J. and C. W. Colemau	432,375	July 15	2079	534	52	417
Button case and exhibitor	J. H. Morse	418,808	Jan. 7	226	55	50	49
Button-chute	C. J. Bresnan	425,928	Apr. 15	2271	601	51	456
Button. Collar or cuff	B. Visanska	423,841	Mar. 18	2220	586	50	1574
Button. Cuff or collar	S. Tennaire	434,683	Aug. 19	1921	501	52	1151
Button-detacher	J. C. Hunt	421,717	Feb. 18	1894	497	50	940
Button fastener	J. C. F. Dick	443,669	Dec. 30	3330	858	53	1944
Button-fastener	C. H. Eggleston	435,409	Sept. 2	48	16	52	1384
Button-fastener	G. D. Paul	419,970	Jan. 21	1980	520	50	414
Button-fastener	F. A. Smith, Jr.	423,451	Mar. 18	1645	434	50	1465
Button-fastener	F. A. Smith, Jr.	427,126	May 6	159	42	51	843
Button-fastener	F. E. Stracke	429,221	June 10	1082	266	51	1690
Button-fastener	L. Witkowsky	426,350	Apr. 22	2909	765	51	594
Button fastener. Glove	E. Fisher	431,340	July 1	463	114	52	94
Button-fastener holder. Shoe	A. G. Wilkins	429,228	June 10	1094	269	51	1692
Button-fasteners. Implement for removing	H. S. Ginther	420,340	Jan. 28	2565	681	50	532
Button-fastening for garments	W. McCabe	425,899	Apr. 15	2222	590	51	448
Button-fastening machine	E. Noelle	429,052	May 27	3077	795	51	1447
Button-holder	E. T. Elliott and W. O. Lyles	431,257	July 1	338	84	52	68
Button-holder	D. W. Long and B. F. Wudser	435,650	Sept. 2	425	113	52	1455
Button-hole-barring machine	H. M. Essington	432,795	July 22	2754	{ 704 705	{ 52	555
Button-hole cutter	J. Badger	419,489	Jan. 14	1258	335	50	265
Button-hole cutter	E. O. Bartholomew	442,005	Dec. 2	589	159	53	1378
Button-hole cutter	R. Theis	427,639	May 13	921	231	51	1002
Button-hole cutter	E. J. Toef	427,245	May 6	346	88	51	878
Button-hole pieces. Making	M. P. Bray	425,533	Apr. 15	1677	447	51	344
Button-hole shield	F. E. Heimig	442,622	Dec. 16	1557	402	53	1583
Button-hole-stitching machines. Gaging attachment for	F. W. Ostrom	419,283	Jan. 14	953	251	50	202
Button-hole strip	M. P. Bray	421,544	Feb. 18	1650	427	50	892

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Disg.	Vol.	Page.
Button-hole strip.....	M. P. Bray.....	430,987	June 24	2956	726	51	2069
Button-hole strip.....	J. H. Haviland and T. A. Mitchell.....	433,863	Aug. 5	631	164	52	880
Button-hole strip.....	A. L. Newman.....	428,571	May 20	2328	590	51	1284
Button-hole strip.....	J. K. Ross.....	437,457	Sept. 30	3349	876	52	2044
Button-hole strips. Making.....	H. W. Lyon and L. Lillingston.....	439,413	Oct. 28	2714	724	53	534
Button-holes. Pattern device for making re-enforce.....	C. Keeler.....	423,327	Mar. 11	1469	384	50	1423
Button-loop and safety-pin. Combined.....	C. A. Preston.....	419,554	Jan. 14	1344	360	50	283
Button-machine.....	D. A. Carpenter.....	425,209	Apr. 8	1197	317 318	51	242
Button-machine.....	J. Mathison.....	431,001	June 24	2975	730	51	2072
Button-machine.....	H. Thurston.....	443,417	Dec. 23	2922	752	53	1857
Button or stud.....	A. Whitney and H. Howard.....	424,153	Mar. 25	2696	717	50	1671
Button or stud.....	F. E. Williams.....	432,218	July 15	1851	475	52	375
Button or stud.....	F. E. Williams.....	437,273	Sept. 30	3044	797	52	1984
Button. Separable.....	A. Cushman.....	434,177	Aug. 12	1110	287	52	984
Button. Separable.....	A. Eisen.....	441,294	Nov. 25	2711	703	53	1151
Button. Separable.....	C. E. Perry.....	434,802	Aug. 19	2092	547	52	1184
Button. Separable.....	F. B. Rhodes and J. Campbell.....	434,202	Aug. 12	1146	297	52	990
Button. Separable.....	M. D. Shipman.....	4,9,696	Nov. 4	104	27	53	628
Button. Separable collar.....	A. Loos.....	427,699	May 13	1016	256	51	1022
Button-setting instrument.....	F. H. Richards.....	439,604	Oct. 28	3007	797	53	591
Button-setting machine.....	D. J. Bushorr.....	435,993	Sept. 9	950	249	52	1564
Button-setting machine.....	C. J. Coleman.....	432,374	July 15	2074	533 534	52	415
Button-setting machine.....	W. M. Gerkey.....	428,903	May 27	2844	723 724	51	1403
Button-setting machine.....	G. M. Griswold.....	422,076	Feb. 25	2394	633	50	1042
Button-setting machine.....	G. M. Griswold.....	440,893	Nov. 18	2022	520 521	53	1014
Button-setting machine.....	A. W. Ham.....	437,924	Oct. 7	384	109 110	53	73
Button-setting machine.....	L. D. Hawkins and E. Woodward.....	424,417	Mar. 25	3121	829	50	1754
Button-setting machine.....	J. P. Lavigne.....	438,110	Oct. 7	675	183 184	53	130
Button-setting machine.....	E. H. Taylor.....	429,394	June 3	449	106	51	1557
Button. Spiral-screw.....	H. B. Lum.....	419,206	Jan. 14	841	221	50	181
Button-strip.....	H. W. Gilbert.....	434,387	Aug. 12	1424	374	52	1046
Button-strip blanks. Making.....	H. W. Lyon.....	434,546	Aug. 19	1689	441 442	52	1106
Button. Tuft.....	W. H. Hutchinson and H. A. Cables.....	432,878	July 22	2866	734	52	578
Buttoner.....	T. B. Hodge.....	438,751	Oct. 21	1663	445	53	329
Buttoner.....	J. M. Sullivan.....	429,661	June 10	846	205	51	1644
Buttoner. Shoe or glove.....	E. O. Williams.....	438,044	Oct. 7	574	156	53	109
Buttress. Circular.....	J. C. De Wye.....	423,417	Mar. 18	1596	419	50	1455
Cab-door hanging device.....	C. Glencross.....	439,143	Oct. 28	2274	610 611	53	452
Cab for pall-bearers.....	A. E. Herman.....	421,934	Feb. 25	2204	577	50	1007
Cabs. Signal-light for.....	G. F. Singleton.....	422,256	Feb. 25	2679	707	50	1095
Cabinet.....	R. B. Carsley.....	425,492	Apr. 15	1618	431	51	332
Cabinet.....	W. I. Ohmer.....	423,625	Mar. 18	1901	502	50	1512
Cabinet.....	W. I. Ohmer.....	425,822	Apr. 15	2109	564	51	428
Cabinet.....	W. I. Ohmer.....	425,823	Apr. 15	2110	564	51	428
Cabinet.....	W. I. Ohmer.....	425,824	Apr. 15	2112	564	51	429
Cabinet, desk, and physician's operating-table. Combination.....	F. L. Tetamore.....	422,098	Feb. 25	2430	642	50	1048
Cabinet. Family-Bible.....	J. Melville.....	428,345	May 20	2003	504	51	1222
Cabinet for duplicating apparatus or slabs.....	M. A. Levy.....	427,518	May 6	741	184	51	958
Cabinet for hotel stationery.....	W. F. Rush.....	420,107	Jan. 28	2202	583	50	466
Cabinet. Physician's.....	M. Noll and F. A. Lowe.....	428,406	May 20	2108	528	51	1242
Cable and railway crossing.....	F. C. Weir and N. O. Goldsmith.....	428,028	May 13	1520	3-6	51	1118
Cable and steam track crossing. Combined.....	W. J. Morden.....	426,840	Apr. 29	3670	955	51	750
Cable-covering machine.....	J. D. Bishop.....	429,255	June 3	215	54 51	51	1514
Cable-driving machinery. Operating mechanism for.....	G. Leverich.....	436,365	Sept. 16	1540	403 404 405 406	52	1685
Cable-grip.....	J. C. Anderson.....	430,412	June 17	2034	501	51	1885
Cable-grip.....	A. Brumwell and M. E. Doolittle.....	435,275	Aug. 26	2834	750	52	1333
Cable-grip.....	E. Dainty.....	421,125	Feb. 11	1044	267	50	771
Cable-grip.....	E. Dainty.....	443,392	Dec. 23	2888	742	53	1851
Cable-grip.....	W. J. Egan and J. J. O'Brien.....	427,756	May 13	1116	279	51	1041
Cable-grip.....	E. R. Guerra.....	426,799	Apr. 29	3608	941 942	51	738
Cable-grip.....	E. R. Guerra.....	428,904	May 27	2848	724	51	1404
Cable-grip.....	E. R. Guerra.....	429,790	June 10	1030	252 253	51	1680
Cable-grip.....	E. R. Guerra.....	433,123	July 29	3270	842 843	52	660
Cable-grip.....	E. R. Guerra.....	437,110	Sept. 23	2756	720 721	52	1925
Cable-grip, &c.....	C. J. P. Heim.....	426,935	Apr. 29	3788	989 990	51	773
Cable-grip.....	N. Kirchner.....	421,050	Feb. 11	937	242	50	750
Cable-grip.....	J. H. Masters.....	429,590	June 3	740	178	51	1615
Cable-grip.....	E. S. Reid.....	424,935	Apr. 1	771	205	51	150
Cable-grip.....	F. A. Yard.....	433,843	Aug. 5	692	156	52	874
Cable-grip-carrier sleeve.....	J. Stephenson.....	427,484	May 6	686	172	51	947
Cable grip. Traction.....	J. Hind.....	436,955	Sept. 23	2541	665	52	1881
Cable grip. Traction.....	W. Phenix.....	441,377	Nov. 25	2837	732	53	1174
Cable-grips. Automatic throw-off for.....	T. W. C. Spencer.....	438,449	Oct. 14	1184	321	53	232
Cable-gripper and means for carrying the same over crossing cables.....	J. E. Morris.....	434,073	Aug. 19	1906	497 498	52	1148
Cable-gripping mechanism.....	T. Obach.....	423,803	Mar. 18	2168	573	50	1563
Cable-hanger.....	W. A. Conner.....	420,638	Feb. 4	302	80	50	622

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cable-lifter. Hand	J. Volk	423,293	Mar. 11	1423	369	50	1413
Cable-lifting device	J. Volk	424,520	Apr. 1	119	34	51	26
Cable road	E. O. McGlauffin	421,507	Feb. 18	1589	410	50	881
Cable road. Elevated	W. P. Walling	426,885	Apr. 29	3729	{ 973 974 }	51	762
Cable roads. Chain grip for	W. Heckert	431,658	July 8	977	{ 243 244 }	52	202
Cable-sheave	F. B. West	431,680	July 8	1023	256	52	209
Cable-terminal	J. C. Reilly	429,815	June 10	1071	{ 263 264 }	51	1687
Cable-tramway	W. E. and W. M. Winby	431,099	July 1	102	25, 26	52	22
Cable. Wire	T. Midgley	432,804	July 22	2768	708	52	558
Cable. Wire-link	G. H. Ogilvy	429,174	June 3	102	24	51	1492
Cables. Adjusting device for hoisting	N. E. Green	422,933	Mar. 11	869	227	50	1310
Cables, &c. Lock and support for	F. M. Bennett	426,655	Apr. 29	3382	888	51	694
Cages. Feed-cup for	H. E. Hendryx	441,956	Dec. 2	507	136	53	1363
Cake-cover. Removable	H. G. Falke	422,015	Feb. 25	2309	610	50	1027
Cake-cutter	W. Zeigler	433,431	July 29	3703	956	52	749
Cake-machine	J. H. Mitchell	434,604	Aug. 19	1774	464	52	1124
Cake or baking pan	G. N. Foster	433,236	July 29	3431	887	52	693
Calcinig or analogous furnace	G. W. Goetz	443,438	Dec. 23	2954	760	53	1863
Calculating-machine	E. Selling	420,667	Feb. 4	338	88, 89	50	630
Calculating system. Electrical	H. Hollerith	430,804	June 24	2672	{ 655 656 }	51	2016
Calculator	W. D. Otis	421,108	Feb. 11	1018	261	50	766
Calculator for percentages	E. B. Dennis	432,380	July 15	2088	536	52	418
Calculator. Tabular	E. J. F. Quirin	424,574	Apr. 1	212	58	51	44
Calculator. Time and date	W. R. Will	432,919	July 22	2919	749	52	588
Calendar	O. C. Blackmer	443,894	Dec. 30	3671	945	53	2010
Calendar	J. Casseday	439,810	Nov. 4	267	67	53	660
Calendar	J. H. Cutter	420,440	Feb. 4	18	4	50	568
Calendar	C. A. Dickinson	442,023	Dec. 2	617	166	53	1383
Calendar	H. S. Hack	436,415	Sept. 16	1620	427	52	1699
Calendar	D. M. Henderson	441,067	Nov. 18	2305	597	53	1068
Calendar	Y. Paez	430,036	June 10	1417	352	51	1755
Calendar	L. Palmerstein	429,949	June 10	1265	313	51	1726
Calendar	H. S. Prentiss	428,318	May 20	1963	493	51	1213
Calendar	H. S. Prentiss	441,443	Nov. 25	2946	759	53	1197
Calendar	E. C. Ryer	442,337	Dec. 9	1104	289	53	1483
Calendar	J. H. Taylor	438,033	Oct. 7	562	153	53	107
Calendar and memorandum-pad. Combined	J. T. Story	437,058	Sept. 23	2678	700	52	1900
Calendar. Perpetual	A. G. Masius	429,043	May 27	3062	789	51	1444
Calendar. Perpetual	A. J. Medalie	435,664	Sept. 2	450	119	52	1461
Calendar. Perpetual	W. D. Romaine	424,356	Mar. 25	3001	797	50	1730
Calendar. Perpetual	T. Stapleton	428,788	May 27	2678	679	51	1369
Calendar. Sporting	A. H. Robinson	432,838	July 22	2807	{ 718 719 }	52	566
Calendering-machine	R. Butterworth	425,978	Apr. 22	2372	628	51	485
Caliper adjustment	A. Munch	441,685	Dec. 2	82	22	53	1278
Caliper and centering-gage. Combined	W. O. Nelson	439,975	Nov. 4	536	141	53	711
Calipers	G. Carlyle	425,208	Apr. 8	1196	316	51	242
Calipers	E. V. Fancett	434,199	July 29	3381	874	52	683
Calipers	F. B. Rhodes	436,108	Sept. 9	1139	297	52	1598
Calipers and dividers	A. P. Laurson	433,869	Aug. 5	639	166	52	882
Calipers and dividers	W. H. Stuart	429,069	May 27	3098	799	51	1451
Calipers and dividers	B. H. Toquet	434,742	Aug. 19	2006	523	52	1167
Calipers. Beam	S. H. Bellows	427,956	May 13	1421	358	51	1098
Calipers or dividers	T. Isaac	426,502	Apr. 29	3154	829	51	650
Calipers or dividers	J. Stevens	432,578	July 22	2388	616	52	486
Calipers. Pencil-holder for	A. L. Schöllhorn	437,250	Sept. 30	3009	788	52	1978
Calipers. Slide	M. F. Smith	423,284	Mar. 11	1412	367	50	1411
Calk for horseshoes	C. Preiss	426,853	Apr. 29	3688	961	51	753
Calking-bit	W. E. Park	435,077	Aug. 26	2546	671	52	1278
Calking vessels	R. B. Caswell, Jr.	430,375	June 17	1983	489	51	1875
Call and voting apparatus. Electric	T. M. Wilkins and A. H. Reed	429,330	June 3	347	82	51	1537
Cam	J. Cryderman	432,301	July 15	1983	506	52	398
Cam-cleat	A. E. McClure	441,692	Dec. 2	96	25, 26	53	1281
Cam. Multiple	H. S. Prentiss	428,319	May 20	1967	494	51	1214
Camera:							
See Detective-camera.	Photographic camera.						
Panoramic camera.	Photographic magazine camera.						
Photograph-camera.	camera.						
Camera	H. M. Altick	422,686	Mar. 4	478	122	50	1228
Camera	G. Bausch	438,834	Oct. 21	1800	480	53	355
Camera	T. H. Blair	428,448	May 20	2157	542	51	1251
Camera	W. H. Bristol	424,402	Mar. 25	3098	823	50	1750
Camera	E. R. Bullard	433,070	July 29	3182	819	52	644
Camera	C. O. Ellison	442,616	Dec. 16	1549	{ 400 401 }	53	1581
Camera	C. F. Getler	425,130	Apr. 8	1071	284	51	216
Camera	H. W. Hales	423,682	Mar. 18	1994	526	50	1531
Camera	G. H. Hurlbut	440,228	Nov. 11	919	236	53	800
Camera	J. A. Mailloux	427,778	May 13	1145	288	51	1047
Camera	F. Newlan	441,018	Nov. 18	2216	{ 572 573 }	53	1051
Camera	W. E. Schneider	433,746	Aug. 5	454	{ 117 118 }	52	844
Camera	W. R. Tobias	435,080	Aug. 26	2549	{ 672 673 }	52	1278
Camera and electrical flash-light attachment	G. E. Davis	421,484	Feb. 18	1553	401	50	874
Camera apparatus, slide, and extension-bed	H. Bode	443,610	Dec. 30	3237	832	53	1927
Camera back-piece	J. F. Hein	427,321	May 6	447	115	51	899
Camera-shutter	W. E. Schneider	433,745	Aug. 5	452	117	52	843
Camera-stand	E. C. Fisher	419,006	Jan. 7	540	135	50	114

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Camera-stand	E. C. Fisher	423,551	Mar. 18	1792	470	50	1492
Camera-stand	H. D. Waite	432,255	July 15	1896	488	52	1383
Cameras. Roll-holder for	T. H. Blair	428,797	May 27	2688	682	51	1371
Camphor. Apparatus for refining	W. V. McKenzie	424,615	Apr. 1	276	72	51	56
Can:							
<i>See</i> Benzine-can. Milk-can.							
Creaming-can. Oil-can.							
Filtering-can. Oil-waste can.							
Fruit-can. Refuse-can.							
Gunpowder-can. Sheet-metal can.							
Jacketed can. Shipping-can.							
Metal can.							
Can	A. F. Ablum	426,651	Apr. 29	3375	885	51	693
Can	W. S. Clark and F. N. Folsom	427,502	May 6	714	179	51	954
Can	D. B. Denison	419,647	Jan. 21	1490	399	50	318
Can	E. W. Spear	442,210	Dec. 9	912	242	53	1448
Can-body-making machine	M. Jensen	442,484	Dec. 9	1324	342 343 344	53	1528
Can-body-making machine	P. Jordan	436,792	Sept. 23	2234	589 590 591	52	1822
Can-body-making machine	P. Jordan and J. G. Hodgson	436,791	Sept. 23	2228	586 587 588	52	1821
Can-cages. Device for manipulating	W. F. Dana	424,278	Mar. 25	2862	765	50	1704
Can-cap	W. D. Brooks	437,086	Sept. 23	2720	711	52	1917
Can-cap	J. G. Hodgson	434,868	Aug. 19	2193	574	52	1204
Can-capping machine	S. Lake	427,332	May 6	463	119 120	51	903
Can-cleaning machine	G. L. Merrell	436,860	Sept. 23	2396	625	52	1853
Can-closure	A. S. Lambert	428,343	May 20	2001	503	51	1221
Can-cover	E. M. Peacock	428,760	May 27	2636	667	51	1361
Can-cover and lock	G. H. Littlewood and O. D. Phillips	422,600	Mar. 4	344	86	50	1202
Can-covers. Machine for expanding	M. W. Chamberlain	433,271	July 29	3484	899	52	705
Can filling and packing machine	T. Houlahan	424,885	Apr. 1	697	184 185 149	51	134
Can-filling machine	E. C. Haines	435,745	Sept. 2	561	150 151	52	1483
Can-filling machine	E. Wildi	424,394	Mar. 25	3074	816 817 186	50	1745
Can-filling machine. Automatic	J. Little	420,910	Feb. 4	725	187	50	701
Can for hermetically-sealed goods	R. T. Smith	420,116	Jan. 28	2214	586	50	469
Can for measuring and retailing liquids	A. D. Lewis and C. S. Irish	420,645	Feb. 4	315	81, 82	50	626
Can for kerosene or other inflammable fluids	T. Modford	431,906	July 8	1367	346	52	276
Can for sirup, &c.	E. T. Mason and F. A. Bergman	435,234	Aug. 26	2764	730	52	1320
Can forming and soldering machine	C. W. Sleeper	429,872	June 10	1157	286 287	51	1704
Can-handle	J. H. Heisey and T. Oliver	437,199	Sept. 30	2928	762	52	1962
Can-head cutter	A. S. Wadleigh	429,489	June 3	595	144	51	1585
Can-heading machine	W. D. Brooks	425,295	Apr. 8	1323	354	51	266
Can-heading machine	R. Steegmüller	440,379	Nov. 11	1152	297 298	53	840
Can-holder	M. E. Rice	419,560	Jan. 14	1352	362	50	284
Can holder and filler. Combined	E. A. Foster	422,199	Feb. 25	2565	684	50	1078
Can holder. Fruit-	L. M. Schmidt	421,437	Feb. 18	1484	385	50	862
Can holder. Oil-	H. Reno	423,631	Mar. 18	1921	506	50	1517
Can-nozzle	A. J. Kuehn	424,421	Mar. 25	3126	830	50	1755
Can-nozzle	M. L. Melton and J. H. Webb	432,676	July 22	2554	654	52	518
Can nozzle. Oil-	F. J. Deverall	442,285	Dec. 9	1022	270	53	1469
Can-opener	H. Alliger	433,263	July 29	3473	896	52	702
Can-opener	E. K. Boothby	425,739	Apr. 15	1995	532	51	405
Can-opener	H. T. Cook and F. Shepard	432,603	July 22	2421	634	52	492
Can-opener	J. C. Myers	426,207	Apr. 22	2714	711	51	552
Can-opener	R. W. Newton	434,676	Aug. 19	1912	499	52	1149
Can-opener	A. B. Schofield	421,197	Feb. 11	1151	294	50	791
Can-opener	G. T. Ware	433,379	July 29	3628	936	52	733
Can-opener	E. E. Wood	434,818	Aug. 19	2117	554	52	1189
Can-spout	J. O'Neill	440,052	Nov. 4	646	173	53	734
Can-testing apparatus	J. W. Roberts	423,083	Mar. 11	1102	288	50	1352
Can-testing machine	E. E. Angell	439,851	Nov. 4	312	85, 86	53	672
Can-top	M. F. Hamsley	422,935	Mar. 11	871	228	50	1310
Can-top	G. J. Record	419,794	Jan. 21	1707	453	50	359
Can washing machine. Milk-	B. R. Rapp	434,679	Aug. 19	1916	500	52	1150
Cans. Adjustable binding device for milk-	W. H. Johnson	430,386	June 17	1998	493	51	1878
Cans. Machine for cleaning the tops of	G. L. Merrell	436,836	Sept. 23	2320	610 611	52	1839
Cans. Machine for crimping the heads of metal	F. A. Robbins	424,133	Mar. 25	2669	710	50	1666
Cans. Machine for making the seams of sheet-metal	C. F. Beaman	434,908	Aug. 26	2301	607 608 609	52	1232
Cans. Making lined	M. Ams	426,091	Apr. 22	2535	668	51	516
Cans. Pouring-nozzle cap for	E. Norton	437,233	Sept. 30	2976	777	52	1971
Cans. Pouring-nozzle for sheet-metal	E. Norton	437,231	Sept. 30	2972	777	52	1970
Cans. Pouring-nozzle for sheet-metal	E. Norton	437,232	Sept. 30	2974	777	52	1971
Cans. Sealed lock for	W. H. Stoops	429,288	June 3	274	66	51	1523
Canning corn, &c. Apparatus for	J. T. Staff	438,028	Oct. 7	554	152	53	105
Canning establishments. Paring-bin structure for	T. Van Kannel	434,411	Aug. 12	1477	384 385	52	1056
Canal-digging machine	J. McMullen, H. S. Wood, and H. Krusi. }	443,458	Dec. 23	2991	768 769	53	1870
Candelabrum	T. McGovern	429,471	June 3	563	137 138	51	1580

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Candle attachment.....	W. T. Ross.....	432,678	July 22	2557	655	52	518
Candle-extinguisher and shade-holder. Automatic	C. F. A. Röell.....	434,298	Aug. 12	1296	337	52	1019
Candle-extinguisher. Automatic	C. F. A. Röell.....	434,297	Aug. 12	1294	336	52	1019
Candle for killing insects.....	R. Atkinson.....	424,590	Apr. 1	237	.....	51	48
Candle-holder.....	A. Stelzner.....	422,989	Mar. 11	959	253	50	1326
Candle-holder.....	T. Wohlmuth.....	441,625	Nov. 25	3230	833	53	1252
Candle. Sulphur.....	C. H. Shaw.....	437,252	Sept. 30	3011	789	52	1978
Candles. Apparatus for finishing wax.....	G. Grieser.....	421,700	Feb. 18	1870	490	50	936
Candles. Mold for forming conical butts on.....	J. Baumgartner.....	436,731	Sept. 16	2111	556	52	1792
Candles. Shade or globe holder for.....	G. W. Rouis.....	442,669	Dec. 16	1620	417	53	1597
Candlestick.....	H. Blume.....	436,118	Sept. 9	1151	301	52	1600
Candlestick.....	G. Gavin and L. W. Cromer.....	428,673	May 27	2496	635	51	1334
Candy.....	L. Kuhn.....	426,506	Apr. 29	3157	830	51	651
Candy chains. Machine for making.....	M. Jacker.....	425,611	Apr. 15	1796	481	51	366
Candy-machine.....	R. D. Nuttall.....	442,732	Dec. 16	1760	455	53	1622
Candy. Machine for making stick.....	F. G. Birchard.....	426,521	Apr. 29	3178	834	51	655
Candy. Manufacturing.....	I. S. Barnett.....	419,001	Jan. 7	533	.....	50	112
Candy. Manufacturing.....	I. S. Barnett. (Reissue).....	11,107	Aug. 26	3026	.....	52	1367
Candy-mold.....	J. H. Seitz.....	419,718	Jan. 21	1595	425	50	337
Candy-packing tray.....	C. H. Bates.....	438,906	Oct. 21	1910	507	53	375
Candy rolling and cutting machine.....	W. Glynn.....	432,937	July 22	2948	755	52	593
Cane and camp-stool. Combined.....	H. Hendrickson.....	436,176	Sept. 9	1240	323	52	1616
Cane and umbrella. Combined.....	C. H. Morgan.....	442,491	Dec. 9	1342	346	53	1532
Cane car. Sugar.....	A. Quasebarth.....	435,319	Aug. 26	2911	772	52	1345
Cane cutter and crusher. Combined sugar.....	J. R. Mesa.....	430,806	June 24	2683	657	51	2017
Cane cutter or disintegrator.....	M. Swensen.....	422,657	Mar. 4	442	111	50	1220
Cane. Device for handling.....	C. S. Palm.....	442,308	Apr. 22	2849	750	51	581
Cane, &c. Diffusion for sorghum.....	H. A. Hughes.....	423,930	Mar. 25	2370	631	50	1609
Cane-juice. Apparatus for the treatment of.....	J. J. Adams and L. W. Tracy.....	435,784	Sept. 2	627	165	52	1495
Cane-mill.....	A. H. Brulard.....	422,289	Feb. 25	2734	720	50	1105
Cane-mill.....	W. O. Dunlap.....	420,147	Jan. 28	2267	600	50	478
Cane-mill.....	J. E. Hatton.....	421,705	Feb. 18	1878	492	50	938
Cane-mill.....	N. Sanders and J. Buchanan.....	441,508	Nov. 25	3043	783	53	1214
Cane-shredding apparatus.....	H. A. Hughes.....	443,522	Dec. 30	3091	797	53	1899
Cane, &c. Shredding apparatus for.....	H. A. Hughes.....	443,523	Dec. 30	3092	797	53	1899
Cane-slicing machine. Sugar.....	J. N. S. Williams.....	420,427	Jan. 28	2687	712	50	555
Cane-stripping machine.....	W. M. Carr.....	442,015	Dec. 2	604	163	53	1381
Cane trash. Apparatus for drying sugar.....	L. Bon.....	435,792	Sept. 2	638	168	52	1497
Cane, &c. Walking.....	E. Höfel.....	442,048	Dec. 2	660	178	53	1392
Cane-work. Machine for weaving.....	F. F. Parker.....	435,947	Sept. 9	883	231	52	1551
Canister. Soap-powder.....	F. S. Fairchild.....	425,769	Apr. 15	2035	542	51	414
Cannon and operating the same. Pneumatic.....	W. A. Bartlett.....	429,593	June 10	747	179	51	1625
Cannon and operating the same. Pneumatic.....	W. A. Bartlett.....	429,594	June 10	749	180	51	1626
Cannon. Breech-loading.....	J. B. G. A. Canet.....	424,378	Mar. 25	3045	809	50	1739
Cannon. Breech-loading.....	S. Seabury.....	425,584	Apr. 15	1750	469	51	358
Cannon. Breech-loading.....	S. Seabury.....	431,214	July 1	276	69	52	56
Cannon. Constructing and loading.....	L. Gathmann.....	424,969	Apr. 8	829	221	51	169
Cannon. Loading.....	L. Gathmann.....	424,970	Apr. 8	831	222	51	169
Cannon. Pneumatic.....	W. A. Bartlett.....	429,595	June 10	750	180	51	1626
Cannon. Pneumatic.....	G. H. Reynolds.....	421,311	Feb. 11	1311	338	50	820
Cannon. Pneumatic.....	G. H. Reynolds.....	429,641	June 10	810	197	51	1638
Cannon valve. Pneumatic.....	J. W. Osborne.....	427,895	May 13	1328	335	51	1080
Cannon-wheel remover.....	H. R. Ekstrom.....	422,013	Feb. 25	2307	609	50	1027
Canopy-holder.....	R. F. Painter.....	424,572	Apr. 1	209	58	51	43
Canopy or awning.....	J. L. Smith.....	421,772	Feb. 18	1963	516	50	953
Canst-dog.....	D. S. Hall.....	442,620	Dec. 15	1554	402	53	1583
Canst-hook.....	G. M. Ayers.....	437,080	Sept. 23	2714	709	52	1916
Canst-hook.....	A. E. Creigh.....	421,124	Feb. 11	1043	267	50	771
Canst-hook.....	H. K. Hamilton.....	434,828	Aug. 19	2129	557	52	1192
Canst-hook.....	F. S. Postal.....	439,553	Oct. 28	2922	777	53	574
Canst-hook.....	T. J. Thompson.....	436,322	Sept. 9	1459	380	52	1661
Canst-hook.....	J. Watson.....	439,315	Oct. 28	2573	686	53	508
Canst-hook crate.....	F. S. Postal.....	433,817	Aug. 5	570	148	52	868
Canst-hook for loggers.....	L. Koster.....	428,724	May 27	2587	656	51	1351
Canst-hooks. Making ferrules for.....	E. Mansfield.....	442,813	Dec. 16	1887	486	53	1648
Canvas-stretching device.....	G. Cope.....	424,095	Mar. 25	2614	696	50	1655
Canvas-stretching device.....	G. Cope.....	424,096	Mar. 25	2615	697	50	1656
Cap.....	C. M. De Lacy.....	430,003	June 10	1360	336	51	1745
Cap and plug. Combined.....	H. Houghton.....	431,056	July 1	43	10	52	10
Cap or bonnet.....	D. Heidelbergberger.....	430,473	June 17	2126	522	51	1902
Cap, pillow, and life-preserver. Combined.....	F. Frank.....	419,765	Jan. 21	1661	441	50	350
Capstan.....	H. Fletcher.....	418,786	Jan. 7	191	46, 47	50	42
Capsule-dipping machine.....	J. Krebbiel.....	430,860	June 24	2763	677	51	2032
Capsule-drying apparatus.....	T. C. Merz.....	433,991	Aug. 12	818	214	52	924
Capsule-joining machine.....	S. R. Bateson.....	422,365	Mar. 4	7	3	50	1138
Capsule-machine.....	S. R. Bateson.....	422,363	Mar. 4	3	1, 2	50	1137

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Capsule-mold and stripping device.....	S. R. Bateson.....	420,031	Jan. 28	2082	550	50	441
Capsule note-roll.....	O. Warmuth.....	418,998	Jan. 7	530	132	50	112
Capsule-press.....	F. W. Perry.....	442,910	Dec. 16	2067	{ 530 531	{ 53	1682
Capsule-receiving frame.....	S. R. Bateson.....	422,364	Mar. 4	5	2	50	1137
Capsule-stripping machine.....	J. Krebbiel.....	430,858	June 24	2757	{ 675 676	{ 51	2031
Capsule-stripping machine.....	F. J. Reinhold.....	429,957	June 10	1276	316	51	1728
Capsules. Machine for cutting gelatine.....	J. Krebbiel.....	430,859	June 24	2760	{ 676 677	{ 51	2032
Car.....	F. C. Ingalls.....	439,781	Nov. 4	226	59	53	652
Car.....	H. W. Libbey.....	441,178	Nov. 25	2495	645	53	1114
Car and air-brake coupling.....	W. H. Thresher.....	439,260	Oct. 28	2468	662	53	488
Car and air-brake coupling. Combined.....	D. J. Lupton.....	433,296	July 29	3517	{ 967 968	{ 52	711
Car and device for operating automatic railway-switches.	B. C. Rowell.....	434,889	Aug. 19	2238	587	52	1212
Car attachment.....	G. Konigsberg.....	434,902	Aug. 19	2268	{ 594 595	{ 52	1218
Car attachment. Street.....	W. S. Livengood.....	428,501	May 20	2228	564	51	1265
Car. Bicycle passenger.....	E. M. Boynton.....	439,770	Nov. 4	210	54, 55	53	650
Car-block.....	A. Deets.....	441,539	Nov. 25	3092	794	53	1224
Car-bodies. Side bearing for.....	L. K. Jewett.....	427,692	May 13	1005	253	51	1019
Car-brace. Coal and freight.....	J. Rhoads.....	442,238	Dec. 9	950	251	53	1456
Car-brake.....	D. L. Barnes.....	438,673	Oct. 21	1513	408	53	303
Car-brake.....	H. G. Bird.....	443,665	Dec. 30	3323	856	53	1943
Car-brake.....	M. Bodefeld.....	421,231	Feb. 11	1192	306	50	798
Car-brake.....	P. J. Boris.....	422,330	Feb. 25	2801	737	50	1118
Car-brake.....	W. Brunquest.....	421,664	Feb. 18	1824	477	50	927
Car-brake.....	J. P. Clancy.....	440,014	Nov. 4	590	{ 156 157	{ 53	723
Car-brake.....	D. Cronin.....	438,433	Oct. 14	1157	313	53	327
Car-brake.....	P. J. Cull.....	434,253	Aug. 12	1232	319	52	1006
Car-brake.....	E. Dederick.....	432,515	July 22	2294	594	52	467
Car-brake.....	A. R. Drake.....	439,837	Nov. 4	309	77, 78	53	668
Car-brake.....	F. Feldhaus.....	432,129	July 15	1723	443	52	351
Car-brake.....	G. L. Fowler.....	424,773	Apr. 1	529	142	51	104
Car-brake.....	E. C. Glover.....	422,519	Mar. 4	225	59	50	1179
Car-brake.....	H. Hackney.....	419,665	Jan. 21	1327	{ 406 407	{ 50	324
Car-brake.....	J. Hahn.....	423,557	Mar. 18	1802	475	50	1494
Car-brake.....	A. Hendee.....	420,996	Feb. 11	859	222	50	735
Car-brake.....	W. Henery.....	443,364	Dec. 23	2849	733	53	1843
Car-brake.....	R. A. Isenberg and S. Alloway.....	418,723	Jan. 7	101	23	50	22
Car-brake.....	W. M. Johns and D. P. Slattery.....	430,957	June 24	2903	714	51	2059
Car-brake.....	A. M. Kendall.....	418,725	Jan. 7	102	24	50	22
Car-brake.....	W. H. Koebler.....	437,652	Sept. 30	3624	947	52	2099
Car-brake.....	M. B. Leonard.....	435,019	Aug. 26	2458	{ 650 651	{ 52	1261
Car-brake.....	M. Madden.....	438,381	Oct. 14	1081	295	53	213
Car-brake.....	J. F. McLaughlin.....	432,203	July 15	1822	470	52	371
Car-brake.....	A. Moore and G. Norwood.....	442,235	Dec. 9	947	250	53	1455
Car-brake.....	L. Pfingst and S. A. Bemis.....	431,075	July 1	70	17	52	16
Car-brake.....	C. W. Powell.....	427,706	May 13	1027	258	51	1024
Car-brake.....	E. F. Roberts.....	433,039	July 29	3142	808	52	636
Car-brake.....	F. W. Rock.....	427,910	May 13	1349	341	51	1084
Car-brake.....	W. D. Sargent.....	423,279	Mar. 11	1404	366	50	1409
Car-brake.....	T. S. Shenston.....	426,336	Apr. 22	2885	759	51	559
Car-brake.....	A. F. Smith.....	420,703	Feb. 4	383	102	50	640
Car-brake.....	N. Smith.....	425,638	Apr. 15	1845	493	51	376
Car-brake.....	J. I. Stafford.....	430,895	June 24	2818	692	51	2043
Car-brake.....	C. W. Stringham.....	435,571	Sept. 2	297	33	52	1432
Car-brake.....	H. H. Westinghouse.....	435,373	Aug. 26	3062	795	52	1363
Car-brake.....	W. R. Zeigler.....	442,085	Dec. 2	717	193	53	1403
Car-brake.....	J. G., Jr., and J. J. Zimmermann and R. A. Stiles.....	436,517	Sept. 16	1767	466	52	1727
Car-brake actuating device.....	W. S. Adams.....	424,160	Mar. 25	2705	720	50	1673
Car-brake actuating device.....	J. A. Brill.....	424,170	Mar. 25	2717	724	50	1675
Car brake and starter.....	E. Chaffey.....	442,700	Dec. 16	1680	431	53	1608
Car brake and starter.....	E. Dredge.....	423,225	Mar. 11	1310	{ 340 341	{ 50	1393
Car brake and starter.....	C. J. Luce.....	432,694	Oct. 21	1557	419	53	309
Car-brake. Automatic.....	G. E. Gillam.....	436,057	Sept. 9	1049	273	52	1553
Car-brake. Automatic.....	J. D. Micks.....	441,015	Nov. 18	2212	571	53	1050
Car-brake. Automatic.....	W. P. Pickard.....	435,633	Sept. 2	400	108	52	1450
Car-brake. Cable.....	W. McCrory and E. O. McGlauffin.....	419,616	Jan. 14	1435	385	50	301
Car-brake. Electro-magnetic.....	D. S. McElroy.....	420,693	Feb. 4	372	99	50	637
Car-brake. Friction.....	J. Wyckoff, C. W. Lunquist, and M. J. Smith.....	436,750	Sept. 16	2158	567	52	1800
Car-brake handle.....	C. W. Alden.....	422,683	Mar. 4	476	121	50	1227
Car-brake mechanism.....	T. H. Haberkorn.....	435,418	Sept. 2	59	19	52	1386
Car-brake mechanism.....	R. Sheldon.....	443,871	Dec. 30	3639	937	53	2004
Car-brake mechanism.....	A. J. Wright.....	430,455	June 17	2097	517	51	1896
Car-brake mechanism.....	A. J. Wright.....	430,500	June 17	2165	533	51	1910
Car-brake mechanism. Electric street.....	J. Illingworth and A. M. Baker.....	434,063	Aug. 12	914	240	52	944
Car brake mechanism. Railway.....	J. E. Loughbridge.....	433,294	July 29	3515	907	52	711
Car brake mechanism. Street.....	W. E. Badger.....	422,693	Mar. 4	489	125	50	1230
Car brake. Motor.....	H. A. Crossley.....	432,020	July 15	1544	392	52	317
Car brake. Motor.....	H. A. Crossley.....	440,398	Nov. 11	1198	309	53	849
Car brake. Railway.....	G. M. Hoadley and S. A. Bemis.....	427,080	May 6	83	22	51	828
Car brake. Railway.....	E. Savage.....	419,362	Jan. 14	1080	285	50	228
Car-brake. Safety.....	E. W. Luce.....	425,443	Apr. 15	1544	414	51	318
Car-brake. Street.....	J. C. Chase.....	440,467	Nov. 11	1312	339	53	870
Car-buffer.....	S. W. Ashmead.....	439,338	Oct. 28	2605	694	53	514

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Car. Burglar proof.....	J. Beermaker.....	422,047	Feb. 25	2355	{ 621 632 }	50	1035
Car. Cable.....	J. Stephenson.....	421,628	Feb. 18	1775	{ 464 465 }	50	916
Car. Cable-grip.....	B. F. Crow.....	431,936	July 8	1408	357	52	283
Car-chair. Reversible.....	S. G. Scarritt and J. H. Mosley.....	429,966	June 10	1306	323	51	1733
Car-chair. Reversible.....	S. G. Scarritt and J. H. Mosley.....	429,967	June 10	1307	{ 323 324 }	51	1734
Car. Cinder.....	C. Bochkoltz.....	439,465	Oct. 28	2796	745	53	549
Car. Cinder.....	W. H. Bradley.....	435,478	Sept. 2	142	40	52	1402
Car. Coal.....	E. R. Steinbilber.....	428,235	May 20	1830	459	51	1188
Car. Collapsible railway.....	L. C. Zolk.....	421,344	Feb. 11	1353	350	50	829
Car. Combination freight.....	R. B. Campbell and F. E. House.....	437,332	Sept. 30	3128	818	52	1999
Car construction.....	G. L. Harvey.....	432,272	July 15	1931	494	52	359
Car construction.....	G. L. Harvey.....	432,273	July 15	1932	494	51	359
Car construction.....	G. L. Harvey.....	432,275	July 15	1937	495	52	390
Car construction.....	G. L. Harvey.....	432,276	July 15	1938	{ 495 496 }	52	390
Car construction.....	G. L. Harvey.....	436,893	Sept. 23	2447	{ 639 640 }	52	1864
Car construction.....	H. C. Hodges.....	420,200	Jan. 28	2358	626	50	494
Car. Convertible freight.....	W. F. Mossop.....	432,890	July 22	2882	738	52	581
Car cooling and ventilating apparatus.....	C. A. Kimpton.....	419,529	Jan. 14	1310	{ 350 351 }	50	275
Car-coupler.....	J. Chesnut.....	436,336	Sept. 16	1480	386	52	1673
Car-coupler.....	E. A. Wilcox.....	443,621	Dec. 30	3253	835	53	1929
Car-couplers. Draw-bar for.....	R. N. Crook.....	436,753	Sept. 16	2163	568	52	1201
Car-coupling.....	C. N. Alderman.....	443,841	Dec. 30	3605	927	53	1997
Car-coupling.....	J. A. Alexauder.....	441,387	Nov. 25	2850	735	53	1177
Car-coupling.....	A. B. Allen.....	430,460	June 17	2104	519	51	1897
Car-coupling.....	D. Altman.....	435,787	Sept. 2	631	166	52	1496
Car-coupling.....	A. A. Anderson and T. G. Hamrick.....	440,122	Nov. 11	745	197	53	763
Car-coupling.....	H. C. Armstrong, D. E. Bigelow, and G. L. Osborn.....	428,546	May 20	2286	581	51	1276
Car-coupling.....	E. S. Bacon and A. F. Sellers.....	427,212	May 6	288	74	51	868
Car-coupling.....	W. S. Bales.....	418,671	Jan. 7	9	3	50	4
Car-coupling.....	C. O. and L. Barnes, Sr.....	437,962	Oct. 7	437	{ 122 123 }	53	84
Car-coupling.....	T. Barnes.....	442,412	Dec. 9	1222	315	53	1507
Car-coupling.....	A. T. Bass.....	433,927	Aug. 12	727	189	52	909
Car-coupling.....	J. Bender.....	418,676	Jan. 7	14	4	50	5
Car-coupling.....	H. J. Bentley.....	425,851	Apr. 15	2163	576	51	437
Car-coupling.....	B. B. Berry.....	434,858	Aug. 19	2165	568	52	1199
Car-coupling.....	T. A. Bissell and C. Bergman.....	440,299	Nov. 11	1038	{ 266 267 }	53	819
Car-coupling.....	C. C. Black.....	434,757	Aug. 19	2030	530	52	1172
Car-coupling.....	H. D. Blagrove and H. J. Marsh.....	440,535	Nov. 11	1429	368	53	892
Car-coupling.....	F. Blauss.....	420,673	Feb. 4	345	91	50	631
Car-coupling.....	J. Bond.....	439,319	Oct. 28	2578	688	53	508
Car-coupling.....	D. Bowles.....	432,971	July 29	3023	777	52	612
Car-coupling.....	A. Bowron.....	425,976	Apr. 22	2369	628	51	485
Car-coupling.....	I. Bradfield.....	427,222	May 6	301	77	51	871
Car-coupling.....	R. L. Breth.....	434,315	Aug. 12	1322	344	52	1025
Car-coupling.....	V. Brett.....	442,853	Dec. 16	1962	504	53	1663
Car-coupling.....	W. C. Brigam.....	440,000	Nov. 4	569	150	53	719
Car-coupling.....	J. W. Brooker.....	421,232	Feb. 11	1195	306	50	799
Car-coupling.....	J. Brown.....	442,509	Dec. 9	1374	352	53	1538
Car-coupling.....	P. Brown.....	434,763	Aug. 19	2041	{ 533 534 }	52	1174
Car-coupling.....	H. C. Buboup.....	427,737	May 13	1072	269	51	1032
Car-coupling.....	H. C. Buboup.....	429,081	May 27	3122	{ 804 805 }	51	1456
Car-coupling.....	H. C. Buboup.....	431,644	July 8	952	238	52	198
Car-coupling.....	H. P. Bullock.....	430,171	June 17	1623	405	51	1205
Car-coupling.....	C. J. Bumpus.....	430,917	June 24	2848	699	51	2048
Car-coupling.....	O. F. Burch.....	437,830	Oct. 7	243	75	53	48
Car-coupling.....	J. C. Burns.....	440,134	Nov. 11	765	201	53	768
Car-coupling.....	C. Burpee.....	433,514	Aug. 5	107	31	52	778
Car-coupling.....	R. Butt.....	418,680	Jan. 7	19	6	50	6
Car-coupling.....	N. F. Campbell.....	426,915	Apr. 29	3763	983	51	769
Car-coupling.....	E. A. Canales.....	430,110	June 17	1549	385	51	1790
Car-coupling.....	E. Caniff.....	440,466	Nov. 11	1311	339	53	870
Car-coupling.....	J. D. Carr.....	437,092	Sept. 23	2732	713	52	1920
Car-coupling.....	H. A. Case.....	426,107	Apr. 22	2565	675	51	522
Car-coupling.....	J. R. Chamblin.....	421,243	Feb. 11	1213	313	50	803
Car-coupling.....	A. J. Chapel.....	421,671	Feb. 18	1831	479	50	928
Car-coupling.....	H. F. Chapin.....	437,900	Oct. 7	344	100	53	67
Car-coupling.....	E. M. Chesney.....	439,269	Oct. 28	2484	666	53	491
Car-coupling.....	J. E. Clark.....	439,476	Oct. 28	2810	{ 748 749 }	53	552
Car-coupling.....	J. M. Clark.....	421,245	Feb. 11	1215	314	50	803
Car-coupling.....	W. P. Clark.....	431,333	July 1	450	112	52	92
Car-coupling.....	M. M. Clarke.....	429,886	June 10	1182	293	51	1709
Car-coupling.....	J. O. Collins.....	434,973	Aug. 26	2397	635	52	1250
Car-coupling.....	A. Colvin.....	430,729	June 24	2550	624	51	1991
Car-coupling.....	W. A. Cooper.....	420,226	Jan. 28	2398	638	50	502
Car-coupling.....	J. Corban and J. F. Green.....	435,287	Aug. 26	2847	753	52	1336
Car-coupling.....	J. M. Cosby.....	419,752	Jan. 21	1645	437	50	346
Car-coupling.....	C. B. Cowen.....	435,209	Aug. 26	2737	722	52	1314
Car-coupling.....	W. Davids.....	428,164	May 20	1717	435	51	1166
Car-coupling.....	H. F. Davis.....	431,688	July 8	1042	261	52	212
Car-coupling.....	J. E. Davis and C. A. Lewis.....	430,247	June 17	1754	437	51	1830
Car-coupling.....	J. F. Deischer.....	439,054	Oct. 21	2129	572	53	418
Car-coupling.....	R. Dial.....	434,385	Aug. 12	1423	373	52	1045

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Car-coupling.....	G. W. Dickey.....	440,250	Nov. 11	951	244	53	806
Car-coupling.....	O. L. W. Dietz and F. Haaf.....	437,582	Sept. 30	3531	921	52	2081
Car-coupling.....	A. Diller and J. W. White.....	426,975	Apr. 29	3845	1004	51	784
Car-coupling.....	P. J. Dockray.....	433,522	Aug. 5	117	34	52	779
Car-coupling.....	G. H. Dougall, Sr.....	433,453	Aug. 5	27	7	52	762
Car-coupling.....	R. H. Dowling.....	424,409	Mar. 25	3112	825	50	1752
Car-coupling.....	R. H. Dowling.....	442,574	Dec. 9	1480	380	53	1559
Car-coupling.....	G. H. Duke.....	443,958	Dec. 30	3776	964	53	2029
Car-coupling.....	J. Dwyer.....	432,697	July 22	2593	664	52	524
Car-coupling.....	E. P. Eastwick, Jr.....	440,586	Nov. 11	1509	388 339	53	907
Car-coupling.....	R. J. Edwards.....	426,786	Apr. 29	3588	937	51	734
Car-coupling.....	H. H. Emery.....	426,929	Apr. 29	3780	988	51	772
Car-coupling.....	A. Epperson.....	440,626	Nov. 18	1582	407	53	930
Car-coupling.....	A. B. Evenden.....	429,122	June 3	25	6	51	1477
Car-coupling.....	W. Falkner.....	421,255	Feb. 11	1224	317	50	805
Car-coupling.....	L. A. Farrar.....	421,825	Feb. 18	2032	537	50	966
Car-coupling.....	R. L. Finley and H. H. Harper.....	421,129	Feb. 11	1049	269	50	772
Car-coupling.....	A. Fisk.....	440,588	Nov. 11	1511	389	53	908
Car-coupling.....	L. E. Ford and A. J. Whitworth.....	421,920	Feb. 25	2184	572	50	1003
Car-coupling.....	S. J. Ford.....	427,758	May 13	1118	280	51	1041
Car-coupling.....	J. Fortier.....	419,933	Jan. 21	1926	507	50	405
Car-coupling.....	F. A. Fox.....	424,285	Mar. 25	2873	767	50	1706
Car-coupling.....	F. A. Fox.....	429,036	May 27	3026	777	51	1438
Car-coupling.....	J. E. Francis.....	436,346	Sept. 16	1502	391	52	1677
Car-coupling.....	C. F. Francisco.....	425,166	Apr. 8	1138	301	51	229
Car-coupling.....	W. H. Franks.....	442,771	Dec. 16	1817	470	53	1634
Car-coupling.....	S. J. Freeman.....	424,192	Mar. 25	2749	733	50	1682
Car-coupling.....	B. J. French and J. H. Carroll.....	442,772	Dec. 16	1818	471	53	1634
Car-coupling.....	J. A. Frenzel.....	428,389	May 20	2084	523 524	51	1238
Car-coupling.....	J. T. Friend.....	437,488	Sept. 30	3391	889	52	2054
Car-coupling.....	G. S. Gaines.....	425,167	Apr. 8	1142	301	51	230
Car-coupling.....	H. Gallagher.....	431,768	July 8	1159	288	52	235
Car-coupling.....	E. A. Gallup.....	438,372	Oct. 14	1071	291	53	211
Car-coupling.....	E. N. Gifford.....	434,865	Aug. 19	2186	573	52	1203
Car-coupling.....	O. L. Gilbert.....	434,332	Aug. 12	1344	350	52	1029
Car-coupling.....	O. L. Gilbert.....	440,770	Nov. 18	1824	470	53	976
Car-coupling.....	W. J. Godsey.....	436,954	Sept. 23	2540	665	52	1881
Car-coupling.....	E. B. Golet.....	431,693	July 8	1048	262	52	213
Car-coupling.....	J. B. Granger.....	427,683	May 13	985	248	51	1016
Car-coupling.....	D. D. Green.....	440,825	Nov. 18	1917	492	53	993
Car-coupling.....	M. M. Green.....	427,310	May 6	431	111	51	896
Car-coupling.....	W. Greenwade.....	438,151	Oct. 14	740	203	53	149
Car-coupling.....	F. L. Habliston.....	436,067	Sept. 9	1064	276	52	1586
Car-coupling.....	J. M. Hagerty.....	439,242	Oct. 28	2443	655	53	483
Car-coupling.....	J. Haish.....	424,473	Apr. 1	43	12	51	11
Car-coupling.....	J. S. Haller.....	442,182	Dec. 9	873	233	53	1441
Car-coupling.....	B. P. Hammerstad and J. Lyken.....	439,653	Nov. 4	45	13	53	615
Car-coupling.....	G. Hardy.....	441,410	Nov. 25	2894	746	53	1186
Car-coupling.....	W. J. Harkness.....	432,039	July 15	1573	403	52	322
Car-coupling.....	G. F. Harlan.....	423,152	Mar. 11	1212	315	50	1374
Car-coupling.....	W. H. Harris.....	428,910	May 27	2861	732	51	1407
Car-coupling.....	W. H. Harris.....	436,660	Sept. 16	2011	525 526	52	1771
Car-coupling.....	M. B. Harris.....	432,135	July 15	1732	445	52	352
Car-coupling.....	H. C. Hart and C. W. Stanton.....	434,986	Aug. 26	2407	637	52	1252
Car-coupling.....	F. Harvey and J. Kane.....	443,916	Dec. 30	3708	949	53	2017
Car-coupling.....	H. F. Henm.....	426,182	Apr. 22	2673	701	51	544
Car-coupling.....	S. Heymann and B. Prosser.....	421,711	Feb. 18	1886	495	50	939
Car-coupling.....	G. Highfield.....	431,659	July 8	979	244	52	202
Car-coupling.....	H. Hill.....	430,953	June 24	2398	713	51	2058
Car-coupling.....	B. Himsoeth.....	432,734	July 22	2643	675 676	52	535
Car-coupling.....	J. A. Hinson.....	421,404	Feb. 18	1440	373	50	853
Car-coupling.....	T. J. Hodges and A. J. Isaacks.....	439,800	Nov. 4	254	64	53	658
Car-coupling.....	Q. J. Hoke.....	425,509	Apr. 15	1636	436	51	336
Car-coupling.....	B. R. Hooks.....	437,117	Sept. 23	2767	723	52	1927
Car-coupling.....	A. N. Hopkins.....	429,920	June 10	1226	304	51	1718
Car-coupling.....	M. R. Hubbell.....	432,830	July 22	2799	715 716	52	564
Car-coupling.....	J. Hughes.....	429,194	June 3	134	33	51	1496
Car-coupling.....	J. Humerickhouse and J. Kraus.....	435,661	Sept. 2	444	118	52	1459
Car-coupling.....	W. J. Huston.....	438,925	Oct. 21	1934	515	53	380
Car-coupling.....	O. Jennings.....	431,145	July 1	105	42	52	35
Car-coupling.....	E. N. Jones.....	421,285	Feb. 11	1267	327	50	813
Car-coupling.....	M. D. Kalbach.....	422,796	Mar. 4	627	161	50	1257
Car-coupling.....	F. H. Kaye, S. L. Kane, and W. A. Yates.....	418,594	Jan. 7	381	93	50	80
Car-coupling.....	E. Kaylor.....	435,360	Aug. 26	2981	791	52	1359
Car-coupling.....	L. J. Kemp.....	428,918	May 27	2871	734	51	1408
Car-coupling.....	A. Kimber.....	422,532	Mar. 4	240	63	50	1182
Car-coupling.....	J. H. King and B. F. Reed.....	420,540	Feb. 4	158	39	50	595
Car-coupling.....	J. E. Kline.....	443,597	Dec. 30	3216	827	53	1922
Car-coupling.....	E. W. Knapp.....	424,067	Mar. 25	2573	687	50	1647
Car-coupling.....	N. Kramer.....	436,859	Sept. 23	2395	625	52	1853
Car-coupling.....	G. A. La Fever.....	424,214	Mar. 25	2776	740	50	1687
Car-coupling.....	W. P. Lamp.....	441,494	Nov. 25	3027	780	53	1211
Car-coupling.....	G. G. Lane.....	420,809	Feb. 4	553	142	50	669
Car-coupling.....	M. C. Lankford.....	431,063	July 1	50	12	52	12
Car-coupling.....	E. Latham.....	420,014	Jan. 21	2050	541	50	427
Car-coupling.....	H. D. Layman.....	431,775	July 8	1172	292	52	237
Car-coupling.....	J. F. Leavitt.....	438,692	Oct. 21	1554	418	53	309
Car-coupling.....	F. P. Lenahan.....	418,731	Jan. 7	110	26	50	24

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Car-coupling	C. Lenhart	431,902	July 8	1363	345	52	275
Car-coupling	G. R. Lewis	439,410	Oct. 28	2711	723	53	534
Car-coupling	A. E. Lewis and W. R. Cosby	437,761	Oct. 7	138	43	53	29
Car-coupling	A. Loughheed	433,797	Aug. 5	538	139	52	861
Car-coupling	A. Lynch	418,732	Jan. 7	111	26	50	24
Car-coupling	D. F. MacCarthy	441,499	Nov. 25	3032	781	53	1212
Car-coupling	C. A. Magne	442,193	Dec. 9	887	236	53	1443
Car-coupling	H. P. Maiden	425,181	Apr. 8	1161	306	51	235
Car-coupling	C. W. Manchester	443,967	Dec. 30	3796	967	53	2033
Car-coupling	M. L. Mardis and J. W. Britton	425,684	Apr. 15	1914	510	51	389
Car-coupling	H. Marshal	433,798	Aug. 5	540	139 140	52	862
Car-coupling	I. E. Marshall	442,814	Dec. 16	1888	487	53	1648
Car-coupling	A. C. Martin	436,796	Sept. 23	2247	592	52	1826
Car-coupling	G. Martin and L. M. Friar	437,400	Sept. 30	3248	840 847	52	2023
Car-coupling	J. N. Martin and W. H. Harris	428,118	May 20	1656	420	51	1155
Car-coupling	J. N. Martin and W. H. Harris	428,119	May 20	1658	420	51	1155
Car-coupling	D. J. Marx	435,072	Aug. 26	2540	670	52	1277
Car-coupling	J. A. Mason	418,734	Jan. 7	114	27	50	25
Car-coupling	J. M. Mason	418,954	Jan. 7	475	118	50	100
Car-coupling	A. C. Mather	438,697	Oct. 21	1563	420	53	310
Car-coupling	W. J. McCaul	435,852	Sept. 2	726	195	52	1515
Car-coupling	A. B. McClave	430,216	June 17	1703	423	51	1820
Car-coupling	A. C. McCord	438,275	Oct. 14	931	252	53	153
Car-coupling	F. E. McCrary and W. W. Gelatt	435,444	Sept. 2	98	28	52	1394
Car-coupling	A. McDougald	427,602	May 13	870	218	51	992
Car-coupling	A. McDougald	429,358	June 3	389	92	51	1545
Car-coupling	P. McEntee	436,019	Sept. 9	985	258	52	1570
Car-coupling	R. D. McGee	443,837	Dec. 30	3602	926	53	1996
Car-coupling	T. L. McKeen	430,743	June 24	2575	631	51	1996
Car-coupling	T. L. McKeen	430,744	June 24	2578	631	51	1996
Car-coupling	C. McKarahan	428,855	May 27	2776	706	51	1389
Car-coupling	C. S. McMillen	441,189	Nov. 25	2511	648 649	53	1117
Car-coupling	S. T. M. McPherson and G. L. Armbrister	440,495	Nov. 11	1370	354	53	881
Car-coupling	W. McRae	436,430	Sept. 16	1642	432	52	1703
Car-coupling	D. McVean	431,019	June 24	3008	738	51	2078
Car-coupling	H. Megorden	439,967	Nov. 4	520	137	53	709
Car-coupling	A. C. Merritt	429,539	June 3	662	162	51	1598
Car-coupling	F. C. Miller	419,207	Jan. 14	842	231	50	181
Car-coupling	F. C. Miller	425,445	Apr. 15	1548	415	51	318
Car-coupling	G. Mock	426,415	Apr. 22	3030	793	51	617
Car-coupling	E. Mohr	441,184	Nov. 25	2503	646	53	1115
Car-coupling	C. S. Monroe and C. E. Yeager	419,341	Jan. 14	1049	277	50	222
Car-coupling	H. E. Moonaw	428,928	May 27	2883	737	51	1411
Car-coupling	H. E. Moonaw	433,902	Aug. 5	684	178	52	890
Car-coupling	G. W. Moon	443,582	Dec. 30	3193	820 821	53	1918
Car-coupling	J. Mooney	422,031	Feb. 25	2327	614 615	50	1030
Car-coupling	R. T. Morrison, Jr.	423,689	May 27	2530	642 643	51	1340
Car-coupling	A. A. Moss	440,956	Nov. 18	2134	552	53	1034
Car-coupling	G. M. Murr	433,357	July 29	3598	928	52	737
Car-coupling	J. Mutton	423,347	May 20	2006	504	51	1232
Car-coupling	N. Newman	429,051	May 27	3076	794	51	1447
Car-coupling	H. Nichols	427,007	Apr. 29	3895	1017	51	793
Car-coupling	H. Niemann	436,722	Sept. 16	2098	552 553	52	1789
Car-coupling	H. Niemann	437,790	Oct. 7	184	57, 58	53	37
Car-coupling	E. F. O'Haver	438,443	Oct. 14	1172	317	53	230
Car-coupling	A. S. Okey and J. A. Scroggins	421,425	Feb. 18	1465	379	50	858
Car-coupling	C. H. Olds	424,655	Apr. 1	336	87, 88	51	65
Car-coupling	F. P. Onzon	438,484	Oct. 14	1228	333	53	242
Car-coupling	G. S. Osmondson	429,151	June 3	65	17	51	1485
Car-coupling	G. B. Painter	440,746	Nov. 18	1778	459	53	968
Car-coupling	W. R. Parkinson	432,893	July 22	2885	739	52	582
Car-coupling	W. R. Parkinson	434,025	Aug. 12	859	226	52	932
Car-coupling	F. W. Parsons	433,695	Aug. 5	376	96	52	829
Car-coupling	P. S. N. Petersen	426,626	Apr. 29	3340	875	51	687
Car-coupling	S. E. Pheister	430,192	June 17	1653	412	51	1811
Car-coupling	C. F. Phelps and R. A. Lucas	441,580	Nov. 25	3157	812	53	1236
Car-coupling	J. Phelps	423,340	Mar. 11	1483	389	50	1426
Car-coupling	T. F. Phillips	433,487	Aug. 5	72	21	52	771
Car-coupling	C. H. Pierce	436,260	Sept. 9	1362	355	52	1642
Car-coupling	S. H. Pierce	431,852	July 8	1299	325	52	263
Car-coupling	W. J. Ponto	440,058	Nov. 4	654	174	53	736
Car-coupling	W. Portlock	433,305	July 29	3533	912	52	714
Car-coupling	G. W. Powell	429,096	May 27	3142	810	51	1461
Car-coupling	J. F. Powell	439,424	Oct. 23	2734	729	53	538
Car-coupling	N. T. Quevedo	432,559	July 22	2365	610	52	481
Car-coupling	C. A. Ratcliff	419,555	Jan. 14	1345	360	50	253
Car-coupling	S. H. Rathburn	439,558	Oct. 28	2929	778	53	575
Car-coupling	J. Rawles	443,867	Dec. 30	3634	936	53	2003
Car-coupling	M. and F. Raymond	419,358	Jan. 14	1075	283 284	50	227
Car-coupling	J. S. Reamer	440,652	Nov. 18	1621	418	53	938
Car-coupling	B. S. Redding	437,514	Sept. 30	3433	898	52	2062
Car-coupling	E. B. Reid	443,540	Dec. 30	3122	803	53	1904
Car-coupling	A. H. Renshaw and H. H. Burden	431,195	July 1	241	61	52	50
Car-coupling	S. T. Richardson	434,000	Aug. 12	828	218	52	926
Car-coupling	J. Rigby and G. W. Reed	427,908	May 13	1348	340	51	1084

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Car-coupling	T. L. Rivers	421,616	Feb. 18	1757	460	50	913
Car-coupling	S. Robertson	443,921	Dec. 30	3714	951	53	2018
Car-coupling	D. Roche	443,794	Dec. 30	3530	905	53	1982
Car-coupling	J. Ronk	438,258	Oct. 14	894	243	53	177
Car-coupling	P. W. Ross	439,897	Nov. 4	408	106	53	687
Car-coupling	B. Rowell	420,700	Feb. 4	380	101	50	639
Car-coupling	B. Rowell	439,564	Oct. 28	2936	781	53	577
Car-coupling	W. Roysdon	421,766	Feb. 18	1955	514	50	951
Car-coupling	W. Roysdon	437,801	Oct. 7	198	61	53	40
Car-coupling	J. A. Ruan	427,913	May 13	1356	342	51	1085
Car-coupling	C. G. Ruby	425,001	Apr. 8	883	233	51	179
Car-coupling	J. H. Rudy	435,772	Sept. 2	602	160	52	1491
Car-coupling	S. B. and J. R. Sadler and D. M. Carter	438,024	Oct. 7	547	151	53	103
Car-coupling	S. L. and J. Sangster	439,694	Nov. 4	101	27	53	628
Car-coupling	C. Schleicher	433,043	July 29	3147	809	52	636
Car-coupling	D. Schofield	435,192	Aug. 26	2713	717	52	1310
Car-coupling	H. H. Schoonover	432,087	July 15	1647	423	52	336
Car-coupling	C. Schryver	441,707	Dec. 2	124	33	53	1286
Car-coupling	E. Scott	427,371	May 6	513	131	51	913
Car-coupling	C. E. Seabury	429,365	June 3	400	95	51	1547
Car-coupling	S. Seay, Jr.	423,532	Mar. 18	1771	465	50	1488
Car-coupling	W. W. Seley	440,726	Nov. 18	1742	447	53	961
Car-coupling	J. Shaaber	433,309	July 29	3538	914	52	715
Car-coupling	J. F. Shannon	428,555	May 20	2019	508	51	1225
Car-coupling	W. C. Shaw	425,189	Apr. 8	1172	310	51	237
Car-coupling	C. C. Shelburn	419,721	Jan. 21	1599	427	50	338
Car-coupling	B. A. Shields	423,450	Mar. 18	1644	{ 433 434 }	50	1465
Car-coupling	W. T. Shutt	435,863	Sept. 2	742	198	52	1519
Car-coupling	R. F. Sillman	422,983	Mar. 11	953	250	50	1325
Car-coupling	G. W. Simmou	428,640	May 27	2438	620	51	1324
Car-coupling	H. Small	424,509	Apr. 1	107	31	51	24
Car-coupling	N. E. Smith	443,466	Dec. 23	3004	{ 171 172 }	53	1872
Car-coupling	W. L. Smith	424,658	Apr. 1	339	89	51	66
Car-coupling	U. Snyder	431,728	July 8	1102	274	52	225
Car-coupling	H. Sommerfeld	424,582	Apr. 1	226	61	51	46
Car-coupling	H. Sommerfeld	433,374	July 29	3622	934	52	732
Car-coupling	H. Sommerfeld	437,055	Sept. 23	2675	699	52	1909
Car-coupling	H. W. Sprague	421,446	Feb. 18	1494	387	50	863
Car-coupling	J. Stallings	419,614	Jan. 14	1432	384	50	300
Car-coupling	W. H. Stewart	421,361	Feb. 11	1377	356	50	833
Car-coupling	J. L. Stillman	439,982	Nov. 4	547	144	53	714
Car-coupling	O. Stone	421,780	Feb. 18	1973	519	50	955
Car-coupling	C. Strathmeier and W. Gutenberger	437,634	Sept. 30	3601	942	52	2095
Car-coupling	M. E. Summers	429,662	June 10	847	205	51	1645
Car-coupling	B. D. Tabor	438,717	Oct. 21	1592	427	53	316
Car-coupling	J. H. Talpey	429,180	June 3	111	26	51	1493
Car-coupling	A. J. Tatam and C. Cole	441,907	Dec. 2	434	116	53	1350
Car-coupling	C. W. Terpeuing	431,627	July 8	914	230	52	190
Car-coupling	A. Testard	437,734	Oct. 7	88	28	53	20
Car-coupling	C. T. Thompson	433,664	Aug. 5	331	85	52	820
Car-coupling	J. A. M. Thompson	420,893	Feb. 4	698	179	50	695
Car-coupling	W. D. Thurmond	430,709	June 24	2518	617	51	1985
Car-coupling	W. D. Thurmond	431,415	July 1	580	{ 146 147 }	52	118
Car-coupling	J. C. Toberer	422,264	Feb. 25	2690	710	50	1097
Car-coupling	W. W. Townsend, Sr.	420,923	Feb. 4	745	191	50	705
Car-coupling	W. Ulery	422,854	Mar. 4	717	184	50	1275
Car-coupling	E. D. Vagnier	439,448	Oct. 28	2769	737	53	544
Car-coupling	J. M. Vaughn	425,275	Apr. 8	1291	345	51	261
Car-coupling	J. W. Vaughn	435,081	Aug. 26	2551	673	52	1279
Car-coupling	J. S. Ventress	441,992	Dec. 2	564	152	53	1374
Car-coupling	W. J. Walker	429,103	May 27	3155	813	51	1463
Car-coupling	W. J. Walker	430,202	June 17	1666	414	51	1813
Car-coupling	W. J. Walker	435,196	Aug. 26	2717	718	52	1310
Car-coupling	G. W. Wallingford	435,956	Sept. 9	895	235	52	1553
Car-coupling	W. C. Watson and J. N. Mileham	441,267	Nov. 25	2672	{ 693 694 }	53	1144
Car-coupling	A. S. Weakley	431,240	July 1	319	78	52	65
Car-coupling	H. J. Webb	429,983	June 10	1330	330	51	1738
Car-coupling	G. W. Weller	430,904	June 24	2831	695	51	2046
Car-coupling	F. and A. C. Wendt	421,459	Feb. 18	1514	392	50	867
Car-coupling	F. A. Westbrook and W. S. Cook	427,385	May 6	531	135	51	916
Car-coupling	A. Wetherell	429,399	June 3	457	108	51	1558
Car-coupling	R. I. Whitley	438,966	Oct. 21	1997	534	53	393
Car-coupling	C. G. Wheeland	428,872	May 27	2799	711	51	1394
Car-coupling	C. G. Wheeler	427,023	Apr. 29	3923	1022	51	799
Car-coupling	C. Whitus	423,463	Mar. 18	1665	{ 439 440 }	50	1469
Car-coupling	G. H. Williams	442,160	Dec. 9	839	225	53	1434
Car-coupling	J. H. Williams	436,683	Sept. 16	2046	535	52	1778
Car-coupling	J. J. A. Williams and G. J. Edleston	429,371	June 3	412	97	51	1549
Car-coupling	D. Y. Wilson	423,297	Mar. 11	1426	370	50	1414
Car-coupling	T. B. Winn	420,258	Jan. 28	2452	651	50	511
Car-coupling	H. A. Winternight	441,624	Nov. 25	3228	833	53	1252
Car-coupling	W. V. Wray	433,385	July 29	3635	938	52	734
Car-coupling	W. Yates	432,470	July 15	2224	575	52	447
Car-coupling and draft apparatus	M. Carter, Jr.	426,769	Apr. 29	3561	{ 928 929 }	51	728
Car coupling and uncoupling device	R. McWhirter and E. S. Scheble	431,850	July 8	1292	{ 324 325 }	52	261

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Car-coupling attachment.....	A. H. S. Davis.....	437,644	Sept. 30	3613	945	52	2097
Car-coupling draw-head.....	J. J. Lappin.....	430,738	June 24	2566	628	51	1995
Car-coupling. Electric.....	L. Pfingst.....	426,317	Apr. 22	2861	753	51	584
Car-coupling link.....	H. Ackerman.....	422,105	Feb. 25	2447	646	50	1051
Car-coupling link.....	W. A. Foust.....	419,934	Jan. 21	1927	508	50	405
Car-coupling link.....	J. Strickler.....	438,088	Oct. 7	643	175	53	124
Car-coupling. Railway.....	J. D. Bagg.....	443,811	Dec. 30	3560	913	53	1988
Car-coupling. Street.....	E. B. Sanborn.....	421,870	Feb. 18	2109	553	50	980
Car-coupling tool.....	J. H. Garner.....	433,283	July 29	3501	904	52	708
Car-coupling tool.....	E. Kint and J. W. Hyde.....	425,433	Apr. 15	1529	409	51	315
Car-coupling unlatching device.....	S. H. Harrington.....	426,565	Apr. 29	3245	{ 851 852 }	51	668
Car-couplings. Link-lifter and link-guide for.....	J. N. Scarborough.....	426,865	Apr. 29	3700	965	51	756
Car-couplings. Link-lifter for.....	F. H. Fisher.....	440,350	Nov. 11	1110	285	53	832
Car-covering. Freight.....	W. W. Green.....	438,580	Oct. 14	1368	371	53	270
Car-door.....	G. D. Burton.....	422,006	Feb. 25	2298	607	50	1025
Car-door.....	J. Caulfield.....	419,925	Jan. 21	1915	505	50	402
Car-door.....	D. S. Cook.....	423,739	Mar. 18	2079	548	50	1545
Car-door.....	J. W. Crumbaugh and L. C. Prater.....	443,956	Dec. 30	3772	963	53	2028
Car-door.....	T. Eubank.....	434,923	Aug. 26	2325	614	52	1236
Car-door.....	J. D. Harless.....	435,176	Aug. 26	2688	710	52	1305
Car-door.....	J. K. Lorton.....	420,305	Jan. 28	2519	668	50	523
Car-door.....	J. Miller.....	419,057	Jan. 7	616	{ 159 160 }	50	129
Car-door.....	E. L. Phipps.....	420,465	Feb. 4	66	14	50	576
Car-door.....	E. L. Phipps.....	433,212	July 29	3399	878	52	686
Car-door.....	E. L. Phipps.....	433,256	July 29	3463	894	52	700
Car-door.....	T. G. Ruffhead.....	427,369	May 6	511	131	51	912
Car-door.....	J. L. Wagner and J. Seath.....	441,724	Dec. 2	150	40	53	1291
Car-door.....	J. L. Wagner and J. Seath.....	442,406	Dec. 9	1212	313	53	1505
Car-door.....	J. L. Wagner and J. Seath.....	442,728	Dec. 16	1755	454	53	1621
Car-door.....	W. J. Walker.....	431,926	July 8	1393	353	52	281
Car-door.....	J. C. Wands.....	424,384	Mar. 25	3060	612	50	1742
Car-door brackets. Catch for.....	F. E. Canda.....	427,297	May 6	414	107	51	892
Car-door cleat.....	F. B. Geoghegan.....	433,403	July 29	3659	945	52	740
Car-door cleat. Freight.....	G. L. Webster.....	431,632	July 8	922	253	52	191
Car-door fastener.....	H. E. Hoke.....	427,419	May 6	597	149	51	930
Car-door fastener.....	P. and C. Hernal.....	425,323	Apr. 8	1364	304	51	274
Car-door fastening.....	R. D. Cleveland.....	423,404	Mar. 11	1576	413	50	1444
Car-door fastening.....	G. W. Harris.....	420,556	Feb. 4	183	46	50	600
Car-door. Freight.....	P. Brown.....	422,710	Mar. 4	508	130	50	1233
Car-door. Freight.....	W. A. McGuire.....	436,586	Sept. 16	1894	{ 497 498 }	52	1749
Car-door. Freight.....	J. L. Ritter.....	436,505	Sept. 16	1754	463	52	1725
Car-door. Grain.....	C. H. Emery.....	437,147	Sept. 23	2847	740	52	1939
Car-door. Grain.....	C. H. and J. P. Emery.....	422,898	Mar. 4	807	206	50	1290
Car-door. Grain.....	C. H. and J. P. Emery.....	423,041	Mar. 11	1040	270	50	1341
Car-door. Grain.....	E. A. Hill.....	426,183	Apr. 22	2674	702	51	544
Car-door. Grain.....	W. A. Pungs.....	435,523	Sept. 2	211	59	52	1415
Car-door. Grain.....	L. Reifsnider.....	438,737	Oct. 21	1632	338	53	324
Car-door guard.....	W. R. Conger.....	438,432	Oct. 14	1156	313	53	227
Car-door hanger.....	A. B. Pullman.....	420,831	Feb. 4	587	151	50	675
Car-doorway bridge. Stock.....	B. C. Hicks.....	429,915	June 10	1222	302	51	1717
Car-draw-bar.....	C. A. Schroyer.....	438,386	Oct. 14	1090	297	53	214
Car-draw-bar and link. Railway.....	G. Leverich.....	428,215	May 20	1787	451	51	1180
Car-draw-bar attachment. Railway.....	J. A. Hinson.....	427,990	May 13	1464	371	51	1107
Car-draw-bar. Mining.....	J. T. Taylor and J. Smith.....	419,899	Jan. 21	1881	494	50	394
Car-draw-bar. Railway.....	D. L. Barnes.....	421,651	Feb. 18	1807	471	50	923
Car-draw-bar. Railway.....	G. W. McGuire.....	437,227	Sept. 30	2967	775	52	1969
Car-draw-gear.....	G. L. Harvey.....	432,274	July 15	1935	495	52	390
Car-draw-head. Railway.....	C. and R. McAfee.....	420,561	Feb. 4	189	49	50	602
Car-drier.....	P. Arnold.....	419,306	Jan. 14	992	262	50	210
Car-driving mechanism.....	C. E. Healy.....	431,115	July 1	124	31, 32	52	27
Car-driving mechanism. Motor.....	J. C. Beckfeld and R. Siegfried.....	421,476	Feb. 18	1539	398	50	872
Car. Dumping.....	J. W. Alfred.....	421,645	Feb. 18	1798	469	50	921
Car. Dumping.....	E. Chevalier and L. Buette.....	427,047	May 6	21	7	51	815
Car. Dumping.....	G. W. Dickinson.....	433,073	July 29	3188	820	52	644
Car. Dumping.....	E. E. Dwight.....	434,257	Aug. 12	1238	320	52	1007
Car. Dumping.....	C. H. Evans and C. Wilson.....	418,785	Jan. 7	190	46	50	42
Car. Dumping.....	J. M. Goodwin.....	419,939	Jan. 21	1934	{ 509 510 }	50	406
Car. Dumping.....	W. W. Green.....	425,607	Apr. 15	1789	480	51	365
Car. Dumping.....	J. K. Lockard.....	434,517	Aug. 19	1640	430	52	1097
Car. Dumping.....	C. W. Raymond.....	421,432	Feb. 18	1476	383	50	860
Car. Dumping.....	J. R. Robinson.....	420,392	Jan. 28	2642	701	50	547
Car. Dumping.....	G. Ross.....	420,105	Jan. 28	2200	582	50	466
Car. Dumping.....	E. C. Sawyer.....	421,976	Feb. 25	2254	593	50	1017
Car. Dumping.....	W. A. Sharp.....	430,546	June 17	2232	548	51	1921
Car. Dumping.....	J. G. Tomlinson.....	420,175	Jan. 28	2316	612	50	486
Car. Electric.....	L. Pfingst.....	430,147	June 17	1597	398	51	1800
Car. Electric.....	E. Wagemann.....	432,501	July 15	2266	{ 586 587 }	52	455
Car. Electric-motor.....	J. A. Brill.....	426,657	Apr. 29	3384	{ 888 889 }	51	695
Car. Electric-motor.....	J. A. Brill.....	426,658	Apr. 29	3386	889	51	695
Car. Electric-motor.....	I. H. Farnham.....	423,339	Feb. 25	2819	744	50	1121
Car. Electric-motor.....	J. F. McLaughlin.....	432,208	July 15	1838	472	52	372
Car. Electric-motor.....	W. Robinson.....	436,439	Sept. 16	1656	{ 435 436 437 }	52	1705
Car. Electric-motor.....	W. Robinson.....	436,440	Sept. 16	1660	{ 436 437 438 }	52	1706
Car. Electric-motor.....	W. Robinson.....	436,742	Sept. 16	2138	{ 562 563 }	52	1797

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Car. Electric-motor.....	W. Robinson.....	436,743	Sept. 16	2141	{ 563 564	{ 52	1797
Car. Electric-motor.....	J. F. Shawhan.....	438,192	Oct. 14	794	217	53	159
Car. Electric-motor.....	D. C. Voss.....	423,400	Mar. 11	1568	412	50	1442
Car. Electric-railway.....	W. S. Belding.....	440,689	Nov. 18	1677	{ 432 433	{ 53	949
Car. Electric-railway.....	H. H. Blades.....	435,641	Sept. 2	412	111	52	1452
Car. Electric-railway.....	J. A. Brill.....	426,708	Apr. 29	3466	908	51	710
Car. Electric-railway.....	M. W. Dewey.....	425,866	Apr. 15	2181	580	51	441
Car. Electric-railway.....	M. W. Dewey.....	435,642	Sept. 2	414	111	52	1453
Car. Electric-railway.....	J. C. Henry.....	426,379	Apr. 22	2951	{ 775 776	{ 51	602
Car. Electric-railway.....	R. M. Hunter.....	424,206	Mar. 25	2765	737	50	1685
Car. Electric-railway.....	R. M. Hunter.....	425,077	Apr. 8	993	266	51	200
Car. Electric-railway.....	H. C. Wirt.....	421,464	Feb. 18	1521	394	50	868
Car. Electric-railway motor.....	C. J. Van Depoele.....	422,266	Feb. 25	2694	{ 710 711	{ 50	1098
Car. Electric-railway motor.....	E. Wagemann.....	439,584	Oct. 28	2965	787	53	582
Car. Electric street.....	L. H. Leher.....	437,210	Sept. 30	2945	769	52	1965
Car. Electrically-propelled.....	R. M. Hunter.....	425,883	Apr. 15	2301	585	51	445
Car. Express.....	F. Bernardin.....	437,475	Sept. 30	3374	883	52	2050
Car-fender attachment.....	J. B. Casaday and M. Peak.....	429,501	June 3	609	149	51	1588
Car-fender. Cable.....	G. E. Rhodes.....	425,049	Apr. 8	953	254	51	192
Car-fender. Street.....	L. H. Leher.....	442,587	Dec. 9	1499	386	53	1563
Car for coke.....	C. W. Hunt.....	425,797	Apr. 15	2069	552	51	421
Car for conveyance of ships on ship-railways.....	W. Smith.....	430,353	June 17	1952	{ 479 480	{ 51	1868
Car for elevators.....	F. B. Rhoads.....	425,828	Apr. 15	2120	566	51	430
Car for transporting poultry. Stock.....	J. Nolan.....	425,242	Apr. 8	1240	330	51	251
Car. Freight.....	J. Bogle and J. S. C. Sowar.....	434,057	Aug. 12	900	237	52	941
Car. Freight.....	W. W. Green.....	432,487	July 15	2250	582	52	452
Car. Freight.....	E. F. Hammekeu.....	428,093	May 20	1620	411	51	1147
Car. Freight.....	M. and L. Wetzler.....	440,907	Nov. 18	2047	529	53	1018
Car. Freight.....	P. D. Whitehead.....	424,915	Apr. 1	743	198	51	144
Car. Fruit.....	R. D. Coulter.....	422,920	Mar. 11	850	221	50	1306
Car gear. Electric.....	E. Peckham.....	420,544	Feb. 4	164	41	50	595
Car gear. Electric street.....	E. Peckham.....	420,543	Feb. 4	163	40	50	595
Car gearing. Motor.....	O. C. Smith.....	438,197	Oct. 14	800	218	53	160
Car gearing. Steam street.....	C. L. Snyder.....	423,397	Mar. 11	1562	{ 410 411	{ 50	1441
Car gearing. Street.....	J. Carnes.....	422,069	Feb. 25	2384	630	50	1040
Car. Gondola.....	T. Watkins.....	427,938	May 13	1392	352	51	1092
Car guard. Railway.....	F. W. Stutt.....	439,985	Nov. 4	550	145	53	715
Car. Hand.....	C. Roberts.....	429,962	June 10	1301	322	51	1732
Car. Hand-propelled tram.....	J. Kreyezik.....	440,230	Nov. 11	923	237	53	800
Car-heater.....	G. A. Barnard.....	429,183	June 3	114	27	51	1493
Car-heater.....	R. M. Dixon.....	435,484	Sept. 2	157	44, 45	52	1405
Car-heater.....	T. S. Glover.....	421,697	Feb. 18	1867	489	50	935
Car-heater.....	G. A. Houston.....	432,238	July 15	1877	483	52	379
Car-heater.....	G. A. Houston.....	432,239	July 15	1879	483	52	380
Car-heater.....	H. B. Keiper.....	443,770	Dec. 30	3493	{ 895 896	{ 53	1975
Car-heater.....	C. O. Newton.....	429,363	June 3	399	94, 95	51	1547
Car-heater.....	R. E. Nichols.....	430,875	June 24	2789	683	51	2037
Car-heater.....	C. E. Struck.....	437,839	Oct. 7	254	78	53	50
Car heater. Railway.....	W. C. Baker.....	439,287	Oct. 28	2517	675	53	497
Car heater. Railway.....	W. C. Baker.....	441,273	Nov. 25	2679	696	53	1145
Car heater. Railway.....	H. M. Bell and W. Armstrong.....	423,369	Mar. 11	1525	{ 400 401	{ 50	1434
Car heater. Railway.....	J. F. McElroy.....	426,845	Apr. 29	3675	957	51	750
Car heater. Street.....	H. W. Lilbey.....	431,947	July 8	1422	361	52	286
Car heating and ventilating apparatus.....	C. A. Kimpton.....	419,456	Jan. 14	1216	323	50	256
Car-heating apparatus.....	W. Buchanan.....	424,459	Apr. 1	25	7	51	7
Car-heating apparatus.....	R. G. Chase.....	439,268	Oct. 28	2483	666	53	490
Car-heating apparatus.....	J. Emerson.....	443,935	Dec. 30	3741	957	53	2023
Car-heating apparatus.....	F. P. Foley.....	440,891	Nov. 18	2020	520	53	1013
Car-heating apparatus.....	I. Hazelton.....	427,863	May 13	1267	{ 320 321	{ 51	1069
Car-heating apparatus.....	D. F. and L. T. Lapaugh.....	434,022	Aug. 12	855	225	52	932
Car-heating apparatus.....	R. H. Soule.....	421,774	Feb. 18	1966	517	50	953
Car-heating apparatus.....	D. J. Timlin.....	423,837	Mar. 18	2213	584	50	1572
Car-heating apparatus.....	D. J. Timlin.....	423,838	Mar. 18	2215	585	50	1573
Car-heating apparatus.....	A. B. Wilson.....	432,349	July 15	2043	526	52	409
Car heating apparatus. Railway.....	E. Collins.....	431,106	July 1	112	28, 29	52	24
Car-heating system.....	R. D. Kimball.....	422,596	Mar. 4	340	84, 85	50	1301
Car journal-box.....	E. W. Mackenzie-Hughes.....	436,355	Sept. 16	1515	395	52	1680
Car label. Railway.....	P. A. Snyder and G. Homan.....	431,290	July 1	369	98	52	80
Car-link-forming machine.....	C. B. Beach.....	438,091	Oct. 7	648	177	53	125
Car-lock.....	E. C. Merrill.....	422,817	Mar. 4	656	168	50	1262
Car. Locomotive street.....	J. R. Gathright.....	421,829	Feb. 18	2038	539	50	967
Car. Log.....	C. D. Scott.....	423,086	Mar. 11	1107	289	50	1753
Car. Logging.....	G. F. Johnson.....	422,531	July 22	2324	600	52	473
Car. Metallic.....	D. L. Barnes.....	421,653	Feb. 18	1808	{ 472 473	{ 50	923
Car. Metallic.....	C. T. Schoen.....	432,086	July 15	1644	{ 422 423	{ 52	336
Car. Metallic passenger.....	C. B. Hutchins.....	442,894	Dec. 16	2043	{ 524 525	{ 53	1677
Car. Metallic railway.....	C. W. M. Smith.....	439,085	Oct. 21	2181	586	53	430
Car. Motor.....	G. M. and J. A. Brill.....	427,966	May 13	1431	{ 361 362	{ 51	1100
Car. Motor.....	E. Verstraete.....	428,719	Oct. 21	1595	428	53	317
Car-motor.....	J. S. Connelly.....	426,985	Apr. 29	3858	1009	51	786

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Car motor. Compressed-air street	F. M. Merrill	435,020	Aug. 26	2461	{ 651 652	{ 52	1261
Car motor. Electric	E. M. Bentley	424,099	Apr. 1	405	106	51	80
Car motor. Electric	E. Peckham	425,627	Apr. 15	1828	{ 488 489	{ 51	373
Car motor. Electric railway	I. F. Baker	440,686	Nov. 18	1670	431	53	948
Car motor. Pneumatic	H. Taylor	427,809	May 13	1192	300	51	1055
Car motor. Street	B. R. Moore	419,534	Jan. 14	1321	{ 352 353	{ 50	277
Car motor. Street	W. H. Patton	434,993	Aug. 26	2418	{ 639 640	{ 52	1254
Car motor. Street	W. E. Prall, Jr	426,060	Apr. 22	2484	{ 656 657	{ 51	506
Car motor. Street	W. E. Prall, Jr	426,061	Apr. 22	2486	657	51	506
Car motor. Street	W. E. Prall, Jr	426,062	Apr. 22	2490	658	51	507
Car motor support	S. H. Short	434,034	Aug. 12	870	229	52	935
Car motor support. Railway	W. Wharton, Jr	433,754	Aug. 5	468	120	52	846
Car mounting. Railway	H. Resley	441,976	Dec. 2	538	144	53	1368
Car mover	G. W. M. Simms	435,326	Aug. 26	2919	775	52	1347
Car or engine mover	R. Mellenthin	423,437	Mar. 18	1630	428	50	1462
Car or locomotive brake	M. P. Burgoy	428,744	May 27	2615	663	51	1356
Car or other dome	S. Strahan	428,428	May 20	2133	536	51	1247
Car Ore	E. W. Mackenzie-Hughes	425,517	Apr. 15	1651	441	51	339
Car. Passenger	I. B. Guenzburg	429,619	June 10	781	189	51	1632
Car. Petroleum	W. H. Hill and C. W. Bender	427,867	May 13	1277	323	51	1071
Car platform	D. J. Lupton	433,295	July 29	3516	907	52	711
Car platform	W. V. H. Willson	422,677	Mar. 4	467	119	50	1326
Car platform gate	H. W. Rion	426,646	Apr. 29	3368	883	51	691
Car platform guard-bolt	J. Robertson	436,292	Sept. 9	1409	367	52	1651
Car. Poultry	H. Danley	431,337	July 1	458	113	52	94
Car. Poultry	J. Nolan	425,241	Apr. 8	1238	{ 329 330	{ 51	250
Car-propelling device. Electric	T. A. Edison	437,428	Sept. 30	3300	{ 861 862	{ 52	2034
Car-propelling mechanism	G. B. Siccardi	428,639	May 27	2437	620	51	1324
Car propulsion. Pneumatic street	M. Toulmin	440,666	Nov. 18	1643	{ 423 424	{ 53	942
Car-pusher or pinch-bar	E. Bowman	425,855	Apr. 15	2167	577	51	438
Car railing. Freight	D. Robinson	437,799	Oct. 7	196	60	53	39
Car. Railway	J. N. Barr	421,375	Feb. 18	1401	361	50	845
Car. Railway	J. N. Barr	421,376	Feb. 18	1402	{ 362 363	{ 50	845
Car. Railway	J. N. Barr	429,834	June 10	1100	272	51	1694
Car. Railway	W. S. Bates	440,615	Nov. 18	1566	403	53	927
Car. Railway	E. H. Beckley	434,755	Aug. 19	2025	{ 529 530	{ 52	1171
Car. Railway	E. A. Benson	435,675	Sept. 2	463	122	52	1464
Car. Railway	E. M. Bentley	431,715	July 8	1081	270	52	220
Car. Railway	E. M. Beutley	437,343	Sept. 30	3148	824	52	2004
Car. Railway	H. G. Bird	436,031	Sept. 9	1061	262	52	1574
Car. Railway	T. A. Bissell	435,676	Sept. 2	464	123	52	1464
Car. Railway	E. M. Boynton	442,508	Dec. 9	1373	352	53	1538
Car. Railway	J. A. Brill	428,068	May 20	1550	401	51	1139
Car. Railway	W. E. Elliott	443,075	Dec. 16	2325	594	53	1734
Car. Railway	L. P. Farmer	432,265	July 15	1920	{ 491 492	{ 52	387
Car. Railway	O. Harriman	424,475	Apr. 1	47	13, 14	51	12
Car. Railway	W. H. Jacoby	439,404	Oct. 28	2703	{ 720 721	{ 53	532
Car. Railway	C. W. Jones	426,385	Apr. 22	2975	779	51	607
Car. Railway	J. B. Low	429,216	June 3	169	40, 41	51	1503
Car. Railway	J. McClay	418,739	Jan. 7	118	28, 29	50	26
Car. Railway	M. Ohlson	441,629	Nov. 25	3237	835	53	1253
Car. Railway	A. B. Pullman	419,355	Jan. 14	1071	282	50	226
Car. Railway	A. B. Pullman	419,356	Jan. 14	1072	283	50	227
Car. Railway	R. Solano	437,729	Oct. 7	81	27	53	18
Car. Railway	K. Upton	440,729	Nov. 18	1747	448	53	963
Car. Railway	W. T. Wilson	439,046	Oct. 21	2114	568	53	416
Car. Railway freight	W. Borner	421,379	Feb. 18	1408	{ 364 365	{ 50	846
Car-register	H. C. Mapes	442,527	Dec. 9	1403	{ 358 359	{ 53	1543
Car-register. Automatic	W. B. Sprague and C. W. Kellogg	439,906	Nov. 4	422	109	53	690
Car-replacer	J. McGary	438,483	Oct. 14	1227	333	53	242
Car-replacer	E. and E. B. Newcomb	425,622	Apr. 15	1816	486	51	370
Car replacer. Railway	J. V. Slusser	421,873	Feb. 18	2114	{ 554 555	{ 50	981
Car replacing and derailing device	S. F. Clonser	439,291	Oct. 28	2522	676	53	498
Car. Road	L. L. Griffin	423,242	Mar. 11	1332	346	50	1397
Car-roof	C. H. Koyl	436,361	Sept. 16	1532	401	52	1683
Car running-gear. Street	A. V. du Pont	423,470	Mar. 18	1674	442	50	1471
Car running-gear. Street	F. W. Judson	425,380	Apr. 8	1447	387	51	289
Car. Safety	J. A. Beaumont	436,330	Sept. 16	1472	383	52	1671
Car. Safety	J. W. King	424,678	Apr. 1	370	98	51	72
Car safety device. Street	A. E. Appleyard	443,738	Dec. 30	3443	{ 883 884	{ 53	1965
Car-sanding device	W. F. McCready	438,568	Oct. 14	1352	367	53	267
Car-seal	W. C. Beckwith	419,491	Jan. 14	1260	336	50	265
Car-seal	G. D. Walker	440,782	Nov. 18	1843	474	53	979
Car-seat	J. Applin	430,413	June 17	2035	501	51	1885
Car-seat	W. B. Beal	443,311	Dec. 23	2769	710	53	1826
Car-seat	G. W. Cushing	430,071	June 10	1478	367	51	1766
Car-seat	G. W. Cushing	441,942	Dec. 2	465	130	53	1359

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Car-seat.....	M. N. Forney.....	436,563	Sept. 16	1851	488	52	1741
Car-seat.....	E. N. Gilfillan.....	436,829	Sept. 23	2306	{ 607 608 }	52	1837
Car-seat.....	H. S. Hale.....	425,505	Apr. 15	1631	434	51	335
Car-seat.....	H. S. Hale.....	432,702	July 22	2599	665	52	526
Car-seat.....	H. S. Hale.....	432,703	July 22	2601	665	52	526
Car-seat.....	F. H. Henry.....	425,424	Apr. 15	1514	405	51	313
Car-seat.....	M. G. Keeran.....	425,328	Apr. 8	1370	366	51	275
Car-seat.....	W. W. and A. Krutsch.....	442,984	Dec. 16	2177	{ 559 560 }	53	1705
Car-seat.....	W. M. Norcross.....	436,313	Sept. 9	1437	{ 374 375 }	52	1657
Car-seat.....	R. R. Pease.....	442,637	Dec. 16	1574	407	53	1587
Car-seat.....	A. M. Richards.....	437,938	Oct. 7	402	114	53	77
Car-seat.....	W. A. Wright.....	443,308	Dec. 23	2766	709	53	1825
Car-seat, Auxiliary.....	N. Joergensen.....	426,278	Apr. 22	2808	737	51	573
Car-seat lock.....	H. S. Hale.....	433,168	July 29	3337	864	52	674
Car-seat lock.....	C. Parham.....	429,176	June 3	104	25	51	1492
Car seat, Railway.....	H. B. Comer.....	429,563	June 3	696	169	51	1605
Car seat, Railway.....	P. J. Mullen.....	431,147	July 1	167	42	52	36
Car seat, Street.....	H. W. Libbey.....	427,095	May 6	108	29	51	833
Car-signal.....	J. O. Belknap and O. F. Cawthon.....	441,327	Feb. 11	1188	305	50	798
Car-signal.....	J. O. Belknap and O. F. Cawthon.....	440,127	Nov. 11	754	198	53	765
Car. Sleeping.....	E. G. Allen.....	440,295	Nov. 11	1033	265	53	818
Car. Sleeping.....	C. L. Arnold.....	426,424	Apr. 29	3046	797	51	629
Car. Sleeping.....	H. Casper.....	422,499	Mar. 4	196	53, 54	50	1174
Car. Sleeping.....	J. B. Davenport.....	436,890	Sept. 23	2445	638	52	1863
Car. Sleeping.....	J. P. Hindman.....	441,558	Nov. 25	3118	801	53	1229
Car. Sleeping.....	W. C. Waite.....	428,258	May 20	1869	469	51	1195
Car sleigh, Street.....	P. Wardman and W. Hollister.....	437,269	Sept. 30	3037	796	52	1923
Car-springs and means for storing air. Means for regulating the elasticity of.....	H. M. Minton.....	439,302	Oct. 28	2554	682	53	504
Car-stake.....	A. Morison.....	428,567	May 20	2332	589	51	1282
Car stake, Railway.....	J. C. Barber.....	441,736	Dec. 2	167	44	53	1294
Car-stall for horses.....	E. G. Shreve.....	420,111	Jan. 28	2207	584	50	467
Car stall or pen for shipping horses and other animals.....	C. L. Lockwood.....	431,024	June 24	3013	739	51	2080
Car stall-partition. Stock.....	B. C. Hicks.....	437,597	Sept. 30	3555	928	52	2085
Car-starter.....	C. G. Bloomer.....	431,029	July 1	4	1	52	3
Car-starter.....	W. H. Forbes.....	441,404	Nov. 25	2882	744	53	1184
Car-starter.....	C. W. Hall.....	433,982	Aug. 12	809	211	52	922
Car-starter.....	J. Leach and W. V. Hirst.....	437,698	Oct. 7	28	9	53	8
Car-starter.....	E. H. Morgan.....	422,888	Mar. 4	790	202	50	1287
Car-starter.....	H. Schreiner.....	443,211	Dec. 23	2603	670	53	1796
Car-starter.....	L. Seebach, C. George, and L. Bush.....	432,908	July 22	2906	745	52	566
Car-starters, Automatic clutch for.....	E. Dederick.....	430,629	June 24	2374	580	51	1957
Car-step.....	C. Freese.....	428,168	May 20	1722	436	51	1167
Car-step.....	F. W. Miller.....	423,262	Mar. 11	1366	355	50	1403
Car-step.....	W. C. Spelman.....	419,329	Jan. 14	882	231	50	188
Car-step, Extensible.....	M. E. Campany.....	436,454	Sept. 16	1682	443	52	1711
Car-step, Extensible.....	J. F. and J. F. Wood.....	431,307	July 1	417	103	52	85
Car-step, Extension.....	W. V. Beebe.....	438,463	Oct. 14	1204	326	53	237
Car-step, Extension.....	R. H. Brown.....	419,107	Jan. 7	684	180	50	144
Car-step, Extension.....	R. H. Brown.....	435,731	Sept. 2	543	144	52	1490
Car-step, Extension.....	W. N. Candee.....	442,571	Dec. 9	1473	378	53	1558
Car-step, Extension.....	W. P. Tracy.....	430,449	June 17	2083	514	51	1894
Car. Stock.....	D. N. Brownell.....	432,506	July 22	2275	590	52	463
Car. Stock.....	G. D. Burton.....	424,598	Apr. 1	248	66	51	51
Car. Stock.....	G. D. Burton.....	427,043	May 6	16	5, 6	51	814
Car. Stock.....	G. D. Burton.....	427,968	May 13	1436	363	51	1101
Car. Stock.....	J. M. Burton.....	426,709	Apr. 29	3468	908	51	711
Car. Stock.....	J. M. Burton.....	442,952	Dec. 16	2129	548	53	1695
Car. Stock.....	G. W. Cushing.....	429,509	June 3	617	151	51	1590
Car. Stock.....	C. B. Herman.....	425,790	Apr. 15	2060	{ 549 550 }	51	419
Car. Stock.....	B. C. Hicks.....	429,916	June 10	1222	303	51	1717
Car. Stock.....	B. C. Hicks.....	430,951	June 24	2895	712	51	2058
Car. Stock.....	B. C. Hicks.....	437,596	Sept. 30	3553	927	52	2085
Car. Stock.....	B. F. Holmes.....	422,413	Mar. 4	68	19	50	1150
Car. Stock.....	J. H. Kimball.....	427,428	May 6	610	153	51	932
Car. Stock.....	S. Lazarus.....	443,287	Dec. 23	2717	697	53	1817
Car. Stock.....	A. C. Paul.....	435,379	Aug. 26	3018	798	52	1366
Car. Stock.....	H. W. Smith.....	421,982	Feb. 25	2261	595	50	1018
Car. Stock.....	W. H. H. Sisum.....	423,533	Mar. 18	1772	465	50	1488
Car. Stock.....	A. G. Steinhilbrenner.....	421,528	Feb. 18	1624	419	50	887
Car. Stock.....	A. W. Street.....	421,087	Feb. 11	990	{ 253 254 }	50	760
Car. Stock.....	S. P. Tallman.....	428,973	May 27	2949	757	51	1424
Car. Stock.....	J. R. Wilson.....	442,161	Dec. 9	840	225	53	1434
Car. Storage-battery electric.....	J. Stephenson.....	442,744	Dec. 16	1778	460	53	1625
Car. Street.....	J. A. Brill.....	432,115	July 15	1694	435	52	345
Car. Street.....	H. H. Cummings.....	441,647	Dec. 2	23	8, 9	53	1267
Car. Street.....	J. W. Evans.....	428,081	May 20	1599	406	51	1143
Car. Street.....	W. Robinson.....	435,123	Aug. 26	2614	692	52	1290
Car. Street.....	J. G. Schneider.....	442,830	Dec. 16	1922	{ 493 494 }	53	1655
Car. Street.....	C. L. Snyder.....	423,396	Mar. 11	1562	410	50	1440
Car. Street-railway.....	E. C. Sessions.....	432,954	July 22	2991	768	52	690
Car switch, Street.....	J. R. Potter.....	426,211	Apr. 22	2718	712	51	552
Car switches, Mechanism for operating street.....	W. A. Lee.....	439,354	Oct. 28	2625	700	53	518
Car table, Railway.....	H. S. Haegard.....	431,580	July 8	847	210	52	176
Car table, Railway.....	N. E. Smith.....	440,969	Nov. 18	2149	557	53	1037
Car to car, Coupling for pipes to convey heat from.....	J. H. Harrington.....	431,518	July 1	748	{ 186 187 }	52	149

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Car tracks. Apparatus for removing obstructions from street.	C. Nagel.	442,994	Dec. 16	2197	565	53	1709
Car-tracks. Electrical connection with.	G. G. Campbell.	423,468	Mar. 18	1670	441	50	1470
Car. Tram.	C. W. Baldwin.	434,172	Aug. 12	1102	285 286	52	982
Car. Transferring.	J. H. Welcker.	424,390	Mar. 25	3070	815	50	1744
Car trolley. Electric-motor.	F. Bain.	433,611	Aug. 5	253	68	52	806
Car trolley. Electric street.	F. C. Wheeler.	433,839	Aug. 5	598	155	52	873
Car trolley. Electromotor.	S. D. Cairns.	435,011	Aug. 26	2447	648	52	1259
Car-unloading device.	J. L. Bryant.	434,375	Aug. 12	1410	379	52	1043
Car. Ventilated.	R. M. Pancoast.	422,618	Mar. 4	384	956	50	1210
Car-ventilating device.	H. L. Morrell.	428,624	May 27	2416	614 615	51	1320
Car-ventilator.	W. E. Andrew.	426,750	Apr. 29	3536	923	51	724
Car-ventilator.	A. T. Bemis.	426,359	Apr. 22	2919	768	51	596
Car-ventilator.	H. F. Hannis.	439,065	Oct. 21	2148	576	53	422
Car-ventilator.	F. B. Mallory.	420,541	Feb. 4	159	39, 40	50	595
Car ventilator. Passenger.	C. B. Hutchins.	442,120	Dec. 9	774	209	53	1431
Car ventilator. Railway.	O. Harriman.	424,476	Apr. 1	49	14	51	12
Car. Vestibule.	J. J. Kirkham.	439,523	Oct. 28	2880	767	53	566
Car. Vestibule.	J. Ridge.	418,929	Jan. 7	440	108	50	92
Car. Weed-mowing hand.	P. Nacey.	420,825	Feb. 4	580	148 149	50	674
Car-wheel.	R. N. Allen.	419,172	Jan. 14	792	209	50	171
Car-wheel.	R. N. Allen.	421,471	Feb. 18	1529	396	50	870
Car-wheel.	R. N. Allen.	435,672	Sept. 2	459	122	52	1463
Car-wheel.	R. D. Apperson.	428,998	May 27	2983	765	51	1430
Car-wheel.	H. W. Avery.	429,407	June 3	466	110	51	1560
Car-wheel.	E. W. Cooke.	425,932	Apr. 15	2284	604 605	51	458
Car-wheel.	P. H. Griffin.	419,850	Jan. 21	1800	476	50	377
Car-wheel.	W. Hailes.	441,241	Nov. 25	2626	681	53	1135
Car-wheel.	V. H. Higgins.	431,143	July 1	161	41	52	34
Car-wheel.	W. S. Kisinger.	418,727	Jan. 7	105	24	50	23
Car-wheel.	J. A. Lacroix.	436,897	Sept. 23	2455	641	52	1865
Car-wheel.	H. F. Mann.	433,950	Aug. 12	759	198	52	915
Car-wheel.	H. F. Mann.	439,358	Oct. 28	2631	701 702	53	518
Car-wheel.	A. Mayer.	439,670	Nov. 4	68	18	53	620
Car-wheel.	W. F. McCready.	440,050	Nov. 4	644	171	53	734
Car-wheel.	J. Mulligan.	436,876	Sept. 23	2425	632	52	1859
Car-wheel.	C. Roberts.	429,963	June 10	1302	322	51	1732
Car-wheel.	C. Roberts.	430,886	June 24	2802	687	51	2040
Car-wheel.	C. Roberts.	430,887	June 24	2803	687	51	2040
Car-wheel.	W. W. Snow.	430,239	June 17	1738	433	51	1827
Car-wheel.	C. G. West.	431,635	July 8	930	233	52	194
Car wheel and axle.	T. C. Churchman.	422,727	Mar. 4	529	135	50	1237
Car-wheel. Balanced.	P. H. Griffin.	427,415	May 6	589	147	51	928
Car-wheel bearing.	J. H. Bowden.	419,494	Jan. 14	1263	337 338	50	266
Car-wheel. Cushioned.	B. F. Haugh and P. F. Leach.	443,047	Dec. 16	2272	583	53	1724
Car-wheel-dressing machine.	B. J. Abbott.	436,295	Sept. 9	1414	368 369	52	1652
Car-wheel-dressing machine.	B. J. Abbott.	443,928	Dec. 30	3728	953	53	2021
Car-wheel. Motor-armature.	E. Wagemann.	436,728	Sept. 16	2105	554 555	52	1791
Car-wheel-testing device.	P. H. Griffin.	421,271	Feb. 11	1253	323	50	810
Car-wheel-truing machine.	J. N. Barr.	421,377	Feb. 18	1405	363 364	50	846
Car-wheels. Die for upsetting cast-steel.	S. A. Freeman.	430,121	June 17	1563	389	51	1793
Car-wheels. Flask for molding.	J. R. Whitney.	428,293	May 20	1925	484	51	1206
Car wheels. Handling railway.	P. H. Griffin.	431,114	July 1	123	31	52	26
Car-wheels. Manufacturing chilled.	R. W. Oswald.	422,435	Mar. 4	104	28	50	1157
Car-wheels. Method of and apparatus for manufacturing metallic.	S. H. Ralston and J. R. Jones.	430,750	June 24	2596	635	51	2000
Car-window sash.	W. J. Hall.	437,337	Sept. 30	3135	820	52	2001
Car-window screen.	L. Landreth.	421,408	Feb. 18	1446	375	50	854
Car-windows. Combined dust-guard and ventilator for.	J. B. Ballard.	424,163	Mar. 25	2709	721	50	1674
Cars. Adjustable fender or guard for street.	H. B. Lent.	432,143	July 15	1741	447	52	354
Cars. Air-brake apparatus for.	R. W. Bayley.	429,332	June 3	350	83	51	1538
Cars. Air-brake for railway.	D. Dunn.	431,938	July 8	1410	358	52	284
Cars and carriages. Ventilating railway.	S. Hughes.	433,942	Aug. 12	748	195	52	913
Cars. Anti-friction support for.	L. K. Jewett.	427,691	May 13	1003	252 253	51	1019
Cars. Apparatus for heating and ventilating railway.	C. M. C. Prentice.	440,500	Nov. 11	1374	355	53	882
Cars, &c. Attachment for street.	W. S. Livengood.	428,500	May 20	2227	563	51	1264
Cars, &c. Attachment for railway.	W. S. Livengood.	428,923	May 27	2277	736	51	1410
Cars. Automatic coupling-pipe for steam-heating systems for railway.	E. Savage.	437,908	Oct. 7	355	102 103	53	69
Cars. Automatic mechanism for station-indicators in railway.	J. Kneffer.	438,689	Oct. 21	1549	417	53	308
Cars. Bridge for doorways of cattle.	B. C. Hicks.	429,760	June 10	990	242	51	1673
Cars. Cattle-guard for doors of stock.	B. C. Hicks.	430,948	June 24	2892	711	51	2057
Cars. Center bearing plate for.	C. T. Schoen.	440,335	Nov. 11	1088	279	53	828
Cars. Center bearing-plate for railway.	C. T. Schoen.	428,527	May 20	2264	575	51	1272
Cars. Closing device for the doors of railway.	E. O. Leimbrock.	434,516	Aug. 19	1639	430	52	1096
Cars. Combined heater and spark-conveyer for railway.	W. Amos.	435,199	Aug. 26	2722	719	52	1311
Cars. Connection for the steam-heating pipes of railway.	P. McEnany.	438,356	Oct. 14	1048	285 286	53	207
Cars. Contact device for electric.	R. M. Hunter.	440,597	Nov. 11	1537	396	53	912
Cars. Corner-band for.	C. T. Schoen.	437,723	Oct. 7	72	23	53	17

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Cars. Corner-strap for	C. T. Schoen	419,715	Jan. 21	1592	425	50	336
Cars. Coupling for steam-pipes between railway-	J. R. Drodzowski. (Reissue)	11,057	Jan. 21	2073	547	50	432
Cars. Current-collecting device for electric	R. M. Hunter	434,276	Aug. 12	1265	328	52	1012
Cars. Curtain-rod for sleeping	H. H. Sessions	440,658	Nov. 18	1628	420	53	940
Cars. Device for the adjustment and testing of electric	T. M. Foote	434,181	Aug. 12	1115	289	52	984
Cars. Die for the manufacture of side bearings for railway-	C. T. Schoen	420,630	Feb. 4	290	77	50	620
Cars. Draft and buffing mechanism for railway-	J. P. Coulter and T. Hibbert	432,376	July 15	2083	535	52	417
Cars. Draw-gear for railway	H. C. Bnhoup	423,727	Mar. 18	2062	543	50	1543
Cars. Electric motor for railway	W. M. McDougall	431,213	July 1	275	69	52	56
Cars. End guard for	W. Walter	443,882	Dec. 30	3654	941	53	2007
Cars. Feeding-rack for cattle	F. E. Canda	440,010	Nov. 4	585	{ 154 155 }	53	722
Cars for inclined railways. Gripping device for	J. M. Isenberg	437,993	Oct. 7	493	140	53	93
Cars. Friction-buffer for railway	J. A. Hinson	439,748	Nov. 4	175	45, 46	53	642
Cars. Grain-door for	E. D. Bronner, R. Potts, and W. A. Pungs	432,909	Mar. 11	831	216	50	1303
Cars. Guide-rod for tops of freight-	M. Sullivan	438,031	Oct. 7	560	153	53	106
Cars. Heating apparatus for railway	E. A. Leland	441,497	Nov. 25	3030	781	53	1212
Cars. Heating railway-	T. S. Glover	421,696	Feb. 18	1865	{ 488 489 }	50	935
Cars in train. Power-gearing for	A. R. Canner	439,108	Oct. 28	2318	{ 595 596 }	53	443
Cars. Label-holder for freight-	M. Williams	426,349	Apr. 22	2908	765	51	594
Cars. Ladder for sleeping	W. Ford	423,237	Mar. 11	1326	344	50	1396
Cars. Life-guard for	C. Carr	429,082	May 27	3124	805	51	1456
Cars. Means for heating railway-	J. Q. C. Scarle. (Reissue.)	11,101	Aug. 5	722	{ 187 188 }	52	899
Cars. Means for recording moving	C. Kehr	434,085	Aug. 12	958	251	52	954
Cars. Means for releasing grips on cable	J. H. Robertson	424,619	Apr. 1	282	73	51	57
Cars. Means for supplying electricity to tram-	A. L. Lineff	423,874	Mar. 18	2276	{ 600 601 }	50	1585
Cars. Means for supporting storage-batteries on railway-	H. H. Blades	435,640	Sept. 2	410	111	52	1452
Cars. Means for switching or guiding railway-	A. E. Appleyard	426,751	Apr. 29	3539	923	51	724
Cars of inclined roads. Grip for	J. M. Isenberg	426,276	Apr. 22	2805	737	51	572
Cars, omnibuses, &c. Registering and recording apparatus for tram-	T. Gregory	443,090	Dec. 23	2970	605	53	1750
Cars on inclined railways. Driving mechanism for	C. W. Hunt	443,768	Dec. 30	3491	895	53	1974
Cars on railway-tracks. Device for replacing	J. B. Bennett	435,914	Sept. 9	840	221	52	1543
Cars. Operating electric brakes for electrically-propelled	W. M. Schlesinger	441,330	Nov. 25	2765	715	53	1161
Cars or other structures. Door for	L. Coburn and W. J. Sumner	432,225	July 15	1859	{ 477 478 }	52	376
Cars. Parcel-carrier for street-	J. S. Hagerty	441,300	Nov. 25	2722	706	53	1153
Cars. Pilot for street-railway	W. Snee	443,014	Dec. 16	2319	571	53	1714
Cars. Pin-and-link holder for	J. M. Love	433,479	Aug. 5	59	18	52	768
Cars. Pin-pulling machine for coal	G. G. Townsend	423,500	Mar. 18	1718	453	50	1479
Cars. Pipe-coupling for railway-	J. Emerson	443,934	Dec. 30	3738	957	53	2023
Cars. Pipe-coupling for railway-	E. E. Gold	424,780	Apr. 1	539	{ 144 145 }	51	106
Cars. Pipe-coupling for railway-	E. E. Gold	435,016	Aug. 26	2453	649	52	1260
Cars. Pipe-coupling for railway-	N. Nilson	420,209	Jan. 28	2370	{ 629 630 }	50	496
Cars. Platform-support for tram-	J. Stephenson	442,745	Dec. 16	1779	{ 460 461 }	53	1625
Cars. Power-actuated braking mechanism for railway-	J. E. Loughridge	422,237	Feb. 25	2652	701	50	1090
Cars. Protecting-plate for grip-	H. E. Hunt	419,677	Jan. 21	1543	411	50	327
Cars provided with intermediate trucks. Means for facilitating the uncoupling of	W. H. Marshall	431,605	July 8	880	{ 218 219 }	52	184
Cars. Rail-brake for street-	C. W. Powell	442,542	Dec. 9	1421	363	53	1547
Cars. Rail-sweeping attachment for street-	O. Sternoff-Beyer	438,868	Oct. 21	1857	493	53	365
Cars. Reversing-gear for electric	T. M. Foote	433,402	July 29	3657	945	52	739
Cars. Rod for coupling	J. B. Lewis	442,061	Dec. 2	686	185	53	1396
Cars. Running-board for	F. W. Pool	412,153	Feb. 25	2517	665	50	1065
Cars. Running-board for freight-	S. L. Mott	423,567	Mar. 18	1814	478	50	1496
Cars. Running-board for freight-	S. L. Mott	427,598	May 13	866	217	51	991
Cars. Safe depositories for railway-	M. N. Forney	436,055	Sept. 9	1048	272	52	1583
Cars. Safeguard for cable and horse	G. Rischmuller	440,749	Nov. 18	1783	460	53	969
Cars. Safety-rail for replacing	C. Baumgard	423,466	Mar. 18	1668	441	50	1470
Cars. Self-adjusting fender or guard for railway-	S. S. Putnam, Jr.	431,393	July 1	553	{ 138 139 }	52	112
Cars. Self-adjusting fender or guard for railway-	S. S. Putnam, Jr., and W. W. Whitmarsh	442,546	Dec. 9	1431	367	53	1549
Cars. Shot-proof structure for	E. McLane	426,949	Apr. 29	3806	995	51	777
Cars. Side bearing for railway	C. T. Schoen	420,629	Feb. 4	299	77	50	620
Cars. Sliding door for railway	A. B. Pullman	421,084	Feb. 11	984	{ 252 253 }	50	759
Cars. Spring-motor for	A. F. George	434,364	Aug. 12	1247	{ 323 324 }	52	1009
Cars. Stako-pocket for	J. H. Evans	436,077	Sept. 9	1085	281	52	1589
Cars. Station-indicator for railway-	G. N. Vanderhoef	440,208	Nov. 11	884	{ 227 228 }	53	792
Cars. Steam and air pipe coupling for railway	J. Emerson	443,936	Dec. 30	3742	957	53	2023
Cars. Steam-coupling for railway	T. W. Moran	422,311	Feb. 25	2766	729	50	1111
Cars. Steam-heating apparatus for railway-	G. Westinghouse, Jr.	420,132	Jan. 28	2241	{ 593 594 }	50	474
Cars. Street-indicator for	G. Spoelstra, J. Vandermeer, and G. Stevens	433,605	Aug. 5	245	65	52	804
Cars. Street or station indicator for railway	J. R. Fletcher	433,858	Aug. 5	622	162	52	878
Cars. Switch attachment for street-railway	A. E. Appleyard	426,980	Apr. 29	3852	1007	51	785
Cars. Switch-operating device for railway	J. Kelly	437,577	May 13	837	209	51	987

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Cars. System of ventilating and heating	E. F. Roberts. (Reissue)	11,054	Jan. 7	784	{ 207 208	{ 50	163
Cars. Train-pipe for railway	J. F. McElroy	428,016	May 13	1505	382	51	1115
Cars. Transfer apparatus for traction-cable	A. G. Middleton	422,352	Feb. 25	2838	748	50	1124
Cars. Trolley-arm for electric	W. F. Harriman	427,569	May 13	825	{ 205 206	{ 51	984
Cars. Trolley-arm for electric-railway	C. J. Van Depoele	424,381	Mar. 25	3055	811	50	1741
Cars. Trolley for electric railway	N. C. Bassett	441,123	Nov. 25	2412	624	53	1098
Cars. Trolley for electrically-propelled	W. L. Stevens and E. J. Wescott	434,682	Aug. 19	1920	501	52	1150
Cars. Trolley or contact-support for electric	L. Atwood	435,166	Aug. 26	2673	706	52	1302
Cars. Trolley-pole for electric	B. C. Rowell and F. E. Galloupe	439,192	Oct. 28	2346	631	53	465
Cars. Trussing for railway	F. E. Canda	426,238	Apr. 22	2755	722	51	561
Cars. Under frame for	S. Fox	425,501	Apr. 15	1628	434	51	334
Cars. Variable-speed gearing for electric	T. M. Foote	433,401	July 29	3655	944	52	739
Cars. Water-trough for cattle	F. E. Canda	423,123	Mar. 11	1157	301	50	1363
Cars. Watering-trough for stock	B. C. Hicks	430,950	June 24	2894	712	51	2057
Cars. Weighing attachment for	C. B. Wanamaker	439,215	Oct. 28	2392	643	53	474
Cars. Weighing attachment for	C. B. Wanamaker	439,217	Oct. 28	2397	{ 644 645	{ 53	475
Caramol-holder	P. C. Wiest	428,765	May 27	2644	670	51	1362
Caramels, &c. Tray for holding	O. B. Weaver	442,500	Dec. 9	1359	348	53	1535
Carbon. Arc-light	W. E. Adeney and L. Sanderson	421,469	Feb. 18	1527	50	50	869
Carbon brush for motors	L. Daft	427,674	May 13	971	{ 244 245	{ 51	1013
Carbon conductors. Manufacture of	A. de Khotinsky	432,490	July 15	2255	50	52	453
Carbon. Electric-lamp	H. H. Head and L. Sanderson	422,302	Feb. 25	2757	50	50	1109
Carbon. Electric-lamp	W. F. Smith	422,456	Mar. 4	143	39	50	1164
Carbon filaments. Manufacture of	T. A. Edison	438,299	Oct. 14	968	262	53	190
Carbon filaments. Manufacture of	A. de Khotinsky	429,534	June 3	657	51	51	1597
Carbon filaments. Manufacture of	A. de Khotinsky	429,535	June 3	659	51	51	1597
Carbon for arc lamps	E. L. Liedke	421,733	Feb. 18	1912	503	50	944
Carbon for electrical purposes and making the same	J. H. Davis	430,991	June 24	2960	51	51	2070
Carbon-rod for arc lamps	C. E. Scribner	423,637	Mar. 18	1929	507	50	1518
Carbon structures. Composition for porous	C. R. Goodwin	431,743	July 8	1126	52	52	229
Carbon tetrachloride. Making	E. G. Scott	435,862	Sept. 2	741	52	52	1518
Carbons. Apparatus for manufacturing electric-light	H. A. Tremaine	426,479	Apr. 29	3122	820	51	644
Carbons for electric lamps. Manufacture of	W. F. Smith	422,895	Mar. 4	803	205	50	1289
Carbons. Gage for testing fibers for incandescent-lamp	T. A. Edison	438,300	Oct. 14	969	262	53	190
Carbons. Manufacturing	C. Heisler	428,604	May 27	2388	{ 607 608	{ 51	1315
Carbonating apparatus	W. T. Thackeray	437,318	Sept. 30	3109	814	52	1096
Carbonized sheet for manufolding	L. H. Rogers	427,015	Apr. 29	3907	1019	51	795
Carbonizing apparatus	A. Silverberg and C. Detering	440,968	Nov. 18	2148	556	53	1037
Carbonizing-chamber	T. A. Edison	439,393	Oct. 28	2691	716	53	529
Carbonizing vegetable fibers. Apparatus for	J. Illingworth	430,127	June 17	1571	{ 390 391	{ 51	1795
Carboy for acids	J. W. Fox	438,149	Oct. 14	737	802	53	148
Carboy-holder	A. A. Robbins	437,455	Sept. 30	3347	876	52	2044
Carbureting air or gas	S. Hanford	425,377	Apr. 15	2194	583	51	443
Carbureting apparatus	G. H. Burrows	427,832	May 13	1222	309	51	1061
Carbureting apparatus	W. Dawson	429,436	June 3	496	118	51	1567
Carburetor	J. J. Cooper	427,225	May 6	305	78	51	872
Carburetor	W. Dawson	430,591	Feb. 4	233	60, 61	50	610
Carburetor	G. Hargreaves, E. W. Porter, and J. P. Scranton	432,270	July 15	1927	493	52	388
Carburetor	L. C. Huber	423,257	Mar. 11	1357	353	50	1402
Carburetor	P. Keller	431,059	July 1	46	11	52	11
Carburetor	J. Love	440,486	Nov. 11	1350	349	53	878
Carburetor	H. S. Maxim	430,213	June 17	1695	422	51	1819
Carburetor	L. C. Parker	435,856	Sept. 2	733	196	52	1516
Carburetor	D. D. Ranney	437,454	Sept. 30	3345	875	52	2043
Carburetor	E. D. Self	443,584	Dec. 30	3197	822	53	1919
Carburetor	W. H. Shannon	427,197	May 6	263	68	51	863
Carburetor	A. B. Smith	433,495	Aug. 5	80	23	52	772
Carburetor	J. W. and A. B. Strouse	422,322	Feb. 25	2784	732	50	1114
Carburetor	J. S. Tibbets	427,487	May 6	691	{ 173 174	{ 51	948
Carburetor. Air	R. D. Bradley	423,898	Mar. 25	2316	611	50	1599
Carburizing malleable cast-iron or low-carbon steel	M. F. Coomes and A. W. Hyde	422,118	Feb. 25	2467	50	50	1055
Carburizing malleable cast-iron or low-carbon steel	M. F. Coomes and A. W. Hyde	422,119	Feb. 25	2467	50	50	1055
Carburizing malleable cast-iron or low-carbon steel	M. F. Coomes and A. W. Hyde	422,120	Feb. 25	2468	50	50	1055
Carburizing malleable cast-iron or low-carbon steel	M. F. Coomes and A. W. Hyde	422,121	Feb. 25	2469	50	50	1056
Card-board-cutting machine	R. T. Smith	434,958	Aug. 26	2370	628	52	1245
Card-board. Machine for cutting grooves in	J. Geiger	442,878	Dec. 16	2000	513	53	1670
Card-case and game-counter	J. W. Palmer	424,126	Mar. 25	2658	708	50	1664
Card-cloth. Tool for use in clothing cylinders and conical bodies with	J. L. Weatherhead	426,575	Apr. 29	3262	855	51	671
Card-clothing. Grinder for	H. E. Cunningham	424,763	Apr. 1	511	138	51	100
Card-clothing grinding-machine	G. O. Wickers	433,919	Aug. 5	705	183	52	894
Card-clothing. Tool for setting up bent teeth of	L. Gardner and N. Reid	443,253	Dec. 23	2662	683	53	1906
Card-cutting machine	M. Meriam	427,098	May 6	110	30	51	833
Card-edging machine	G. Lispenard	434,088	Aug. 12	962	252	52	955
Card fillets. Apparatus for covering cylinders with	N. Whitley, F. W. Thomson, and H. Hoyle	429,985	June 10	1332	{ 330 331	{ 51	1739
Card-forming machinery	H. E. Cunningham	437,021	Sept. 23	2631	687	52	1899
Card-grinder	R. Schofield	428,529	May 20	2266	575	51	1272
Card-grinding apparatus	W. H. Rankin	426,545	Apr. 29	3216	843	51	662
Card-grinding machine	C. H. Foss	428,082	May 20	1600	{ 406 407	{ 51	1143
Card. Hand	G. I. Haeberle	422,772	Mar. 4	589	151	50	1249
Card or pamphlet. Sale	E. Denzel	425,496	Apr. 15	1623	433	51	333
Card-rack	G. C. and E. A. Williams	419,235	Jan. 14	887	233	50	190

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Card-repeating machine. Jacquard.....	W. P. Uhlinger.....	438,508	Oct. 14	1261	{ 341 342 }	{ 53	248
Card-setting-machine cutter.....	J. A. Ellison.....	439,057	Oct. 21	2134	575	53	420
Card-setting machines. Back-bend apparatus for.....	R. Ashworth.....	427,950	May 13	1412	357	51	1096
Card-teeth for carding fibers. Apparatus for grinding.....	W. Middleton and W. Wilson.....	429,044	May 27	3064	790	51	1445
Cards in packs. Machinery for composing playing-.....	P. Gauchot.....	420,194	Jan. 28	2343	{ 620 621 622 623 624 }	{ 50	491
Cards or sheets. Supporting device for advertising and other.....	E. G. Bond, E. C. and A. Goldsmith.....	433,230	July 29	3424	884	52	691
Carding-engine.....	G. and E. Ashworth.....	442,936	Dec. 16	2111	543	53	1691
Carding-engines. Cylinder for.....	W. P. Canning.....	431,685	July 8	1036	260	52	211
Carding-engine.....	J. J. Hoey.....	420,795	Feb. 4	521	136	50	664
Carding-engine.....	W. H. Richardson and W. Greaves.....	418,852	Jan. 7	305	73, 74	50	64
Carding-engine.....	L. L. Williams.....	425,091	Apr. 8	1010	270	51	204
Carding-engine cylinder.....	E. and G. Ashworth.....	421,153	Feb. 11	1086	279	50	780
Carding-engines. Apparatus for grinding flats for revolving.....	J. W. McConnel and J. Higginson, Jr.....	426,416	Apr. 22	3032	794	51	618
Carding-engines, &c. Coiler for.....	G. T. Francis.....	432,132	July 15	1727	444	52	352
Carding-engines. Cylinder for.....	S. W. Goddard.....	433,620	Aug. 5	265	71	52	808
Carding-engines. Flat-supporting device for.....	C. A. Taft.....	422,849	Mar. 4	712	183	50	1274
Carding-engines. Fleece-dividing attachment for.....	W. T. Leech and G. Himelspark.....	439,073	Oct. 21	2160	579	53	425
Carding-engines. Mechanism for stripping the traveling flats of.....	B. A. Dobson and W. I. Bromiley.....	439,126	Oct. 28	2244	{ 603 604 }	{ 53	447
Carding-engines. Top-flat-stripping mechanism for.....	H. Ellis.....	422,752	Mar. 4	564	144	50	1244
Carding-fibrous materials. Machine for.....	J. P. Thompson.....	443,414	Dec. 23	2918	751	53	1856
Carding-machine.....	J. P. Thompson.....	443,415	Dec. 23	2919	751	53	1856
Carding-machine feeder.....	E. Kearsley.....	437,304	Sept. 30	3088	809	52	1993
Carding-machine for producing slivers of varying colors.....	R. W. Duxbury.....	421,823	Feb. 18	2027	538	50	965
Carding-machine stripping mechanism.....	J. Thomson, Jr.....	430,200	June 17	1663	414	51	1812
Carding-machines. Automatic winding attachment for.....	J. F. McAfee and J. H. Loback.....	439,542	Oct. 28	2902	{ 771 772 773 }	{ 53	570
Carding-machines. Burring attachment for.....	I. Newell.....	419,211	Jan. 14	851	223	50	183
Carding-machines. Mechanism for adjusting traveling flats of.....	T. Knowles.....	428,778	May 27	2661	675	51	1365
Carding wool, &c. Machine for and method of.....	J. P. Thompson.....	443,416	Dec. 23	2921	752	53	1856
Carillon.....	L. Haberkam.....	428,207	May 20	1774	448	51	1177
Carpenter's gage.....	L. O. Barrett.....	436,166	Sept. 9	1225	319	52	1613
Carpenter's gage.....	W. P. Orr.....	436,101	Sept. 9	1116	290	52	1595
Carpenter's roll-gage.....	S. G. Arnold.....	435,027	Aug. 26	2469	654	52	1263
Carpenter's tool.....	G. B. Orswell.....	436,542	Sept. 16	1827	481	52	1736
Carpet-beater. Hand-power.....	J. Clark.....	428,715	May 27	2573	652	51	1348
Carpet heating and cleaning apparatus.....	A. Midgley.....	435,850	Sept. 2	722	194	52	1514
Carpet-beating device.....	J. S. McIntire.....	440,408	Nov. 11	1213	313	53	853
Carpet-cleaner.....	J. Knoche.....	435,935	Sept. 9	868	227	52	1548
Carpet-cleaning machine.....	W. Bowman.....	427,827	May 13	1214	306	51	1059
Carpet-cleaning machine.....	W. Fay.....	440,223	Nov. 11	915	235	53	799
Carpet fabric.....	W. C. Gray and W. Tannahill.....	419,516	Jan. 14	1294	346	50	271
Carpet fabric. Axminster or Moquette.....	W. C. Sanford.....	428,022	May 13	1513	384	51	1117
Carpet fabric. Ingrain.....	W. B. Keefer.....	419,855	Jan. 21	1810	479	50	379
Carpet fabric. Ingrain.....	W. B. Keefer.....	424,308	Mar. 25	2914	778	50	1714
Carpet fabric. Ingrain.....	W. B. Keefer.....	443,095	Dec. 23	2377	607	53	1751
Carpet fabric. Two-ply ingrain.....	T. B. Dornan.....	438,064	Oct. 7	609	166	53	117
Carpet-fastener.....	P. Beamish.....	429,410	June 3	468	111	51	1561
Carpet-fastener.....	O. D. Southworth.....	424,511	Apr. 1	110	32	51	24
Carpet fastener. Stair.....	W. G. Collins.....	418,972	Jan. 7	496	124	50	104
Carpet fastener. Stair.....	W. G. Collins.....	426,661	Apr. 29	3389	890	51	696
Carpet-lining.....	A. Gregg, Jr.....	419,849	Jan. 21	1800	476	50	376
Carpet. Moquette.....	R. F. Patterson.....	432,763	July 22	2704	691	52	546
Carpet or upholstering fabric.....	G. S. Griffith, Jr.....	420,269	Jan. 28	2469	656	50	514
Carpet. Reversible ingrain or imitation Brussels.....	S. Wood and G. H. Heppleston.....	421,219	Feb. 11	1180	303	50	796
Carpet-stretcher.....	O. Anderson and F. J. Stetter.....	434,103	Aug. 12	988	258	52	959
Carpet-stretcher.....	S. Boice.....	425,160	Apr. 8	1124	298	51	226
Carpet-stretcher.....	J. P. Browne.....	437,971	Oct. 7	458	128	53	87
Carpet-stretcher.....	M. J. Cook.....	435,920	Sept. 9	847	223	52	1545
Carpet-stretcher.....	J. W. Crise.....	431,443	July 1	634	159	52	128
Carpet-stretcher.....	L. S. Denison.....	431,182	July 1	224	56	52	47
Carpet-stretcher.....	A. E. Finegan.....	442,874	Dec. 16	1995	512	53	1669
Carpet-stretcher.....	F. V. Foster.....	429,567	June 3	704	171	51	1607
Carpet-stretcher.....	J. L. Kingston.....	438,437	Oct. 14	1161	314	53	228
Carpet-stretcher.....	C. Mabel.....	426,030	Apr. 22	2449	649	51	499
Carpet-stretcher.....	F. B. Noble.....	424,495	Apr. 1	87	24	51	20
Carpet-stretcher.....	E. O'Dell.....	430,399	June 17	2021	498	51	1882
Carpet-stretcher.....	J. J. Plowman.....	436,088	Sept. 9	1099	285	52	1592
Carpet-stretcher.....	F. H. Rundell.....	439,327	Oct. 28	2587	690	53	510
Carpet-stretcher.....	C. Sack.....	431,488	July 1	700	176	52	140
Carpet-stretcher.....	J. Schilling.....	432,769	July 22	2711	694	52	547
Carpet-stretcher.....	L. H. Spurgeon.....	431,411	July 1	574	144	52	116
Carpet-stretcher.....	F. C. Trowbridge.....	419,979	Jan. 21	1996	525	50	417
Carpet-stretcher.....	R. E. Zimmermann.....	421,343	Feb. 11	1352	350	50	828
Carpet stretcher and tacker.....	J. Blakeslee.....	427,544	May 13	785	195	51	977
Carpet stretcher and tacker combined.....	W. I. Ludlow.....	425,137	Apr. 8	1081	286	51	218
Carpet-sweeper.....	W. J. Drew.....	422,508	Mar. 4	209	56	50	1176
Carpet-sweeper.....	W. J. Drew.....	424,672	Apr. 1	361	95, 96	51	70
Carpet-sweeper.....	W. J. Drew.....	426,116	Apr. 22	2575	677	51	525
Carpet-sweeper.....	W. J. Drew.....	443,163	Dec. 23	2501	640	53	1773
Carpet-sweeper.....	W. J. Drew.....	443,164	Dec. 23	2502	{ 640 641 }	{ 53	1774
Carpet-sweeper.....	R. H. Eddy.....	433,723	Aug. 5	415	106	52	836

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Carpet-sweeper	G. W. Kelley	424,309	Mar. 25	2916	778	50	1714
Carpet-sweeper	W. H. Pickett	419,349	Jan. 14	1063	{ 280 281 }	{ 50 225 }	
Carpet-sweeper	S. H. Raymond	438,114	Oct. 7	681	185	53	131
Carpet-sweeper	G. S. Rooney	437,349	Sept. 30	3158	827	52	2006
Carpets. Manufacturing Wilton and Moquette	R. B. Loynd	436,529	Sept. 16	1784	471	52	1730
Carpets, rugs, mats, &c. Manufacturing	R. J. Grubb	430,230	June 17	1725	429	51	1824
Carriage	H. Wadsworth	430,450	June 17	2085	515	51	1894
Carriage and sleigh. Combined	J. S. Gourlay	432,268	July 15	1925	492	52	388
Carriage-apron	M. S. Lorsch	421,737	Feb. 18	1916	504	50	945
Carriage-apron support	H. E. Mereness	422,428	Mar. 4	95	26	50	1155
Carriage-bow	I. N. Topliff	423,460	Mar. 18	1660	438	50	1468
Carriage brake. Baby-	G. W. Dolby	420,230	Jan. 28	2406	640	50	503
Carriage brake. Baby-	R. W. Welch	437,826	Oct. 7	236	72	53	47
Carriage brake. Baby-	W. Willson	429,709	June 10	920	225	51	1659
Carriage brake. Child's	C. Miller and C. Hanimann	422,245	Feb. 25	2666	704	50	1093
Carriage canopy-support. Child's	J. A. Anderson	430,224	June 17	1717	427	51	1823
Carriage. Child's	J. A. Crandall	436,304	Sept. 9	1427	372	52	1655
Carriage. Child's	T. A. Galt	435,997	Sept. 9	935	250	52	1565
Carriage. Child's	P. Gendron	441,950	Dec. 2	501	134	53	1362
Carriage. Child's	T. Johnson, A. Hanson, and N. Whiteley	425,612	Apr. 15	1799	482	51	367
Carriage. Child's	G. Marqua	432,492	July 15	9257	583	52	453
Carriage. Child's	W. H. Newton	439,303	Oct. 28	2555	682	53	504
Carriage. Child's	W. W. Schiesl	431,401	July 1	562	141	52	114
Carriage. Child's	C. C. Shults	423,089	Mar. 11	1111	290	50	1353
Carriage. Child's	J. H. and W. Tozer	432,097	July 15	1661	{ 426 427 }	{ 52 339 }	
Carriage. Convertible	J. F. Goodrich	434,663	Aug. 19	1889	493	52	1145
Carriage-curtains. Button-hole shield and latch for	J. M. Mast	430,348	June 17	1945	477	51	1867
Carriage-door	F. A. Bradley	424,701	Apr. 1	409	107	51	81
Carriage-door	J. F. Hurrig	430,026	June 10	1400	348	51	1752
Carriage-door window	H. Lines and H. G. Bronson	420,205	Jan. 28	2364	628	50	495
Carriage-fender	C. S. Caffrey	423,024	Mar. 11	1004	264	50	1335
Carriage. Folding	T. M. McCarty	424,570	Apr. 1	206	56, 57	51	43
Carriage-jack	C. L. Bellamy	425,728	Apr. 15	1953	528	51	403
Carriage-jack	T. L. Williams	422,275	Feb. 25	2706	713	50	1100
Carriage. Jump-seat	J. F. Goodrich	427,856	May 13	1257	317	51	1067
Carriage. Jump-seat	G. E. Spare	435,716	Sept. 2	526	139	52	1477
Carriage. Jump-seat	G. E. Spare	435,717	Sept. 2	527	139	52	1477
Carriage. Jump-seat	M. Woodhull	426,158	Apr. 22	2637	693	51	537
Carriage parasol. Child's	J. T. Smith	421,771	Feb. 18	1962	515	50	952
Carriage-seat	G. D. Ramsdell	421,970	Feb. 25	2247	590	50	1015
Carriage-seats. Cushion-roll for	H. K. James	434,789	Aug. 19	2074	542	52	1181
Carriage-spring	G. T. Chapman	425,162	Apr. 8	1127	299	51	226
Carriage-spring	W. T. Foster	427,261	May 6	366	95	51	882
Carriage-spring	L. I. Hatfield and E. A. Chubb	420,905	Feb. 4	714	184	50	698
Carriage-step	E. L. Howe	419,198	Jan. 14	830	219	50	178
Carriage-step blank	S. E. Brown	435,916	Sept. 9	841	222	52	1544
Carriage-sunshade	D. Argerbright	442,935	Dec. 16	2110	543	53	1691
Carriage-top	W. Boughton	440,343	Nov. 11	1104	283	53	830
Carriage-top	D. F. Luse	436,632	Sept. 16	1955	514	52	1761
Carriage-top	J. D. Whitney	441,813	Dec. 2	295	80	53	1321
Carriage-top curtains. Knob-iron for	D. Conboy	442,858	Dec. 16	1970	506	53	1664
Carriage-top. Folding	J. Quindry	430,435	June 17	2066	509	51	1891
Carriage-top joint	G. Gillies	430,638	June 24	2396	583	51	1961
Carriage-top lifter	J. T. Dysard	425,126	Apr. 8	1066	283	51	215
Carriage-top prop	J. P. Faber	430,995	June 24	2965	727	51	2071
Carriage-top prop	M. C. Flanders	432,818	Sept. 2	680	181	52	1506
Carriage-top prop	J. V. Pailea	434,455	Aug. 19	1549	404	52	1077
Carriage-top support. Child's	D. P. Jefferies and A. W. Grant	438,238	Oct. 14	868	235	53	172
Carriage wear-iron	R. D. Jacobus	436,907	Sept. 23	2471	644	52	1868
Carriage-wrench	F. A. Wegner	420,981	Feb. 11	835	216	50	731
Carriage-wrench	F. A. Wegner	426,224	Apr. 22	2739	717	51	557
Carriage-wheels. Journal for	T. Clements	439,113	Oct. 28	2229	599	53	444
Carrier:							
See Book or parcel carrier.	Gun-carrier.						
Bundle-carrier.	Harvester sheaf-carrier.						
Cash-carrier.	Hay-carrier.						
Cash and parcel carrier.	Log-carrier.						
Carrier.	Package-carrier.						
Cash or bundle carrier.	Paint-carrier.						
Carrier.	Parcel-carrier.						
Chain-carrier.	Pneumatic dispatch-tube carrier.						
Coin-carrier.	Sheaf-carrier.						
Egg-carrier.	Straw-carrier.						
Elevated carrier.	Trace-carrier.						
Glass-carrier.	Trolley-carrier.						
Grain-carrier.	Turner's work-carrier.						
Grip-carrier.	Wire-carrier.						
Carrier system	I. E. Storey	418,856	Jan. 7	309	75	50	65
Carrier-track	W. and C. A. Gutenkunst	426,179	Apr. 22	2668	700	51	543
Carrying and power cable apparatus	L. H. Goodwin	431,945	July 8	1420	360	52	286
Cart. Ash-	N. Robinson	433,823	Aug. 5	578	151	52	869
Cart-brake	C. W. Young	432,219	July 15	1851	475	52	375
Cart. Dumping-	C. Gibbs	427,851	May 13	1249	315	51	1066
Cart. Dumping-	F. M. Gibson	422,518	Mar. 4	224	59	50	1178
Cart. Dumping-	T. Hill	420,941	Feb. 11	776	201	50	720
Cart. Dumping-	C. Spiess	440,550	Nov. 11	1497	386	53	905
Cart. Four-wheeled dog-	W. H. Barlow	443,423	Dec. 23	2932	754	53	1858
Cart. Hand-	W. A. Eddy	430,205	June 17	1668	415	51	1813
Cart-loading attachment	J. A. Schenley	440,440	Nov. 11	1277	330	53	862
Cart. Road-	C. L. Barrett	427,454	May 6	649	162	51	940

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Cart. Road.....	F. Borntrager.....	439,858	Nov. 4	342	89	53	674
Cart. Road.....	C. C. Bradley.....	432,595	July 22	2409	621	52	490
Cart. Road.....	G. Bryanton.....	423,307	Mar. 11	1440	375	50	1417
Cart. Road.....	A. Z. Bulger.....	430,916	June 24	2847	698	51	2048
Cart. Road.....	L. Bnrg.....	443,592	Dec. 30	3209	825	53	1921
Cart. Road.....	S. E. Burke.....	422,291	Feb. 25	2736	721	50	1105
Cart. Road.....	J. B. Burroughs.....	428,330	May 20	1983	499	51	1217
Cart. Road.....	G. H. Carroll.....	437,811	Oct. 7	214	65	53	43
Cart. Road.....	J. Coefield.....	433,517	Aug. 5	111	32	52	778
Cart. Road.....	C. Comstock.....	438,345	Oct. 14	1031	280 281	53	203
Cart. Road.....	D. W. Corey.....	429,016	May 27	3014	773 774	51	1436
Cart. Road.....	C. A. Davis.....	423,860	Mar. 18	2249	594	50	1579
Cart. Road.....	W. B. Dodge.....	439,056	Oct. 21	2133	572	53	419
Cart. Road.....	E. W. Doolittle.....	426,369	Apr. 22	2936	772	51	599
Cart. Road.....	H. Duffey.....	443,222	Dec. 23	2619	673	53	1799
Cart. Road.....	C. Fahrney.....	431,569	July 8	829	207	52	173
Cart. Road.....	P. W. Fergus.....	423,143	Mar. 11	1195	312	50	1370
Cart. Road.....	E. Garren.....	437,189	Sept. 30	2914	759	52	1959
Cart. Road.....	J. Haury.....	421,707	Feb. 18	1880	493	50	938
Cart. Road.....	G. W. Irish.....	433,171	July 29	3341	864	52	675
Cart. Road.....	D. N. Kratzer.....	433,572	Aug. 5	195	52	52	794
Cart. Road.....	J. H. Lewis.....	428,921	May 27	2875	735	51	1409
Cart. Road.....	J. S. McCoy.....	437,446	Sept. 30	3334	869 870	52	2040
Cart. Road.....	C. A. and J. H. Miller.....	438,700	Oct. 21	1565	421	53	311
Cart. Road.....	C. A. and J. H. Miller.....	438,701	Oct. 21	1566	421	53	311
Cart. Road.....	H. J. Miller.....	428,014	May 13	1503	382	51	1115
Cart. Road.....	G. V. Montgomery.....	422,057	Feb. 25	2369	626	50	1038
Cart. Road.....	O. L. Muench.....	439,541	Oct. 28	2901	771	53	570
Cart. Road.....	W. Munro.....	437,503	Sept. 30	3417	894	52	2058
Cart. Road.....	T. C. Munz.....	442,384	Dec. 9	4172	305	53	1497
Cart. Road.....	D. M. and T. H. Parry.....	435,515	Sept. 2	201	55	52	1414
Cart. Road.....	M. J. Rourke.....	441,444	Nov. 25	2947	759	53	1197
Cart. Road.....	F. Rudolph.....	421,316	Feb. 11	1320	341	50	822
Cart. Road.....	H. Schehr.....	425,832	Apr. 15	2126	567	51	431
Cart. Road.....	R. D. Scott.....	423,087	Mar. 11	1107	290	50	1353
Cart. Road.....	R. D. Scott.....	438,493	Oct. 14	1240	336	53	244
Cart. Road.....	E. B. Skinner.....	419,613	Jan. 14	1430	383	50	300
Cart. Road.....	A. L. Smith and J. P. Betts.....	434,095	Aug. 12	973	255	52	957
Cart. Road.....	H. C. Turner.....	429,784	June 10	1024	251	51	1679
Cart. Road.....	W. M. Ward.....	439,218	Oct. 28	2399	645	53	476
Cart. Road.....	T. S. Watrous.....	427,939	May 13	1393	352 353	51	1092
Cart. Road.....	T. S. Watrous.....	441,345	Nov. 25	2787	720	53	1165
Cart. Road.....	T. S. Watrous.....	441,346	Nov. 25	2788	721	53	1165
Cart. Road.....	P. Weidner.....	421,337	Feb. 11	1345	348	50	827
Cart. Road.....	J. M. Williams.....	433,607	Aug. 5	248	66	52	804
Cart. Road.....	L. H. Zeigler.....	433,386	July 29	3635	938	52	735
Cart. Water.....	M. J. McDonna.....	436,373	Sept. 16	1558	409	52	1688
Cart. Watering.....	P. B. Donahoo.....	426,664	Apr. 29	3392	891	51	696
Carts. Loading attachment for dump.....	G. Haag.....	435,825	Sept. 2	688	184	52	1508
Carts. Spring-back for road.....	J. D. Hough.....	427,083	May 6	87	24	51	829
Carts. Spring-back for road.....	G. T. Wilson.....	431,098	July 1	101	25	52	22
Cartridge.....	F. M. Garland.....	430,229	June 17	1724	429	51	1824
Cartridge.....	G. M. Peters.....	422,442	Mar. 4	111	30	50	1158
Cartridge. Blasting.....	J. E. Evans.....	437,646	Sept. 30	3615	945	52	2098
Cartridge. Blasting.....	A. Pallé.....	424,685	Apr. 1	383	100	51	75
Cartridge. Blasting.....	G. M. Peters.....	422,439	Mar. 4	108	29	50	1157
Cartridge. Blasting.....	G. M. Peters.....	422,440	Mar. 4	109	30	50	1158
Cartridge. Blasting.....	G. M. Peters.....	422,441	Mar. 4	110	30	50	1158
Cartridge-case.....	J. C. Butterfield and T. C. Batchelor.....	430,918	June 24	2849	699	51	2049
Cartridge-case.....	A. Reinisch.....	436,150	Sept. 9	1199	313	52	1609
Cartridge-cases. Utilizing electricity in the formation of metallic.....	M. W. Dewey.....	438,409	Oct. 14	1131	305	53	222
Cartridge-extractor. Ring.....	P. Mauser.....	427,587	May 13	853	214	51	989
Cartridge-feeder for machine-guns.....	S. Goodell.....	421,862	Feb. 18	2101	551	50	978
Cartridge-feeding device.....	L. F. Bruce.....	421,348	Feb. 11	1359	352	50	829
Cartridge-filling machine.....	W. Rees.....	419,473	Jan. 14	1242	329	50	261
Cartridge for breech-loading cannon.....	S. Seabury.....	441,904	Dec. 2	431	115	53	1349
Cartridge for ordnance.....	J. P. Holland.....	420,623	Feb. 4	281	75	50	619
Cartridge-indentor.....	W. S. Tobie.....	427,282	May 6	396	103	51	888
Cartridge loading and unloading tool. Combination.....	G. S. Adams.....	428,328	May 20	1979	498	51	1216
Cartridge-loading machine.....	E. A. Franklin.....	441,616	Nov. 25	3217	828 830	53	1249
Cartridge-magazine for fire-arms.....	C. G. Harston.....	419,518	Jan. 14	1296	346	50	272
Cartridge-magazines. Spring for.....	J. J. Speed.....	431,410	July 1	574	144	52	116
Cartridge-primer. Gun.....	W. Lorenz.....	431,601	July 8	876	217	52	183
Cartridge-shell reloader.....	C. A. Hussey.....	434,339	Aug. 12	1353	353	52	1032
Cartridge-shells. Machine for boring.....	C. Raue.....	438,241	Oct. 14	874	237	53	173
Cartridge-shells. Machine for heading.....	W. Mason.....	437,442	Sept. 30	3328	868	52	2039
Cartridges. Means for loading and capping.....	J. W. Carver.....	424,641	Apr. 1	316	82	51	62
Carving-fork.....	T. C. J. Thomas.....	436,024	Sept. 9	992	260	52	1572
Carving-machine.....	C. F. Hotchkiss.....	441,087	Nov. 18	2340	605 606	53	1075
Carving-machine.....	J. Jacobson.....	429,213	June 3	164	39	51	1502
Carving-machine.....	F. D. Peck.....	430,678	June 24	2465	601 602	51	1975
Carving-machine.....	T. L. Smith and P. W. Post.....	443,802	Dec. 30	3541	908 909	53	1984
Carving machine. Wood.....	A. Dodds.....	426,408	Apr. 22	3019	791	51	615

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Carving-machines. Adjustable table for.....	S. Y. Kittle.....	436,712	Sept. 16	2085	{ 548 549	52	1786
Carving-machines. Work-holding table for.....	F. R. Potter.....	428,351	May 20	2013	506	51	1224
Case:							
See Accident-case.	Organ-case.						
Account and record holding case.	Packing-case.						
Advertising show-case.	Packing and refrigerating case.						
Blacking-case.	Pencil-case.						
Book-case.	Piano-case.						
Bottle-case.	Pocket-case.						
Bottle-packing case.	Portable case.						
Button-case.	Postal examination-case.						
Card-case.	Post-office distributing-case.						
Cartridge-case.	Preserving-case.						
Cell-case.	Razor-strop case.						
Cigar-case.	Ribbon-display case.						
Clock-case.	Sacramental case.						
Dressing-case.	Sample-case.						
Egg-case.	Show-case.						
Eyeglass-case	Show and sale case.						
File-case.	Spectacle-case.						
Filing-case.	Spool-case.						
Fishing-rod case.	Storage-case.						
Fruit-packing case.	Surgical case.						
Jeweler's case.	Thermometer-case.						
Label-case.	Thread-case.						
Latch-case.	Ticket-case.						
Lock-case.	Toilet-case.						
Mailing-case.	Type-transferring case.						
Map-case.	Violin-case.						
Medicine-case.	Watch-case.						
Needle-case.	Watch-shipping case.						
Case for holding and exhibiting oil-cloths, &c.....	E. E. Jandrey.....	431,587	July 8	859	214	52	179
Case-hardened bar or plato.....	J. H. Van Dorn.....	440,978	Nov. 18	2163	.....	53	1040
Case lock. Extension.....	H. F. Lane.....	424,486	Apr. 1	69	20	51	16
Cash and parcel carrier.....	F. S. Church.....	437,567	Sept. 30	3512	916	52	2077
Cash and parcel carrier.....	W. R. Dean and W. H. Barnett.....	421,822	Feb. 18	2026	536	50	965
Cash and parcel carrier.....	D. Lippy.....	424,319	Mar. 25	2938	783	50	1718
Cash and parcel carrier. Pneumatic.....	H. Miller.....	429,143	June 3	56	14, 15	51	1483
Cash-car.....	A. and A. Iske.....	428,102	May 20	1635	414	51	1150
Cash-carrier.....	W. F. Beyer.....	435,621	Sept. 2	382	103	52	1447
Cash-carrier.....	D. Brown.....	428,039	May 13	1536	369	51	1121
Cash-carrier.....	A. A. Caille.....	427,396	May 6	548	140	51	920
Cash-carrier.....	F. S. Church.....	441,641	Dec. 2	20	6	53	1266
Cash-carrier.....	A. R. Cory.....	429,338	June 3	360	86	51	1539
Cash-carrier.....	H. P. During.....	425,094	Apr. 8	1014	271	51	204
Cash-carrier.....	A. and A. Iske.....	424,789	Apr. 1	558	{ 148 149	51	109
Cash-carrier.....	O. J. Panches.....	420,832	Feb. 4	589	151	50	675
Cash-carrier.....	W. S. Reed.....	439,686	Nov. 4	92	24	53	626
Cash-carrier.....	C. D. Reeves.....	438,714	Oct. 21	1588½	426	53	316
Cash-carrier.....	F. Schreidt and T. E. Barrow.....	422,254	Feb. 25	2676	706	50	1095
Cash-carrier.....	W. S. Solomon.....	425,007	Apr. 8	895	236	51	182
Cash-carrier.....	A. and H. C. Waggoner and L. H. Elliott.....	421,458	Feb. 18	1511	392	50	867
Cash-carrier apparatus.....	J. G. Davis.....	413,903	Dec. 30	3683	948	53	2013
Cash-carrier apparatus.....	F. J. H. Hazard.....	430,996	June 24	2966	728	51	2071
Cash-carrier apparatus.....	M. C. Swozey.....	422,460	Mar. 4	147	40	50	1165
Cash-carrier apparatus. Curve for.....	R. W. Soper.....	432,576	July 22	2386	615	52	486
Cash-carriers. Propelling device for.....	C. E. Williams.....	421,999	Feb. 25	2282	601	50	1022
Cash-drawer recorder.....	F. R. Woodward.....	432,468	July 15	2220	{ 573 574 575 576 577 578	52	446
Cash drawer and desk.....	S. Messerer.....	443,257	Dec. 23	2670	{ 684 685 686 687 688	53	1808
Cash-indicating and check-printing machine.....	W. Koeb.....	428,003	May 13	1482	{ 377 378 379	51	1111
Cash-indicator.....	E. W. Blackhall and J. H. Smith.....	425,121	Apr. 8	1052	280	51	213
Cash-indicator.....	F. L. Fuller and G. H. Griswold.....	420,555	Feb. 4	180	45, 46	50	599
Cash-indicator.....	T. Schumann.....	438,089	Oct. 7	644	176	53	124
Cash indicator and recorder.....	L. M. Mills.....	434,799	Aug. 19	2085	{ 545 546 547 548	52	1183
Cash indicator and register.....	T. Carney.....	424,177	Mar. 25	2726	{ 727 728 729	50	1677
Cash indicator and register.....	J. W. Clark.....	422,878	Mar. 4	769	{ 196 197 198 199	50	1284
Cash indicator and register.....	W. H. Clark.....	431,438	July 1	626	{ 156 157	52	126
Cash indicator and register.....	W. H. Clark.....	433,888	Aug. 5	669	174	52	888
Cash indicator and register.....	W. H. Clark.....	435,396	Sept. 2	22	7, 8	52	1379
Cash indicator and register.....	W. H. Clark.....	435,397	Sept. 2	25	8, 9	52	1379
Cash indicator and register.....	W. H. Clark.....	435,398	Sept. 2	28	10, 11	52	1380
Cash indicator and register.....	W. H. Clark.....	435,400	Sept. 2	36	12, 13	52	1381
Cash indicator and register.....	W. W. Drew.....	434,584	Aug. 19	1740	456	52	1117
Cash indicator and register.....	A. J. Kletzker and B. Dubinski.....	420,346	Jan. 28	2572	{ 683 684 685 686	50	533
Cash indicator and register.....	W. Koeb.....	428,679	May 27	2513	{ 639 640 641	51	1336
Cash indicator and register.....	W. G. Latimer.....	430,390	June 17	2003	{ 494 495 496	51	1879
Cash indicator and register.....	H. E. Marshall.....	437,441	Sept. 30	3323	{ 867 868	52	2039

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Cash indicator and register	E. B. Parkhurst	422,823	Mar. 4	665	170	50	1264
Cash indicator and register	J. F. Pfeffer	422,827	Mar. 4	671	171	50	1266
Cash indicator and register	J. F. Pfeffer	422,828	Mar. 4	673	172	50	1266
Cash indicator and register	E. Rector	420,018	Jan. 21	2054	173	50	428
Cash indicator and register	W. G. Schickner and L. K. Marty	436,383	Sept. 16	1569	174	52	1691
Cash indicator and register	R. W. Uhlig	432,099	July 15	1663	427	52	339
Cash indicator and register	L. T. Weiss	428,259	May 20	1870	428	51	1196
Cash indicator, register, and calculator. Combined	J. Sharpe	429,486	June 3	585	429	51	1584
Cash indicator, register, recorder, and calculator	E. T. Bates	431,640	July 8	941	469	52	195
Cash-indicators. Key-arrester for	F. J. Patterson	437,236	Sept. 30	2980	143	52	1972
Cash or bundle carrier	T. Wilson, Jr.	428,194	May 20	1758	144	51	1174
Cash-receiver	J. S. Hagerty	432,610	July 22	2428	236	52	494
Cash-recorder	W. Koch	431,661	July 8	981	245	52	203
Cash-recorder	B. P. Wagner	434,217	Aug. 12	1168	246	52	994
Cash-recorder	A. Webster	440,670	Nov. 18	1648	304	53	944
Cash-recorder and money-drawer protector	H. Donaldson	428,202	May 20	1768	425	51	1176
Cash-recorder for store-service	R. H. North	435,241	Aug. 26	2770	426	52	1321
Cash recording and indicating machine	C. H. L. Pillsbury	423,628	Mar. 18	1917	732	50	1516
Cash-recording device	G. M. Enyeart	432,388	July 15	2102	505	52	421
Cash-recording machine	C. E. Hadley	433,728	Aug. 5	420	540	52	837
Cash-register	H. T. Bradley	434,374	Aug. 12	1407	541	52	1042
Cash-register	J. Brady	435,052	Aug. 26	2509	108	52	1270
Cash-register	T. Carney	428,270	May 20	1883	109	51	1198
Cash-register	L. Ehrlich	442,249	Dec. 9	963	369	53	1459
Cash-register	H. A. Herr	425,949	Apr. 15	2315	370	51	465
Cash-register	H. A. Herr	441,161	Nov. 25	2470	614	53	1109
Cash-register	W. Koch	440,108	Nov. 4	717	615	53	749
Cash-register	W. G. Latimer	435,067	Aug. 26	2532	640	52	1275
Cash-register	T. Munnell	436,290	Sept. 9	1404	669	52	1650
Cash register and indicator	A. I. Blanchard	442,660	Dec. 16	1602	365	53	1593
Cash register and indicator	I. D. Boyer	442,851	Dec. 16	1954	366	53	1661
Cash register and indicator	I. D. Boyer and J. D. Riggs	422,287	Feb. 25	2731	367	50	1104
Cash register and indicator	I. D. Boyer and F. Ham	436,573	Sept. 16	1867	414	52	1744
Cash register and indicator	T. Carney	422,375	Mar. 4	20	415	50	1140
Cash register and indicator	T. Carney and E. Snyder	428,269	May 20	1881	491	51	1198
Cash register and indicator	J. T. Cowley	413,982	Dec. 30	3823	492	53	2038
Cash register and indicator	F. L. Fuller and G. H. Griswold	420,554	Feb. 4	175	974	50	598
Cash register and indicator	C. D. Grimes	436,579	Sept. 16	1885	975	52	1747
Cash register and indicator	A. B. Hayden	435,038	Aug. 26	2486	44	52	1266
Cash register and indicator	A. B. Hayden	435,303	Aug. 26	2889	45	52	1341
Cash register and indicator	H. A. Herr	421,074	Feb. 11	972	657	50	756
Cash register and indicator	H. A. Herr	426,412	Apr. 22	3025	658	51	616
Cash register and indicator	H. T. Jones	427,086	May 6	90	765	51	829
Cash register and indicator	W. G. Latimer	430,391	June 17	2008	766	51	1880
Cash register and indicator	W. G. Latimer	430,585	June 17	2291	496	51	1933
Cash register and indicator	M. R. Longacre	429,927	June 10	1236	563	51	1720
Cash register and indicator	E. Rector	434,201	Aug. 12	1139	307	52	989
Cash register and indicator	H. B. Renwick	440,116	Nov. 4	732	296	53	752
Cash register and indicator	J. H. Schnarrenberger	422,545	Mar. 4	258	297	50	1185
Cash register and indicator	J. H. and J. F. Schnarrenberger	422,040	Feb. 25	2339	66, 67	50	1032
Cash register and indicator	S. P. Watt	434,897	Aug. 19	2250	618	52	1215
Cash register and indicator	J. J. Webster	434,616	Aug. 19	1798	590	52	1128
Cash register and indicator	J. J. Webster	436,325	Sept. 9	1461	591	52	1662
Cash register and indicator	C. W. Weiss	443,024	Dec. 16	2229	592	53	1716
Cash register and indicator	C. W. Weiss	443,025	Dec. 16	2234	575	53	1717
Cash register and indicator	L. T. Weiss	440,382	Nov. 11	1150	576	53	842
Cash register and indicator and adding-machine. Combined	W. H. Clark	435,399	Sept. 2	31	299	52	1361
Cash-register. Electric	W. L. Bundy	443,475	Dec. 23	3018	775	53	1875
Cash-register for coin-actuated locks	J. W. Patterson	423,948	Mar. 25	2397	776	50	1615

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Cash-registers. Rotary drawer for	W. G. Latimer	442,379	Dec. 9	1164	303	53	1495
Cash-registering and advertisement-displaying apparatus. Combined	M. A. Drew	434,255	Aug. 12	1235	320	52	1007
Casing-head	M. R. Skinner	423,422	May 20	2125	534	51	1245
Casing-splitter	B. Masseth	439,167	Oct. 23	2308	619	53	458
Cask	S. L. Wiegand	437,410	Sept. 30	3271	854	52	2028
Cask-forming machine	S. L. Wiegand	437,408	Sept. 30	3260	849 850 851 852	52	2025
Casks or barrels. Machine for making	A. Dunbar	423,418	Mar. 18	1597	419 420	50	1456
Casket-handle	M. Bremer	442,949	Dec. 16	2126	547	53	1694
Casket-handle	J. R. Fletcher	438,349	Oct. 14	1041	283	53	205
Casket-handle	J. R. Fletcher	441,148	Nov. 25	2448	634	53	1105
Casket-holder	A. H. Downing	443,317	Dec. 23	2778	712	53	1828
Casket-lowering device	C. E. Window	433,113	July 29	3257	838	52	658
Caskets or other articles. Support for	W. White	443,469	Dec. 23	3008	773	53	1873
Caster	A. B. Clark	440,875	Nov. 18	1994	514	53	1008
Caster	A. Currier	436,698	Sept. 16	2063	541	52	1782
Caster	G. J. Helmstaedter	439,777	Nov. 4	219	57	53	651
Caster	H. Howell	426,020	Apr. 22	2435	644	51	497
Caster	W. Livingstone	423,065	Mar. 11	1072	279	50	1347
Caster	J. P. Nettle	439,546	Oct. 28	2912	774	53	572
Caster	J. Ridge	418,928	Jan. 7	440	107	50	92
Caster	F. H. Roedell	428,143	May 20	1694	430	51	1161
Caster	C. Stengel	428,155	May 20	1706	433	51	1164
Caster	E. B. Thayer	419,297	Jan. 14	975	258	50	206
Caster	J. Thinnies	438,506	Oct. 14	1258	340	53	248
Caster	J. Toler	422,552	Mar. 4	274	69	50	1188
Caster	W. A. Wright	435,473	Sept. 2	134	38	52	1401
Caster. Ball	H. A. Dalrymple	424,467	Apr. 1	37	11	51	10
Caster. Ball	H. A. Dalrymple	440,346	Nov. 11	1106	284	53	831
Caster colter and jointer	S. Storr	441,760	Dec. 2	239	61	53	1310
Caster. Furniture	A. B. Diss	436,307	Sept. 9	1430	373	52	1656
Caster. Furniture	A. B. Diss	436,308	Sept. 9	1431	373	52	1656
Caster. Furniture	O. Pederson	438,276	Oct. 14	933	252	53	183
Caster. Furniture	O. Pederson	438,422	Oct. 14	1145	309	53	225
Caster-socket and corner-brace. Combined	C. F. Blandon, C. F. Ross, and J. J. Lumn	427,662	May 13	950	239	51	1008
Caster. Stove	W. H. Vance	424,694	Apr. 1	397	105	51	78
Casters or wheels to scales or other articles. Means for attaching	J. A. Mead	441,433	Nov. 25	2930	755	53	1194
Casting	R. C. Totten	420,646	Feb. 4	316	82	50	626
Casting apparatus	H. H. Lloyd	438,553	Oct. 14	1330	360	53	262
Casting apparatus. Sash-weight	W. P. Cahill	435,205	Aug. 26	2732	721	52	1313
Casting apparatus. Stereotype	J. R. Cummings	442,363	Dec. 9	1143	298	53	1491
Casting apparatus. Stereotype	J. R. Cummings	442,515	Dec. 9	1382	354	53	1540
Casting apparatus. Stereotype's	J. R. Cummings	433,449	Aug. 5	24	6	52	761
Casting box. Stereotype	T. A. Thorsen	441,340	Nov. 25	2780	719	53	1164
Casting box. Stereotype-plate	J. H. Stonemetz	442,341	Dec. 9	1110	290	53	1484
Casting-boxes. Clamping device for stereotyper's	J. R. Cummings	433,448	Aug. 5	22	6	52	761
Casting ingots	B. Atha	425,846	Apr. 15	2153	574	51	435
Casting ingots. Method of and apparatus for	J. Illingworth	439,780	Nov. 4	222	58	53	652
Casting. Machine for making sand molds for	H. E. Fridmore	435,520	Sept. 2	208	57, 58	52	1415
Casting machine. Stereotype	H. G. Lange	443,662	Dec. 30	3317	854 855	53	1941
Casting machine. Stereotype	C. E. Strong and H. G. Lange	443,656	Dec. 30	3308	853	53	1940
Casting machine. Type	F. Wicks	430,051	June 10	1441	358 359	51	1759
Casting metal pipes and cylinders. Core for	C. G. and J. B. Curry	419,187	Jan. 14	816	215 216	50	176
Casting metals. Machine for	T. J. Close	441,643	Dec. 2	22	7	53	1266
Casting-mold	W. Adams	440,801	Nov. 13	1872	482	53	985
Casting-mold	S. D. Locke	422,425	Mar. 4	90	24	50	1154
Casting-mold	F. M. Lytle	422,055	Feb. 25	2367	626	50	1038
Casting pencil-sharpener. Mold for	H. M. Wirz	435,959	Sept. 9	901	237 238	52	1554
Casting pipes and cylinders. Mold for	J. Graham, Jr., and E. Graves	439,501	Oct. 23	2347	758	53	559
Casting printers' rollers. Apparatus for	L. K. Bingham	419,915	Jan. 21	1901	500	50	399
Casting retort-pipes, &c. Apparatus for	J. I. Kinsey	435,041	Aug. 26	2493	659	52	1268
Casting sad-irons. Mold for	J. M. Davies	430,337	June 17	1932	473	51	1864
Casting sash-weights. Device for	R. W. Barrett	438,137	Oct. 14	715	196	53	145
Casting steel. Apparatus for	W. M. Cooper	423,375	Mar. 11	1533	403	50	1435
Casting stereotypes. Mechanism for	G. H. Benedict	437,374	Sept. 30	3214	838	52	2016
Casting traps. Apparatus for	C. H. Muckenhirn	431,609	July 8	885	220	52	184
Casting tubular ingots. Apparatus for	J. B. D. Boulton	442,305	Dec. 9	1052	276	53	1474
Castings. Core for	W. N. Reddout	418,750	Jan. 7	132		50	29
Castings. Machine for making	F. N. Cline	427,337	May 13	1228	810 811	51	1062
Castings. Mold and bed for forming	S. J. Adams	433,588	Aug. 5	220	59	52	799
Catamenial bandage	J. Teufel	420,978	Feb. 11	831	215	50	730
Catamenial sack	G. Fuller	438,537	Oct. 14	1305	353	53	258
Catch-snap	A. Timpe	434,006	Aug. 12	834	219	52	928
Catches. Making garment or fabric holding	G. H. Phelps	427,242	May 6	339	87	51	877
Catheter	C. A. Chapman	419,926	Jan. 21	1917	505	50	402
Cattle. Device for pritching up	F. W. Wilder	440,676	Nov. 18	1656	428	53	945
Cattle-guard	P. Merrill	431,119	July 1	130	33	52	28
Cattle-guard	J. Swegles	429,393	June 3	448	105	51	1557
Cattle-guard. Surface	F. C. Balch	432,175	July 15	1787	459	52	363
Cattle-guard. Surface	F. C. Balch	432,194	July 15	1815	467	52	368
Cattle-guard. Surface	J. T. Hall	421,928	Feb. 25	2197	575	50	1006
Cattle-guard. Surface	P. Merrill	426,193	Apr. 22	2693	707	51	548
Cattle-guard. Surface	J. Whittemore	437,742	Oct. 7	99	31	53	22

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Cattle. Implement for dehorning.	R. A. Steele	438,959	Oct. 21	1986	530	53	390
Cattle. Instrument for slaughtering	J. Apsley	422,687	Mar. 4	480	122	50	1228
Cattle-horns. Knob for	L. Barnes	422,490	Mar. 4	184	50	50	1171
Cattle while being dehorned. Machine for holding.	H. G. Welch	434,309	Aug. 12	1309	{ 341 342 }	52	1022
Caustic holder. Stick-	G. E. Ferren	421,070	Feb. 11	966	248	50	756
Canterizing apparatus	F. M. S. Roy	423,393	Mar. 11	1557	409	50	1439
Ceiling-block	W. E. Jacques and G. R. Emmett	434,186	Aug. 12	1121	291	52	985
Ceiling-block	H. T. Paiste	442,451	Dec. 9	1276	330	53	1518
Ceiling-block	H. T. Paiste	442,452	Dec. 9	1277	330	53	1518
Ceiling-block	D. A. Tompkins	440,934	Nov. 18	2095	514	53	1027
Ceiling-block	A. E. White and M. W. Wragg	419,388	Jan. 14	1113	294	50	234
Ceiling-block connector	C. W. Huntington	434,509	Aug. 19	1631	428	52	1095
Ceiling-block. Electric	W. C. Bryant	431,551	July 8	803	200	52	168
Ceiling-block. Electric	A. E. Nichols	437,783	Oct. 7	183	57	53	37
Ceiling fuse-block	H. A. Fitch	434,925	Aug. 26	2328	615	52	1236
Ceiling. Metal	H. S. Northrop	434,353	Aug. 12	1372	358	52	1035
Ceiling. Metallic	G. H. Burt	431,328	July 1	445	110	52	91
Ceiling. Metallic	F. G. Caldwell	431,436	July 1	624	156	52	126
Ceiling. Metallic	W. R. Kinnear	424,312	Mar. 25	2926	779	50	1716
Ceiling. Metallic	W. R. Kinnear	424,313	Mar. 25	2927	780	50	1716
Ceiling. Metallic	W. R. Kinnear	443,323	Dec. 23	2786	{ 715 716 }	53	1830
Ceiling. Metallic	W. R. Kinnear	443,324	Dec. 23	2788	716	53	1830
Ceiling. Metallic	C. C. Moore	438,323	Oct. 14	1001	{ 271 272 }	53	197
Ceiling-molding. Sheet-metal	F. G. Caldwell	440,007	Nov. 4	589	154	53	722
Ceiling panel	F. G. Caldwell	440,008	Nov. 4	583	154	53	722
Ceiling. Tile	J. H. Bright	425,652	Apr. 15	1863	498	51	379
Ceiling ventilator and center-piece	D. O'Leary	430,542	Feb. 4	162	40	50	595
Celery-banking machine	E. A. Dewey	442,425	Dec. 9	1238	320	53	1511
Celery-hilling machine	M. M. Ranney	428,352	May 20	2015	507	51	1224
Cell-case	E. D. Averell	429,406	June 3	465	110	51	1560
Cellar-doors. Device for raising and lowering	C. E. Golden	443,962	Dec. 30	3789	966	53	2032
Cellars. Automatic device for removing water from	G. Hoffman	424,553	Apr. 1	183	51	51	38
Cells or retaining-vessels. Composition for	O. A. Enholm	438,313	Oct. 14	984		53	193
Cells or retaining-vessels. Composition of matter for	O. A. Enholm	438,311	Oct. 14	982	265	53	193
Celluloid articles. Making and attaching button-hole sections to	J. K. France	421,860	Feb. 18	2098	551	50	977
Celluloid. Embossing sheets of	W. H. Wood and G. C. Gillmore	421,367	Feb. 11	1384		50	834
Celluloid. Embossing sheets of	W. H. Wood and G. C. Gillmore.	11,074	Apr. 15	2355		51	474
	(Reissue.)						
Cement. Establishing units of measure in compound-	E. N. Trump and D. W. Peck	427,380	May 6	525		51	915
ing Portland							
Cement into forms to be tested. Device for molding	L. Girdler	423,756	Mar. 18	2100	554	50	1550
Cement-kilns. Feeding	W. Joy	434,830	Aug. 19	2130		52	1192
Cement-lined pipe	H. B. Nichols	429,947	June 10	1263	313	51	1725
Cement-making materials. Burning	J. M. Wilcox	430,371	Jan. 23	2610		50	541
Cement tubes. Machine for making	D. Zissler	427,388	May 6	537	136	51	918
Cements. Manufacturing composition of refractory	W. S. Lea	433,129	July 29	3282		52	663
Center and mortise gage	J. A. Painter	432,328	July 15	2019	519	52	404
Center-board for boats, yachts, &c	J. A. Squires	438,199	Oct. 14	803	218	53	161
Center-board for vessels	J. H. McPartland	433,955	Aug. 12	767	199	52	916
Center-board. Revolving	F. W. Martin	421,008	Feb. 11	879	227	50	739
Center-pieces, &c. Composition for	J. H. Arner	423,108	Mar. 11	1141		50	1359
Centering	F. Triebert	431,628	July 8	915	230	52	190
Centering and countersinking machine	G. Wagner	427,811	May 13	1198	301	51	1056
Centering device	A. P. Henderson	436,526	Sept. 16	1780	470	52	1730
Centering device	S. B. Minnich	419,788	Jan. 21	1699	451	50	357
Centering-tool	J. R. Rand	430,299	June 17	1863	457	51	1851
Centrifugal bolt	R. Schulze	423,635	Mar. 18	1926	507	50	1518
Centrifugal extractor	W. T. Forbes	433,339	July 29	3576	922	52	723
Centrifugal fluid-separating machines. Drum for	W. Bergh	422,369	Mar. 4	13	5	50	1139
Centrifugal liquid-separator	H. F. Beindling	427,390	May 6	539	137	51	918
Centrifugal liquid-separator	C. D. Shepard	427,804	May 13	1184	298	51	1053
Centrifugal machine	D. H. Benjamin	423,408	Mar. 18	1585	{ 416 417 }	50	1453
Centrifugal machine	H. W. Lafferty	422,083	Feb. 25	2405	636	50	1044
Centrifugal-machine motor	P. M. Sharples	435,591	Sept. 2	322	90	52	1437
Centrifugal reel	W. R. Dunlap	432,519	July 22	2302	{ 595 596 597 }	52	469
Centrifugal separator	C. von Bechtolsheim	432,719	July 22	2619	{ 670 671 }	52	530
Centrifugal separator	T. T. A. Hansen	434,130	Aug. 12	1041	269	52	969
Centrifugal separator	F. Hart	436,419	Sept. 16	1626	428	52	1700
Centrifugal separator	P. M. and D. T. Sharples	442,461	Dec. 9	1291	{ 334 335 }	53	1521
Centro-linead	H. A. Hickok	430,647	June 24	2109	587	51	1964
Cereals. Preparation of	F. Lanboff	440,866	Nov. 18	1979	510	53	1005
Cesspool	F. L. Union	424,838	Apr. 1	631	166	51	122
Chaff-burning furnace	J. L. Sheppard	420,971	Feb. 11	820	{ 212 213 }	50	728
Chain	W. C. Edge	419,189	Jan. 14	819	216	50	176
Chain	W. C. Edge	431,804	July 8	1920	305	52	247
Chain	A. B. Hendryx	429,444	June 3	518	124	51	1572
Chain	A. B. Hendryx	429,445	June 3	519	124	51	1572
Chain	V. M. Moore	431,819	July 8	1246	311	52	252
Chain	J. L. Taplin	425,467	Apr. 15	1584	{ 423 424 }	51	324
Chain	P. Thomas and L. S. Beals	499,978	June 10	1324	328	51	1737
Chain attachment	R. A. Breal	428,798	May 27	2689	682	51	1371
Chain attachment. Watch-	R. Bresch	427,664	May 13	952	{ 239 240 }	51	1039
Chain carrier. Endless	M. Swenson	440,931	Nov. 18	2093	543	53	1027

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.'g.	Vol.	Page.
Chain. Dredge-bucket	A. W. Robinson	436,008	Sept. 9	968	253	52	1567
Chain. Drive	J. Applby	441,815	Dec. 2	293	80	53	1322
Chain. Drive	C. H. Brampton	439,466	Oct. 28	2798	745	53	549
Chain. Drive	C. A. Case	437,978	Oct. 7	467	132	53	89
Chain. Drive	H. B. Dierdorff	430,631	June 24	2376	580	51	1958
Chain. Drive	F. Eckstein, Jr	423,038	Mar. 11	1035	269	50	1340
Chain. Drive	J. Goodrich	420,341	Jan. 28	2565	681	50	532
Chain. Drive	O. P. Hurford	443,769	Dec. 30	3492	895	53	1975
Chain. Drive	A. F. Kull	423,779	Mar. 18	2131	562	50	1556
Chain. Drive	J. H. Lorimer	422,955	Mar. 11	906	237	50	1317
Chain. Drive	T. Maxon	420,818	Feb. 4	567	145	50	672
Chain. Drive	C. W. Miller	436,608	Sept. 16	1917	504	52	1753
Chain. Drive	D. J. Sheldrick	428,862	May 27	2786	708	51	1391
Chain. Drive	D. J. Sheldrick	428,863	May 27	2787	708	51	1391
Chain. Drive	D. J. Sheldrick	432,089	July 15	1651	424	52	337
Chain. Drive	D. J. Sheldrick	433,965	Aug. 12	787	205	52	918
Chain elevator. Endless	C. A. Case	418,839	Jan. 7	281	68	50	59
Chain for flexible partitions	B. C. Hicks	430,949	June 24	2893	711	51	2057
Chain-hook	R. M. Johnson	441,490	Nov. 25	3023	779	53	1210
Chain. Key	J. A. Trant	431,859	July 8	1307	327	52	264
Chain-link	J. W. Garland	426,177	Apr. 22	2666	700	51	543
Chain link and splice	A. Hunter and A. D. Stansbury	432,622	July 22	2447	631	52	498
Chain-link. Elastic	E. Ongley	427,605	May 13	874	{ 219 220 }	{ 51 51 }	{ 993 338 }
Chain link or splice	D. Snyder and S. C. Beatty	419,725	Jan. 21	1602	428	50	338
Chain-link. Wire	F. W. Smith, Jr	435,327	Aug. 26	2920	775	52	1347
Chain. Ornamental	L. S. Beals and P. Thomas	442,505	Dec. 9	1371	351	53	1537
Chain. Ornamental	C. D. Reynolds	442,917	Dec. 16	2077	534	53	1684
Chain. Pole	S. Naylor	425,577	Apr. 15	1739	466	51	355
Chain-wrench	G. W. Buford	442,569	Dec. 9	1471	377	53	1557
Chairs. Apparatus for treating drive	J. D. Storio	443,302	Dec. 23	2747	{ 705 706 }	{ 53 53 }	{ 1822 1823 }
Chairs for shipment. Machine for preparing drive	J. D. Storio	443,303	Dec. 23	2753	706	53	1823
Chairs. Machine for making welded	J. I. Cheesman	423,731	Mar. 18	2067	{ 545 546 }	{ 50 50 }	{ 1544 1544 }
Chair:							
See Adjustable chair. Portable chair.							
Artist's chair. Rail-chair.							
Baby-chair. Railway-chair.							
Barber's chair. Railway-rail chair.							
Boat or canoe chair. Reclining-chair.							
Car-chair. Reclining and folding chair.							
Child's chair. Revolving chair.							
Convertible chair. Revolving and tilting chair.							
Dental chair. Rocking-chair.							
Easy-chair. Rocking and reclining chair.							
Electro-magneto chair. Rocking and reclining chair.							
therapeutic chair. Rocking and reclining chair.							
Electro-medical chair. Rotary chair.							
Folding chair. Stair-chair.							
Hammock-chair. Suspended adjustable chair.							
Hygienic chair. Swinging-chair.							
Invalid-chair. Theater-chair.							
Nursery-chair. Tilting-chair.							
Opera-chair. Toy chair.							
Operating-chair. Window-chair.							
Photographic posing-chair. Window-cleaning chair.							
Chair	A. Blum	424,952	Apr. 8	800	215	51	163
Chair	H. A. Dabrymple	424,466	Apr. 1	36	10	51	10
Chair	C. H. De Frehn	443,504	Dec. 30	3071	791	53	1894
Chair	H. A. Gage and H. E. Herrick	443,913	Dec. 30	3701	947	53	2016
Chair	C. A. Lee	434,515	Aug. 19	1638	430	52	1096
Chair	O. E. Michand	432,423	July 15	2148	553	52	430
Chair	W. Oswald	437,235	Sept. 30	2978	773	52	1972
Chair	T. H. Speakman	428,150	May 20	1702	431	51	1163
Chair	A. Van Slyke	433,836	Aug. 5	595	154	52	872
Chair and sleeper	J. W. White	430,553	June 17	2239	549	51	1923
Chair and sofa bed	B. Morvay	427,597	May 13	864	{ 216 217 }	{ 51 51 }	{ 991 809 }
Chair and table. Combined	G. Hnnzinger	433,623	Aug. 5	268	71	52	809
Chair attachment	M. C. Hutton	422,080	Feb. 25	2402	635	50	1044
Chair attachment	J. W. Lipscomb	442,629	Dec. 16	1564	404	53	1585
Chair attachment	A. M. Whiteley	439,989	Nov. 4	554	146	53	716
Chair attachment. Rocking	C. Kade	418,724	Jan. 7	101	23	50	22
Chair attachment. Rocking	A. B. Stevens	421,529	Feb. 18	1625	{ 419 420 }	{ 50 50 }	{ 888 661 }
Chair-back. Detachable	J. H. Hanlenbeek	433,125	July 29	3275	843	52	661
Chair-backs. Machine for molding	L. A. Chichester	441,935	Dec. 2	474	{ 126 127 }	{ 53 53 }	{ 1357 1357 }
Chair-brace	J. S. Virtne	435,531	Sept. 2	230	64	52	1419
Chair, desk, and table. Combined	O. Fritz	427,413	May 6	588	147	51	928
Chair iron. Tilting	D. Jenkins	418,917	Jan. 7	423	104	50	88
Chair or seat iron	C. C. Trapp	431,536	July 1	777	193	52	155
Chair rest. Rocking	E. Mühl	426,602	Apr. 29	3300	866	51	679
Chair-seat	M. Herz	442,581	Dec. 9	1488	353	53	1561
Chair-seat. Reversible	J. B. Popenhagen	427,359	May 6	500	128	51	910
Chair spring attachment. Platform rocking	W. I. Bunker	430,601	June 17	2317	569	51	1938
Chair spring attachment. Rocking	A. B. Stevens	423,882	Mar. 18	2226	604	50	1566
Chair spring attachment. Rocking	A. B. Stevens	440,516	Nov. 11	1398	361	53	882
Chairs, cradles, &c. Attachment for rocking	H. Frockmann, T. Ballay, and A. Appel	422,390	Mar. 4	40	12	50	1144
Chairs. Fan attachment for rocking	C. Arthur and H. Bamberger	424,589	Apr. 1	235	63	51	48

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Chairs. Support for leg-rests in	H. H. Elbreg	440,610	Nov. 11	1556	400	53	916
Chalk-line and reel	M. Nelson	433,956	Aug. 12	768	199	52	916
Chalk-sharpener, chalk-dust collector, and weight	C. W. Schaefer	443,008	Dec. 16	2211	569	53	1712
Champagne-tap	A. W. Weston	425,480	Apr. 15	1601	428	51	328
Chamfer-cutter and lathe. Combined	C. Mattison	431,525	July 1	758	159	52	151
Chandelier. Extension	H. Horn	420,270	Jan. 28	2470	656	50	514
Chandeliers. Device for operating keys of gas	R. F. Bridewell	439,632	Nov. 4	303	76	53	667
Channel-cleaner	W. Evans	426,254	Apr. 22	2776	728	51	566
Channel-cutter	C. F. T. Salger	425,003	Apr. 8	885	233	51	179
					234		
Channel-iron	S. Stuart	428,291	May 20	1923	483	51	1205
Channeling-machine	W. H. Bryant. (Reissue)	11,136	Dec. 23	3049	784	53	1882
Channeling-machine	M. Griffin	432,161	July 15	1768	454	52	360
					455		
Charactering-machine	A. G. Baker	425,725	Apr. 15	1979	527	51	402
					528		
Charcoal. Apparatus for treating	R. V. F. de Guinon	429,682	June 10	873	212	51	1650
					213		
Chart. Anatomical	G. Henckel	421,833	Feb. 18	2041	539	50	967
					540		
Chart. Dress-skirt	E. M. Huot	433,203	July 29	3388	876	52	634
Chart for drafting garments	J. S. and M. E. Baughman	430,059	June 10	1457	361	51	1762
					362		
Chart. Geneological	O. W. Rogers	432,148	July 15	1752	450	52	356
Chart, reading, and number stand	F. L. Matson	420,560	Feb. 4	188	49	50	601
Check and ticket. Baggage	H. A. Deraismes	424,963	Apr. 8	820	219	51	167
Check. Baggage	F. H. Crump	428,465	May 20	2183	550	51	1256
Check-bit	H. G. Cox	437,576	Sept. 30	3524	919	52	2079
Check-cutter	L. C. Pressley and W. Lombard	418,961	Jan. 7	486	121	50	102
Check-hook	A. Lobdell	438,380	Oct. 14	1080	295	53	213
Check-hook	A. O. Payne	423,178	Mar. 11	1247	325	50	1381
Check-hook	L. Rooney	428,320	May 20	1968	494	51	1214
Check-hook. Harness	G. E. Foster	421,131	Feb. 11	1053	270	50	773
Check loop. Head	J. H. Rafferty	420,244	Jan. 28	2430	646	50	507
Check-machine	W. Koch	428,678	May 27	2506	637	51	1335
					638		
Check-marker	C. H. Coggeshall	441,057	Nov. 18	2287	593	53	1065
Check rating and punching machine	E. S. Raff	433,541	Aug. 5	138	40	52	784
Check receiver and indicator	E. C. Mehleck	425,686	Apr. 15	1917	511	51	390
Check-row attachment	J. C. Barlow	443,471	Dec. 23	3010	773	53	1874
Check-row attachment	A. Roberts	442,641	Dec. 16	1579	408	53	1588
Check-row attachment	L. Scofield	419,291	Jan. 14	966	255	50	205
Check-row wires. Knot for	R. Faries	420,992	Feb. 11	852	220	50	734
Checks. Apparatus for issuing	J. S. Reehill	443,333	Dec. 23	2798	719	53	1833
					720		
Checking and unchecking device	K. P. Drysdale	426,250	Apr. 22	2771	726	51	564
Checking and unchecking device	S. Osborn	422,617	Mar. 4	383	95	50	1209
Checkrein	L. G. and G. L. Sprague and J. Carpenter	425,055	Apr. 8	958	256	51	193
Checkrein attachment	A. E. Howard	428,914	May 27	2866	733	51	1407
Checkrein-holder	W. A. Scott, Jr., and W. Wehrmeyer	423,636	Mar. 18	1923	507	50	1518
Checkrein-hook	H. B. Madden	439,357	Oct. 28	2630	701	53	518
Checkrein-hook	J. R. Newton	422,433	Mar. 4	100	27	50	1156
Checkrein-hook	W. J. Roe	421,435	Feb. 18	1481	384	50	861
Checkrein-hook	O. Taber	424,624	Apr. 1	290	75	51	58
Checkrein-loop	G. L. Smith	420,172	Jan. 28	2305	609	50	455
Checkrein safety-loop	J. O'Brien	431,672	July 6	1006	250	52	206
Cheese and creamery vat	D. H. Burrell	433,197	July 29	3379	874	52	682
Cheese-cutter	S. L. Bligh	441,053	Nov. 18	2278	590	53	1063
Cheese-cutter	O. W. Smith	441,985	Dec. 2	551	148	53	1371
Cheese. Shelf for supporting	J. J. Singley	442,148	Dec. 9	825	221	53	1431
Chemical-feeder	O. H. and W. M. Jewell	423,773	Mar. 18	2123	560	50	1555
Chenille cloth	B. Bartmann	419,402	Jan. 14	1143	304	50	241
Chenille to tulle. Machine for applying	H. Perret, A. Gros, and H. Million	434,355	Aug. 12	1376	359	52	1036
					360		
					361		
Cheroot-cutting machine	D. Z. Craver	437,853	Oct. 7	274	82	53	54
Cherry-seeder	J. C. Magruder	418,733	Jan. 7	113	27	50	24
Chest:							
See Flour-chest. Tool-chest.							
Child's chair and chair. Combined	J. J. Elias	433,649	Aug. 5	312	81	52	817
Chili mill	T. A. Blake	422,706	Mar. 4	503	128	50	1232
Chill	N. S. Bouton	421,899	Feb. 25	2154	565	50	998
Chill for car-wheels	P. Connelly	427,052	May 6	26	9	51	816
Chills. Making sectional	N. S. Bouton	421,900	Feb. 25	2156	565	50	998
Chimney	A. Gusdorf	426,532	Apr. 29	3198	839	51	658
Chimney	A. Gusdorf	442,179	Dec. 9	865	231	53	1439
Chimney	A. H. Ristedt	441,506	Nov. 25	3041	783	53	1214
Chimney-cap	W. H. Gardiner	439,816	Nov. 4	275	69	53	662
Chimney cap and ventilator	W. J. Kayser	441,101	Nov. 18	2362	612	53	1079
Chimney-cleaner	J. M. Berwig	440,940	Nov. 18	2106	546	53	1029
Chimney. Continuous sectional	L. E. Clawson	435,557	Sept. 2	271	75	52	1427
Chimney-cowl	F. A. Gira and F. J. Asterlin	441,236	Nov. 25	2617	678	53	1133
Chimney cowl and ventilator	J. H. Burley	421,094	Feb. 11	1004	257	50	762
Chimney cowl or ventilator	W. G. Henis	429,911	June 10	1217	301	51	1716
Chimney-flues. Thimble for	A. T. Staples	421,203	Feb. 11	1160	297	50	793
Chimney or ventilator cap	D. Scott	424,135	Mar. 25	2672	711	50	1667
Chimney-tube. Fire-proof	J. Schindler	433,042	July 29	3146	808	52	636
China-firing kiln	F. A. Wilke	427,941	May 13	1395	353	51	1093
Chisel	C. P. Bostian	420,529	Feb. 4	146	36	50	592
Chisel. Mortising	G. Fletcher	435,538	Sept. 2	240	66	52	1421
Chisels. Machine for dressing toothed	F. G. Smith	423,357	May 20	2024	508	51	1226
Chloroformamide	J. F. von Mering	425,039	Apr. 8	942	51	190

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Chloralformamide.....	J. F. von Mering.....	425,040	Apr. 8	943	51	190
Chlorine. Apparatus for making.....	E. Solvay.....	430,195	June 17	1660	413	51	1812
Chlorine compounds from natural gas. Obtaining.....	T. F. Colin.....	427,744	May 13	1092	274	51	1036
Chlorine. Making.....	E. Solvay.....	420,837	Feb. 4	601	154	50	677
Chlorine. Obtaining.....	R. Dormer.....	427,467	May 6	666	.....	51	944
Chloroforming. Mask for.....	C. Schimmelbusch.....	429,287	June 3	274	65	51	1522
Chock-block for logging-trucks.....	W. H. Garlock.....	424,287	Mar. 25	2-78	768	50	1707
Chocolate-pot.....	C. J. Mulford.....	430,783	June 24	2642	648	51	2010
Chocolate-pot.....	C. J. Mulford.....	430,784	June 24	2643	648	51	2010
Chocolate. Preparing.....	V. Tobias and H. Fischer.....	443,970	Dec. 30	3816	.....	53	2037
Chop-grader.....	C. Haggemacher.....	428,908	May 27	2858	731	51	1406
Chopper:							
See Cotton-chopper. Stalk-chopper.							
Meat-chopper. Vegetable-chopper.							
Chopping-knife.....	M. Ludwig.....	443,600	Dec. 30	3219	828	53	1923
Chopping-knife.....	E. L. Maranville.....	436,043	Sept. 9	1033	268	52	1580
Chopping-machine.....	F. J. Melonnek.....	427,594	May 13	860	216	51	990
Christmas-tree candle-holder.....	C. Reinhardt.....	420,607	Feb. 4	255	68	50	614
Christmas-tree ornament.....	B. Wilmsen.....	424,916	Apr. 1	744	198	51	144
Chromates. Making.....	W. J. A. Donald.....	442,109	Dec. 9	760	.....	53	1419
Chromatic pitch-pipe.....	C. H. Congdon.....	439,115	Oct. 28	2231	599	53	445
Chromatropes. Mounting for.....	J. B. Colt.....	430,113	June 17	1552	386	51	1791
Chromium and chromium alloys. Obtaining.....	A. K. Eaton.....	422,509	Mar. 4	210	.....	50	1176
Chuck.....	C. E. Abrams.....	435,475	Sept. 2	136	39	52	1401
Chuck.....	J. Hartness.....	425,224	Apr. 8	1218	324	51	247
Chuck.....	W. A. McCool.....	420,016	Jan. 21	2052	541	50	427
Chuck.....	A. Muir.....	441,071	Nov. 18	2315	599	53	1070
Chuck.....	L. E. Whiton.....	422,479	Mar. 4	172	47	50	1169
Chuck.....	L. E. Whiton.....	422,480	Mar. 4	172	48	50	1169
Chuck and bit. Combined.....	J. A. Aiken.....	427,821	May 13	1209	304	51	1058
Chuck. Bit.....	J. W. Miller.....	423,386	Mar. 11	1545	406	50	1437
Chuck. Car-wheel.....	N. S. Bouton.....	436,886	Sept. 23	2441	637	52	1862
Chuck. Dredge.....	J. H. Turner.....	443,805	Dec. 30	3551	910	53	1987
Chuck. Drill.....	N. E. Austin.....	440,255	Nov. 11	958	246	53	807
Chuck. Drill.....	N. E. Austin.....	443,490	Dec. 30	3053	785	53	1891
Chuck. Drill.....	G. H. Ives.....	421,718	Feb. 18	1896	498	50	941
Chuck. Drill.....	C. T. Pratt.....	434,460	Aug. 19	1554	405	52	1078
Chuck for rock-drills.....	A. C. Rand.....	421,612	Feb. 18	1752	659	50	912
Chuck for screw-machines.....	C. L. Libby.....	442,230	Dec. 9	941	{ 248 249 }	53	1454
Chuck for turning-lathes.....	F. McClure.....	436,459	Sept. 16	1689	445	52	1712
Chuck having revoluble jaws.....	J. T. Hayden.....	420,199	Jan. 28	2357	626	50	493
Chuck-jaw.....	E. B. Bailey.....	424,698	Apr. 1	404	106	51	80
Chuck. Lathe.....	N. E. Austin.....	438,135	Oct. 14	711	194	53	144
Chuck. Lathe.....	S. D. Hollenbeck.....	423,253	Mar. 11	1347	351	50	1400
Chuck. Rock-drill.....	W. S. Sharpneck.....	441,026	Nov. 18	2230	577	53	1053
Chuck or tool holder.....	W. F. Schmidt.....	434,406	Aug. 12	1465	381	52	1054
Chuck. Polishing-strip.....	B. H. Teague.....	437,463	Sept. 30	3358	879	52	2046
Chuck. Tool.....	W. H. Seiders and G. H. Hood.....	434,026	Aug. 12	860	227	52	932
Chucks. Reversible jaw for.....	L. E. Whiton.....	425,279	Apr. 8	1304	349	51	263
Churn.....	J. A. Adams.....	423,710	Mar. 18	2038	537	50	1538
Churn.....	H. C. Anderson.....	426,979	Apr. 29	3851	1006	51	785
Churn.....	C. J. Bloom and W. M. Atherton.....	433,194	July 29	3375	873	52	681
Churn.....	C. T. Boyer.....	421,065	Feb. 11	961	247	50	755
Churn.....	S. S. Bussett.....	437,331	Sept. 30	3127	818	52	1999
Churn.....	R. Campbell.....	434,318	Aug. 12	1325	345	52	1025
Churn.....	S. Clark.....	436,213	Sept. 9	1297	338	52	1628
Churn.....	J. Clear.....	440,345	Nov. 11	1105	283	53	831
Churn.....	W. J. Cole and E. W. Kerrihard.....	426,525	Apr. 29	3187	836	51	656
Churn.....	R. F. Collins.....	429,506	June 3	614	150	51	1589
Churn.....	H. M. Cooper.....	430,174	June 17	1628	407	51	1806
Churn.....	H. G. Cronk.....	422,736	Mar. 4	544	139	50	1240
Churn.....	J. M. Curtice.....	427,053	May 6	27	9	51	816
Churn.....	A. Dant.....	424,600	Apr. 1	250	66	51	51
Churn.....	W. H. Day.....	435,113	Aug. 26	2598	686	52	1287
Churn.....	J. A. and W. D. Gabbert.....	420,231	Jan. 28	2406	640	50	503
Churn.....	J. Gifford.....	432,032	July 15	1563	399	52	320
Churn.....	W. J. Hersom.....	439,067	Oct. 21	2150	577	53	423
Churn.....	I. Hogeland.....	436,662	Sept. 16	2015	{ 526 527 }	52	1772
Churn.....	B. S. Hovey and W. H. Drake.....	425,429	Apr. 15	1522	408	51	314
Churn.....	J. Ingells.....	422,019	Feb. 25	2313	{ 610 611 }	50	1028
Churn.....	C. A. Japhet.....	426,186	Apr. 22	2683	705	51	546
Churn.....	P. Kallen.....	419,127	Jan. 7	711	187	50	149
Churn.....	E. Kellerstrass.....	430,654	June 24	2425	590	51	1967
Churn.....	J. L. Lancaster.....	438,165	Oct. 14	757	207	53	152
Churn.....	A. M. Lance.....	436,605	Sept. 16	1913	503	52	1752
Churn.....	A. B. Lang.....	422,950	Mar. 11	900	236	50	1316
Churn.....	M. M. McDill.....	424,335	Mar. 25	2969	791	50	1724
Churn.....	E. D. Middlekauff.....	438,482	Oct. 14	1227	333	53	242
Churn.....	C. Miller, J. W. Blue, and C. S. Miller.....	429,356	June 3	386	91	51	1545
Churn.....	S. D. Palmer.....	441,441	Nov. 25	2944	758	53	1196
Churn.....	H. W. Parsons.....	439,549	Oct. 28	2916	775	53	573
Churn.....	J. F. Richardson.....	422,631	Mar. 4	405	100	50	1214
Churn.....	J. H. Rebok, T. T. Maguire, and P. K. Rebok.....	427,188	May 6	249	65	51	860
Churn.....	J. D. Rogers.....	419,888	Jan. 21	1864	490	50	391
Churn.....	H. G. Sanders.....	433,909	Aug. 5	693	180	52	892
Churn.....	P. A. Schuch.....	427,192	May 6	255	66	51	861
Churn.....	I. H. Shambaugh.....	443,410	Dec. 23	2912	749	53	1855
Churn.....	J. P. Sinclair.....	439,697	Nov. 4	105	27	53	628
Churn.....	J. L. Smith.....	428,323	May 20	1972	495	51	1215
Churn.....	W. S. Snyder.....	425,706	Apr. 15	1948	518	51	396

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Churn	R. H. Socolefsky	432,575	July 22	2385	615	52	486
Churn	T. C. Sonneman	426,872	Apr. 29	3712	969	51	758
Churn	E. Stillwell	420,976	Feb. 11	827	214	50	729
Churn	W. Walter	437,537	Sept. 30	3472	906	52	2069
Churn	W. H. Wells	423,362	Mar. 11	1514	398	50	1431
Churn	H. Westphal	429,707	June 10	917	225	51	1659
Churn	S. M. White	425,645	Apr. 15	1856	495	51	378
Churn	S. Whitney	430,906	June 24	2833	695	51	2046
Churn	J. F. Wilsey	433,503	Aug. 5	91	36	52	774
Churn	F. H. Wolfmeyer	433,507	Aug. 5	98	27, 28	52	776
Churn	C. M. Worthingham	433,059	July 29	3169	815	52	641
Churn	C. L. Wroughton and J. C. Moore	423,365	Mar. 11	1519	399	50	1433
Churn attachment	J. Remsde	431,234	July 1	310	76	52	62
Churn-closure	H. F. Batcheller	438,263	Oct. 14	905	246	53	179
Churn-closure	H. Brekaw	427,457	May 6	652	163	51	940
Churn-closure	M. N. Castleman	441,611	Nov. 25	3205	825	53	1247
Churn-closure	D. W. Curtis	438,284	Oct. 14	942	254	53	185
Churn-closure	A. H. Reid	425,147	Apr. 8	1103	293	51	221
Churn-closure fastening	S. D. Palmer	423,489	Mar. 18	1703	449	50	1477
Churn-dasher	B. F. Carson	421,669	Apr. 1	359	95	51	70
Churn-dasher	B. Fearin	438,535	Oct. 14	1303	352	53	257
Churn-dasher	J. E. Finley	419,760	Jan. 21	1654	439	50	349
Churn-dasher	A. Geiger	442,519	Dec. 9	1393	356	53	1541
Churn-dasher	N. R. Sheets and M. T. Goforth	435,369	Aug. 26	2996	794	52	1362
Churn. Extractor	A. Wahlm, C. J. Lundstrom, and T. Collins.	432,714	July 22	2612	668	52	529
Churn-motor	J. and G. Cherry	443,720	Dec. 30	3413	877	53	1959
Churn-motor	J. H. Jordan	438,888	Oct. 21	1888	501	53	371
Churn-motor	C. W. Lillie	443,682	Dec. 30	3358	863	53	1949
Churn-motor	W. Nisbett	436,489	Sept. 16	1734	457	52	1721
Churn-motor	W. Ouer	436,992	Sept. 23	2589	677	52	1890
Churn-operating mechanism	J. H. Hense	440,158	Nov. 11	809	210	53	778
Churn-operating mechanism	J. T. Wright	426,353	Apr. 22	2912	766	51	594
Churn-power	J. S. Dickey	437,100	Sept. 23	2744	717	52	1922
Churn-power	W. H. Swegger	428,158	May 20	1711	434	51	1165
Churn-power	M. J. Williamson	428,987	May 27	2967	761	51	1427
Churn. Swinging	E. H. Taliaferro	425,915	Apr. 15	2247	596	51	452
Churn. Working body	C. Fnerste	420,049	Jan. 28	2105	556	50	446
Churns. Double-acting bellows for	A. Means	426,500	Apr. 29	3161	831	51	652
Churns. Means for operating	F. R. Bassett	419,985	Jan. 21	2005	528	50	419
Churns. Means for operating	J. W. Hopkins	422,217	Feb. 25	2615	692	50	1084
Churns. Means for operating	L. H. James	436,604	Sept. 16	1913	502	52	1752
Churns, &c. Motor for	L. W. Lindley	438,011	Oct. 7	520	145	53	99
Churns. Motor for operating	J. Peggs	423,805	Mar. 18	2170	574	50	1564
Churns. Removable strainer for	A. W. McLaren	428,404	May 20	2105	528	51	1242
Chute. Coal	W. Claypoole	429,840	June 10	1111	274	51	1696
Chute. Coal	D. H. Henkels	424,785	Apr. 1	550	146	51	108
Chute. Coal	R. A. McCauley	427,184	May 6	243	63	51	859
Chute. Coin	G. A. Ellis	437,585	Sept. 30	3533	922	52	2082
Chute-loader	T. R. Griffith	430,800	June 24	2667	654	51	2015
Chute. Portable	J. Musgrave and J. P. Clarke	426,301	Apr. 22	2842	748	51	579
Chute. Portable stock	H. W. Hammond	430,426	June 17	2054	506	51	1889
Chutes of coal or ore bins. Counter-balance for the discharge	E. S. Eaton	435,356	Aug. 26	2978	789	52	1358
Cider-mill	B. R. Collins	438,679	Oct. 21	1519	410	53	304
Cider mill and press	J. H. Stewart	438,960	Oct. 21	1988	530	53	390
Cider-press	D. Whiting	432,153	July 15	1757	451	52	357
Cigar-box	D. W. Parker	426,309	Apr. 22	2849	751	51	582
Cigar-boxes. Moisture-partition for	F. G. Heydt	441,557	Nov. 25	3118	800	53	1229
Cigar-branding machine	G. E. Le Clair	426,133	Apr. 22	2600	683	51	530
Cigar-bunch roller	C. Browning	428,451	May 20	2163	543	51	1252
Cigar-bunch roller	F. C. Miller	421,296	Feb. 11	1221	331	50	815
Cigar-bunches. Apparatus for cutting fillers for long-filler	O. Hammerstein	428,208	May 20	1775	449	51	1177
Cigar-bunches. Making long-filler	B. H. Meyer	435,510	Sept. 2	194	53	52	1412
Cigar-bunching machine	J. H. Abraham and E. K. Martin	419,983	Jan. 21	2001	526	50	418
Cigar-bunching machine	M. van Gulpen	422,325	Feb. 25	2788	733	50	1115
Cigar-bunching machine	O. Hammerstein	430,644	June 21	2404	585	51	1963
Cigar-bunching machine	E. K. Martin	421,030	Feb. 11	907	234	50	745
Cigar-bunching machine	B. H. Meyer	436,369	Sept. 16	1551	407	52	1686
Cigar-bunching machine	F. A. and F. A., Jr., Schleif and P. Elmke	439,978	Nov. 4	540	142	53	712
Cigar-bunching machine	A. H. Sheck	422,455	Mar. 4	137	37	50	1163
Cigar-bunching machine	A. H. Sheck	433,102	July 29	3239	834	52	654
Cigar-bunching machine	F. and E. H. Thompson	438,993	Oct. 21	1906	507	53	374
Cigar-bunching machine	J. R. Williams	419,742	Jan. 21	1634	433	50	343
Cigar-bunching machine	J. R. Williams	422,000	Feb. 25	2284	601	50	1023
Cigar-bunching machine	J. R. Williams	442,278	Dec. 9	1008	266	53	1466
Cigar case and extinguisher. Combined	J. Smith	420,704	Feb. 4	385	102	50	640
Cigar channel-piece	H. W. Hoops, Jr	428,394	May 20	2092	525	51	1240
Cigar-cutter	J. H. Bewon	439,320	Oct. 28	2579	688	53	509
Cigar-cutter	J. S. Henry	442,252	Dec. 9	972	256	53	1460
Cigar-cutter	W. Scholer	436,269	Sept. 9	1375	358	52	1644
Cigar-cutter	G. D. Woodworth	419,300	Jan. 14	982	260	50	207

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Cigar-cutter and match holder and igniter. Combined	T. E. Keavy	424,307	Mar. 25	2911	{ 777 778	50	1713
Cigar-cutter and match-safe. Combined	T. Dalton	439,481	Oct. 28	2816	750	53	553
Cigar-cutting machine	F. W. Hoffmann	443,676	Dec. 30	3346	861	53	1947
Cigar-holder	E. Promis	437,837	Oct. 7	352	77	53	50
Cigar-holder	E. Promis	440,367	Nov. 11	1135	292	53	837
Cigar-lighter	E. Kehm and H. Meyer	419,856	Jan. 21	1811	479	50	379
Cigar-lighter	W. H. Kelly	419,454	Jan. 11	1213	322	50	255
Cigar-lighter. Electric	R. Graham	432,197	July 15	1819	468	52	369
Cigar-lighter. Electric	M. M. Hayden	436,354	Sept. 16	1514	395	52	1680
Cigar-lighter. Electric	J. Roberts	435,668	Sept. 2	456	120	52	1462
Cigar-lighter. Self	T. West and E. M. Turner	429,329	June 3	346	82	51	1537
Cigar machine	J. J. Becker	425,120	Apr. 8	1048	279	51	212
Cigar-machine	G. Caswell	436,559	Sept. 16	1847	486	52	1740
Cigar-maker's gage	J. A. Messina and P. Burgos	435,073	Aug. 25	2542	670	52	1277
Cigar-making machine	A. H. Shock	419,893	Jan. 21	1870	{ 491 492	50	392
Cigar or cigarette boxes. Machine for making	G. J. Hardy, Jr.	422,077	Feb. 25	2397	634	50	1043
Cigar or cigarette holder	A. Fritsch	439,649	Nov. 4	39	11	53	614
Cigar or tobacco box	S. E. Warren	427,285	May 6	399	103	51	889
Cigar piercer or drill	L. L. Dyckman	423,138	Mar. 11	1190	311	50	1369
Cigar-pressing apparatus	F. R. De Estenoz	439,934	Nov. 4	462	121	53	698
Cigar-rolling apron	F. C. Miller	431,907	July 8	1368	346	52	276
Cigar-rolling apron	F. C. Miller	431,908	July 8	1368	346	52	276
Cigar-rolling machine	C. W. Boman	442,945	Dec. 16	2120	546	53	1693
Cigar-rolling machine	A. Vogel and H. Neuerburg	422,861	Mar. 1	739	{ 188 189	50	1278
Cigar-stump receptacle	W. F., Jr., and G. C. Smith	439,309	Oct. 28	2566	685	53	506
Cigar-tip cutter	R. W. Booth	422,708	Mar. 4	505	129	50	1233
Cigar-tip cutter and match-safe. Combined	W. J. Briggs	440,874	Nov. 18	1992	513	53	1007
Cigar-vending machine	E. J. Graves	435,626	Sept. 2	391	105	52	1448
Cigar-wrapper cutter	G. M. Hathaway	420,451	Feb. 4	38	7, 8	50	571
Cigar-wrapper-cutting machine	G. M. Hathaway	420,452	Feb. 4	39	8	50	571
Cigar-wrapper-rolling machine	G. M. Hathaway	424,296	Mar. 25	2894	{ 772 773	50	1710
Cigar-wrapping machine	R. A. Bright	428,550	May 20	2296	{ 583 584	51	1278
Cigar-wrapping machine	G. M. Hathaway	424,883	Apr. 1	693	{ 183 184	51	134
Cigars. Case for exhibiting packages of	B. Baron	419,028	Jan. 7	575	145	50	132
Cigarette	E. M. Harris	439,004	Oct. 21	2056	550	53	405
Cigarette	F. S. Kinney	427,176	May 6	235	61	51	858
Cigarette-feeding device	F. S. Kinney	437,208	Sept. 30	2942	{ 768 769	52	1965
Cigarette-holder	E. D. Ewen	433,335	July 29	3572	921	52	722
Cigarette-machine	J. V. Bohannon	431,432	July 1	612	{ 153 154 155	52	123
Cigarette-machine	E. A. Durand	422,193	Feb. 25	2578	682	50	1077
Cigarette-machine	C. G. and W. H. Emery	420,869	Feb. 4	651	{ 168 169 170 780 781 782 783 784 785	50	687
Cigarette-machine	R. Hardie	429,031	May 27	3033	{ 599 600 601 602 603 604	51	1440
Cigarette-machine	R. Hardie. (Reissue)	11,104	Aug. 19	2281	{ 601 602 603 604	52	1220
Cigarette-machine	L. Josselin	421,721	Feb. 18	1899	499	50	941
Cigarette-machine	F. S. Kinney	437,207	Sept. 30	2940	768	52	1964
Cigarette-machine	F. J. Ludington	439,963	Nov. 4	507	{ 133 134 135 136	53	707
Cigarette-machine	S. Prager	433,818	Aug. 5	571	149	52	868
Cigarette-machine	P. Vauselle	439,615	Oct. 28	3026	{ 802 803	53	595
Cigarette-machine	J. Weisert	436,682	Sept. 16	2044	{ 534 535	52	1778
Cigarette-machines. Tobacco-feeding mechanism for	O. W. Allison	424,443	Mar. 25	3165	839	50	1763
Cinders. Apparatus for transporting and dumping	J. M. Hartman	443,574	Dec. 30	3176	816	53	1914
Circuit breaker and closer	J. S. Potter and D. J. Cartwright	443,404	Dec. 23	2904	747	53	1853
Circuit-breaker. Automatic	M. C. Hoppoldt	422,524	Mar. 4	230	60	50	1180
Circuit-closer	J. A. Dempf	424,182	Mar. 25	2735	729	50	1679
Circuit-closer	J. Geary	438,234	Oct. 14	860	233	53	171
Circuit-closer	T. Marcher	438,167	Oct. 14	761	208	53	153
Circuit-closer	H. B. Whitaker	427,024	Apr. 29	3924	1022	51	799
Circuit-closer. Magnetic	J. von der Kammer	426,024	Apr. 22	2442	645	51	498
Circuit-interrupter	N. and J. Chaize	438,344	Oct. 14	1030	280	53	203
Circuit system. Artificial ground and compound metallic	C. E. McCluer	437,311	Sept. 30	3099	812	52	1994
Circuits. Apparatus for detecting short	H. Redding	432,215	July 15	1846	474	52	374
Circular bodies. Machine for producing	J. N. Barr	421,374	Feb. 18	1399	361	50	845
Circulator and feed-water heater	E. C. Jordan	422,793	Mar. 4	622	150	50	1256
Cistern	C. E. Ernsberger	438,994	Oct. 21	2045	547	53	403
Cistern	C. S. Johnson	437,601	Sept. 30	3558	928	52	2086
Cistern-cleaning machine	O. I. Searles, G. F. Jackson, and F. M. Gustin	433,099	July 29	3236	833	52	654
Cisterns. Automatic siphon for	T. Bntler	425,859	Apr. 15	2171	578	51	438

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &g	Vol.	Page.
Cisterns. Dome-support for arching	W. H. H. Davis	425,124	Apr. 8	1062	282	51	214
Clam-roaster	G. B. Fowler	424,875	Apr. 1	686	181	51	132
Clamp:							
See Anvil-clamp. Flooring-clamp.							
Automatic clamp. Frame-clamp.							
Basin-clamp. Furniture-clamp.							
Bedclothes-clamp. Hose band-clamp.							
Bedding-clamp. Hub-clamp.							
Bench-clamp. Rope-clamp.							
Box-clamp. Rubber-dam clamp.							
Brake-beam clamp. Saw-clamp.							
Broom-head clamp. Sewing-clamp.							
Door-clamp. Sewing-machine needle-clamp.							
Drum-clamp. Spring-clamp.							
Dynamo-brush clamp. Stone-saw clamp.							
Extension-clamp. Strap-clamp.							
Fabric holding and stretching clamp. Tailor's table-clamp.							
Floor-clamp. Welding-clamp.							
Wood-working clamp.							
Clamp	J. L. Ackerman	442,934	Dec. 16	2109	542	53	1691
Clamp	W. Carroll	427,300	May 6	417	108	51	893
Clamp	C. F. Clements	425,658	Apr. 15	1878	502	51	382
Clamp	E. S. Drake	426,665	Apr. 29	3393	891	51	697
Clamp	S. B. Ellithorp	435,887	Sept. 2	789	210	52	1527
Clamp	H. Kells	420,236	Jan. 28	2412	642	50	504
Clamp	A. Nacke and A. Brinkmann	437,403	Sept. 30	3252	847	52	2023
Clamp	W. J. Shampel	442,733	Dec. 16	1762	456	53	1622
Clamp	E. Talbot	419,379	Jan. 14	1101	291	50	232
Clamp	A. T. Tietz	434,487	Aug. 19	1597	419	52	1089
Clamp-collar	R. H. Richards, Jr.	438,058	May 13	1568	396	51	1128
Clamp for molders' flasks, &c.	E. E. Josef	424,988	Apr. 8	859	228	51	175
Clamping device. Spring	I. W. Heysinger	423,054	Mar. 11	1058	274	50	1344
Clamping mechanism	J. G. Froelich	423,992	Mar. 25	2464	655	50	1627
Clapboard-holder	B. F. Mooney	421,746	Feb. 18	1928	507	50	947
Clapboard-supporting jack	E. W. Brown	424,173	Mar. 25	2721	725	50	1676
Clarionet-reed protector	C. L. Renzenbrink	425,521	Apr. 15	1663	443	51	341
Clasp:							
See Album-clasp. Overshoe-clasp.							
Belt-clasp. Pencil-clasp.							
Boot or shoe clasp. Pocket-book clasp.							
Clothes-line clasp. Rope-clasp.							
Coil-clasp. Sash-clasp.							
Corset-clasp. Spring-clasp.							
Corset-steel clasp. Surgical-instrument clasp.							
Envelope-clasp. Suspender-clasp.							
Fabric-clasp. Ticket-clasp.							
Garment-clasp. Umbrella-clasp.							
Hame-clasp.							
Clasp	H. C. Anderson	440,243	Nov. 11	942	242	53	804
Clasp	A. H. Bartley	439,288	Oct. 28	2518	675	53	497
Clasp	C. H. Crossette	420,041	Jan. 28	2095	553	50	444
Clasp	J. Drexler	433,454	Aug. 5	28	7	52	762
Clasp	C. R. Harris	433,466	Aug. 5	44	14	52	765
Clasp	E. K. Kelly	435,099	Aug. 26	2577	680	52	1283
Clasp	C. La Dow	428,006	May 13	1490	378	51	1112
Clasp	J. R. Macmillan	426,672	Apr. 29	3407	895	51	699
Clasp	J. Schmidt	421,086	Feb. 11	969	253	50	760
Clasp	J. A. Turnbull	424,516	Apr. 1	115	33	51	26
Clasp for albums, books, boxes, &c.	J. C. Koch	421,174	Feb. 11	1114	286	50	785
Clasp for boxes, &c.	T. M. Hass	433,240	July 29	3439	888	52	696
Clasp or buckle	C. B. Griffin	432,731	July 22	2639	674	52	534
Clasp or buckle	J. Lambert	433,868	Aug. 5	639	166	52	882
Clasp-tongues. Machine for forming	S. T. Hisley and J. A. Mundy	418,915	Jan. 7	420	{ 103 104 }	50	98
Clasping-strip. Spring	A. B. Heller	442,889	Dec. 16	2033	521	53	1675
Claw	S. Montgomery	441,316	Nov. 25	2749	711	53	1158
Claw-bar	F. P. Craig	432,299	July 15	1981	506	52	398
Claw-bar. Shackle	J. H. Morgan	438,083	Oct. 7	637	173	53	123
Clay building-blocks in imitation of stone. Making ..	J. C. Anderson	424,251	Mar. 25	2823	756	50	1697
Clay-burning kilns. Utilizing waste heat of	J. S. Baldwin	441,816	Dec. 2	299	81	53	1322
Clay conduits. Machine for making	J. J. Powers and R. Van Buren	419,793	Jan. 21	1706	453	50	359
Clay-elevator	C. Chambers, Jr.	421,857	Feb. 18	2094	550	50	976
Clay for paving materials. Burning	J. Stubbs	419,977	Jan. 21	1993	524	50	417
Clay-grinding mill	T. and J. Clifford	432,602	July 22	2419	624	52	492
Clay-grinding mill	H. E. Long	428,172	May 20	1727	437	51	1168
Clay. Machinery for preparing	A. A. Bennett	425,729	Apr. 15	1984	529	51	403
Clay-mill covering	G. C. Little	440,172	Nov. 11	831	214	53	781
Clay-pulverizing machine	J. A. Boyd and B. C. White	440,537	Nov. 11	1431	369	53	893
Clay slug. Apparatus for rounding plastic	S. C. Dyke	432,127	July 15	1720	442	52	350
Cleaner:							
See Boiler-cleaner. Lamp-chimney cleaner.							
Carpet-cleaner. Lawn-cleaner.							
Channel-cleaner. Pen-cleaner.							
Chimney-cleaner. Pipe or flue cleaner.							
Comb-cleaner. Plow-cleaner.							
Cuspidor-cleaner. Pulp screen-cleaner.							
Flue-cleaner. Railway-track cleaner.							
Flue-cleaner. Stove-pipe cleaner.							
Foot-cleaner. Track-cleaner.							
Harrow-cleaner. Type-cleaner.							
Hemp-cleaner. Window-cleaner.							
Horse-cleaner. Wire and track cleaner.							
Knife-cleaner.							
Cleaning material. Preparing graulated	F. W. Kistenmacher	440,314	Nov. 11	1062	53	823

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Cleansing compound.....	S. V. Harbaugh.....	430,350	June 24	2747	51	2029
Cleat. Pendant.....	A. R. Bush.....	442,746	Dec. 16	1781	461	53	1626
Clevis.....	P. Brown.....	439,771	Nov. 4	212	55	53	650
Clevis.....	J. Duncan.....	443,650	Dec. 30	3302	851	53	1939
Clevis.....	T. G. Mandt.....	429,461	June 3	540	130	51	1577
Clevis and pin.....	N. B. Helm.....	432,735	July 22	2645	676	52	535
Clevis and pin.....	W. I. Wooster.....	437,388	Sept. 30	3234	843	52	2020
Clevis and wrench-bolt. Combined.....	G. Evans.....	442,479	Dec. 9	1318	340	53	1526
Clevis. Plow.....	F. M. Foss.....	438,536	Oct. 14	1304	353	53	257
Clevis. Plow.....	I. T. McIntyre.....	427,603	May 13	872	219	51	993
Clevis. Plow.....	J. F. Packer.....	440,648	Nov. 18	1616	416	53	934
Clevis. Safety.....	J. F. Forrest.....	443,393	Dec. 23	2890	743	53	1851
Clew-thimbles. Machine for making.....	J. T. Hamby.....	439,350	Oct. 28	2620	{ 698 699 }	53	517
Climbing apparatus.....	O. L. W. Johanson.....	428,812	May 27	2708	687	51	1374
Clip:							
See Binding-clip. Spring-clip.							
Detector-bar clip. Stub-clip.							
Harness-clip. Tug-clip.							
Paper-clip. Whiffletree-clip.							
Silver-ware-case Wire-ropeway clip.							
Clip or paper-holder.....	E. D. Rockwell.....	426,216	Apr. 22	2727	714	51	554
Clip or paper-holder.....	E. D. Rockwell.....	443,210	Dec. 23	2603	670	53	1796
Clipper. Animal.....	C. M. Palmer.....	432,433	July 15	2157	555	52	432
Clipper. Hair.....	W. H. Burman.....	433,513	Aug. 5	106	31	52	778
Clipper. Rotary.....	W. H. Cogswell.....	430,070	June 10	1477	366	51	1766
Clipper sweat-guard. Hair.....	J. K. Priest.....	432,076	July 15	1633	419	52	334
Clippers. Adjustable attachment for hair.....	W. C. Hatcher.....	429,722	June 10	932	229	51	1662
Clippers. Adjustable attachment for hair.....	W. C. Hatcher.....	442,807	Dec. 16	1879	484	53	1646
Clipping-machine.....	J. W. Eichenhuth.....	419,323	Jan. 14	1018	{ 269 270 }	50	215
Clipping-machine. Hair.....	O. R. Cook and L. Hinds.....	431,965	July 8	1456	369	52	293
Clipping-machine motor.....	H. S. Daggett.....	422,738	Mar. 4	547	140	50	1240
Clipping-machine. Wool or hair.....	W. Silver.....	440,902	Nov. 18	2039	525	53	1017
Cloak.....	J. Davailon.....	437,377	Sept. 30	3219	839	52	2017
Cloak-hanger.....	F. Wolf.....	422,871	Mar. 4	753	192	50	1281
Cloak-rack.....	F. Wolf.....	431,833	July 8	1266	318	52	256
Clock.....	A. M. Lane.....	419,685	Jan. 21	1554	415	50	329
Clock.....	A. M. Lane.....	423,058	Mar. 11	1064	276	50	1345
Clock.....	F. A. Lane.....	436,583	Sept. 16	1890	496	52	1748
Clock. Advertising.....	C. A. Ward.....	429,552	June 3	680	{ 166 167 }	51	1603
Clock. Alarm.....	A. M. Lane.....	424,797	Apr. 1	568	151	51	110
Clock. Alarm.....	A. M. Lane.....	431,595	July 8	868	216	52	181
Clock. Alarm.....	A. M. Lane.....	436,922	Sept. 23	2500	654	52	1873
Clock-alarm. Electric.....	M. W. Tiedemann.....	441,908	Dec. 2	435	116	51	1350
Clock and bell. Combined.....	A. M. Lane.....	419,686	Jan. 21	1554	415	50	329
Clock-bell.....	A. C. Sanford.....	439,193	Oct. 28	2347	631	53	465
Clock. Calendar.....	E. B. Miller.....	422,090	Feb. 25	2415	639	50	1046
Clock. Calendar.....	P. F. Nilson.....	420,519	Feb. 4	129	32	50	588
Clock-case.....	A. Bannatyne.....	440,386	Nov. 11	1166	301	53	843
Clock-case.....	S. Greeny.....	425,060	Aug. 26	2520	666	52	1273
Clock-case.....	A. M. Lane.....	436,919	Sept. 23	2497	653	52	1873
Clock-chime.....	W. Matthews.....	429,965	Nov. 4	517	136	53	708
Clock. Double-faced electric.....	E. W. Lindenau.....	424,929	Apr. 1	765	203	51	149
Clock. Electric.....	F. Schwartz.....	410,441	Nov. 11	1278	{ 330 331 }	53	363
Clock. Electric advertising.....	M. Levi.....	437,905	Oct. 7	350	102	53	68
Clock. Electric programme.....	J. L. McCaskey.....	428,854	May 27	2775	706	51	1389
Clock. Electrical.....	A. B. Jones.....	419,776	Jan. 21	1678	445	50	353
Clock. Electrical watchman's.....	H. S. Park.....	435,185	Aug. 26	2703	{ 714 715 }	52	1307
Clock. Electro-magnetic watch.....	R. B. Carr.....	424,268	Mar. 25	2842	760	50	1700
Clock. Electro-pneumatic.....	V. Popp.....	438,767	Oct. 21	1684	452	53	333
Clock-escapement.....	M. Schwalbach.....	421,622	Feb. 18	1767	462	50	914
Clock. Geographical.....	A. L. Silvernail.....	425,833	Apr. 15	2128	568	51	431
Clock-key.....	A. M. Lane.....	436,921	Sept. 23	2499	654	52	1873
Clock-key.....	R. Ueltzen.....	424,630	Apr. 1	297	77	51	59
Clock-leveling device.....	J. R. Broadstreet.....	423,411	Mar. 18	1589	417	50	1454
Clock. Motion.....	A. Bannatyne.....	439,854	Nov. 4	337	87	53	673
Clock. Motion.....	A. Bannatyne.....	439,855	Nov. 4	338	87	53	673
Clock. Motion.....	A. Phelps.....	431,262	July 1	379	95	52	77
Clock. Musical.....	J. Sprangers.....	433,220	July 29	3410	880	52	639
Clock-pendulum.....	G. P. Reed.....	436,941	Sept. 23	2524	601	52	1877
Clock. Stop.....	J. H. Dates.....	428,717	May 27	2576	652	51	1348
Clock. Stop.....	R. M. Johnson.....	429,132	June 3	38	9	51	1479
Clock striking mechanism.....	C. Braun.....	420,006	Jan. 21	2041	538	50	425
Clock striking mechanism.....	R. B. Carr.....	424,267	Mar. 25	2840	760	50	1700
Clock striking mechanism.....	G. T. Keil.....	429,455	June 3	531	{ 127 128 }	51	1575
Clock striking mechanism.....	A. M. Lane.....	424,796	Apr. 1	567	151	51	110
Clock-synchronizer.....	A. Gipperich.....	438,314	Oct. 14	984	266	53	193
Clock-synchronizer.....	A. G. Wiseman.....	437,168	Sept. 23	2876	748	52	1945
Clock system. Electro-pneumatic.....	C. A. Mayrhofer.....	427,781	May 13	1148	288	51	1048
Clock-winding mechanism.....	A. Bannatyne.....	427,292	May 6	409	106	51	891
Clock-winding mechanism.....	A. Hitt.....	424,418	Mar. 25	3123	829	50	1755
Clock-winding mechanism. Automatic.....	O. Urban.....	427,381	May 6	526	134	51	915
Clock-winding mechanism. Electrical.....	C. A. Ward.....	429,396	June 3	453	{ 106 107 }	51	1557
Clocks. Duplex escapement for.....	C. B. Hibbard.....	436,783	Sept. 23	2214	{ 582 583 }	52	1818
Clocks. Electric actuating device for pendulum.....	J. H. Dyson.....	439,838	Nov. 4	311	78	53	669
Clocks. Electric actuating mechanism for.....	H. T. Schlegel.....	440,241	Nov. 11	938	242	53	803

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Clocks. Electric-alarm device for.....	R. Schmitz.....	425,004	Apr. 8	887	{ 234 235 }	51	180
Clocks. Electric alarm for.....	W. H. Deane.....	435,213	Aug. 26	2741	723	52	1315
Clocks. Electric-circuit closer for.....	H. C. Karr.....	428,676	May 27	2499	636	51	1334
Clocks. Electro-mechanical central system for regu- lating.....	C. A. Mayrhofer.....	443,291	Dec. 23	2726	{ 700 701 }	53	1818
Clocks. Verge-wire for.....	J. M. Miller.....	438,355	Oct. 14	1047	285	53	206
Clocks. Winding-arbor for.....	F. L. Shaw.....	441,708	Dec. 2	125	34	53	1287
Clod-fender.....	S. B. Davis.....	427,160	May 6	216	55	51	854
Closet: See Dry closet. Sanitary closet. Earth-closet. Water-closet. Folding closet.							
Closet.....	G. H. Goetze.....	429,518	June 3	626	153	51	1591
Closet.....	S. H. Nutting, E. Parsons, and G. W. Bower.....	425,083	Apr. 8	1001	268	51	202
Closet.....	C. T. Pratt.....	429,952	June 10	1271	314	51	1727
Closet attachment.....	R. V. Baraco.....	425,972	Apr. 22	2365	627	51	484
Closet-cistern.....	D. L. Drinnell.....	432,820	July 22	2787	712	52	562
Cloth. Apparatus for holding bolts of.....	J. Talbert.....	425,011	Apr. 8	899	238	51	182
Cloth-board.....	J. W. Jones.....	420,344	Jan. 28	2870	682	50	533
Cloth-board machine.....	J. W. Jones.....	433,626	Aug. 5	271	72	52	809
Cloth brushing and cleaning machine.....	A. C. Heath.....	439,949	Nov. 4	488	127	53	703
Cloth-cutting apparatus.....	I. Reens.....	435,610	Sept. 2	350	97	52	1442
Cloth-cutting machine.....	M. Kohn.....	431,521	July 1	753	188	52	150
Cloth-cutting machine.....	M. Hofheimer.....	425,572	Apr. 15	1728	464	51	354
Cloth-cutting machine.....	P. Howe.....	423,056	Mar. 11	1062	275	50	1345
Cloth-cutting machine.....	P. Howe.....	441,243	Nov. 25	2629	{ 681 682 }	53	1136
Cloth-cutting machine.....	M. Kohn.....	425,102	Apr. 8	1025	274	51	207
Cloth-cutting machine.....	W. S. Salisbury.....	431,998	July 8	1503	{ 380 381 }	52	302
Cloth-cutting machine.....	W. S. Salisbury.....	431,999	July 8	1505	381	52	303
Cloth-finishing machines. Mechanism for guiding the edges of webs to Cloth into strips. Machine for cutting.....	P. J. Shortle and J. Lettch.....	432,494	July 15	2259	524	52	454
Cloth-marking apparatus.....	F. O. Ellis.....	438,915	Oct. 21	1922	511	53	377
Cloth-marking apparatus.....	W. B. Main and C. H. Wilson.....	424,717	Apr. 1	432	{ 114 115 }	51	85
Cloth-napping machine.....	C. F. X. Ott.....	437,715	Oct. 7	56	17, 18	53	14
Cloth. Ornamented.....	H. Unger.....	426,152	Apr. 22	2631	690	51	536
Cloth-piling machine.....	H. A. Bindeman.....	431,321	July 1	433	107	52	89
Cloth-piling machine.....	L. A. Hazard and W. O. Crain.....	426,809	Apr. 29	3622	945	51	740
Cloth-piling machine.....	J. Novotny.....	428,128	May 20	1677	425	51	1158
Cloth-pressing apparatus.....	G. W. Miller.....	420,885	Feb. 4	683	{ 175 176 }	50	692
Cloth-pressing machine.....	G. Gessner.....	424,971	Apr. 8	832	{ 222 223 }	51	169
Cloth-pressing machine.....	D. Gessner.....	429,268	June 3	230	58	51	1516
Cloth-pressing machine.....	D. Gessner.....	438,774	Oct. 21	1693	454	53	335
Cloth-pressing machine.....	G. W. Miller.....	418,805	Jan. 7	220	54	50	48
Cloth-pressing machine.....	G. W. Miller.....	442,706	Dec. 16	1693	{ 434 435 }	53	1610
Cloth-pressing machine.....	G. W. Voelker.....	443,700	Dec. 30	3385	869	53	1953
Cloth-pressing machines. Brushing attachment for.....	G. W. Miller.....	418,804	Jan. 7	219	53, 54	50	48
Cloth shearing or cropping machines. Bed for.....	E. Martin, T. F. Drake, and J. W. Johnson.....	421,865	Feb. 18	2105	552	50	979
Cloth-sponging apparatus.....	G. Kraft.....	443,325	Dec. 23	2789	716	53	1831
Cloth, &c. Steam-box for dampening.....	D. Gessner.....	427,069	May 6	57	16	51	821
Cloth-tentering machine.....	I. E. Palmer.....	430,749	June 24	2592	634	51	1999
Cloth-washing machines. Guide-eye for.....	H. J. Kennedy.....	443,285	Dec. 23	2716	697	53	1816
Clothes and dish washer. Combined.....	M. A. Wilcox.....	426,486	Apr. 29	3132	{ 822 823 }	51	646
Clothes-beater.....	M. Fitzpatrick.....	422,387	Mar. 4	36	11	50	1144
Clothes-bracket. Folding.....	G. R. Morrison.....	424,569	Apr. 1	205	56	51	42
Clothes-drier.....	E. E. Arnold.....	439,853	Nov. 4	336	87	53	673
Clothes-drier.....	W. Curtis.....	434,921	Aug. 26	2321	613	52	1235
Clothes-drier.....	A. C. Etzel.....	429,022	May 27	3021	776	51	1437
Clothes-drier.....	J. W. Fletcher.....	429,023	May 27	3022	776	51	1437
Clothes-drier.....	E. A. Foster.....	433,859	Aug. 5	624	163	52	874
Clothes-drier.....	F. Frank.....	435,561	Sept. 2	278	77	52	1429
Clothes-drier.....	B. F. Fuller.....	429,378	June 3	426	100	51	1552
Clothes-drier.....	F. E. Garner.....	441,481	Nov. 25	3007	774	53	1207
Clothes-drier.....	F. B. Hawes.....	419,668	Jan. 21	1531	408	50	324
Clothes-drier.....	D. K. Hickok.....	422,410	Mar. 4	65	18	50	1149
Clothes-drier.....	W. Holt.....	441,562	Nov. 25	3122	802	53	1230
Clothes-drier.....	J. S. Jump and J. Bullenger.....	440,429	Nov. 11	1263	327	53	860
Clothes-drier.....	R. P. and A. H. Lake.....	422,949	Mar. 11	898	236	50	1315
Clothes-drier.....	J. L. Lincoln.....	435,436	Sept. 2	84	25	52	1391
Clothes-drier.....	A. N. Paxson.....	426,313	Apr. 22	2854	752	51	582
Clothes-drier.....	D. Reed.....	430,970	June 24	2928	719	51	2063
Clothes-drier.....	J. W. Reed.....	443,920	Dec. 30	3713	951	53	2018
Clothes-drier.....	E. F. Rouse.....	437,247	Sept. 30	2998	784	52	1976
Clothes-drier.....	A. Smith.....	428,535	May 20	2274	577	51	1274
Clothes-drier.....	B. F. Standish.....	419,896	Jan. 21	1877	493	50	393
Clothes-drier.....	D. C. Stauffer.....	420,838	Feb. 4	603	155	50	677
Clothes-drier.....	T. B. Ward.....	425,355	Apr. 6	1403	374	51	282
Clothes-drier.....	J. G. Webb.....	426,697	Apr. 29	3449	904	51	1508
Clothes-hook.....	R. M. Henshaw.....	435,827	Sept. 2	691	184	52	1508
Clothes-hook.....	C. Hill.....	434,417	Aug. 12	1492	369	52	1059
Clothes-hook.....	C. W. Katherman.....	434,343	Aug. 12	1359	355	52	1033
Clothes-hook.....	J. H. Templein.....	433,699	Aug. 5	380	97	52	830
Clothes-lifter.....	H. H. and H. H. Forsythe, Jr.....	432,523	July 22	2314	598	52	471
Clothes-line.....	C. Barlow.....	418,937	Jan. 7	453	111	50	95
Clothes-line.....	J. N. Brown.....	430,170	June 17	1623	405	51	1805

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Clothes-line	S. Smith	443,411	Dec. 23	2913	749	53	1855
Clothes-line adjuster	H. F. Metzler	426,731	Apr. 29	3505	916	51	718
Clothes-line and clothes-pin box	J. A. Eichner, Jr.	419,427	Jan. 14	1176	312 313	50	248
Clothes-line apparatus	J. E. Kellogg	439,957	Nov. 4	497	130	53	705
Clothes-line clasp	E. Manser	426,392	Apr. 22	2983	721	51	609
Clothes-line. Endless	W. W. Hatfield	442,044	Dec. 2	653	176	53	1390
Clothes-line fastener	J. B. Mayer	424,071	Mar. 25	2580	689	50	1649
Clothes-line fastener	G. Reimers	420,962	Feb. 11	808	210	50	726
Clothes-line hanger	G. Goodyear, Jr., and J. B. Plum	435,625	Sept. 2	390	105	52	1448
Clothes-line hanger	G. L. Kohler	442,378	Dec. 9	1163	303	53	1495
Clothes-line holder	T. Chapin	441,934	Dec. 2	473	126	53	1357
Clothes-line holder	G. H. Regar	428,412	May 20	2115	531	51	1244
Clothes-line. Pinless	E. Converse	440,915	Nov. 18	2063	533	53	1021
Clothes-line prop	T. F. Altman	438,131	Oct. 14	707	193	53	143
Clothes-line prop	S. Keeling	443,618	Dec. 30	3247	834	53	1923
Clothes-line prop	S. V. D. Wack	427,642	May 13	923	232	51	1003
Clothes-line prop and stretcher	C. C. McClaughry	432,429	July 15	2154	554	52	431
Clothes-line pulley	F. P. Skornicki	432,334	July 15	2026	521	52	406
Clothes-line reel	F. R. French	424,054	Mar. 25	2558	683	50	1645
Clothes-line reel	L. E. Thomas	421,452	Feb. 18	1503	390	50	865
Clothes-line reel	D. Young	438,215	Oct. 14	832	225	53	166
Clothes-line support. Safety	H. Clayton and L. Bried	441,535	Nov. 25	3085	793	53	1223
Clothes-lines. Adjustable prop for	W. B. Adams	442,763	Dec. 16	1805	467	53	1631
Clothes-pin	P. M. Ackerman	434,551	Aug. 19	1605	444	52	1108
Clothes-pin	L. Liebscher	418,918	Jan. 7	425	104	50	99
Clothes-pin	G. W. McCord	439,250	Oct. 28	2457	658	53	486
Clothes-pin	W. Richards	443,602	Dec. 30	3227	830	53	1925
Clothes-pin	M. E. Thrall	429,550	June 3	679	166	51	1602
Clothes-pin	E. H. Turner	422,168	Feb. 25	2537	670	50	1069
Clothes-pin	E. M. Turner	435,195	Aug. 26	2716	718	52	1310
Clothes-pin	P. S. Weaver	432,809	July 22	2773	709	52	559
Clothes-pin bag	D. Dunscomb and A. M. Heflebower	426,494	Apr. 29	3144	825	51	648
Clothes-pounder	E. B. Dreifloos	424,865	Apr. 1	671	177	51	130
Clothes-pounder	N. Probst	429,476	June 3	570	139	51	1582
Clothes-pounder	B. A. Spencer	434,843	Aug. 19	2150	563	52	1196
Clothes-pounder	H. Youmans	425,360	Apr. 8	1408	375	51	283
Clothes-prop	C. L. Burge	429,227	June 3	179	43	51	1506
Clothes-prop attachment	L. E. Friend	430,012	June 10	1379	343	51	1748
Clothes-rack for houses or exhibiting garments in stores.	M. C. Adams	438,517	Oct. 14	1273	344	53	250
Clothes-rack, ironing-table, and clothes-drier. Combined	J. S. Cole	427,051	May 6	25	8	51	815
Clothes. Safety apparatus for hanging	J. A. McMahon	427,890	May 13	1322	333 334	51	1079
Clothes-slide	H. C. Durler	423,743	Mar. 18	2084	550	50	1546
Clothes-suspending device	H. Gerbo	435,117	Aug. 26	2603	688	52	1288
Clothes-tongs	W. H. Mitchell	426,039	Apr. 22	2460	649	51	501
Clothes-wringer	O. D. Hudson	425,074	Apr. 8	989	265	51	199
Clothes-wringer	G. H. Jantz	432,624	July 22	2450	631	52	498
Clothes-wringer	J. A. Russell	429,178	June 3	108	25	51	1492
Clothes-wringer	A. L. Slager	432,495	July 15	2260	584	52	454
Clothes-wringer	C. K. Stinson	434,303	Aug. 12	1303	339	52	1021
Clothes-wringer	T. W. Stone	432,252	July 15	1892	487	52	382
Clothes-wringers. Extension-clamp for.	O. Walscheid	419,483	Jan. 14	1253	332	50	264
Clover-feed cutter	I. B. Coleman	426,364	Apr. 22	2930	770	51	598
Clover-huller	D. Whiting	428,260	May 20	1873	470	51	1196
Club. Policeman's	A. W. Smith	443,263	Dec. 23	2681	687	53	1810
Club. Policeman's	W. I. Underwood and H. Frese	441,042	Nov. 18	2259	585	53	1059
Club. Policeman's	J. W. Willeford	442,470	Dec. 9	1306	337	53	1524
Clutch	D. Mackie	438,077	Oct. 7	629	171	53	121
Clutch	J. W. Moore and J. A. White	427,344	May 6	483	124	51	907
Clutch	J. D. Westgate	442,296	Dec. 9	1038	273	53	1471
Clutch	M. F. Williams	441,998	Dec. 2	574	155 156	53	1375
Clutch	G. Wirth	440,679	Nov. 18	1660	429	53	946
Clutch and shaft cut-off. Combined friction	L. S. Pfouts	441,254	Nov. 25	2644	686	53	1138
Clutch-controller	D. R. Steele	425,465	Apr. 15	1582	423	51	324
Clutch-coupling for pipes. Combination	J. B. Genin	429,126	June 3	30	7	51	1478
Clutch. Electric	J. F. McLaughlin	432,209	July 15	1840	472	52	372
Clutch. Electro-magnetic	S. C. C. Currie	434,382	Aug. 12	1418	372	52	1044
Clutch. Electro-magnetic	C. E. Kells, Jr.	443,772	Dec. 30	3496	896 897	53	1975
Clutch. Electro-magnetic	C. H. Veeder	439,213	Oct. 28	2389	642	53	474
Clutch for connecting and disconnecting shafts	G. Leverich	431,066	July 1	55	13	52	13
Clutch for holding disks	T. Suchland	427,930	May 13	1379	349	51	1069
Clutch. Friction	C. A. Anderson and J. Fogarty	425,482	Apr. 15	1604	428	51	329
Clutch. Friction	E. L. Babcock	429,298	June 3	295	70	51	1526
Clutch. Friction	J. W. Blodgett	432,473	July 15	2228	576	52	418
Clutch. Friction	E. S. Capen	439,179	July 15	1790	460	52	364
Clutch. Friction	J. Clark	432,600	July 22	2415	623	52	491
Clutch. Friction	H. P. Claussen	429,085	May 27	3128	806	51	1457
Clutch. Friction	O. Crosby	426,989	Apr. 22	2330	634	51	488
Clutch. Friction	A. A. Cushman and G. W. Stinebring	442,308	Dec. 9	1059	277	53	1475
Clutch. Friction	L. D. Dana	431,446	July 1	638	160	52	129
Clutch. Friction	J. D. Ehrmann	427,257	May 6	357	92	51	881
Clutch. Friction	J. D. Ehrmann	438,614	Oct. 21	1429	356	53	257
Clutch. Friction	W. D. Ewart	427,563	May 13	814	204	51	983
Clutch. Friction	H. J. Gilbert	421,694	Feb. 18	1862	488	50	934
Clutch. Friction	H. Haberlin	422,402	Mar. 4	57	16	50	1148
Clutch. Friction	C. I. Hague	439,504	Oct. 28	2852	750	53	561
Clutch. Friction	J. C. Hartman	442,703	Dec. 16	1687	432	53	1609
Clutch. Friction	E. H. C. Hartmann and A. Meedom	442,374	Dec. 9	1159	397	53	1494
Clutch. Friction	J. J. Hayes and O. S. Felch	431,209	July 1	268	67	52	55

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Clutch. Friction.....	L. J. Hirt.....	429,446	June 3	520	125	51	1572
Clutch. Friction.....	L. J. Hirt.....	434,445	Aug. 19	1533	400	52	1074
Clutch. Friction.....	A. W. Jones.....	427,085	May 6	89	24	51	829
Clutch. Friction.....	T. C. Kenney.....	419,958	Jan. 21	1966	516 517	50	412
Clutch. Friction.....	S. F. Kerslake.....	436,140	Sept. 9	1184	309	52	1606
Clutch. Friction.....	O. B. Kinnard.....	438,733	Oct. 21	1627	437	53	323
Clutch. Friction.....	W. F. Leo.....	439,960	Nov. 4	502	131	53	706
Clutch. Friction.....	G. Leverich.....	426,567	Apr. 29	3247	852	51	668
Clutch. Friction.....	T. McBride and E. Fisher.....	442,076	Dec. 2	706	189 190	53	1401
Clutch. Friction.....	W. H. McConnell.....	428,568	May 20	2323	589	51	1283
Clutch. Friction.....	J. F. McLaughlin.....	424,341	Mar. 25	2980	793	50	1725
Clutch. Friction.....	P. Medart.....	423,333	Mar. 11	1477	387	50	1424
Clutch. Friction.....	E. A. Muller.....	431,121	July 1	132	34	52	28
Clutch. Friction.....	W. N. Rumely.....	428,634	May 27	2428	618	51	1322
Clutch. Friction.....	E. D. Schmitt.....	434,611	Aug. 19	1788	466	52	1126
Clutch. Friction.....	A. Schroeder.....	442,260	Dec. 9	982	258 259	53	1462
Clutch. Friction.....	J. Walker.....	421,332	Feb. 11	1340	347	50	826
Clutch. Friction.....	J. Walker.....	421,333	Feb. 11	1341	347	50	826
Clutch. Friction.....	J. Walker.....	424,631	Apr. 1	297	77	51	50
Clutch. Friction.....	J. Walker.....	434,122	Aug. 12	1026	266	52	966
Clutch. Friction.....	J. Walker.....	441,726	Dec. 2	153	41	53	1292
Clutch. Friction.....	L. H. Watson.....	430,097	June 10	1522	378	51	1775
Clutch. Friction.....	S. P. Watt.....	427,646	May 13	930	233	51	1004
Clutch. Friction.....	S. and T. H. Widdowson.....	437,828	Oct. 7	240	73, 74	53	47
Clutch. Friction.....	S. L. Wiegand.....	430,907	June 24	2834	695 696	51	2046
Clutch. Friction.....	W. A. Wilkinson.....	429,402	June 3	460	109	51	1559
Clutch. Friction.....	W. J. Woodcock.....	443,694	Dec. 30	3376	867	53	1952
Clutch. Friction-band.....	E. Wright.....	442,346	Dec. 9	1118	292	53	1486
Clutch. Frictional grip.....	H. H. Kendrick.....	434,934	Aug. 26	2339	618	52	1289
Clutch mechanism.....	A. E. Brown.....	428,376	May 20	2055	518	51	1233
Clutch mechanism.....	W. S. Kisinger.....	423,431	Mar. 18	1620	425	50	1460
Clutch-operating mechanism.....	W. J. Parmelee.....	439,069	July 15	1619	415	52	331
Clutch or clamp for raising or lowering tile or pipe.....	J. W. Teetzel.....	435,594	Sept. 2	328	91	52	1438
Clutch. Pulley.....	E. Waldron.....	432,102	July 15	1671	430	52	341
Clutch. Rope.....	W. Leiter.....	424,560	Apr. 1	191	52	51	39
Clutch. Stop.....	H. V. Hartz.....	424,478	Apr. 1	52	16	51	13
Clutching and belt-shifting devices. Mechanism for operating.....	F. B. Miles.....	439,080	Oct. 21	2175	584	53	428
Coal and ore bins. Discharge apparatus for.....	A. A. Strom.....	424,938	Apr. 1	775	206	51	151
Coal and other like minerals. Apparatus for getting.....	W. Walker.....	425,718	Apr. 15	1965	522	51	400
Coal and other minerals. Separating and cleansing.....	C. Lührig and J. C. Cuninghame.....	427,433	May 6	620	155 156	51	934
Coal. Apparatus for removing piles of.....	J. M. Dodge.....	439,487	Oct. 28	2826	753	53	555
Coal breaker. Bituminous.....	W. H. Emerson and J. Skinner.....	433,777	Aug. 5	506	131	52	854
Coal-breaking machine.....	A. Simpson and J. B. Alvord.....	432,446	July 15	2178	560 561	52	436
Coal-brick. Combustible.....	J. J. Hiertz.....	424,299	Mar. 25	2900	757	50	1711
Coal-cage. Automatic.....	A. W. Davidson.....	443,430	Dec. 23	2941	756 757	53	1860
Coal-conveyer belts. Means for securing push-plates for.....	C. S. Schenck.....	435,025	Aug. 26	2468	653	52	1263
Coal-conveyer gate.....	C. S. Schenck.....	424,937	Apr. 1	774	206	51	150
Coal-cutting machine.....	P. Richards.....	428,951	May 27	2910	746	51	1416
Coal-cutting machine.....	P. Richards.....	438,446	Oct. 14	1175	317 318	53	231
Coal-drill.....	D. Davis and J. McComb.....	420,442	Feb. 4	23	5	50	569
Coal-drilling machine.....	M. Hardsocg.....	426,587	Apr. 29	3279	860 861	51	675
Coal-drilling machine. Grip.....	E. Wages and S. H. Armstrong.....	433,556	Aug. 5	171	46	52	790
Coal-dumping apparatus.....	S. Salmon.....	419,077	Jan. 7	646	168 169	50	136
Coal-elevating crane.....	C. S. Schenck.....	425,552	Apr. 15	1703	455	51	349
Coal-handling apparatus.....	W. S. Bogle.....	419,628	Jan. 21	1461	392 393	50	312
Coal-handling apparatus.....	W. S. Bogle.....	419,630	Jan. 21	1464	393	50	313
Coal-hod.....	T. S. Lovely.....	425,440	Apr. 15	1539	413	51	317
Coal-hoist.....	J. Jopling.....	442,442	Dec. 9	1264	326 327	53	1516
Coal-jig.....	J. D. Zeisloft.....	437,743	Oct. 7	100	32	53	22
Coal-loading mechanism.....	E. B. Ely and S. Salmon.....	419,145	Jan. 7	735	193 194 195	50	154
Coal, &c. Means for conveying or transferring.....	C. S. Schenck.....	430,238	June 17	1736	432	51	1826
Coal or dredge bucket.....	C. Elbee.....	427,980	May 13	1452	367	51	1104
Coal or ore bins. Discharge apparatus for.....	W. W. Rich.....	422,094	Feb. 25	2424	640	50	1047
Coal or rock drill.....	I. Wantling and J. T. Johnson.....	436,815	Sept. 23	2281	601 602	52	1833
Coal piling and removing machinery.....	J. M. Dodge.....	443,605	Dec. 30	3229	830	53	1925
Coal-screen.....	H. B. Sackett.....	426,864	Apr. 29	3639	965	51	755
Coal-screen.....	J. C. Simpson and L. Stockett.....	427,526	May 6	751	186 187	51	960
Coal-screening mechanism.....	E. B. Coxo.....	438,527	Oct. 14	1291	349 350	53	254
Coal-screening mechanism.....	E. B. Coxo and S. Salmon.....	419,113	Jan. 7	692	182 183	50	146
Coal-separator.....	W. H. Soxton.....	427,124	May 6	156	41	51	842
Coal, &c. Shift for.....	T. McCarty.....	426,045	Apr. 22	2466	651 652	51	502
Coal-tar. Treating.....	A. L. Munson.....	440,830	Nov. 18	1928	495	53	995
Coal-tipple.....	T. B. De Armit.....	424,098	Mar. 25	2620	698	50	1656

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Coal vase or holder	F. M. Tucker	421,787	Feb. 13	1982	521	50	956
Coat-adjuster	R. Lacourse	426,098	Apr. 29	3884	1014	51	791
Coat and hat hook	A. W. Parmelee	433,182	July 29	3359	868	52	678
Coat-fastener	F. Wolkow	426,087	Apr. 22	2529	667	51	514
Coat-hanger	C. V. Doe	428,166	May 20	1720	435	51	1166
Coat or like garment	H. J. Upthegrove	422,669	Mar. 4	458	116	50	1224
Coating chills. Composition for	E. M. Royal and I. B. Turner	425,346	Apr. 8	1391	.....	51	279
Coating iron and wood. Composition for	I. T. Dyer	425,412	Apr. 15	1497	.....	51	309
Coating metal pipes. Means for	J. D. Hooker	425,675	Apr. 15	1904	.....	51	388
Coating metal sheets with tin, &c. Automatic machine for	P. Rogers and J. Player	426,962	Apr. 29	3824	999 1000	51	780
Cock. Ball	R. Murphy	425,619	Apr. 15	1813	485	51	370
Cock box for water or gas service pipes. Stop	B. B. Bignall	421,897	Feb. 25	2152	565	50	997
Cock box. Stop	A. Ormsby	420,413	Jan. 28	2667	707	50	551
Cock. Compression	T. C. Booth	422,906	Mar. 11	827	215	50	1302
Cock. Compression ball	W. Jameison	421,573	Feb. 18	1690	437	50	900
Cock. Cylinder	F. B. How	434,870	Aug. 19	2194	575	52	1204
Cock. Cylinder	J. Ryan	438,022	Oct. 7	544	150	53	103
Cock for water coil boilers. Inlet	R. W. Applegarth	421,224	Feb. 11	1185	304	50	797
Cock. Gage	R. J. Colvin	435,286	Aug. 26	2846	753	52	1336
Cock. Gage	G. Elton	435,488	Sept. 2	164	46	52	1406
Cock. Gage	E. F. Landis	433,685	Aug. 5	363	93	52	827
Cock. Gage	E. W. Luce	425,441	Apr. 15	1540	413	51	317
Cock gage. Gas	W. W. Robinson and W. S. Brockway	422,449	Mar. 4	128	35	50	1161
Cock. Gas	L. Ott	441,190	Nov. 25	2513	649	53	1117
Cock or faucet. Self-closing	O. F. Hageman	420,155	Jan. 28	2277	604	50	480
Cock. Stop and waste	H. J. Freudenfeld	424,774	Apr. 1	531	143	51	104
Cock. Stop and waste	F. W. Meyer	430,869	June 24	2781	682	51	2036
Cocks. Apparatus for controlling and registering liquids drawn through	R. Jewell	442,053	Dec. 2	671	181	53	1394
Cocks automatically. Machine for grinding	G. B. Chadwick	430,142	June 17	1589	396	51	1798
Cocks. Extension service-box for water or gas	H. E. Dennis	420,044	Jan. 28	2097	554	50	445
Cocks. Manufacturing polished metal	L. Filstrup	421,257	Feb. 11	1226	317	50	806
Cocks. Support for service-pipe	F. W. Allison	436,011	Sept. 9	973	255	52	1568
Cockeyo. Clip	E. L. Howe	434,045	Aug. 12	886	234	52	938
Cockle-separator	F. W. Howell	442,051	Dec. 2	668	180 181	53	1393
Cocoonut-oil. Refining	A. Smith	432,251	July 15	1892	.....	52	382
Coffee and preparing the same. Dry extract of	H. Barotte	439,318	Oct. 28	2576	688	53	508
Coffee. Apparatus for preparing extract for	H. Barotte	440,752	Nov. 18	1787	461 462	53	970
Coffee-boilers and method of making the same. Lip for	C. L. Wagandt	443,154	Dec. 23	2490	637	53	1771
Coffee. Composition for coating	F. W. Moore. (Reissue)	11,093	July 1	789	.....	52	156
Coffee. Decorticating-machine for removing outer covering from	J. L. Notley	435,854	Sept. 2	730	195	52	1516
Coffee-grinder	S. L. Cowan	420,773	Feb. 4	483	126	50	657
Coffee-grinder	A. B. McCanna and B. B. Brady	425,817	Apr. 15	2102	562	51	427
Coffee huller and polisher	W. A. Dieseldorff	439,485	Oct. 28	2824	752 753	53	555
Coffee-mill	W. A. Hance	437,856	Oct. 7	277	83	53	54
Coffee-mill	E. L. McClain	419,700	Jan. 21	1573	421	50	333
Coffee-mill	E. L. McClain	419,701	Jan. 21	1574	421	50	333
Coffee-mill	M. L. Means	424,120	Mar. 25	2651	706	50	1662
Coffee-mill	C. and E. H. Morgan	425,815	Apr. 15	2099	561 562	51	426
Coffee-mill holder	D. W. Rowland	431,485	July 1	697	175	52	140
Coffee-mill-operating mechanism	F. Wiswell	428,709	May 27	2562	649	51	1346
Coffee or tea boiler	J. H. Monsey	436,485	Sept. 16	1731	456	52	1721
Coffee or tea pot	C. Halstead	427,568	May 13	824	205	51	984
Coffee or tea pot	E. Shobe	424,361	Mar. 25	3013	799	50	1732
Coffee or tea pot handle	G. E. Batsford	421,807	Feb. 18	2007	530	50	961
Coffee or tea pot handle	E. F. Smith	425,349	Apr. 8	1394	371	51	280
Coffee or tea steeper	J. H. Burtis	425,858	Apr. 15	2170	578	51	438
Coffee-polisher	J. H. Brookmire	426,910	Apr. 29	3758	982	51	767
Coffee-pot	J. W. Barwell	436,395	Sept. 16	1590	420	52	1694
Coffee-pot	E. J. Colby	433,673	Aug. 5	345	88	52	823
Coffee-pot	H. B. Cornish	424,671	Apr. 1	361	95	51	70
Coffee-pot	J. A. Hadley	423,867	Mar. 18	2262	597	50	1582
Coffee-pot	M. Mattison	419,965	Jan. 21	1973	518	50	413
Coffee pot or boiler	E. B. Turner	425,473	Apr. 15	1593	426	51	327
Coffee-pot. Two-part	J. K. Hawkins	435,302	Aug. 26	2888	765	52	1340
Coffee-pots, &c. Handle and cover for	C. R. Munger and G. H. Cornell	424,807	Apr. 1	579	153	51	112
Coffee-pots or similar vessels. Handle for	H. S. Reynolds	440,061	Nov. 4	657	175	53	737
Coffee-pots or similar vessels. Handle for	W. C. McIntire	420,916	Feb. 4	731	189	50	703
Coffee, &c. Preserving	W. C. McIntire	420,917	Feb. 4	736	1-9	50	703
Coffee-roasting apparatus	P. Gassen	430,182	June 17	1641	.....	51	1808
Coffin-dam	H. Stollwerck	423,458	Mar. 18	1658	498	50	1467
Coffin	G. K. Kirkham	418,726	Jan 7	104	24	50	23
Coffin	S. and C. A. Blodget	427,391	May 6	540	137	51	918
Coffin	E. Grueninger	427,760	May 13	1120	281	51	1042
Coffin	T. McGovern	427,889	May 13	1320	333	51	1079
Coffin-fastener	C. A. Conklin	443,822	Dec. 30	3585	922	53	1993
Coffin-fastener	H. C. Forshay	428,335	May 20	1989	500	51	1219
Coffin-fastener	N. K. Gamble	419,846	Jan. 21	1796	474	50	375
Coffin-fastener	H. R. Grothaus	436,035	Sept. 9	1016	264	52	1577
Coffin-fastener	L. G. Kregel	430,478	June 17	2132	524	51	1903
Coffin-fastener	L. G. Kregel	430,479	June 17	2132	524	51	1903
Coffin-fastener	W. J. Noble	421,106	Feb. 11	1016	260	50	765
Coffin-fastener	A. E. Palmer	424,346	Mar. 25	2989	795	50	1727
Coffin-fastener	C. E. Richards	424,618	Apr. 1	281	73	51	57
Coffin-fastener	L. E. Woodard	420,290	Jan. 28	2500	663	50	520
Coffin-handle	W. H. Blackford	439,049	Oct. 21	2119	569	53	417
Coffin-handle	O. McCarthy	433,692	Aug. 5	372	95	52	829

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Coffin ornament.....	O. McCarthy.....	430,395	June 17	2014	496	51	1881
Cog-wheel.....	L. Atwood.....	430,818	June 24	2704	662	51	2021
Coil-clasp.....	C. Jackson.....	433,791	Aug. 5	528	136	52	859
Coil. Reactive.....	H. Lemp and W. S. Moody.....	428,620	May 27	2412	613	51	1319
Coiled steel spring.....	I. A. Timmis.....	432,341	July 15	2031	523	52	407
Coiled steel spring.....	I. A. Timmis.....	432,342	July 15	2033	523	52	407
Coiling metal rods. Apparatus for.....	H. Roberts.....	426,067	Apr. 22	2498	659	51	509
Coiling metal rods. Device for.....	F. G. Tallman.....	428,971	May 27	2947	756	51	1423
Coiling metal rods. Device for.....	F. G. Tallman.....	428,972	May 27	2949	756	51	1424
Coin-actuated box.....	J. W. Patterson.....	438,174	Oct. 14	772	210	53	155
Coin-actuated boxes. Electric detecting apparatus for.....	W. J. Howey.....	420,070	Jan. 28	2141	566	50	453
Coin-actuated device.....	P. Kennedy, Jr.....	432,163	July 15	1770	455	52	360
Coin and automatically delivering a receipt therefor. Apparatus for receiving.....	I. E. Clifford.....	423,313	Mar. 11	1446	377	50	1418
Coin-carrier.....	F. T. Camp.....	429,752	June 10	976	239	51	1671
Coin-controlled apparatus.....	T. H. Costello.....	432,983	July 29	3048	763	52	617
Coin-controlled apparatus.....	J. E. Neiswanger.....	423,073	Mar. 11	1082	281	50	1349
Coin-counter.....	J. Hock.....	442,892	Dec. 16	2041	523	53	1677
Coin freed or actuated machine.....	A. Harris.....	434,109	Ang. 12	997	260	52	961
Coin-holder.....	E. M. Goldsmith.....	435,220	Aug. 26	2747	725	52	1316
Coin-holder.....	S. H. Loring.....	430,531	June 17	2213	544	51	1918
Coin-locked box.....	C. S. Patterson.....	442,686	Dec. 16	1650	424	53	1602
Coin-operated apparatus.....	C. S. Batdorf.....	424,593	Apr. 1	241	64	51	49
Coin-operated machine.....	F. B. Cochran.....	434,768	Aug. 19	2049	535	52	1176
Coin-operated machine.....	P. Schneider.....	421,619	Feb. 18	1760	461	50	913
Coin-operated receptacle.....	W. Macnamar.....	443,368	Dec. 23	2855	734	53	1844
Coin-receptacle register.....	N. Stafford.....	439,791	Nov. 4	240	61, 62	53	655
Coin-setting.....	T. F. Gaynor.....	439,139	Oct. 28	2267	609	53	451
Coin-tray.....	W. H. Staats.....	421,984	Feb. 25	2265	596	50	1019
Coin-wrapper.....	S. S. Kimball.....	420,159	Jan. 28	2285	605	50	481
Coke and gas. Apparatus for making.....	C. N. Trump.....	436,882	Sept. 23	2436	636	52	1862
Coke-conveyer.....	C. W. Hunt.....	438,376	Oct. 14	1076	293	53	212
Coke-drawing machine.....	N. O. Goldsmith.....	435,891	Sept. 2	795	212	52	1528
Coke from ovens. Device for removing.....	W. H. Dinsmore.....	428,466	May 20	2184	550	51	1256
Coke. Manufacturing.....	H. Müller.....	421,299	Feb. 11	1285	331	50	816
Coke-oven.....	W. W. Anderson.....	420,897	Feb. 4	703	181	50	696
Coke-oven.....	I. N. Knapp.....	421,583	Feb. 18	1703	442	50	903
Coke-oven front.....	H. B. Riddell.....	428,953	May 27	2913	746	51	1417
Coke-ovens. Portable bottom for.....	D. Evans and A. W. Adams.....	427,307	May 6	428	111	51	895
Colander or sifter. Vegetable.....	G. K. Knowlton.....	419,457	Jan. 14	1218	323	50	256
Cold-storage house.....	A. W. Black.....	433,316	July 29	3547	916	52	717
Collar.....	J. H. Browne.....	436,765	Sept. 16	2180	573	52	1804
Collar.....	E. Robinson.....	427,909	May 13	1348	340	51	1084
Collar and cuff box.....	T. Springmeyer.....	428,866	May 27	2791	709	51	1392
Collar attachment and protector. Horse.....	H. Lerew.....	433,010	July 29	3089	793	52	625
Collar. Breast.....	J. Sterett.....	439,206	Oct. 28	2381	640	53	472
Collar, cuff, &c. Apparel.....	J. R. Fraunce.....	418,787	Jan. 7	193	47	50	43
Collar. Dog.....	A. F. Nuttall.....	426,137	Apr. 22	2609	665	51	532
Collar-fastener.....	W. A. Bennett.....	442,215	Dec. 9	920	214	53	1449
Collar-fastener.....	G. S. Crosby.....	426,246	Apr. 22	2766	725	51	563
Collar fastener. Horse.....	H. M. Auerswald.....	435,721	Sept. 2	532	141	52	1478
Collar fastener. Horse.....	M. W. Bach.....	423,714	Mar. 18	2043	539	50	1339
Collar fastener. Horse.....	M. W. Bach.....	434,232	Aug. 12	1196	311	52	999
Collar fastener. Horse.....	T. B. and W. A. Bomar.....	424,850	Apr. 1	645	170	51	125
Collar fastener. Horse.....	P. T. Bradley.....	431,548	July 8	799	199	52	167
Collar fastener. Horse.....	J. H. Emerson.....	423,676	Mar. 18	1969	524	50	1530
Collar fastener. Horse.....	W. S. Finney.....	428,205	May 20	1773	448	51	1177
Collar fastener. Horse.....	G. B. Himes.....	431,465	July 1	664	166	52	134
Collar fastener. Horse.....	T. N. Mathias.....	435,149	Aug. 26	2649	701	52	1297
Collar fastener. Horse.....	C. G. Ortwayner.....	431,394	July 1	555	139	52	112
Collar fastener. Horse.....	B. O. Smith.....	432,093	July 15	1656	425	52	338
Collar fastener. Horse.....	W. L. Stevens.....	440,517	Nov. 11	1399	362	53	886
Collar fastener. Horse.....	D. Stone.....	421,986	Feb. 25	2266	596	50	1019
Collar fastener. Horse.....	J. Thomas.....	425,836	Apr. 15	2132	569	51	432
Collar fastening. Horse.....	H. M. Auerswald.....	435,722	Sept. 2	533	141	52	1478
Collar fastening. Horse.....	F. E. Freeman.....	423,043	Mar. 11	1042	270	50	1342
Collar fastening. Horse.....	F. Hora.....	426,501	Apr. 29	3154	829	51	650
Collar fastening. Horse.....	J. Straus.....	423,350	Mar. 11	1497	392	50	1428
Collar for animals.....	W. H. Harrison.....	424,197	Mar. 25	2754	735	50	1683
Collar for flannel shirts.....	I. B. Keller.....	422,054	Feb. 25	2366	626	50	1037
Collar for training animals.....	A. Schneider.....	441,706	Dec. 2	123	33	53	1286
Collar. Horse.....	W. A. Bennett.....	437,278	Sept. 30	3052	799	52	1987
Collar. Horse.....	W. B. Chapman.....	419,500	Jan. 14	1273	339	50	267
Collar. Horse.....	A. Charles.....	431,558	July 8	813	203	52	170
Collar. Horse.....	S. J. M. Cox.....	442,864	Dec. 16	1981	509	53	1666
Collar. Horse.....	P. Degnan and M. Meyer.....	426,366	Apr. 22	2932	772	51	598
Collar. Horse.....	W. Irvine.....	434,277	Aug. 12	1267	329	52	1013
Collar. Horse.....	A. C. Jacobs.....	440,571	Nov. 11	1485	384	53	903
Collar. Horse.....	C. A. Ludewig.....	436,875	Sept. 23	2424	632	52	1859
Collar. Horse.....	C. K. Marshall.....	428,218	May 20	1799	452	51	1182
Collar. Horse.....	A. Mendel.....	423,566	Mar. 18	1813	478	50	1496
Collar. Horse.....	D. Stone.....	421,987	Feb. 25	2267	596	50	1019
Collar. Horse.....	T. J. Thorp.....	432,001	July 8	1508	382	52	303
Collar machine. Horse.....	C. J. McNulty.....	442,992	Dec. 16	2191	564	53	1708
Collar. Metallic.....	A. Muir.....	427,887	May 13	1318	332	51	1079
Collar or cuff.....	J. W. Hyatt.....	419,258	Jan. 14	919	242	50	196
Collar or cuff.....	J. W. Hyatt.....	419,263	Jan. 14	925	244	50	197
Collar or cuff.....	J. W. Hyatt.....	422,303	Feb. 25	2758	727	50	1109

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Collar or cuff.	E. Kipper and J. G. Jarvis	425,679	Apr. 15	1907	508	51	388
Collar or cuff. Apparel.	J. W. Hyatt	419,259	Jan. 14	920	243	50	196
Collar or cuff blanks. Machine for cutting	G. E. Hills	427,572	May 13	830	206 207 208	51	985
Collar or cuff. Water-proof.	J. W. Hyatt	419,257	Jan. 14	916	242	50	196
Collar or cuff. Water-proof.	J. W. Hyatt	419,262	Jan. 14	924	243	50	197
Collar or cuff. Water-proof.	J. W. Hyatt	436,787	Sept. 23	2221	585	52	1820
Collar or cuff. Water-proof.	H. C. Milligan	421,137	Feb. 11	1061	272	50	774
Collar or cuff. Water-proof paper	J. W. Hyatt	419,261	Jan. 14	923	243	50	197
Collar-pad.	W. T. O'Brien	439,678	Nov. 4	78	21	53	623
Collar-pad fastener	R. W. Caldwell	436,695	Sept. 16	2060	540	52	1781
Collar-pad fastener. Horse.	F. R. Smith	420,892	Feb. 4	697	179	50	695
Collar-pad. Harness.	L. H. Kindy	435,229	Aug. 26	2759	729	52	1319
Collar pad. Horse.	D. D. Buckles	419,030	Jan. 7	576	145	50	122
Collar pad. Horse.	E. L. McClain	438,171	Oct. 14	768	209	53	154
Collar pad. Horse.	R. H. and J. Morrow	439,539	Oct. 28	2899	770 771	53	569
Collar pad. Horse.	F. C. White	434,647	Aug. 19	1864	489	52	1141
Collars for water-proof garments. Making	M. Rothenbücher	422,061	Feb. 25	2375	627 628	50	1039
Collar-stiffener	C. Gible	440,027	Nov. 4	607	160	53	727
Collar stiffener. Shirt.	F. C. Weir	443,023	Dec. 16	2229	575	53	1716
Collar-stuffing machine. Horse.	R. Brownson	425,063	Apr. 8	973	261	51	196
Collar-stuffing machine. Horse.	C. J. McNulty	442,993	Dec. 16	2193	564 565	53	1708
Collar sweat-pad. Horse.	J. Loos	435,702	Sept. 2	506	134	52	1473
Collar sweat-pad. Horse.	C. Mollencoff	426,674	Apr. 29	3411	895	51	700
Collars. Metal shield for horse.	W. E. Thomas	437,261	Sept. 30	3025	793	52	1981
Collars, &c. Stiffening for.	L. T. Hadley	435,929	Sept. 9	859	225	52	1547
Color. Azo	J. Walter	431,297	July 1	398	.....	52	82
Colors on cotton or other vegetable fiber. Producing azo	R. Holliday	439,953	Nov. 4	494	.....	53	704
Coloring and tinting. Composition for	F. W. Fewins	443,361	Dec. 23	3845	.....	53	1842
Coloring-matter	A. Herrmann. (Reissue)	11,077	May 20	2358	.....	51	1290
Coloring-matter	A. Herrmann. (Reissue)	11,078	May 20	2361	.....	51	1290
Colter.	A. Hirschheimer	436,478	Sept. 16	1722	454	52	1719
Colter. Plow.	J. Newmon	424,897	Apr. 1	718	192	51	139
Colter. Rolling.	A. Gale and E. Tremblay	420,051	Jan. 28	2108	557	50	447
Colters to plow-beams. Device for attaching	G. Moore	427,102	May 6	116	31, 32	51	834
Column. Building-front	F. Mesker	435,848	Sept. 2	721	194	52	1514
Column. Building-front	F. Mesker	435,849	Sept. 2	722	194	52	1514
Column. Plate-metal	F. Mesker and H. F. Edwards	437,669	Sept. 30	3651	952	52	2105
Column. Plate-metal	F. Mesker and H. F. Edwards	437,670	Sept. 30	3651	953	52	2105
Comb.							
See Curry-comb.							
Comb.	C. Felder	424,604	Apr. 1	258	68	51	52
Comb-cleaner	J. H. Loose	421,413	Feb. 18	1452	376	50	855
Comb-cleaner	E. R. Pettit	437,238	Sept. 30	2984	779	52	1973
Combining and brushing hatters' furs not on the skin.	C. E. Sackott	426,218	Apr. 22	2729	714 715	51	554
Machine for	J. Schüssler	422,638	Mar. 4	413	103	50	1215
Combining machine. Hair.	T. Kennedy	421,725	Feb. 18	1903	500	50	942
Combining machine. Wool.							
Combining-machines. Mechanism for actuating the	G. Dixon	422,125	Feb. 25	2478	654 655	50	1057
dabbing-brushes of	J. B. Mitchell	428,398	May 20	2095	526	51	1240
Combination article.	W. F. Jones	426,997	Apr. 29	3883	1014	51	791
Combination-gage	W. B. Little	424,681	Apr. 1	373	98	51	72
Combination-gage	D. R. Breed	443,218	Dec. 23	2611	672	53	1797
Combination-lock	H. Brown	441,610	Nov. 25	3202	825	53	1247
Combination-lock	J. J. Deal	425,992	Apr. 22	2397	635	51	490
Combination-lock	I. Livingston, A. Blum, A. Wollenweber, L. Westheimer, and H. Cohn.	429,691	June 10	886	215	51	1653
Combination-lock	H. W. Masters	438,353	Oct. 14	1045	284 285	53	206
Combination-lock	J. H. and H. Morris	437,658	Sept. 30	3634	949 950	52	2101
Combination-lock	A. Siekmann	427,922	May 13	1370	346	51	1088
Combination-lock	F. E. Young	420,528	Feb. 4	143	36	50	592
Combustion. Means for assuring perfect.	J. Livingstone	427,432	May 6	618	154	51	934
Communicating materials of a viscous or pasty nature.	G. W. Goetz	441,951	Dec. 2	502	134	53	1363
Process of and apparatus for							
Commode	J. A. Bell	423,588	Mar. 18	1841	485	50	1500
Commode	M. C. Scherer	426,963	Apr. 29	3827	1000	51	781
Commutator	H. H. Blades	437,844	Oct. 7	262	79	53	51
Commutator	W. F. D. Crane	424,406	Mar. 25	3106	824	50	1751
Commutator	C. A. Lieb	435,503	Sept. 2	186	52	52	1411
Commutator and making the same	C. A. Lieb	435,504	Sept. 2	188	52	52	1411
Commutator-brush	E. H. Bowen	428,038	May 13	1535	388	51	1121
Commutator-brush	P. Diehl	423,912	Mar. 25	2342	617	50	1605
Commutator-brush	J. F. McLaughlin	432,206	July 15	1845	471	52	372
Commutator brush and holder. Carbon	C. J. Van Depoele	422,265	Feb. 25	2691	710	50	1098
Commutator-brush for dynamos	L. Van Brown	428,073	May 20	1588	403	51	1141
Commutator-brush holder	J. C. Chamberlain	423,309	Mar. 11	1442	376	50	1417
Commutator. Dynamo.	J. W. Easton	435,523	Aug. 5	118	34	52	780
Commutator. Electric.	L. Gutmann	419,660	Jan. 21	1518	403	50	322
Commutator. Electric.	L. Gutmann	419,662	Jan. 21	1522	404 405	50	323
Commutator for dynamo-electric machines.	T. A. Edison	425,763	Apr. 15	2028	540	51	412
Commutator for dynamo-electric machines	T. A. Edison	438,302	Oct. 14	971	263	53	191
Commutator for dynamos	W. S. Belding	433,393	July 29	3645	941 942	52	737
Commutator for dynamos, motors, &c.	G. H. Alton and W. O. Wakefield	421,222	Feb. 11	1183	304	50	797

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Commutator for electric motors	A. A. Ingraham	427,235	May 6	327	84	51	875
Commutator for induction-generators for telegraph-lines.	W. S. Richards	430,688	June 24	2482	606	51	1978
Commutators in dynamo-machines. Machine for dressing the	G. P. Cummings	443,270	Dec. 23	2691	690	53	1811
Commutators. Machine for turning dynamo-.....	H. G. McLean	429,946	June 10	1262	{ 312 313 }	{ 51	1725
Commutators. Tool for turning dynamo-.....	A. D. Spencer	430,094	June 10	1517	377	51	1774
Commutators. Wire joint for	W. E. Harrington	441,487	Nov. 25	3017	777	53	1209
Compartment box	H. Willson	420,527	Feb. 4	143	35	50	592
Compass. Beam	F. A. Welles and T. H. Harrison	428,191	May 20	1755	444	51	1173
Compasses. Binnacle for ships'	J. E. Hand	426,804	Apr. 29	3614	943	51	739
Compasses. Draftsman's	D. S. Williams	437,411	Sept. 30	3273	854	52	2028
Composing-stick	W. B. Fish	441,475	Nov. 25	2998	772	53	1205
Composing-stick	A. M. White	418,858	Jan. 7	311	75	50	65
Composite board	W. W. Green	421,397	Feb. 18	1432	371	50	851
Composition of matter	F. N. Boxer	430,766	June 24	2616	.....	51	2005
Composition of matter	A. J. McDannell	428,219	May 20	1801	.....	51	1182
Composition of matter	C. C. Shiber	440,066	Nov. 4	662	.....	53	737
Composition of matter for use in the mechanic arts	E. Andrews	423,544	May 20	2285	.....	51	1276
Compost-distributor	J. R. McGee	421,300	Feb. 11	1286	331	50	816
Compound boiler	J. J. Hogan	425,945	Apr. 15	2308	{ 611 612 }	{ 51	464
Compound engine	F. W. Dean	433,164	July 29	3329	862	52	672
Compound engine	A. B. Drautz	422,051	Feb. 25	2359	623	50	1036
Compound engine	A. H. Eddy	426,252	Apr. 22	2774	727	51	565
Compound engine	J. H. Eickershoff	441,947	Dec. 2	494	{ 132 133 }	{ 53	1361
Compound engine	J. Riekie	422,157	Feb. 25	2521	666	50	1066
Compound engine	S. M. Vauclain	431,860	July 8	1308	327	52	264
Compound press	F. B. Deane	435,212	Aug. 26	2739	723	52	1314
Compressor	H. C. Sergeant	422,255	Feb. 25	2677	{ 706 707 }	{ 50	1095
Computing-machine	P. O'Connor and W. T. McConnell	438,820	Oct. 21	1774	475	53	351
Concentrator	G. Gates	435,562	Sept. 2	278	78	52	1429
Concentrator	E. Z. Kidd	426,821	Apr. 29	3641	{ 949 950 }	{ 51	744
Concentrator	C. E. Seymour	436,807	Sept. 23	2269	598	52	1830
Concrete body	D. J. Marston	433,014	July 29	3097	795	52	627
Concrete continuously. Mold for molding	E. L. Ransome	424,656	Apr. 1	338	88	51	66
Concrete-mixing apparatus	L. W. Hewes	420,453	Feb. 4	41	8	50	571
Concrete-mixing machine	W. S. Hotchkins	441,563	Nov. 25	3124	{ 802 803 }	{ 53	1220
Concrete pavements. Forming	E. F. Murdock	423,796	Mar. 18	2160	571	50	1561
Condenser	W. Simpkin	428,233	May 20	1828	459	51	1188
Condenser	F. M. Wheeler	426,891	Apr. 29	3737	976	51	764
Condenser and cobling apparatus. Air-.....	J. Popper	430,881	June 24	2796	685	51	2039
Condenser and water-heater. Steam	F. Rademacher	434,463	Aug. 19	1560	466	52	1079
Condenser. Automatic	L. Schutte	427,193	May 6	256	66, 67	51	862
Condenser for furnace-fumes	R. F. Nenninger	426,465	Apr. 29	3099	{ 812 813 }	{ 51	640
Condenser for steam-pumps	R. L. Frost	429,808	June 10	1056	260	51	1685
Condenser-plate. Corrugated	E. Theisen	441,781	Dec. 2	239	{ 61 62 63 }	{ 53	1310
Condenser. Steam	I. J. Hartford	442,885	Dec. 16	2028	520	53	1674
Condensing and cooling purposes. Apparatus for	E. Theisen	443,015	Dec. 16	2220	{ 571 572 }	{ 53	1714
Conductor. Underground	E. Verstraete	440,780	Nov. 18	1841	{ 473 474 }	{ 53	979
Conductors. Automatic disconnecter for overhead.	A. L. Johnston	435,098	Aug. 26	2575	680	52	1283
Conductors in conduits. Apparatus for laying	T. J. Cope	443,824	Dec. 30	3588	922	53	1993
Conductors. Machine for stripping the lead covering from	D. Thatcher	429,292	June 3	279	67	51	1524
Conductors. Safety device for overhead	R. A. Morgan, Jr.	442,816	Dec. 16	1891	487	53	1648
Conductors. Structure for supporting and insulating suspended bare	C. J. Van Depoele	435,262	Aug. 26	2813	745	52	1329
Conductors. Support and insulator for suspended	C. J. Van Depoele	437,533	Sept. 30	3463	904	52	2067
Conduit	T. Wallace	431,630	July 8	916	231	52	190
Conduit and electric conducting-rail therefor	J. H. Wehrle	437,953	Oct. 7	424	119	53	81
Conduit. Electric	W. J. Brewer	440,822	Nov. 18	1911	491	53	991
Conduit for electric wires or cables. Underground.	C. G. Gilman	424,057	Mar. 25	2560	684	50	1645
Conduit for underground wires	T. M. Morton	437,445	Sept. 30	3332	869	52	2040
Conduit. Underground	J. F. Munie	426,197	Apr. 22	2698	708	51	548
Conduit. Wire	A. J. Smith	425,913	Apr. 15	2245	595	51	452
Conduits. Constructing underground	R. D. Radcliffe	440,576	Nov. 11	1492	385	53	904
Confection-molds. Machine for making	C. B. Overbaugh	428,513	May 20	2244	{ 567 568 }	{ 51	1268
Confection-rolling machine	W. J. White	424,393	Mar. 25	3073	816	50	1745
Confectionery-machine	J. H. Smith	432,912	July 22	2911	746	52	587
Confectionery. Machine for dropping	T. Hoelderlin	443,281	Dec. 23	2706	{ 694 695 }	{ 53	1815
Confectionery. Machine for working	O. R. Chase	441,640	Dec. 2	18	6	53	1266
Connecting branch sleeve and tapping apparatus	A. P. Smith	419,974	Jan. 21	1987	{ 522 523 }	{ 50	416
Connecting-rod	R. W. Aitken	425,119	Apr. 8	1047	279	51	211
Connecting-rod	L. C. Morgan	442,293	Dec. 9	1029	272	53	1470
Connector. Flexible	J. F. Munie	426,200	Apr. 22	2704	709	51	549
Contact and switch. Overhead	R. W. Hawkesworth	419,771	Jan. 21	1670	444	50	351
Contact-box	F. A. Wessel	434,853	Aug. 19	2160	566	52	1198
Contact device. Electric	J. J. Hoppes	436,874	Sept. 23	2421	{ 631 632 }	{ 52	1858
Converter	R. F. Ludlow	423,612	Mar. 18	1877	495	50	1507
Converter	E. Wagemann	426,153	Apr. 22	2631	691	51	536

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Converters. Manufacturing basic linings for.....	E. Bertrand.....	419,404	Jan. 14	1145	.....	50	241
Convertible chair.....	N. Bartelle.....	439,857	Nov. 4	341	88	53	674
Convertible chair.....	J. W. Clift.....	439,721	Nov. 4	139	37	53	635
Convertible chair.....	E. W. Fant and W. B. Anderson.....	436,953	Sept. 23	2538	665	52	1881
Convertible chair.....	J. G. Goggins.....	434,826	Aug. 19	2127	557	52	1192
Convertible chair.....	T. W. Washburn.....	443,128	Dec. 23	2433	621	53	1761
Convertible chair, cradle, and lounge.....	F. A. Thomas.....	440,974	Nov. 18	2157	559	53	1039
Conveyer.....	H. Birkholz.....	426,488	Apr. 29	3137	824	51	647
Conveyer.....	A. B. Bonneville.....	438,054	Oct. 7	591	160	53	112
Conveyer.....	D. M. Maxon.....	422,139	Feb. 25	2492	659	50	1061
Conveyer.....	F. H. C. Mey.....	431,232	July 1	307	75, 76	52	62
Conveyer. Chain.....	F. A. Lockwood.....	420,277	Jan. 28	2481	659	50	516
Conveyer. Endless.....	J. H. Otten.....	437,506	Sept. 30	3421	895	52	2059
Conveyer for carrying crushed stone.....	F. St. Clair.....	443,488	Dec. 23	3042	782	53	1880
Conveyer. Screw.....	J. A. Gowans.....	422,766	Mar. 4	582	149	50	1248
Conveyer. Slatted-apron.....	T. S. Miller.....	423,069	Mar. 11	1078	280	50	1348
Conveyers. Bucket-attaching link for chain.....	T. Craney.....	422,735	Mar. 4	543	139	50	1239
Conveyers. Driving mechanism for endless-chain.....	C. W. Hunt.....	425,798	Apr. 15	2070	553	51	421
Conveying apparatus.....	C. W. Hunt.....	442,976	Dec. 16	2166	557	53	1703
Conveying service apparatus.....	J. C. Martin.....	431,666	July 8	996	248	52	205
Cooker and cake-former for oil-meal. Combined.....	J. H. Vaile and D. A. Tompkins.....	421,454	Feb. 18	1505	390 } 391 }	50	865
Cooker. Cupola.....	D. H. Talbot.....	437,635	Sept. 30	3602	942 } 943 }	52	2095
Cooker. Feed.....	W. S. Carpenter and A. L. Montague.....	425,300	Apr. 8	1337	357	51	268
Cooker. Oyster.....	A. J. Doty.....	434,822	Aug. 19	2121	556	52	1191
Cooker. Steam.....	T. S. Craig.....	420,335	Jan. 28	2559	679	50	531
Cooker. Steam.....	E. Elsworth and A. Faber du Faur.....	433,399	July 29	3653	943	52	738
Cooker. Steam.....	J. E. Ford.....	436,228	Sept. 9	1315	343	52	1631
Cooker. Steam.....	G. Thomason.....	439,027	Oct. 21	2088	559	53	411
Cooker. Steam.....	W. H. Woolard.....	430,980	June 24	2943	722	51	2065
Cooker. Steam food.....	O. C. Christin.....	432,863	July 22	2843	728	52	574
Cooking apparatus.....	E. Atkinson.....	424,949	Apr. 8	797	214	51	163
Cooking apparatus.....	S. Müller.....	430,394	June 17	2013	496	51	1881
Cooking apparatus. Electric.....	E. Abshagen.....	412,932	Dec. 16	2105	512	53	1690
Cooking apparatus. Portable.....	S. J. McDowell.....	428,569	May 20	2324	590	51	1283
Cooking apparatus. Steam.....	W. C. Salmon.....	429,099	May 27	3148	812	51	1462
Cooking utensil.....	R. C. Andersen.....	429,768	Nov. 4	207	54	53	649
Cooking utensil.....	H. Bodenstein.....	429,256	June 3	216	54	51	1514
Cooking utensil.....	H. Chadwick.....	426,240	Apr. 22	2758	722	51	562
Cooking utensil.....	P. Kremers.....	438,849	Oct. 21	1829	487	53	360
Cooking-utensil handle.....	L. Benvenuti.....	430,984	June 24	2947	723	51	2066
Cooking-vessel.....	J. Cochran.....	422,380	Mar. 4	29	9	50	1142
Cooking-vessel.....	E. A. Peck.....	436,903	Sept. 23	2468	643	52	1867
Cooler.....	See Beer-cooler. Water-cooler. Milk-cooler. Wine-cooler. Milk and butter cooler.						
Cooler.....	A. McDowell.....	424,125	Mar. 25	2656	707 } 708 }	50	1663
Cooler or refrigerator.....	W. C. Lancaster.....	437,697	Oct. 7	27	8, 9	53	8
Cooling and freezing.....	H. Von Bayer.....	431,244	July 1	322	79	52	65
Cooling and refrigerating apparatus.....	H. J. W. S. Cooke.....	423,133	Mar. 11	1178	307 } 308 }	50	1367
Cooling-board.....	W. A. Griffith.....	434,443	Aug. 19	1531	399	52	1074
Cooling device.....	F. Fayod and H. Mestern.....	434,633	Aug. 19	1835	480	52	1135
Coop. Chicken.....	J. A. Barkeley.....	441,120	Nov. 25	2407	623	53	1097
Coop. Folding.....	A. Evans.....	419,511	Jan. 14	1288	344	50	270
Coop. Folding.....	R. F. Vaughn.....	435,596	Sept. 2	331	92	52	1439
Coop. Portable folding poultry.....	R. Yeakum.....	420,260	Jan. 28	2454	652	50	511
Copial. Manufacture of artificial.....	E. Schaal. (Reissue).....	11,069	Apr. 1	786	209	51	153
Copied letters. Producing imitation press.....	S. Hall.....	423,558	Mar. 18	1803	475	50	1494
Copies of written or printed matter. Machine for taking.....	W. Bland.....	425,651	Apr. 15	1861	497	51	379
Copies. Re-enforcing press.....	C. E. Jewell.....	429,855	June 10	1128	279	51	1699
Coping-stone.....	J. Schwartz.....	433,219	July 29	3409	880	52	688
Copper. Deoxidizing.....	W. W. Keys.....	433,086	July 29	3212	826	52	649
Copper. Manufacturing.....	H. H. Vivian.....	437,265	Sept. 30	3028	.....	52	1981
Copper matte. Reducing.....	J. E. Gaylord.....	443,757	Dec. 30	3475	.....	53	1972
Copper matte to copper. Converting.....	J. E. Gaylord.....	443,758	Dec. 30	3477	892	53	1972
Copper. Refining.....	J. Garnier.....	421,046	Feb. 11	934	.....	50	750
Copper when heated. Preventing the oxidation and deoxidation of.....	G. W. Cummins.....	429,892	June 10	1192	296	51	1711
Cops, &c. Apparatus for treating.....	C. Weber.....	436,070	Sept. 9	1072	278	52	1587
Copy-holder.....	O. C. Blackmer.....	424,086	Mar. 25	2602	693	50	1653
Copy-holder.....	C. E. Brunthaver.....	431,934	July 8	1405	357	52	283
Copy-holder.....	L. Dawson.....	432,985	July 29	3052	784	52	618
Copy-holder.....	J. F. Frankey.....	421,260	Feb. 11	1231	318	50	807
Copy-holder.....	W. A. Morton.....	420,913	Feb. 4	730	188	50	702
Copy-holder.....	C. H. Platt.....	422,538	Mar. 4	250	64	50	1183
Copy-holder.....	G. H. Seymour.....	440,967	Nov. 18	2146	556	53	1036
Copy-holder.....	J. W. Snyder and G. H. Grabe.....	428,700	May 27	2548	646	51	1344
Copy-holder.....	J. T. Solomon.....	430,894	June 24	2817	691	51	2043
Copy-holder.....	F. L. Twiss.....	442,927	Dec. 16	2098	540 } 541 }	53	1688
Copy-holder.....	W. C. Williams and A. W. Thom- son.....	419,026	Jan. 7	572	144	50	121
Copy-press.....	R. A. Brown.....	440,823	Nov. 18	1913	491	53	992
Copy-press.....	E. A. Lingner.....	430,781	June 24	2640	647	51	2010
Copying-hooks. Press-plate for.....	H. M. Underwood.....	441,261	Nov. 25	2659	691	53	1142
Copying-cloths. Moist-pan for.....	H. G. Razall.....	439,896	Nov. 4	407	106	53	687
Copying. Device for manifold.....	L. H. Clark.....	429,336	June 3	358	85	51	1539
Copying drawings. Instrument for.....	R. W. Whitney.....	420,484	Feb. 4	86	20	50	580
Copying-pad.....	P. E. Loree.....	424,930	Apr. 1	766	204	51	149

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Copying pads moist. Receptacle for keeping press-	C. L. Wise	429,163	June 3	89	21	51	1489
Copying-press	J. W. Jones	435,309	Aug. 26	2896	767	52	1343
Copying-press	S. T. Lockwood	438,850	Oct. 21	1829	487	53	360
Copying-press	W. B. Sargent	419,286	Jan. 14	958	253	50	203
Copying-press pad	A. Schorno	427,802	May 13	1183	297	51	1053
Copying-press. Portable	F. O. Climer	420,037	Jan. 28	2091	552	50	443
Copying purposes. Device for holding carbon-paper for	W. H. Pardee	428,856	May 27	2778	706	51	1389
Copying-sheet	H. W. Brown. (Reissue)	11,113	Sept. 30	3657		52	2106
Copying table or device. Autograph-manuscript	A. Grethen	421,926	Feb. 25	2194	575	50	1005
Cord-fastener case and label-holder. Combined	A. L. Pitney	421,032	Feb. 11	910	235	50	745
Cord, twine, &c. Ball of	A. C. Miller	425,381	Apr. 8	1448	388	51	290
Cordage. Machine for making	W. H. Avis	441,734	Dec. 2	163	43	53	1293
Core-box	J. T. Hill and J. P. McGuire	439,659	Nov. 4	51	14	53	616
Core-making machine. Sand-	D. Carlin	432,790	July 22	2744	702	52	553
Core. Mold-	R. J. Gatling	423,045	Mar. 11	1044	271 272	50	1342
Core or mandrel. Expanding	T. J. Leahy	435,756	Sept. 2	580	154 155	52	1486
Core-support	E. A. Sumner	437,732	Oct. 7	85	28	53	19
Corer and slicer. Apple	M. Siersdorfer	419,722	Jan. 21	1599	427	50	338
Cores. Making	R. Preston	435,858	Sept. 2	736	197	52	1517
Cores. Mold for forming	W. N. Reddout	436,998	Sept. 23	2596	679	52	1892
Cork-extractor	J. F. Duffy	438,410	Oct. 14	1133	305	53	222
Cork-extractor	J. Kline	441,422	Nov. 25	2909	750	53	1190
Cork-extractor	I. N. Mills	434,192	Aug. 12	1126	293	52	987
Cork-extractor	B. Tormey	441,604	Nov. 25	3194	822	53	1244
Cork-feeding machine	N. Laroe	423,610	Mar. 18	1873	494	50	1506
Cork-feeding machine	S. Wile and H. La Casse	443,062	Dec. 16	2292	587	53	1728
Cork-holder	H. Baldwin	421,226	Feb. 11	1187	305	50	798
Cork-machine	C. Nelson	432,212	July 15	1844	473	52	373
Cork-puller	S. T. Jull	422,348	Feb. 25	2832	746	50	1123
Cork-puller	S. T. Jull	428,000	May 13	1479	375	51	1110
Cork-puller. Automatic	E. D. Middlekauff	427,099	May 6	113	31	51	834
Cork-pulling appliance	A. J. Parker	441,804	Dec. 2	274	74	53	1318
Corking bottles and wiring the corks therein. Machine for	S. Wile and H. La Casse	443,185	Dec. 23	2540	650	53	1782
					651		
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Corkscrew	A. Edie	420,572	Feb. 4	203	52	50	604
Corkscrew	H. J. Ennis	442,691	Dec. 16	1658	426	53	1604
Corkscrew. Safety-alarm	C. J. Bailey	427,656	May 13	943	237	51	1007
Corkscrews. Machine for making	W. R. Clough	441,137	Nov. 25	2426	629 630	53	1101
Corn and cane cutter and buncher	B. G. Severance	419,719	Jan. 21	1596	426	50	337
Corn-crib. Portable	C. I. Cook and H. M. Britton	426,714	Apr. 29	3486	912	51	713
Corn-cutter	J. H. and C. Burkholder	441,744	Dec. 2	178	47	53	1297
Corn-cutter	W. Carr and J. T. Mallahan	432,508	July 22	2283	591	52	465
Corn-cutter	C. G. and S. P. Deming	430,004	June 10	1361	336 337	51	1745
Corn-cutter	W. S. Morden and R. Hoffman	439,969	Nov. 4	522	138	53	709
Corn-cutter	J. Weber	426,344	Apr. 22	2896	762	51	592
Corn cutting and shocking machine	F. C. O'Harra	431,615	July 8	893	223	52	186
Corn-cutting device	C. B. Darley	422,384	Mar. 4	33	10	50	1143
Corn-cutting implement	J. E. Peterson	443,055	Dec. 16	2284	586	53	1726
Corn-cutting machine	W. S. Morden	440,049	Nov. 4	642	171	53	734
Corn. Device for preparing green	L. M. Thompson	439,582	Oct. 28	2962	786	53	582
Corn-drill	D. Bennett and M. Farlander	422,368	Mar. 4	10	4	50	1138
Corn-hook	L. H. Sholder	431,822	July 8	1248	312	52	253
Corn-husker	H. G. Baker	426,901	Apr. 29	3748	978	51	766
Corn-husker	J. S. Cuttall	436,776	Sept. 23	2201	580	52	1816
Corn-husker	J. E. Miller	421,083	Feb. 11	983	252	50	759
Corn-husker	A. Steiner	436,386	Sept. 16	1573	413 414	52	1691
Corn-husker and fodder-cutter. Combined	T. A. Galt and G. S. Tracy	422,932	Mar. 11	867	226 227	50	1309
Corn-husking and fodder-preparing machine	J. F. Hurd	436,136	Sept. 9	1177	308	52	1605
Corn-husking machine	N. Brennan	434,654	Aug. 19	1877	491	52	1143
Corn-husking machine	I. F. Gilmore and G. W. Padget	419,250	Jan. 14	907	239 240	50	194
Corn. Machine for breaking shelled	A. Ball	442,066	Dec. 2	718	193	53	1403
Corn. Machine for cutting and carrying	P. F. Fleming	433,121	July 29	3268	841	52	660
Corn. Machine for cutting and shocking	H. Lomax and W. Hasard	422,427	Mar. 4	94	26	50	1155
Corn. Machine for separating silks, &c., from green	G. L. Merrell	419,696	Jan. 21	1566	419 420	50	331
Corn off the cob. Machine for cutting green	W. Sprague	422,650	Mar. 4	430	107 108	50	1218
Corn or cane cutter or harvester	T. J. Brockway and C. Taylor	425,402	Apr. 15	1480	397	51	305
Corn or cotton thinner	G. L. Webb	429,328	June 3	345	82	51	1537
Corn-popper	A. B. Olson	428,626	May 27	2420	615	51	1321
Corn-popper	O. Watson	431,200	July 1	250	63	52	52
Corn product	B. G. Hudnut	430,289	June 17	1854	455	51	1849
Corn product. Flaked	B. G. Hudnut	430,290	June 17	1855	455	51	1849
Corn-sheller	H. A. Adams	426,748	Apr. 29	3532	922	51	723
Corn-sheller	C. Oath, Jr.	422,035	Feb. 25	2331	616	50	1031
Corn-sheller	T. H. Tabor	419,570	Jan. 14	1366	366	50	257
Corn sheller and cutter. Combined	S. Loree	443,143	Dec. 23	2466	631	53	1766
Corn sheller and husker. Combined	F. A. Depp	437,180	Sept. 30	2903	756	52	1957
Corn-shocker	J. Armstrong	425,969	Apr. 22	2360	625	51	483
Corn-shocker	J. Armstrong	430,609	June 24	2344	573 574	51	1952

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Corn-shocker.....	H. Levern.....	427,094	May 6	106	29	51	833
Corn-splitting machine.....	R. E. Poindexter.....	429,794	June 10	1034	254	51	1681
Corn-thinner.....	J. S. Lewis.....	426,028	Apr. 22	2447	646	51	499
Cornstalk-cutter.....	A. H. Mahaffie and P. Kesling.....	430,664	June 24	2445	596	51	1971
Cornstalk-cutting machine.....	H. D. Hammersley.....	438,775	Oct. 21	1694	455	53	335
Coronet.....	C. G. Conn and W. F. Seidel.....	442,955	Dec. 16	2134	549	53	1696
Coronet.....	J. F. Stratton.....	426,398	Apr. 22	2991	783	51	610
Cornice-machine brake.....	J. White.....	427,025	Apr. 29	3924	1023	51	800
Cornice, Metal.....	W. R. Kinnear.....	443,322	Dec. 23	2785	715	53	1830
Cornice, Making.....	W. R. Kinnear.....	443,453	Dec. 23	2983	767	53	1869
Corpses, Method of treating.....	J. H. Chambers.....	431,687	July 8	1040	260	52	212
Corrugated structure.....	J. Mitchell.....	429,937	June 10	1252	310	51	1723
Corrugating-machine.....	E. Gothberg.....	434,504	Aug. 19	1762	461	52	1121
Corset.....	B. Bass.....	425,561	Apr. 15	1715	459	51	351
Corset.....	J. J. Boylan.....	427,828	May 13	1215	306	51	1059
Corset.....	G. H. Colley.....	419,641	Jan. 21	1478	396	50	316
Corset.....	G. H. Colley.....	423,595	Mar. 18	1850	488	50	1502
Corset.....	S. B. Ferris.....	442,968	Dec. 16	2150	554	53	1699
Corset.....	G. D. Nichols.....	429,542	June 3	668	163	51	1600
Corset.....	J. H. Odenbrett.....	436,431	Sept. 16	1644	432	52	1703
Corset.....	C. L. Olmstead.....	430,876	June 24	2790	684	51	2037
Corset.....	C. L. Olmstead.....	438,858	Oct. 21	1843	490	53	362
Corset.....	R. W. Parramore.....	425,520	Apr. 15	1662	443	51	341
Corset.....	H. Philip.....	432,895	July 22	2888	{ 739 740 }	52	582
Corset.....	J. K. Ross.....	439,690	Nov. 4	96	25	53	627
Corset.....	E. L. Smith.....	418,989	Jan. 7	520	{ 129 130 }	50	109
Corset.....	E. L. Smith.....	422,985	Mar. 11	956	251	50	1325
Corset.....	J. Stone.....	442,552	Dec. 9	1446	370	53	1552
Corset.....	E. Thompson.....	441,077	Nov. 18	2324	602	53	1072
Corset.....	C. A. Tierney.....	427,934	May 13	1385	350	51	1090
Corset.....	B. Viau.....	432,171	July 15	1783	458	52	362
Corset and making the same.....	M. J. Roberts.....	423,490	Mar. 18	1703	449	50	1477
Corset-clasp.....	C. F. Allou and J. E. Doolittle.....	439,331	Oct. 28	2422	650	53	479
Corset-clasp.....	D. C. Cole.....	439,385	Oct. 28	2678	713	53	527
Corset-clasp.....	F. B. Converse.....	418,688	Jan. 7	29	8	50	8
Corset-clasp.....	F. B. Converse.....	436,473	Sept. 16	1715	453	52	1717
Corset-clasp.....	J. A. Levison.....	438,009	Oct. 7	516	144	53	98
Corset-clasp.....	W. F. McGee.....	438,172	Oct. 14	770	210	53	154
Corset-clasp.....	G. D. Nichols.....	430,874	June 24	2787	683	51	2037
Corset-clasp.....	F. B. Spooner.....	421,445	Feb. 18	1492	387	50	863
Corset-clasp.....	C. M. Thomas.....	425,012	Apr. 8	900	238	51	182
Corset-clasp and brace.....	R. W. Parramore.....	439,891	Nov. 4	398	103	53	684
Corset-fastening.....	F. Beauchamp.....	432,687	July 22	2576	660	52	521
Corset-fastening.....	T. J. Brough.....	427,295	May 6	412	107	51	892
Corset-fastening.....	J. R. Haight.....	420,409	Jan. 28	2662	706	50	550
Corset-fastening.....	J. R. Haight.....	420,410	Jan. 28	2663	706	50	551
Corset or analogous fastening.....	T. C. Stodd.....	432,844	July 22	2814	720	52	568
Corset-protector.....	A. Leatham.....	434,638	Aug. 19	1842	481	52	1136
Corset. Shoulder-brace.....	A. J. Bobbs.....	432,363	July 15	2060	530	52	413
Corset. Shoulder-brace.....	F. Reast.....	433,095	July 29	3229	831	52	652
Corset-stay.....	F. D. F. Müller.....	442,530	Dec. 9	1407	360	53	1544
Corset-steel clasp.....	M. W. Henius.....	419,439	Jan. 14	1192	316	50	251
Corset-waist.....	A. Benjamin.....	435,725	Sept. 2	536	142	52	1478
Corset. Waist.....	M. P. Bray.....	432,787	July 22	2738	701	52	552
Corsets. Securing button-strips to.....	H. W. Lyon.....	434,547	Aug. 19	1690	442	52	1106
Corsets. Skirt-supporter for.....	W. Smith.....	420,471	Feb. 4	73	17	50	578
Cosmetic.....	A. Bosse.....	439,101	Oct. 28	2208	.....	53	441
Cosmetic.....	J. B. Strong.....	427,202	May 6	271	.....	51	865
Cosmetic. Remedial.....	C. J. Wilkins.....	431,157	July 1	184	.....	52	38
Cot.....	J. R. Lariew.....	443,712	Dec. 30	3402	873	53	1956
Cot.....	J. P. Luther.....	420,813	Feb. 4	560	143	50	671
Cot. Folding.....	C. M. Wagner.....	440,730	Nov. 18	1748	448	53	963
Cot. Folding.....	C. M. Wagner.....	440,732	Nov. 18	1750	{ 449 450 }	53	964
Cot. Folding.....	C. M. Wagner.....	440,733	Nov. 18	1752	{ 450 451 }	53	964
Cot or lounge.....	J. A. Bishop.....	441,922	Dec. 2	450	120	53	1353
Cotter-key. Spring.....	F. S. McWhorter.....	433,804	Aug. 5	549	142	52	864
Cotton-box. Revolving.....	C. C. Connell and J. B. Johnson.....	421,554	Feb. 18	1664	431	50	895
Cotton-chopper.....	J. Casey and S. A. Morgan.....	434,764	Aug. 19	2042	534	52	1175
Cotton-chopper.....	J. M. Crews.....	433,520	Aug. 5	113	33	52	779
Cotton-chopper.....	F. Green.....	427,566	May 13	818	204	51	983
Cotton-chopper.....	E. Jackson.....	443,049	Dec. 16	2275	584	53	1725
Cotton-chopper.....	{ W. J. Leaird, W. W. Meggs, G. F. Pond, and W. D. Separk. }	423,331	Mar. 11	1475	{ 386 387 }	50	1424
Cotton-chopper.....	W. E. Lindsay.....	432,057	July 15	1604	{ 410 411 }	52	328
Cotton-chopper.....	T. H. Smith.....	435,462	Sept. 2	119	34	52	1398
Cotton-chopper.....	J. H. Stanford.....	424,906	Apr. 1	730	195	51	141
Cotton-chopper and cultivator.....	A. S. Harrell.....	435,153	Oct. 14	742	203	53	149
Cotton-chopper and cultivator.....	W. D. Porter.....	433,179	Mar. 11	1248	325	50	1381
Cotton-chopper and cultivator. Combined.....	T. E. Anderson.....	438,375	Oct. 21	2015	538	53	396
Cotton-chopper and cultivator. Combined.....	P. L. Jordan.....	420,335	Jan. 28	2411	642	50	504
Cotton-chopper and scraper. Combined.....	J. H. Williams.....	436,201	Sept. 9	1251	334	52	1624
Cotton-chopper, scraper, and cultivator.....	D. D. Ellis.....	427,061	May 6	45	13	51	819
Cotton-cleaning machine.....	G. Josephy.....	437,303	Sept. 30	3087	{ 808 809 }	52	1992
Cotton-cleaning mechanism.....	P. Carroll.....	421,242	Feb. 11	1209	{ 312 313 }	50	802
Cotton conveying and cleaning apparatus.....	W. E. Elam.....	423,040	Mar. 11	1039	270	50	1341
Cotton-cupper.....	R. R. Pace.....	439,176	Oct. 28	2332	623	53	461
Cotton-delivering machine.....	J. B. Allin.....	429,493	June 3	599	147	51	1586

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Cotton fabric. Napped	F. Ott	435,445	Sept. 2	100	28	52	1394
Cotton-fiber dust and preparing the same	J. R. France	420,447	Feb. 4	31	6	50	570
Cotton-gin	G. F. Brott	434,859	Aug. 19	2167	568 569	52	1199
Cotton-gin	J. S. Edgcomb	429,119	June 3	22	5	51	1476
Cotton-gin	C. Gilbert	419,514	Jan. 14	1292	345	50	271
Cotton-gin attachment	G. F. Brott	434,759	Aug. 19	2033	531	52	1172
Cotton-gin feeder	J. W. Wofford	421,037	Feb. 11	918	237	50	747
Cotton-gin rib	C. G. Washburn	441,344	Nov. 25	2787	720	53	1165
Cotton-gin roller	F. H. Chase	435,885	Sept. 2	788	209	52	1527
Cotton-gin. Roller	F. H. Chase	418,908	Jan. 7	405	99	50	84
Cotton-gin. Roller	F. H. Chase	435,886	Sept. 2	789	210	52	1527
Cotton-gin. Roller	F. H. Chase	437,172	Sept. 23	2884	751	52	1947
Cotton-gins. Belt-tightener for	W. S. Reeder	437,241	Sept. 30	2986	780 781	52	1974
Cotton huller and cleaner	C. Young	432,921	July 22	2922	749 750	52	589
Cotton-mills. Picker-house for	S. N. Bourne	433,642	Aug. 5	297	78	52	814
Cotton, &c. Opener and picker for	G. Homrocks	441,760	Dec. 2	210	55	53	1304
Cotton-openers. Dust-trunk for	H. C. Perham	427,008	Apr. 29	3896	1017	51	793
Cotton-openers, &c. Evening mechanism for	A. Falls	436,577	Sept. 16	1878	493 494	52	1746
Cotton-openers. Evening mechanism for	J. C. Potter	420,735	Feb. 4	427	113	50	648
Cotton or hay presses. Tramping attachment for	W. W. Adams	421,644	Feb. 18	1796	469	50	921
Cotton or other fibrous materials. Apparatus for compressing	A. L. Blackman	439,985	June 24	2948	724	51	2066
Cotton-picker	C. R. Stephenson	428,867	May 27	2792	709 710	51	1392
Cotton-picker	J. W. Thorn	442,405	Dec. 9	1210	312 313	53	1504
Cotton-picker. Tricycle	J. W. Wallis	422,671	Mar. 4	460	117	50	1224
Cotton-picking device	G. N. Todd	423,536	Mar. 18	1775	466	50	1489
Cotton-picking device	G. N. Todd	423,537	Mar. 18	1777	466	50	1489
Cotton-press	G. W. Glisson, Jr.	419,433	Jan. 14	1183	314	50	249
Cotton-press	J. W. Gregory	438,762	Oct. 21	1676	450	53	332
Cotton-press	C. C. Ingram and W. S. Kellogg	435,119	Aug. 26	2607	690	52	1289
Cotton-press	F. L. White	426,892	Apr. 29	3738	976	51	764
Cotton-press	F. L. White	439,617	Oct. 28	3037	803	53	597
Cotton-press	T. E. Wolfe	425,481	Apr. 15	1603	428	51	329
Cotton-scraper	J. M. Crews	424,962	Apr. 8	819	219	51	167
Cotton, &c. Traverse-bar-actuating mechanism in machines for preparing and spinning	G. Paley	419,872	Jan. 21	1845	484 485	50	386
Cotton-waste picker	W. H. Goldsmith	419,434	Jan. 14	1184	315	50	249
Couch or lounge	O. Alexander	429,750	June 10	973	238 239	51	1670
Counter	W. D. Sutton	419,295	Jan. 14	973	258	50	206
Counter-balance for chutes	D. T. Denton	425,994	Apr. 22	2399	635	51	490
Counterbalanced forged wheel	S. M. Vauclain	420,842	Feb. 4	607	156	50	678
Counter. Coin and check	F. J. Hoyt	420,271	Jan. 28	2472	656	50	515
Counter-guard	G. C. Peck	437,130	Sept. 23	2797	729	52	1932
Counter. Mechanical	F. Sweet	430,708	June 24	2517	616 617	51	1985
Counter-seat	H. Hill	435,307	Aug. 26	2895	767	52	1342
Counting apparatus	H. M. Aldrich	430,910	June 24	2839	697	51	2047
Counting device	R. Huudhausen	423,690	Mar. 18	2014	531	50	1534
Counting device. Euvelope and card	R. W. Pittman	424,127	Mar. 25	2660	708 709	50	1664
Counting machine or register	S. T. Bacon	419,100	Jan. 7	674	177	50	142
Counting-register	M. H. Coffin	423,374	Mar. 11	1531	402	50	1435
Counting-register	K. H. Schaper	423,880	Mar. 18	2285	603	50	1586
Coupler	A. Sweetland	423,093	Mar. 11	1114	291	50	1354
Coupling:							
See Air-brake coupling.	Pitman-coupling.						
Bell-cord coupling.	Pole-coupling.						
Belt-coupling.	Railway-brake-pipe coupling.						
Car-coupling.							
Car and air brake coupling.	Rod-coupling.						
Clutch-coupling.	Rope-coupling.						
Drill-tube coupling.	Shaft-coupling.						
Electric-motor coupling.	Shaft and wheel coupling.						
Electric-wire coupling.	Stove-pipe coupling.						
Flexible coupling.	Strap-coupling.						
Hoop-coupling.	Thill-coupling.						
Hose-coupling.	Trolley-wire coupling.						
Hose or pipe coupling.	Tag-coupling.						
Joint coupling.	Union-coupling.						
Latch-coupling.	Vehicle-coupling.						
Pipe-coupling.	Water-closet coupling.						
	Whiffletree-coupling.						
	Wire-coupling.						
	Yoke-coupling.						
Coupling	J. M. Gilmour	425,171	Apr. 8	1148	303	51	232
Coupling	J. S. Hunter	442,809	Dec. 16	1883	485	53	1647
Coupling device. Magnetic	T. M. Foote	433,400	July 29	3654	944	52	739
Coupling for shafts or like purposes	J. O. Ellinger	428,808	May 27	2702	685	51	1373
Coupling-joint	W. Amos	420,220	Jan. 28	2390	636	50	500
Coupling-links. Die for	M. Kennedy	428,279	May 20	1898	478 479	51	1201
Coupon-cutter	G. D. Phippen and J. H. Browne	423,950	Mar. 25	2403	638	50	1615
Cover-fastener	C. Markworth	442,233	Dec. 9	945	249 250	53	1455
Cover-holder	E. W. Stone	434,844	Aug. 19	2151	563	52	1196
Cow-tail holder	G. W. and A. J. Doore	429,849	June 10	1122	277	51	1698

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Cow-tail holder	F. B. Hibbard	423,999	Mar. 25	2476	658	50	1629
Cow-tail holder	S. J. Morgan	424,016	Mar. 25	2507	667	50	1635
Crab and fish trap	R. M. Franklin	424,548	Apr. 1	176	49	51	37
Cracker and cake machines. Stripping device for	J. H. Mitchell	441,890	Dec. 2	404	106	53	1341
Cracker facing and stacking machine	G. Smith and E. S. Bright	420,743	Feb. 4	436	116	50	650
Cracker-machine	J. Parr	431,149	July 1	170	43, 44	52	36
Cracker-machine cutter	J. W. Ruger	422,039	Feb. 25	2338	618	50	1032
Cracker-stacking machine	G. Smith and E. S. Bright	424,435	Mar. 25	3151	836	50	1761
Cradle	G. S. Brewer	430,616	June 24	2355	576	51	1951
Cranberry-picker	D. Lambert	433,177	July 29	3351	866	52	677
Cranberry-picker	D. Lambert	433,178	July 29	3352	867	52	677
Cranberry-picker	D. Lambert	433,179	July 29	3354	867	52	677
Crane	H. Aiken	439,264	Oct. 28	2476	664, 665	53	489
Crane	S. Forter	427,260	May 6	363	94, 95	51	882
Crane	S. Forter and J. Kennedy	442,877	Dec. 16	1998	512, 513	53	1670
Crane and weighing apparatus. Combined	J. A. Potter	432,072	July 15	1625	416	52	332
Crane. Electric	A. J. Shaw	430,487	June 17	2141	526, 527	51	1905
Crane. Hydraulic	I. W. Frank	428,749	May 27	2620	664	51	1357
Crane. Hydraulic	J. Hemphill and J. Fawell	435,179	Aug. 26	2692	710, 711	52	1305
Crane. Hydraulic traveling	J. Graham, Jr., and E. Graves	422,399	Mar. 4	50	14, 15	50	1147
Crane mechanism. Traveling	L. R. Lemoine	431,000	June 24	2970	729, 730	51	2072
Crane. Swinging	H. A. Hughes	431,116	July 1	125	32	52	27
Crane. Traveling	C. Davy	439,483	Oct. 28	2818	750, 751	53	553
Crane. Traveling	J. Murray	441,686	Dec. 2	83	22, 23	53	1278
Crane. Traveling	W. Wood	433,156	July 29	3320	858	52	671
Crane. Traveling	W. Wood	433,157	July 29	3321	858, 559	52	671
Crane. Traveling	W. Wood	433,158	July 29	3323	859	52	671
Crane. Traveling	W. Wood	435,164	Aug. 26	2671	706	52	1302
Crank. Adjustable	S. N. Pond	421,969	Feb. 25	2245	590	50	1015
Crank-connection	J. E. T. Bartlett	428,297	May 20	1933	486	51	1207
Crank-connection	D. A. Cameron	443,267	Dec. 23	2687	689	53	1811
Crank-fastening	R. B. Hain	420,010	Jan. 21	2046	539	50	426
Crank-movement	H. C. Groves	440,561	Nov. 11	1467	379	53	899
Crank-pin. Adjustable	J. Mills	421,297	Feb. 11	1282	331	50	816
Crank-pins. Device for testing	A. McDuff and J. Mrazek	437,225	Sept. 30	2963	775	52	1969
Crank-pins. Tool for turning	C. A. Jefferis	438,731	Oct. 21	1626	436	53	322
Crank-wheel	B. Carnan	443,931	Dec. 30	3733	954	53	2021
Crate	D. J. Bard	420,855	Feb. 4	627	161, 162	50	682
Crate	J. W. Brook	424,172	Mar. 25	2720	725	50	1676
Crate	C. Campbell and J. Cox	428,331	May 20	1985	409	51	1218
Crate	G. T. Hall	428,840	May 27	2753	700	51	1385
Crate	W. Hall	432,405	July 15	2123	545	52	425
Crate	F. W. Kendall	422,600	Mar. 4	633	162	50	1259
Crate	F. A. Rappleye	425,253	Apr. 8	1259	336	51	255
Crate	J. L. Ritter	433,369	July 29	3615	933	52	730
Crate	D. A. Ross	426,558	Apr. 29	3692	963	51	754
Crate	J. C. Seaggins	432,907	July 22	2904	745	52	585
Crate	F. E. Spencer	428,152	May 20	1704	432	51	1163
Crate	F. B. Sites	428,642	May 27	2440	621	51	1324
Crate	C. P. Ward	437,538	Sept. 30	3473	906	52	2069
Crate	W. Wheat	421,534	Feb. 18	1633	421	50	889
Crate. Butter	W. H. Ferguson	423,144	Mar. 11	1197	313	50	1371
Crate. Folding	W. S. Killingsworth	420,908	Feb. 4	723	186	50	700
Crate. Folding poultry	H. B. Cornish and S. M. Higgason	434,321	Aug. 12	1328	346	52	1026
Crate. Fruit	G. Blair	421,655	Feb. 18	1810	474	50	924
Crate-head	R. J. Patterson	441,326	Nov. 25	2761	714	53	1161
Crate-head frame	R. J. Patterson	430,879	June 24	2794	684	51	2038
Crate. Knockdown	J. J. Herbert	442,225	Dec. 9	935	247	53	1453
Crate. Knockdown	J. D. Scovel	431,287	July 1	385	96, 97	52	78
Crate. Poultry	J. Cain and G. W. Mann	431,032	July 1	7	2	52	4
Crayon	A. Hart	418,947	Jan. 7	466	10	50	98
Crayons, carpenters' chalk, &c. Machine for manufacturing	J. S. Cowdery	437,752	Oct. 7	117	35, 36	53	26
Crayons, &c. Holder for	G. Sandell	432,570	July 22	2379	613	52	484
Crayons. Machine for the manufacture of	J. S. Cowdery	437,751	Oct. 7	114	35	53	25
Cream of tartar. Obtaining	A. Martignier	439,805	Nov. 4	260	53	53	659
Cream-separator. Centrifugal	C. A. and O. W. Hult	426,275	Apr. 22	2803	736, 737	51	572
Creamer. Cabinet	N. G. Williams	435,005	Aug. 26	2439	645	52	1257
Creamer. Centrifugal	F. Hart	436,418	Sept. 16	1624	428	52	1699
Creaming-can	R. D. Parks	424,996	Apr. 8	875	231	51	178
Creaming-can	C. W. Wentworth and S. M. Manchester	422,476	Mar. 4	167	47	50	1168
Credit-slip tablet	E. Seyfarth	439,434	Oct. 28	2752	733	53	541
Creel for warping-machines	F. A. Whitmore	428,261	May 20	1874	470	51	1196
Cremator. Domestic	A. Manser	435,184	Aug. 26	2702	714	52	1307
Crib	L. A. Mackenzie	430,294	June 17	1859	456, 457	51	1850
Crib. Folding	C. M. Wagner	440,731	Nov. 18	1749	448, 449	53	963
Cribbing-iron for horses	B. L. E. Gowan	420,054	Jan. 28	2111	557	50	447
Crimping-machine	C. J. Colling	441,399	Nov. 25	2774	712	53	1182
Crimping-machine	J. G. Hodgson	436,784	Sept. 23	2215	583	52	1819
Crocheting-machine	J. M. Merrow	441,315	Nov. 25	2747	710	53	1157
Crocheting or overseaming machine	J. M. Merrow	428,508	May 20	2236	566	51	1266

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Croquet-wicket. Adjustable	F. K. Ward	438,392	Oct. 14	1099	299	53	216
Cross-head	F. Robb	442,137	Dec. 9	804	217	53	1427
Cross-head jack	S. A. Teal	435,194	Aug. 26	2716	717	52	1310
Cross-over block	F. Bathurst	440,753	Nov. 18	1789	462	53	970
Crossing and switch	N. O. Goldsmith	431,514	July 1	740	{ 184 185 }	52	148
Crow-bar	H. Bowman	424,757	Apr. 1	500	135	51	97
Crown-anchor	R. F. Ludwig	421,947	Feb. 25	2219	582	50	1010
Croze. Adjustable	W. Kampfe and J. Nagengast	438,480	Oct. 14	1224	332	53	241
Crozing and chamfering machine	W. P. Walter	437,467	Sept. 30	3363	880	52	2047
Crucible-furnace	J. B. Alzugaray	428,441	May 20	2150	540	51	1250
Cruets or other vessels. Cap for	S. B. Simon	423,639	Mar. 18	1932	508	50	1519
Crupper-former	S. H. Randall	440,722	Nov. 18	1736	445	53	960
Crupper-stuffing machine	B. A. Schuler	428,419	May 20	2122	533	51	1245
Crusher:							
See Ore-crusher.	Stone-crusher.						
Crushing and grinding mill	S. Benson	443,929	Dec. 30	3729	{ 953 954 }	53	2021
Crushing and grinding mill	T. C. Cadwgan	421,481	Feb. 18	1546	400	50	873
Crushing and pulverizing machine.	W. H. Howland	434,786	Aug. 19	2070	541	52	1180
Crushing-fork	F. Christenson	440,861	Nov. 18	1974	508	53	1003
Crushing-mill	C. B. Bingham	430,602	June 17	2318	{ 569 570 }	51	1938
Crushing-mill	F. A. Huntington	419,256	Jan. 14	915	242	50	196
Crushing-mill	F. A. Huntington	427,690	May 13	1001	252	51	1018
Crushing-mill. Roller	M. G. Mosher	429,146	June 3	59	15, 16	51	1483
Crushing-roll	H. C. Behr	442,006	Dec. 2	590	160	53	1378
Crushing-rolls	D. Brennan, Jr.	442,761	Dec. 16	1806	468	53	1631
Crushing-rolls	C. G. Buchanan	420,571	Feb. 4	202	52	50	604
Crushing-rolls	J. M. Caso	419,498	Jan. 14	1271	339	50	267
Crutch	J. Dobney	428,467	May 20	2185	550	51	1256
Crutch	G. W. Doe	437,024	Sept. 23	2637	688	52	1901
Crystallized lead plates. Producing	C. Payen	440,269	Nov. 11	984	251	53	811
Crystallized metal plate. Porous	C. Payen	440,271	Nov. 11	989	253	53	812
Crystallized metal plates. Making porous	C. Payen	440,272	Nov. 11	992	{ 252 253 }	53	812
Crystallized metal plates. Making porous	C. Payen	440,273	Nov. 11	994	{ 253 254 }	53	812
Crystallized metal plates. Producing	C. Payen	440,270	Nov. 11	987	252	53	812
Crystallized metal plates. Producing	C. Payen	440,575	Nov. 11	1490	385	53	904
Crystallized metal plates. Producing porous	C. Payen	440,267	Nov. 11	979	{ 249 250 }	53	811
Crystallized metal plates. Producing porous	C. Payen	440,274	Nov. 11	996	{ 254 255 }	53	812
Crystallized metal plates. Producing porous	C. Payen	440,275	Nov. 11	998	{ 255 256 }	53	812
Crystallized metal plates. Producing porous	C. Payen	440,276	Nov. 11	1000	{ 256 257 }	53	813
Crystallized metallic lead plates. Producing	C. Payen	440,268	Nov. 11	980	250	53	811
Crystallized metallic lead plates. Producing	C. Payen	440,277	Nov. 11	1002	{ 257 258 }	53	813
Cuff	J. F. Fellows	443,096	Dec. 30	3380	868	53	1952
Cuff	J. W. Hyatt	419,260	Jan. 14	922	243	50	197
Cuff-fastener	C. E. Candee	431,330	July 1	446	110	52	92
Cuff-holder	H. H. Baker, Jr.	432,591	July 22	2403	619	52	489
Cuff-holder	G. W. Bell	423,732	Mar. 18	2052	541	50	1541
Cuff-holder	W. E. Bishop	437,326	Sept. 30	3122	816	52	1998
Cuff-holder	A. W. Cash	442,169	Dec. 9	851	229	53	1436
Cuff-holder	E. N. Dodge	440,019	Nov. 4	598	158	53	725
Cuff-holder	E. C. Drew	438,473	Oct. 14	1215	329	53	239
Cuff-holder	A. H. Eldridge	423,861	Mar. 18	2250	594	50	1579
Cuff-holder	W. D. Elwell	436,232	Sept. 9	1306	310	52	1630
Cuff-holder	A. Goulding	427,414	May 6	589	147	51	928
Cuff-holder	I. L. Green	425,669	Apr. 15	1891	505	51	385
Cuff-holder	A. A. Lomont	439,299	Oct. 28	2549	681	53	503
Cuff-holder	J. B. G. McMurray	441,577	Nov. 25	3150	810	53	1235
Cuff-holder	L. A. Negraval	434,944	Aug. 26	2354	623	52	1242
Cuff-holder	M. D. Strait	419,376	Jan. 14	1096	290	50	231
Cuff-holder	E. C. Townsend	421,637	Feb. 18	1789	468	50	920
Cuff-holder	W. T. Wood	437,074	Sept. 23	2706	707	52	1914
Cuff retainer or holder	W. L. Fullaway	424,777	Apr. 1	535	144	51	105
Cuffs. Making	F. B. Ide	442,319	Dec. 9	1075	{ 281 282 }	53	1478
Culinary device	G. W. Bowe	435,962	Sept. 9	905	238	52	1555
Culinary press and grater. Combined	E. Baltzley	419,104	Jan. 7	682	179	50	143
Culinary utensil	A. F. Pralm	435,448	Sept. 2	104	29	52	1395
Culinary-vessel handle	A. Haarlander and O. F. Grant	430,941	June 24	28-6	709	51	2056
Cultivator	C. Albersen	427,142	May 6	186	48	51	848
Cultivator	J. H. Albright	423,711	Mar. 18	2039	538	50	1538
Cultivator	S. L. Allen	424,946	Apr. 8	793	212	51	162
Cultivator	B. B. Barnett	422,694	Mar. 4	491	125	50	1230
Cultivator	E. E. Blackman	439,340	Oct. 28	2608	695	53	514
Cultivator	J. Blakeley	427,543	May 13	784	195	51	977
Cultivator	G. M. Bowman	435,202	Aug. 26	2729	720	52	1312
Cultivator	H. S. Brink	439,469	Oct. 28	2802	746	53	550
Cultivator	S. Brooke	440,860	Nov. 18	1973	508	53	1003
Cultivator	L. A. Brown	421,903	Feb. 25	2160	567	50	999
Cultivator	S. R. Brown	422,711	Mar. 4	510	130	50	1234
Cultivator	J. D. Burkhardt	430,828	June 24	2713	665	51	2023
Cultivator	A. W. Butt	440,135	Nov. 11	766	{ 201 202 }	53	768
Cultivator	A. Caldwell	428,591	May 27	2373	603	51	1312
Cultivator	H. Carrier	424,462	Apr. 1	29	8, 9	51	8

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drawings	Vol.	Page.
Cultivator.....	S. C. Cobb.....	425,210	Apr. 8	1201	318	51	243
Cultivator.....	S. C. Cobb.....	436,472	Sept. 16	1714	{ 452 453 }	52	1717
Cultivator.....	E. R. Conklin.....	443,703	Dec. 30	3389	870	53	1954
Cultivator.....	R. Cracraft.....	429,888	June 10	1184	294	51	1710
Cultivator.....	L. S. Crittenden.....	432,818	July 22	2784	712	52	561
Cultivator.....	C. R. Davis.....	418,692	Jan. 7	44	10	50	10
Cultivator.....	W. Davis.....	433,021	July 15	1546	393	52	317
Cultivator.....	S. W. Decker.....	438,989	Oct. 21	2039	545	53	402
Cultivator.....	E. Dickinson.....	434,433	Aug. 19	1519	396	52	1071
Cultivator.....	J. Dullenty.....	429,020	May 27	3019	775	51	1437
Cultivator.....	E. E. Eddington.....	420,046	Jan. 28	2100	555	50	445
Cultivator.....	A. Ellis.....	432,128	July 15	1721	{ 442 443 }	52	350
Cultivator.....	J. R. Evans and F. T. Levick.....	442,518	Dec. 9	1393	355	53	1541
Cultivator.....	F. C. Field.....	427,409	May 6	579	{ 144 145 }	51	926
Cultivator.....	J. O. Ford.....	442,876	Dec. 16	1997	512	53	1669
Cultivator.....	W. H. Fuller.....	419,936	Jan. 21	1929	508	50	405
Cultivator.....	W. H. Fuller. (Reissue).....	11,134	Dec. 23	3044	783	53	1881
Cultivator.....	D. D. Funk.....	432,031	July 15	1561	{ 398 399 }	52	319
Cultivator.....	H. Gale.....	429,343	June 3	370	87, 88	51	1541
Cultivator.....	F. R. Glascock.....	443,914	Dec. 30	3702	94	53	2016
Cultivator.....	W. J. Gohn.....	419,328	Jan. 14	1027	271	50	217
Cultivator.....	W. J. Gohn.....	428,559	May 20	2308	586	51	1280
Cultivator.....	J. T. Greenwood.....	425,030	Apr. 8	926	246	51	187
Cultivator.....	L. B. Henry.....	421,710	Feb. 18	1885	495	50	939
Cultivator.....	A. J. Kern.....	421,726	Feb. 18	1905	{ 500 501 }	50	942
Cultivator.....	J. Kirby.....	439,014	Oct. 21	2069	554	53	408
Cultivator.....	M. L. Kissell.....	424,316	Mar. 25	2932	782	50	1717
Cultivator.....	J. W. Kraus.....	443,919	Dec. 30	3711	950	53	2018
Cultivator.....	J. P. L'Homedieu.....	436,795	Sept. 23	2246	{ 591 592 }	52	1825
Cultivator.....	J. Lee.....	418,729	Jan. 7	108	25	50	23
Cultivator.....	N. P. and J. W. Lehr.....	436,667	Sept. 16	2022	528	52	1774
Cultivator.....	S. T. Likens.....	419,691	Jan. 21	1560	418	50	330
Cultivator.....	H. Loewenstein.....	418,953	Jan. 7	473	118	50	99
Cultivator.....	J. Mallon.....	441,500	Nov. 25	3034	781	53	1212
Cultivator.....	D. C. Markham.....	430,965	June 24	2921	717	51	2061
Cultivator.....	A. S. McDermott.....	434,067	Aug. 12	925	{ 243 244 }	52	947
Cultivator.....	J. C. Messer, A. Garner, and J. W. Williams.....	437,309	Sept. 30	3095	811	52	1994
Cultivator.....	F. E. Montgomery.....	433,018	July 29	3101	796	52	627
Cultivator.....	W. W. and F. M. Mullen.....	427,888	May 13	1319	333	51	1079
Cultivator.....	H. Myers.....	426,136	Apr. 22	2608	685	51	532
Cultivator.....	J. W. Naples.....	435,514	Sept. 2	199	55	52	1413
Cultivator.....	O. Noack.....	420,694	Feb. 4	373	99	50	637
Cultivator.....	J. N. Parker.....	442,909	Dec. 16	2065	530	53	1681
Cultivator.....	E. Poole.....	423,342	Mar. 11	1486	389	50	1426
Cultivator.....	I. J. Potter.....	443,056	Dec. 16	2286	586	53	1726
Cultivator.....	W. H. Rand.....	429,955	June 10	1274	315	51	1727
Cultivator.....	L. M. Reed.....	438,896	Oct. 21	1896	504	53	372
Cultivator.....	W. J. Roe.....	438,447	Oct. 14	1177	319	53	231
Cultivator.....	F. A. Ruggles.....	422,161	Feb. 25	2527	668	50	1067
Cultivator.....	I. Sachs.....	430,693	June 24	2489	608	51	1980
Cultivator.....	H. H. Sater.....	420,248	Jan. 28	2436	648	50	508
Cultivator.....	M. Sattley.....	422,543	Mar. 4	256	66	50	1185
Cultivator.....	D. M. Shanl.....	430,323	June 17	1906	467	51	1859
Cultivator.....	R. Simpson.....	441,382	Nov. 25	2245	734	53	1176
Cultivator.....	I. and B. Stuart.....	435,867	Sept. 2	748	200	52	1520
Cultivator.....	C. H. Taylor.....	432,452	July 15	2189	564	52	439
Cultivator.....	J. P. Turner.....	428,824	June 10	1085	267	51	1691
Cultivator.....	C. C. Warren.....	438,040	Oct. 7	570	155	53	108
Cultivator.....	W. D. Watkins.....	420,551	Feb. 4	171	43	50	597
Cultivator.....	W. H. Whetstone.....	431,016	June 24	2998	736	51	2077
Cultivator.....	L. H. Whitman.....	429,668	June 10	858	{ 207 208 }	51	1647
Cultivator.....	B. F. Zell.....	434,747	Aug. 19	2016	527	52	1168
Cultivator and cotton-chopper.....	J. B. Hurd and H. H. McLane.....	419,333	Jan. 14	1034	{ 273 274 }	50	218
Cultivator and barrow.....	B. F. Westmoreland.....	426,888	Apr. 29	3732	974	51	762
Cultivator and planter.....	P. Montecino.....	425,337	Apr. 8	1379	368	51	277
Cultivator and pulverizer.....	W. H. Horn.....	435,584	Sept. 2	316	88	52	1436
Cultivator and pulverizer. Surface.....	C. C. Crumb.....	440,993	Nov. 18	2182	564	53	1045
Cultivator and seed-dropper. Combined.....	J. S. Hickman.....	435,830	Sept. 2	694	185	52	1509
Cultivator and seeder. Combined.....	J. S. Hickman.....	435,831	Sept. 2	695	{ 185 186 }	52	1509
Cultivator attachment.....	E. Crandell.....	438,750	Oct. 21	1672	449	53	331
Cultivator attachment.....	L. M. Reed.....	422,973	Mar. 11	939	246	50	1322
Cultivator attachment.....	L. P. Schrader.....	440,578	Nov. 11	1495	366	53	905
Cultivator attachment. Tongueless.....	J. L. Comstock.....	422,919	Mar. 11	849	221	50	1306
Cultivator. Corn.....	J. L. Bottorff and C. A. Conyers.....	442,946	Dec. 16	2123	546	53	1693
Cultivator. Cotton.....	W. W. Bailey.....	423,655	Mar. 18	1962	{ 576 577 }	50	1524
Cultivator. Cotton or corn.....	A. G. Bushea and D. Hearn.....	421,548	Feb. 18	1654	428	50	893
Cultivator. Disk.....	H. M. and G. L. Rose.....	435,655	Sept. 2	437	117	52	1458
Cultivator-fender.....	E. C. Holladay.....	432,047	July 15	1590	{ 406 407 }	52	324
Cultivator for listed corn.....	L. P. Schrader.....	431,079	July 1	76	19	52	17
Cultivator. Gang.....	W. P. Sney.....	436,957	Sept. 23	2544	666	52	1882
Cultivator. Hand.....	J. W. Stanley.....	425,150	Apr. 8	1106	294	51	222

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Cultivator, harrow, and marker. Combined	H. J. Crocker, Jr.	430,336	Jan. 28	2560	679	50	531
Cultivator-hoe	J. A. Garber	432,761	Mar. 4	575	147	50	1246
Cultivator. Listed-corn	F. F. and H. Deitchler	430,043	Jan. 28	2096	553	50	444
Cultivator. Listed-corn	D. W. Plowman	443,148	Dec. 23	2477	632	53	1768
Cultivator. Lister	B. F. Erway	435,291	Aug. 26	2853	754	52	1337
Cultivator. Lister	W. C. Milroy and J. H. Hoak	429,541	June 3	667	162	51	1599
Cultivator. Lister	W. R. Pettijohn	440,498	Nov. 11	1372	354	53	882
Cultivator. Lister	A. A. Sawyer	429,964	June 10	1304	322	51	1733
Cultivator. Listing	R. W. Hagel	429,520	June 3	629	154 155	51	1592
Cultivator or harrow	A. Peterson and O. O. Raaen	437,450	Sept. 30	3340	873 874	52	2042
Cultivator. Riding	J. H. Jones	431,980	July 8	1479	374	52	298
Cultivator. Rotary	R. Stone	437,872	Oct. 7	303	90, 91	53	59
Cultivator shank and tooth attachment	E. G. Dorchester	430,841	June 24	2735	670	51	2027
Cultivator-shovel	C. A. Anderson	436,911	Sept. 23	2484	649	52	1870
Cultivator-shovel	A. J. Kern	429,037	May 27	3054	787	51	1443
Cultivator-shovel	M. Templin	440,090	Nov. 4	685	184	53	744
Cultivator-shovel. Reversible	J. A. Johnson	423,774	Mar. 18	2125	561	50	1555
Cultivator-shovel. Reversible	J. A. Johnson	423,775	Mar. 18	2126	561	50	1555
Cultivator-shovel. Yielding	A. Lindgren	428,010	May 13	1497	380	51	1114
Cultivator-spring	J. M. W. Long	440,316	Nov. 11	1065	273	53	824
Cultivator. Spring-tooth	J. H. Fountain	427,066	May 6	52	15	51	820
Cultivator. Spring-tooth	J. Theobald	419,734	Jan. 21	1610	440	50	340
Cultivator. Steam	C. R. Sack	427,117	May 6	146	38	51	841
Cultivator, &c. Strawberry	I. D. Carpenter	439,474	Oct. 28	2807	748	53	551
Cultivator. Sulky	W. E. Taft	424,376	Mar. 25	3040	807	50	1738
Cultivator. Tongueless	J. M. Long	441,179	Nov. 25	2497	645	53	1114
Cultivator-tooth	E. Cutcliffe	418,691	Jan. 7	43	10	50	10
Cultivator-tooth	T. K. Godbey	424,973	Apr. 8	837	223	51	171
Cultivator. Walking	J. H. Jones	431,981	July 8	1481	374	52	298
Cultivator. Wheel	W. H. Bonwell	436,690	Sept. 16	2055	537	52	1780
Cultivator. Wheel	D. F. Hunt	441,414	Nov. 25	2899	747	53	1188
Cultivator. Wheel	W. E. Taft	426,221	Apr. 22	2735	716	51	556
Cultivator. Wheel	E. Children	434,765	Aug. 19	2044	534 535	52	1175
Cultivators. Corn-dropping attachment for	W. O. Dixon	431,882	July 8	1340	337	52	270
Cultivators. Line-holder for walking	J. Glor	419,039	Jan. 7	586	149	50	124
Cultivators. Seeder attachment for	J. B. McDaniel	434,397	Aug. 12	1450	377	52	1051
Culvert	H. H. Colby	426,112	Apr. 22	2571	676	51	524
Culvert	O. W. Wenzel	437,954	Oct. 7	427	119	53	82
Cup:							
See Dope-cup.	Oil-cup.						
Grease-cup.	Oil-drip cup.						
Lubricator-cup.	Umbrella drip-cup.						
Cup-holder	J. Sutherland	443,949	Dec. 30	3763	961	53	2026
Curb. Street	H. H. Wainwright	428,432	May 20	2138	538	51	1248
Curb and gutter	I. L. Landis	442,060	Dec. 2	685	184	53	1396
Curb and gutter	S. A. Webb	427,648	May 13	933	234	51	1005
Curbstone	I. L. Landis	428,007	May 13	1491	379	51	1113
Curling-iron	E. F. Angell	420,325	Jan. 28	2542	674	50	528
Curling-iron	J. H. Bevington	433,440	Aug. 5	10	3	52	759
Curling-iron	F. D. Miller	429,279	June 3	245	61	51	1519
Curling-iron	S. Reid	427,907	May 13	1346	340	51	1084
Curling-iron	G. L. Thompson	438,295	Oct. 14	963	261	53	189
Curling-iron beater	R. Nicol, Jr.	419,469	Jan. 14	1247	328	50	260
Current and switch controlling mechanism	E. W. Rice, Jr.	432,644	July 22	2488	640	52	505
Current apparatus. Alternating	E. and F. W. Heymann	427,571	May 13	828	206	51	985
Current circuits. Turn-off for alternating	E. Thomson	428,647	May 27	2449	625	51	1326
Current-converting apparatus	C. Zepernowsky and M. Déri	433,758	Aug. 5	472	122 123	52	847
Current-direction indicator	E. P. Warner	420,422	Jan. 28	2680	710	50	553
Current generator and motor. Alternating	C. S. Bradley	438,602	Oct. 21	1405	380	53	282
Current generator. Pulsating	C. J. Van Depoele	440,977	Nov. 18	2161	500	53	1040
Current generators. Regulation of alternate	S. C. C. Currie	423,029	Mar. 11	1011	265	50	1336
Current-indicator	F. B. Rae	426,065	Apr. 22	2496	639	51	509
Current machines. Synchronizing alternate	E. W. Rice, Jr.	430,320	June 17	1900	466	51	1858
Current-motor	A. Siegrist	442,402	Dec. 9	1204	311 312	53	1504
Current motor. Alternating	M. von Dolivo-Dobrowolsky	427,978	May 13	1450	367	51	1104
Current motor. Alternating	N. Tesla	433,701	Aug. 5	383	97	52	830
Current motor. Alternating	E. Thomson	430,328	June 17	1915	409 470	51	1861
Current motor. Constant	W. Baxter, Jr.	423,897	Mar. 25	2310	609 610	50	1576
Current motor. Pulsatory	C. J. Van Depoele	422,856	Mar. 4	725	186 187	50	1298
Current-motor regulator. Alternating	L. Gutmann	419,664	Jan. 21	1325	406	50	323
Current motors. Operating synchronous alternating	C. Zepernowsky, M. Déri, and O. F. Blathy	425,923	Apr. 15	2255	598	51	454
Current pulsating generator. Multiple	C. J. Van Depoele	422,860	Mar. 4	737	188	50	1278
Current pulsating system. Alternate	C. J. Van Depoele	422,857	Mar. 4	729	187	50	1276
Current-regulator. Automatic	R. Thury	435,332	Aug. 26	2929	777 778 779	52	1349
Current-regulator or rheostat	O. Flemming	432,131	July 15	1725	444	52	351
Current-regulator or rheostat	G. B. Massey	432,279	July 15	1944	497	52	892
Current-system. Pulsating	C. J. Van Depoele	422,859	Mar. 4	734	187	50	1278
Currents. Means for creating artificial	E. Bantz	429,833	June 10	1099	271	51	1694
Currents. System of distribution for alternating	E. Thomson	421,208	Feb. 11	1166	299	50	794
Currents. Transformer for heavy	H. Lemp	438,618	May 27	2408	612	51	1318
Curry-comb	L. Bailey	443,215	Dec. 23	2608	671	53	1797
Curry-comb	A. P. Clements	441,136	Nov. 25	2425	628	53	1100
Curry-comb	A. C. Decker	430,628	June 24	2373	580	51	1957

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Curry-comb	J. Du Shane	440,022	Nov. 4	600	159	53	725
Curry-comb	J. Du Shane	441,472	Nov. 25	2995	771	53	1205
Curry-comb	A. Kline	433,006	July 29	3084	791	52	624
Curry-comb	S. C. Schofield	436,744	Sept. 16	2144	564	52	1798
Curry-comb	T. S. Sherman	439,435	Oct. 28	2753	733	53	541
Curry-comb	J. H. Stapleton	434,733	Aug. 19	1996	521	52	1165
Curry-comb	H. G. Thomas	431,490	July 1	704	177	52	141
Curry-comb and brush	F. L. Lewis	439,668	Nov. 4	66	18	53	620
Curry-comb and brush. Combined	S. W. Burke	429,010	May 27	3006	772	51	1434
Curry-comb rack	A. B. Friedmann	428,085	May 20	1605	408	51	1144
Curtain	E. F. Braven	443,981	Dec. 30	3822	974	53	2038
Curtain-adjusting device. Window.	D. F. McDonald	442,590	Dec. 9	1502	387	53	1564
Curtain-bracket	R. E. House	434,665	Aug. 19	1892	494	52	1146
Curtain-drying frame. Lace.	C. Imandt	419,449	Jan. 14	1206	319	50	254
Curtain-fastener	J. B. Walton	443,127	Dec. 23	2432	621	53	1761
Curtain-fastening	M. Renshaw	433,821	Aug. 5	574	150	52	869
Curtain-fastening. Canopy-top.	A. R. Tully	440,074	Nov. 4	671	178	53	739
Curtain-fixture	J. L. Baker	422,108	Feb. 25	2451	647	50	1052
Curtain-fixture	D. Chase	422,292	Feb. 25	2739	721	50	1106
Curtain-fixture	E. E. Clark	422,379	Mar. 4	28	9	50	1142
Curtain-fixture	J. Dorn	443,188	Dec. 23	2557	657	53	1786
Curtain-fixture	D. T. Graham	441,550	Nov. 25	3109	798	53	1228
Curtain-fixture	C. Günsel	436,097	Sept. 9	1110	287	52	1594
Curtain-fixture	C. Günsel	436,131	Sept. 9	1169	305	52	1604
Curtain-fixture	C. Günsel	441,955	Dec. 2	507	136	53	1363
Curtain-fixture	C. Günsel	443,091	Dec. 23	2372	606	53	1750
Curtain-fixture	G. W. Haskins	435,061	Aug. 26	2521	666	52	1273
Curtain-fixture	T. Hauck	430,249	June 17	1757	437	51	1830
Curtain-fixture	W. C. Howe	440,742	Nov. 18	1763	454	53	966
Curtain-fixture	H. D. Knight	435,018	Aug. 26	2457	650	52	1261
Curtain-fixture	J. F. Romor	439,848	Nov. 4	328	84	53	672
Curtain-fixture	F. Root	424,224	Mar. 25	2789	744	50	1690
Curtain-fixture	F. Spitz	423,187	Mar. 11	1257	327	50	1383
Curtain-fixture	E. F. Tubach	433,057	July 29	3167	815	52	640
Curtain fixture. Window.	H. J. Iles	437,436	Sept. 30	3315	864	52	2036
Curtain-holder	A. D. Field	424,410	Mar. 25	3113	825	50	1753
Curtain-pole	C. W. Lawrence	424,610	Apr. 1	269	71	51	54
Curtain pole and ring	W. H. Lewis, Jr.	440,773	Nov. 18	1827	471	53	976
Curtain-pole fixture	R. T. Brewer	435,053	Aug. 26	2510	663	52	1271
Curtain-pole fixture	C. H. Morgan	425,638	Apr. 15	1923	512	51	391
Curtain-pole ring	H. J. Gilbert	443,514	Dec. 30	3081	794	53	1897
Curtain-pole ring and pin. Combined	L. Weidenfeld	433,338	Aug. 5	597	155	52	873
Curtain-pole support	H. J. Gilbert	443,175	Dec. 23	2521	645	53	1777
Curtain-rack	W. Meyer	425,336	Apr. 8	1379	367	51	277
Curtain-ring	M. M. Barager	442,565	Dec. 9	1465	376	53	1556
Curtain-ring	J. Berbecker	437,279	Sept. 30	3054	799	52	1987
Curtain-ring	J. T. Congdon	435,919	Sept. 9	846	223	52	1545
Curtain-ring	J. Lines	443,288	Dec. 23	2720	698	53	1817
Curtain-ring	D. N. Plume	426,682	Apr. 29	3422	897	51	702
Curtain-ring	F. R. Welton	422,170	Feb. 25	2539	670	50	1069
Curtain-ring or hanger	J. W. Leslie	440,170	Nov. 11	829	214	53	780
Curtain-rod fixture	H. D. Allen	419,302	Jan. 14	986	261	50	208
Curtain-rod fixture	A. E. Jones	438,109	Oct. 7	674	183	53	130
Curtain-rod support	H. Reubel and H. Taylor	428,783	May 27	2671	677	51	1367
Curtain-roll support	S. S. Mackin	429,930	June 10	1244	308	51	1722
Curtain-roller bracket	J. E. Juenemann	434,714	Aug. 19	1974	513	52	1160
Curtain stretcher. Lace.	J. Gilray	439,272	Oct. 28	2491	667	53	492
Curtain-support	E. E. Arnold	433,509	Aug. 5	101	28	52	776
Curtains. Extension-rod for window.	E. M. Wyant	420,486	Feb. 4	88	20	50	580
Curtains. Means for suspending	R. G. Sharp	428,965	May 27	2938	754	51	1422
Curve-scriber	A. McKenzie	419,467	Jan. 14	1234	328	50	260
Cushion:							
See Air-cushion.	Ventilated cushion.						
Pincushion.							
Cuspidor	D. Lange	439,667	Nov. 4	65	17	53	620
Cuspidor	N. Hartmann	426,410	Apr. 22	3023	791	51	615
Cuspidor	J. F. Parsons	424,815	Apr. 1	592	156	51	114
Cuspidor	J. J. Parsons	424,816	Apr. 1	594	156 157	51	115
Cuspidor-cleaner	M. Barger	439,740	Nov. 4	165	43	53	640
Cuspidor-lifter	G. S. Trumbore	441,721	Dec. 2	146	39	53	1290
Cuspidor or cuspidor-holder	E. F. Drake	425,497	Apr. 15	1624	433	51	333
Cuspidors. Machine for making	C. C. Chaubertlain	418,888	Jan. 7	367	88, 89	50	77
Cut nail	W. Wickersham	423,009	Mar. 11	984	259	50	1331
Cut-off	C. W. Blake	441,739	Dec. 2	171	45	53	1295
Cut-off and filtering-joint	A. Anderson	443,810	Dec. 30	3559	912	53	1988
Cut-off. Automatic water	T. L. Bissell and W. P. Prescott	433,441	Aug. 5	11	3	52	759
Cut-off for engines. Variable.	W. de Sanno	428,861	May 27	2785	708	51	1391
Cut-off for rain-water spouts	S. T. Suddick	427,206	May 6	278	71	51	866
Cut-off gear. Engine	N. Chandler	428,453	May 20	2165	544	51	1253
Cut-off. Pipe	W. A. Smith and W. W. Dutton	424,368	Mar. 25	3025	803	50	1735
Cut-off. Rain-water	J. L. Grasser	422,770	Mar. 4	587	151	50	1249
Cut-out	C. Batchelor	425,726	Apr. 15	1981	528	51	403
Cut-out	G. A. Frei	421,396	Feb. 18	1430	371	50	851
Cut-out	E. W. Little	421,179	Feb. 11	1120	287	50	786
Cut-out	G. W. Mingle	443,195	Dec. 23	2579	662	53	1792
Cut-out	W. F. Smith	435,048	Aug. 26	2502	662	52	1269
Cut-out	N. P. Stevens	422,358	May 20	2025	508	51	1236
Cut-out	C. B. Story	419,733	Jan. 21	1609	429	50	340
Cut-out	E. Thomson and E. W. Rice, Jr.	425,588	Apr. 15	1756	471	51	359
Cut-out. Automatic	A. Z. Haines and J. H. Curry	431,516	July 1	745	186	52	149
Cut-out. Automatic	G. W. Richardson	438,326	Oct. 14	1004	273	53	198
Cut-out. Fusible	W. J. Feuks	433,682	Aug. 5	358	92	52	826
Cut-out. Fusible	I. N. Miller	430,967	June 24	2923	717	51	2062

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. ed.	Vol.	Page.
Cut-out. Multiple fusible	L. B. Favor	431,185	July 1	228	57	52	47
Cut-out. Multiple thermal	L. B. Favor	431,186	July 1	229	57, 58	52	48
Cut-out. Safety	F. B. Rae	422,354	Feb. 25	2841	749	50	1125
Cut-out. Safety	C. E. Scribner	433,045	July 29	3149	809	52	637
Cut-out. Safety	M. S. Shapleigh	433,187	July 29	3364	870	52	679
Cut-out. Thermal	A. Bernstein	433,229	July 29	3423	884	52	691
Cut-out. Thermal	D. J. Cartwright	441,933	Dec. 2	472	126	53	1357
Cut-out. Thermal	L. B. Favor	431,718	July 8	1087	271	52	221
Cut-out. Thermal	C. Goddard	439,398	Oct. 28	2697	718	53	530
Cut-out. Thermal	W. R. White	438,394	Oct. 14	1100	299	53	217
Cut-out. Thermal	G. H. Whittingham	436,952	Sept. 23	2537	664	52	1880
Cut-out. Thermal	G. H. Whittingham	438,721	Oct. 21	1597	429	53	317
Cut-out. Thermal	J. J. Wood	423,102	Mar. 11	1131	294	50	1357
Cutlery-handle.	C. E. Eggleston and J. H. La Fave	432,991	July 29	3061	786	52	620
Cutlery handle. Table.	W. T. Decker	433,276	July 29	3490	901	52	706
Cutlery-handles. Manufacture of	W. H. Chapin	431,034	July 1	9	3	52	4
Cutlery polisher and sharpener	M. Siersdorfer	428,321	May 20	1969	494	51	1214
Cutlery. Rolls for making table	I. Hirsch	438,374	Oct. 14	1073	292 293	53	211
Cutlery-scourer	H. F. Warren	440,080	Nov. 4	677	180	53	740
Cutter:							
<i>See</i> Band-cutter.	Harvester-cutter.						
Bolt-cutter.	Ice-planer cutter.						
Bread-cutter.	Leather-thong cutter.						
Brick or tile machine cutter.	Lemon-cutter.						
Button-hole cutter.	Meat-cutter.						
Cake-cutter.	Milling-cutter.						
Can-head cutter.	Mint-machine cutter.						
Cane-cutter.	Miter-cutter.						
Chamber-cutter.	Mower or harvester cutter.						
Channel-cutter.	Mowing machine cutter.						
Check-cutter.	Paper-cutter.						
Cheese-cutter.	Pipe-cutter.						
Cigar-cutter.	Pipe or flue cutter.						
Cigar-tip cutter.	Railway-rail cutter.						
Cigar-wrapper cutter.	Rod or pipe cutter.						
Clover-feed cutter.	Rotary cutter.						
Corn-cutter.	Rut-cutter.						
Corn and cane cutter.	Sausage-meat cutter.						
Corn or cane cutter.	Slaw or kraut cutter.						
Cornstalk-cutter.	Soap-cutter.						
Coupon-cutter.	Sod-cutter.						
Cracker-machine cutter.	Stalk-cutter.						
Dado-cutter.	Stencil-cutter.						
Edge-trimming cutter.	Strap-cutter.						
Feed-cutter.	Straw-cutter.						
Finger-nail cutter.	Sugar-cutter.						
Flue-cutter.	Thrashing-machine band-cutter.						
Flue-hole cutter.	Thread-cutter.						
Fodder-cutter.	Tobacco-cutter.						
Food-cutter.	Tube-cutter.						
Gear-cutter.	Tube and pipe cutter.						
Glass-tube cutter.	Twine-cutter.						
Wire-cutter.	Vegetable-cutter.						
Cutter-bar	Wire-cutter.						
Cutter-bar	L. W. Holland	439,276	Oct. 28	2498	669	53	493
Cutter-bar	E. T. Sheppard	432,445	July 15	2177	564	52	436
Cutter-bar for headers. Double	C. E. Plumtree and L. A. A. Tonnet	443,002	Dec. 16	2205	567	53	1711
Cutter-bar guide	R. J. Plumtree and C. F. Collins	434,469	Aug. 19	1567	407	52	1081
Cutter for fodder, straw, &c.	J. S. Peterman, Jr.	420,734	Feb. 4	426	113	50	648
Cutter-head	J. Green	421,832	Feb. 18	2041	539	50	967
Cutter-head	A. M. Moore	432,321	July 15	2010	513	52	403
Cutter-head	J. W. Moss and H. B. Dillenback	422,607	Mar. 4	364	90	50	1206
Cutter-head	F. A. and H. W. Reqnarth and H. W. Hueffelmann	433,035	July 29	3135	806	52	634
Cutter-head knife. Molding-	J. E. Erickson	435,996	Sept. 9	954	250	52	1565
Cutter-head. Rotary	A. C. Heath and F. H. White	421,276	Feb. 11	1257	325	50	841
Cutter-head. Universal	M. Morton	439,673	Nov. 4	72	19	53	621
Cutter-stock. Method of and machine for producing V-welded	F. Searle	442,550	Dec. 9	1438	369	53	1550
Cutters. Machine for shaping rotary	W. S. Tyler	434,815	Aug. 19	2110	553 554	52	1188
Cutting and conveying machine. Wood	W. Merrill	426,946	Apr. 29	3802	994	51	776
Cutting and folding sheets into pamphlets. Machine for	W. Scott	426,647	Apr. 29	3369	883	51	692
Cutting and polishing tools. Apparatus for supplying abrading and polishing material to	F. A. Palmer	419,346	Jan. 14	1057	279 280	50	224
Cutting apparatus	E. J. Pullen	441,698	Dec. 2	105	28	53	1283
Cutting apparatus	H. W. Spratt	437,943	Oct. 7	411	116	53	78
Cutting circular plates. Machine for	S. Trethewey	429,072	May 27	3101	800	51	1451
Cutting-die	C. E. Ramus	419,357	Jan. 14	1074	283	50	227
Cutting fabrics. Machine for	W. W. Macfarlane	424,425	Mar. 25	3129	831	50	1756
Cutting irregular shapes. Machine for	F. H. Niemann	443,535	Dec. 30	3111	801 802	53	1902
Cutting-machine	J. O. Purnell	430,882	June 24	2797	685	51	2039
Cutting machine. Wood	J. L. Gage	428,475	May 20	2201	555	51	1359
Cutting machines. Straightener for board	T. S. Crane	425,988	Apr. 22	2338	633	51	468
Cutting mechanism	H. La Casse and S. Wile	443,193	Dec. 23	2568	659 660	53	1788
Cutting or trimming device	C. H. Scofield	434,956	Aug. 26	2368	627	52	1244
Cutting pile fabrics. Apparatus for	J. H. Smith, A. Goddard, L. Higginbottom, and T. Mannock	426,076	Apr. 22	2511	633	51	511
Cutting square holes. Machine for	H. F. Ainley	438,791	Oct. 21	1715	460	53	339

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cutting-tool.	T. Carroll	423,413	Mar. 18	1591	418	50	1454
Cutting-tool.	H. M. Darling	436,306	Sept. 9	1429	373	52	1656
Cutting-tool and handle.	S. P. Graham	433,078	July 29	3198	821	52	646
Cutting-tools. Machine for sharpening	A. H. Richardson	424,025	Mar. 25	2517	669	50	1636
Cycle-handle.	H. H. Brown	429,416	June 3	476	113	51	1562
Cycle-wheel.	A. H. Overman	436,993	Sept. 23	2590	678	52	1890
Cyclorama. Coin-controlled.	B. S. Molyneux	438,170	Oct. 14	765	209	53	154
Cylinder and piston motor-engine.	J. C. Gräbner and H. Ruperti	425,172	Apr. 8	1150	303	51	232
Cylinder coupling-joint.	T. W. Moran	443,946	Dec. 30	3758	960	53	2026
Cylinder engine. Radial.	G. H. Reynolds.	436,568	Sept. 16	1859	{ 489 490 }	52	1743
Cylinder head or cover.	L. Trapp	423,291	Mar. 11	1421	369	50	1412
Cylinder-linings. Device for driving in and with- drawing	D. Evans	442,312	Dec. 9	1064	{ 278 279 }	53	1476
Cylinder-lock.	H. B. Sargent.	437,939	Oct. 7	404	114	53	78
Cylindrical surfaces. Producing.	P. Howieson	439,819	Nov. 4	280	71	53	662
Dado-cutter.	W. R. Fox	432,824	July 22	2792	714	52	563
Dam.	W. D. Arnett	422,901	Mar. 11	822	213	50	1301
Dam.	W. D. Arnett	422,902	Mar. 11	823	214	50	1301
Dam.	A. Kirk	439,522	Oct. 28	2878	766	53	566
Dam. Portable.	S. P. Williams	419,093	Jan. 7	664	174	50	140
Dampening-machine.	C. H. Hoover	436,480	Sept. 16	1725	455	52	1719
Dampening-machine.	W. Scott	430,256	June 17	1766	439	51	1832
Dampening-material. Apparatus for.	R. Kron.	420,601	Feb. 4	246	65, 66	50	612
Damper.	E. P. Jones and E. R. Williams.	421,576	Feb. 18	1693	438	50	901
Damper.	S. S. Richardson	431,708	July 8	1074	268	52	219
Damper.	S. G. Seagrigh	435,125	Aug. 26	2616	692	52	1291
Damper. Flue.	T. I. Rankin	421,141	Feb. 11	1065	{ 273 274 }	50	775
Damper for chimney-flues.	J. Keith	440,229	Nov. 11	922	237	53	800
Damper for steam-boilers. Automatic.	G. Cumming	431,162	July 1	193	49	52	40
Damper-regulator.	L. Copleston	423,673	Mar. 18	1985	523	50	1529
Damper-regulator.	C. G. Jewett	427,327	May 6	456	117	51	901
Damper-regulator.	T. J. Kiele	427,175	May 6	235	61	51	857
Damper-regulator.	W. B. Mason	426,835	Apr. 29	3664	953	51	748
Damper-regulator.	C. R. Nelson	422,091	Feb. 25	2421	639	50	1046
Damper-regulator.	N. F. Sawyer	434,471	Aug. 19	1569	408	52	1081
Damper-regulator.	J. M. Snyder	441,591	Nov. 25	3171	817	53	1239
Damper-regulator.	J. B. West	419,090	Jan. 7	661	173	50	139
Damper-regulator. Electric.	J. O'Meara	443,716	Dec. 30	3406	875	53	1957
Damper. Stove.	C. W. Crabtree and J. W. Collins	436,697	Sept. 16	2062	541	52	1782
Damper. Stove-pipe.	D. L. Osborn	428,129	May 20	1678	425	51	1158
Damper. Throat.	C. J. Wadsworth	419,233	Jan. 14	886	233	50	189
Damper. Vertical sand.	J. Reuleaux.	421,516	Feb. 18	1602	410	50	883
Damping apparatus.	W. T. Shaw	438,193	Oct. 14	796	217	53	160
Dancing puppet.	L. P. Goldsborough.	423,757	Mar. 18	2101	554	50	1550
Dandelion digger and puller	W. H. Vogel	437,466	Sept. 30	3362	880	52	2047
Dark-room. Portable.	G. Bausch	428,036	May 13	1532	388	51	1121
Darning-last.	L. D. Carhart.	432,661	July 22	2527	648	52	512
Darning-last.	C. C. Gale	425,606	Apr. 15	1787	479	51	365
Darning-machine.	A. Helwig	431,583	July 8	851	{ 211 212 }	52	177
Darning-last.	C. H. Shaw	440,659	Nov. 18	1629	421	53	940
Darning-last.	C. H. Shaw	441,709	Dec. 2	126	34	53	1287
Dash-board. Vehicle.	G. W. Powell.	434,198	Aug. 12	1137	295	52	989
Dash-pot.	M. Raughtigan	434,951	Aug. 26	2362	625	52	1243
Dash. Vehicle.	G. M. Peters and L. B. Walton	422,970	Mar. 11	934	245	50	1322
Dead-centering. Means for preventing.	R. Watt	435,267	Aug. 26	2824	748	52	1331
Deal-indicator for card-players.	W. C. McIntire.	436,739	Sept. 16	2125	559	52	1795
Decorated removable films. Preparing surfaces for the formation of	C. T. Kemmer	437,305	Sept. 30	3089	.....	52	1993
Decorating spherical and uneven surfaces of glass, earthenware, &c.	W. J. Dobinson	441,086	Nov. 18	2337	605	53	1074
Decoration. Interior.	A. Bowers and G. Pettit, Jr.	420,293	Jan. 28	2504	664	50	520
Decoration. Surface.	A. Bowers and G. Pettit, Jr.	420,263	Jan. 28	2459	653	50	512
Decorative frame.	R. Marsh	421,741	Feb. 18	1920	505	50	946
Decorative material. Manufacturing.	T. J. Palmer	440,055	Nov. 4	650	174	53	735
Decorative ware and making the same.	C. I. Goodale	437,431	Sept. 30	3304	862	52	2035
Decorticating fibrous plants. Machine for.	E. A. Van Buren	420,481	Feb. 4	82	19	50	579
Decorticating-machine.	J. T. Stewart	428,257	May 20	1865	{ 468 469 }	51	1194
Decorticating-machine.	J. T. Stewart.	442,735	Dec. 16	1765	457	53	1623
Decorticating-machine for ramie, &c.	L. Landreth	426,453	Apr. 29	3081	808	51	636
Decorticating, &c., ramie, &c. Machine for	N. de Landtsheer and T. C. Barra- clough.	442,566	Dec. 9	1497	{ 385 386 }	53	1563
Decoy.	S. Curlin	430,565	June 17	2256	554	51	1926
Dehorning apparatus.	E. P. C. Webster.	425,478	Apr. 15	1598	427	51	328
Dehorning device.	H. W. Leavitt	432,056	July 15	1603	410	52	327
Dehorning-shears.	W. A. Farmer	441,146	Nov. 25	2446	634	53	1105
Dehorning-shears.	T. Fields	432,663	July 22	2530	649	52	512
Delivery apparatus. Automatic.	M. P. Hanicke and P. Bermich	428,720	May 27	2579	653	51	1349
Delivery apparatus. Street.	W. H. Thomas	425,469	Apr. 15	1586	424	51	325
Delivery mechanism. Prepaid automatic.	J. M. Sellers	420,696	June 24	2498	610	51	1981
Dental anæsthetic.	R. A. Graham	420,653	Feb. 4	326	.....	50	627
Dental anodyne.	A. Clark	420,186	Jan. 28	2335	.....	50	490
Dental apparatus.	S. A. Milton.	419,787	Jan. 21	1698	{ 450 451 }	50	357
Dental articulator.	J. W. Moffitt	431,849	July 8	1291	324	52	261
Dental bracket.	J. Hood and S. H. Reynolds	420,069	Jan. 28	2139	566	50	453
Dental bridge.	G. L. Curtis	424,924	Apr. 1	755	201	51	147
Dental chair.	E. T. Starr	443,152	Dec. 23	2487	635	53	1770
Dental chair.	B. M. Wilkerson	419,299	Jan. 14	977	{ 259 260 }	50	207
Dental chairs. Truck for.	B. S. Brown	425,654	Apr. 15	1868	499	51	380

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Dental-disk mandrel	J. Pugh	428,019	May 13	1508	383	51	1116
Dental drill	A. Retter	423,344	Mar. 11	1487	390	50	1436
Dental elevator	D. Siddall	427,275	May 6	385	100	51	886
Dental engine	W. G. A. Bonwill	440,128	Nov. 11	756	199	53	765
Dental engine	A. Retter	426,328	Apr. 22	2878	757	51	587
Dental engine	C. H. Seeger	421,323	Feb. 11	1326	343	50	823
Dental engine	E. T. Starr	418,901	Jan. 7	397	97	50	83
Dental engine	E. Thompson	437,319	Sept. 30	3111	814	52	1996
Dental-engine hand-piece	W. R. Marsh	427,780	May 13	1147	288	51	1047
Dental-engine hand-piece	C. M. Richmond	434,952	Aug. 26	2363	625	52	1243
Dental-engine hand-pieces. Attachment for	A. W. Browne	434,697	Aug. 19	1954	508	52	1156
Dental-engine motive gear	P. Brown	431,020	June 24	3008	738	51	2079
Dental engines. Angle attachment for	F. Fleury and A. G. Goodman	435,138	Aug. 26	2634	697	52	1295
Dental engines. Hand-piece pulley-head for	A. W. Browne	434,697	Aug. 19	1953	508	52	1156
Dental engines. Slip joint and coupling for	D. E. Coulson	430,420	June 17	2045	504	51	1887
Dental flask	J. E. Register	428,139	May 20	1689	428	51	1161
Dental forceps	E. E. Burger	436,210	Sept. 9	1294	337	52	1627
Dental forceps	C. B. Dean	421,250	Feb. 11	1220	316	50	804
Dental grinding and polishing wheel	L. M. Halsey	426,994	Apr. 29	3879	1013	51	790
Dental grindstone wetter and wiper	E. C. Goeldner	443,572	Dec. 30	3174	815	53	1914
Dental heater. Electro-	L. A. Faught	439,238	Oct. 28	2437	654	53	482
Dental mallet	W. H. Dibble	442,768	Dec. 16	1814	470	53	1633
Dental mallet and pliers. Combined	A. O. Corey	433,592	Aug. 5	227	60	52	800
Dental matrix	W. H. Marshall	427,338	May 6	472	121	51	904
Dental-matrix retainer	J. W. Ivory	424,790	Apr. 1	861	149	51	109
Dental mold	L. F. Seeger, Jr	432,909	July 22	2907	745	52	586
Dental mouth-speculum	E. Gash	443,512	Dec. 30	3080	793	53	1896
Dental operations. Electrical device for use in	C. W. and G. F. Manker	423,617	Mar. 18	1885	496 497	50	1509
Dental plate	J. J. Stedman	422,165	Feb. 25	2533	669	50	1068
Dental plugger	H. Craigie	420,532	Feb. 4	149	37	50	593
Dental plugger	J. L. Mewborn	443,399	Dec. 23	2899	746	53	1852
Dental plugger	F. C. Ries	425,344	Apr. 8	1388	370	51	279
Dental plugger	E. M. Stroud	420,745	Feb. 4	439	116	50	650
Dental plugger	L. West	443,691	Dec. 30	3369	865	53	1951
Dental plugger. Automatic	H. C. Ballard	423,205	Mar. 11	1280	333	50	1388
Dental plugger. Electric	W. E. Gibbs	427,070	May 6	58	16	51	821
Dental plugger. Pneumatic	F. E. Thomas and R. P. Lennox	419,381	Jan. 14	1103	291	50	232
Dental pluggers. Re-enforcing mallet for	J. L. Mewborn	442,070	Dec. 2	699	188	53	1399
Dental polishing-disk	W. N. Morrison	425,897	Apr. 15	2220	589	51	448
Dental polishing-pencil	K. C. Whaley	431,713	July 8	1079	269	52	220
Dental separator	J. G. Morey	426,733	Apr. 29	3507	917	51	718
Dental separator and matrix. Combined	W. H. Marshall	421,952	Feb. 25	2225	584	50	1011
Dental surgery. Galvanic apparatus for	C. W. and G. F. Manker	423,616	Mar. 18	1884	496	50	1509
Dental tool	B. J. Bing	425,650	Apr. 15	1861	496	51	379
Dental tool	G. H. Peirce	443,705	Dec. 30	3392	871	53	1955
Dental tool	F. T. Van Woert	438,566	Oct. 14	1350	366	53	267
Dental-tool holder	C. M. Richmond	439,427	Oct. 28	2739	730	53	539
Dental vulcanizer	J. E. Quinn	433,185	July 29	3362	869	52	679
Dental vulcanizer	F. W. Seabury	443,699	Dec. 30	3385	869	53	1953
Dental vulcanizers. Locking device for the flasks of	A. H. Stoddard	436,009	Sept. 9	969	254	52	1568
Dental wedges. Forceps for	G. J. Davison	442,107	Dec. 9	757	204	53	1418
Dental work. Preparing artificial gums for	D. E. Rugg	439,305	Oct. 28	2558	53	505	
Dentist's burring-tool	A. W. Browne. (Reissue)	11,118	Oct. 28	3039	803	53	598
Dentist's mixing-slab	L. Teal	434,737	Aug. 19	2001	522	52	1166
Denture. Artificial	N. J. Goodwin	430,639	June 24	2397	584	51	1961
Denture. Artificial	J. E. Low	443,144	Dec. 23	2468	631	53	1767
Denture. Artificial	J. A. Throckmorton	421,116	Feb. 11	1030	264	50	768
Deposit-box	F. Carl	425,491	Apr. 15	1617	431	51	332
Derailing-switch. Side-track	A. and J. Patton and G. A. Billson	426,058	Apr. 22	2182	656	51	506
Derrick	M. S. Hildreth	430,207	June 17	1674	417	51	1815
Derrick. Cotton-loading	E. M. Field, J. Peggs, and S. Bassinger	426,372	Apr. 22	2941	773	51	600
Derricks. Device for turning the arms of	H. B. Arden	424,530	Apr. 1	139	40, 41	51	29
Designs in colors. Producing raised	T. Benfield	438,397	Oct. 14	1104	300	53	217
Desk	F. E. Waring	420,321	Jan. 28	2537	672 673	50	527
Desk and its supports	W. A. Roos	432,901	July 22	2895	742	52	584
Desk and seat. School	E. E. Hicks	435,305	Aug. 26	2893	766	52	1342
Desk and seat. School	R. B. Hunter	421,405	Feb. 18	1442	374	50	853
Desk and writing-machine table	C. T. Brown and F. R. Wolfinger	437,477	Sept. 30	3376	884 885	52	2051
Desk attachment	H. J. Muller	438,856	Oct. 21	1841	489	53	362
Desk. Duplex	W. O. Partridge	428,407	May 20	2109	529 530	51	1243
Desk-furniture	V. Munger	426,542	Apr. 29	3212	842	51	661
Desk, &c. Music	A. Weber	423,844	Mar. 18	2233	587	50	1574
Desk, &c. School	C. A. Merrill and A. D. Linn	432,319	July 15	2008	513	52	402
Desk. School	C. B. Towle	436,642	Sept. 16	1977	518	52	1764
Desk. Writing	A. Y. Andrews	434,040	Aug. 12	881	232	52	937
Desks. Ink-well for school	G. H. Humphrey	418,749	Jan. 7	132	32	50	29
Desks. Flexible cover for cylinder or roll top	F. Joseph and J. Hein	425,432	Apr. 15	1528	409	51	315
Desks, tables, &c. Covered top for	W. F. Smith	430,092	June 10	1515	376	51	1774
Detective-camera	M. A. Seed	436,745	Sept. 16	2145	564 565	52	1798
Detector:							
See Bridge-detector. Ground-detector.							
Detector-bar clip	H. Johnson	441,798	Dec. 2	267	71	53	1316
Detergent	C. P. Andersen	421,223	Feb. 11	1184	50	797	
Detergent	J. J. Gilbert	429,435	June 3	506	51	1569	
Detergent	P. K. Post, Jr	432,437	July 15	2165	52	434	
Detonator for flag-staffs, &c.	G. D. Adams	426,423	Apr. 29	3045	797	51	629
Detonator or primer. Electric	H. J. Smith	436,023	Sept. 9	991	259	52	1572
Dial. Electric time-	C. A. Colby and J. C. Strong	424,273	Mar. 25	2849	762	50	1702

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Dial. Sun.....	A. B. Satterlee	436,153	Sept. 9	1202	314	52	1609
Dial. Time-piece	W. W. Barrett	428,588	May 27	2369	602	51	1311
Dial. Time-piece	G. K. Cooke	436,051	Sept. 9	1042	271	52	1582
Dials. Spindle for time-piece	M. V. B. Ethridge	436,973	Sept. 23	2567	671	52	1886
Diamond-washer	L. W. Levy	429,276	June 3	240	60	51	1518
Dice-shaker	I. J. Turner	434,613	Aug. 19	1789	467	52	1127
Die:							
See Brick-die. Pipe-threading die.							
Cutting-die. Screw-cutting die.							
Forging-die. Thimble-die.							
Interchangeable die. Upsetting-machine die.							
Lead-press die. Wire-drawing die.							
Pipe-die.							
Die and dice-box	M. Schott	435,635	Sept. 2	405	109	52	1451
Die and die-stock	S. Tideman	441,603	Nov. 25	3193	822	53	1244
Die-cutting machine	H. Thurston	432,959	July 22	3000	{ 770 }	52	602
Die-stock	J. M. Carpenter	434,320	Aug. 12	1327	345	52	1036
Die-stocks. Reamer attachment for	E. T. Mueller	431,610	July 8	887	221	52	185
Dies. Making	J. Scott	428,961	May 27	2930	752	51	1420
Dies. Manufacture of	J. A. House	443,767	Dec. 30	3490	894	53	1974
Dies. Method of and apparatus for making	C. Grasser	432,375	Apr. 22	2943	774	51	601
Dies or articles. Ornamenting circular	F. Ecauherl	434,540	Aug. 19	1675	438	52	1103
Diffusion apparatus	L. Boyer	428,589	May 27	2370	602	51	1312
Diffusion apparatus	L. F. Hanbman	435,747	Sept. 2	564	{ 150 }	52	1484
Diffusion-battery	M. Swenson	430,976	June 24	2937	720	51	2064
Digester	W. T. Forbes	439,033	Oct. 21	2097	362	53	413
Digester	J. Hess	434,272	Aug. 12	1260	{ 326 }	52	1011
Digester	F. C. Lovejoy	429,692	June 10	888	{ 215 }	51	1654
Digester	S. Smith	443,922	Dec. 30	3716	951	53	2018
Digester	S. Smith	443,923	Dec. 30	3718	951	53	2019
Digester	S. Smith	443,924	Dec. 30	3719	952	53	2019
Digester. Lead-lined	S. Smith	428,149	May 20	1700	431	51	1162
Digesters and retorts. Discharge-door for steam	P. F. Dundon	418,867	Jan. 7	328	80	50	69
Digger:							
See Dandelion-digger. Potato-digger.							
Post-hole digger.							
Dipper	M. L. Schoch	432,905	July 22	2902	744	52	585
Dipper-handle	H. Maycock	434,351	Aug. 12	1370	358	52	1035
Direct-acting engine	A. Ball	433,641	Aug. 5	296	78	52	834
Direct-acting engine	H. C. Sergeant	430,257	June 24	2605	637	51	2002
Direct-acting engine	C. C. Worthington	422,680	Mar. 4	470	120	50	1226
Directory. Night	H. Bergstein	441,863	Dec. 2	372	98	53	1337
Dirt conveyer and grader	J. Toohey	432,915	July 22	2916	{ 747 }	52	588
Dirt-loading machine	E. T. Hoffman	424,300	Mar. 25	2901	{ 774 }	50	1711
Dish	F. A. Oetzmann	433,539	Aug. 5	136	39	52	784
Dish-cover	V. P. Tompkins	423,543	Mar. 18	1784	468	50	1490
Dish-drainer	C. and S. K. Coons	423,740	Mar. 18	2081	548	50	1546
Dish-drainer	S. Mansfield	435,148	Aug. 26	2648	701	52	1297
Dish-holder	G. W. Carpenter	433,977	Aug. 12	804	210	52	922
Dish pan and drainer. Wash	M. A. Gaugh	431,943	July 8	1418	360	52	286
Dish. Pie	E. Eghertson	429,513	June 3	622	152	51	1591
Dish rinsing and drying crate	W. O. Demorest	424,863	Apr. 1	668	176	51	129
Dish-washer	G. W. Carter and E. L. Dutton	422,049	Feb. 25	2357	622	50	1036
Dish-washer	H. E. Davis	438,533	Oct. 14	1301	352	53	257
Dish-washer	G. M. Hawes	440,150	Nov. 11	787	207	53	772
Dish-washer	B. F. Wilson	431,305	July 1	415	103	52	85
Dish washing and draining apparatus	V. C. Caradine	419,497	Jan. 14	1270	338	50	267
Dish washing and draining machine	C. M. Bryan	422,371	Mar. 4	15	5	50	1139
Dish-washing machine	A. D. Miller	442,906	Dec. 16	2061	599	53	1681
Dish-washing machine	T. A. and H. W. Pudan	426,739	Apr. 29	3519	919	51	721
Disinfectant	H. M. Baker	430,725	June 24	2542	.....	51	1990
Disinfectant	D. W. Macdonald and J. G. Flower	423,875	Mar. 18	2279	.....	50	1585
Disinfectant	J. M. Raymond	423,530	Mar. 18	1767	.....	50	1488
Disinfectant	W. F. Simes	433,877	Aug. 5	652	.....	52	884
Disinfectant	W. P. Taggart	423,883	Mar. 18	2287	.....	50	1587
Disinfectant-cover for dry closets, &c.	J. A. McOmber	424,811	Apr. 1	588	155	51	114
Disinfecting apparatus	F. J. Mitchell	442,073	Dec. 2	702	188	53	1399
Disinfecting device	W. S. Gubelmann	436,130	Sept. 9	1168	305	52	1603
Disinfecting device	M. B. Manwaring	429,384	June 3	435	102	51	1554
Disinfecting device	A. R. Upward	441,078	Nov. 18	2325	602	53	1072
Disinfecting trees, &c.	F. Jones	440,612	Nov. 11	1557	.....	53	916
Disinfecting water-closets, &c. Apparatus for auto- matically	W. and G. Heywood	439,152	Oct. 28	2283	612	53	451
Disintegrating-machine	J. Hickey	430,646	June 24	2408	586	51	1963
Disintegrating-machine	J. W. Hyatt	423,870	Mar. 18	2268	{ 598 }	50	1582
Disintegrating-machine	J. W. Hyatt	427,686	May 13	995	251	51	1017
Disintegrator	R. N. Ross	443,838	Dec. 30	3602	926	53	1997
Disk engine	J. P. Eastman	425,213	Apr. 8	1204	319	51	244
Disk-sharpener	S. C. Cobb	435,599	Sept. 2	334	82	52	1439
Dismembering apparatus	W. Hanlon	421,493	Feb. 18	1568	{ 405 }	50	878
Display apparatus. Coin-operated	E. H. Amet	423,654	Mar. 18	1959	576	50	1534
Display device	M. F. Connett	422,570	Mar. 4	295	75, 76	50	1192
Display-frame. Adjustable	W. Standing and A. J. Hoenny	439,439	Oct. 28	2756	734	53	542
Display-frame for dress goods. Folding extension	H. S. Bogy	424,262	Mar. 25	2834	758	50	1699
Display-frames. Shoe-rest for	J. Hoffman	424,555	Apr. 1	185	51	51	38
Display-jar	H. Copleston	422,184	Feb. 25	2559	677	50	1073

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Display rack or stand.....	G. E. Ulbricht.....	437,834	Oct. 7	234	72	53	46
Display-stand.....	F. E. Wallace.....	420,668	Feb. 4	340	89	50	630
Display-stand.....	J. E. Waugh.....	418,857	Jan. 7	311	75	50	65
Display-stand, Traveling.....	H. Westphal.....	426,890	Apr. 29	3734	975	51	763
Displaying-receptacle.....	F. S. Gifford.....	427,982	May 13	1456	369	51	1105
Distance-instrument.....	W. T. Unge.....	425,838	Apr. 15	2135	569 570	51	432
Distillation, Alcoholic.....	W. L. Horne.....	419,332	Jan. 14	1033		50	218
Distillation of mineral oils and like products. Apparatus for the.....	J. Dewar and B. Redwood.....	426,173	Apr. 22	2660	699	51	541
Distillation, Treating residues of.....	E. M. Cook.....	439,639	Nov. 4	29		53	612
Distilleries, Apparatus for separating the solid from the liquid portions of the waste of.....	A. Parks.....	442,539	Dec. 9	1417	362	53	1546
Distilling and concentrating liquids, Apparatus for.....	C. C. Peck.....	426,139	Apr. 22	2610	686	51	532
Distilling apparatus, Wood.....	O. Koch and W. Danner.....	422,806	Mar. 4	641	164	50	1260
Distilling-column and condenser, Combined.....	E. Bolton.....	440,087	Nov. 4	690	183	53	743
Distilling hydrocarbons, Apparatus for.....	T. McGowan.....	443,328	Dec. 23	2792	717	53	1831
Distilling mineral oils and like products.....	J. Dewar and B. Redwood.....	419,931	Jan. 21	1923	507	50	404
Distilling oils, Apparatus for.....	E. A. Edwards.....	439,745	Nov. 4	170	44	53	641
Distilling oil, Apparatus for.....	T. McGowan.....	431,386	July 1	547	136	52	110
Distilling water.....	A. Gerdes and B. Thoens.....	425,316	Apr. 8	1355	362	51	272
Distilling wood, Apparatus for.....	E. Koch.....	421,029	Feb. 11	905	233 234	50	744
Distributor, Automatic.....	C. Tixidre.....	422,551	Mar. 4	273	69	50	1188
Ditcher and cultivator, Combined.....	O. T. Davies.....	439,933	Nov. 4	460	120 121	53	698
Ditching and excavating machine.....	H. Carter.....	421,122	Feb. 11	1037	266	50	769
Ditching-machine.....	A. E. Buchanan.....	435,276	Aug. 26	2835	750	52	1333
Ditching-machine.....	J. W. Humphreys.....	436,241	Sept. 9	1337	349	52	1636
Ditching-machine.....	H. Kelley.....	423,329	Mar. 11	1471	385 386	50	1423
Ditching machine.....	W. C. Witt, Jr.....	439,739	Nov. 4	164	43	53	640
Ditching-machine, grader, and loader, Combined.....	W. H. Sanford.....	427,273	May 6	383	100	51	886
Ditching-shovel, Scoop.....	D. Freel.....	440,260	Nov. 11	966	247	53	808
Ditching-wheel.....	J. W. Roat.....	435,770	Sept. 2	601	160	52	1490
Diving-armor.....	A. Hemenger.....	437,779	Oct. 7	163	51	53	34
Dock, Dry.....	N. Von Nerta.....	427,382	May 6	527	134	51	915
Dock, Portable.....	N. F. Rogers.....	431,675	July 8	1009	251	52	207
Dog-line, Detachable.....	A. Schneider.....	431,402	July 1	563	141	52	114
Doll.....	R. Steiner.....	427,927	May 13	1375	348	51	1089
Doll-hand.....	M. W. Alderson.....	440,986	Nov. 18	2173	562	53	1043
Doll-head.....	H. Graeser.....	440,706	Nov. 18	1714	439 440	53	956
Domestic press.....	L. H. Taylor.....	422,263	Feb. 25	2688	709	50	1097
Door.....	C. M. Amsden.....	432,504	July 22	2272	589	52	463
Door.....	H. A. Benedict.....	440,245	Nov. 11	943	243	53	804
Door.....	D. Johnson.....	437,438	Sept. 30	3317	865	52	2037
Door.....	F. R. H. Lohse.....	430,482	June 17	2135	525	51	1904
Door.....	J. H. Murray.....	427,599	May 13	867	217	51	992
Door.....	C. E. Richardson.....	443,541	Dec. 30	3123	804	53	1904
Door-actuating device.....	D. McVean.....	432,066	July 15	1613	413	52	330
Door-alarm.....	W. F. Lutz, Jr.....	434,876	Aug. 19	2205	577	52	1207
Door-alarm.....	J. F. Wollensak.....	421,339	Feb. 11	1346	349	50	827
Door attachment.....	F. W. Gregg.....	439,942	Nov. 4	476	124	53	701
Door-check.....	S. D. Ashmore.....	431,310	July 1	421	104	52	86
Door-check.....	J. D. Barber.....	424,257	Mar. 25	2829	756	50	1698
Door-check.....	J. Bardsley.....	441,274	Nov. 25	2680	696 697	53	1145
Door-check.....	F. F. Blandin.....	437,559	Sept. 30	3503	914	52	2075
Door-check.....	E. I. Blount.....	435,677	Sept. 2	467	123	52	1465
Door-check.....	E. I. Blount.....	435,678	Sept. 2	469	124	52	1465
Door-check.....	J. M. Brolhard.....	433,848	Aug. 5	608	158	52	875
Door-check.....	E. Chapman.....	442,953	Dec. 16	2132	548	53	1695
Door-check.....	E. T. Cooke and N. Kidney.....	435,732	Sept. 2	545	144	52	1480
Door-check.....	S. J. Dohrmann.....	422,745	Mar. 4	555	142	50	1242
Door-check.....	C. W. Fishel and F. S. Hotchkiss.....	432,867	July 22	2851	729	52	575
Door-check.....	T. Goodenough.....	432,485	July 15	2249	581	52	452
Door-check.....	J. A. Hoffman.....	424,063	Mar. 25	2568	686	50	1646
Door-check.....	E. W. Inler.....	435,226	Aug. 26	2756	728	52	1318
Door-check.....	C. J. Kieran.....	437,847	Oct. 7	266	80	53	52
Door-check.....	J. W. Lairmore.....	431,897	July 8	1357	343	52	274
Door-check.....	G. H. Markillie.....	442,068	Dec. 2	696	187	53	1393
Door-check.....	A. E. Matheson.....	431,667	July 8	999	249	52	205
Door-check.....	J. M. May.....	441,314	Nov. 25	2746	710	53	1157
Door-check.....	T. D. Morris.....	442,989	Dec. 16	2157	563	53	1707
Door-check.....	L. R. Plank.....	430,682	June 24	2475	604	51	1977
Door-check.....	J. H. and J. Sherry.....	443,262	Dec. 23	2680	687	53	1810
Door-check.....	W. Shipsey.....	436,800	Sept. 23	2272	599	52	1831
Door-check.....	R. Stevenson.....	426,339	Apr. 22	2890	761	51	590
Door-check.....	H. W. Struss.....	442,759	Dec. 16	1709	465	53	1630
Door-check.....	J. B. Thompson.....	432,958	July 22	2999	770	52	602
Door-check.....	S. J. Vance.....	434,534	Aug. 19	1668	436	52	1102
Door-check.....	J. G. Whittier.....	420,134	Jan. 28	2246	594	50	474
Door-check.....	M. W. Wiard.....	432,466	July 15	2219	573	52	446
Door-check.....	W. Windus.....	441,914	Dec. 2	441	118	53	1351
Door-check and closer, Combined.....	R. Adams.....	437,547	Sept. 30	3488	910	52	2072
Door-check and spring, Pneumatic.....	F. J. Wood.....	443,702	Dec. 30	3388	870	53	1954
Door-check, Pneumatic.....	J. A. Sherman.....	428,232	May 20	1827	458	51	1188
Door-clamp, Sliding.....	E. Y. Moore.....	439,886	Nov. 4	387	100	53	683
Door-closer.....	C. A. Root.....	441,899	Dec. 2	424	113	53	1348
Door-closer, Thermal.....	W. R. Patterson.....	427,899	May 13	1335	337	51	1082
Door-closing device.....	S. Loe.....	429,278	June 3	244	61	51	1519
Door-closing device.....	S. Loe.....	439,076	Oct. 21	2165	580	53	426
Door-fastening.....	A. Brunner.....	432,178	July 15	1790	460	52	364

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Door. Fire-proof.....	M. Kelling.....	425,804	Apr. 15	2080	556	51	423
Door. Fire-proof.....	J. W. Rapp.....	427,362	May 6	504	129	51	911
Door. Folding.....	A. Ney and J. Baumgartner.....	423,176	Mar. 11	1244	324	50	1380
Door-frame.....	F. R. H. Lohse.....	435,313	Aug. 26	2902	768	52	1344
Door-guard. Trap.....	J. Kearney.....	427,427	May 6	609	152	51	932
Door-hanger.....	W. Barry.....	434,651	Aug. 19	1873	490	52	1142
Door-hanger.....	C. W. Bullard.....	442,950	Dec. 16	2127	547	53	1694
Door-hanger.....	G. A. Colton.....	433,722	Aug. 5	413	106	52	836
Door-hanger.....	G. A. Colton.....	442,422	Dec. 9	1234	319	53	1510
Door-hanger.....	W. Cronk.....	427,838	May 13	1230	311	51	1062
Door-hanger.....	P. N. French.....	422,200	Feb. 25	2586	684	50	1078
Door-hanger.....	E. N. Hutchins.....	435,499	Sept. 2	181	50	52	1410
Door-hanger.....	B. F. Ishell and L. T. Wilcox.....	436,311	Sept. 9	1435	374	52	1657
Door-hanger.....	A. T. Kingsley.....	419,201	Jan. 14	834	220	50	179
Door-hanger.....	W. J. Lane.....	422,306	Feb. 25	2761	728	50	1110
Door-hanger.....	W. J. Lane.....	426,390	Apr. 22	2981	780	51	608
Door-hanger.....	W. J. Lane.....	433,009	July 29	3088	792	52	625
Door-hanger.....	W. Luitink.....	438,111	Oct. 7	678	184	53	131
Door-hanger.....	E. Y. Moore.....	426,298	Apr. 22	2334	746	51	578
Door-hanger.....	G. W. Morris.....	420,238	Jan. 28	2415	643	50	505
Door-hanger.....	J. R. Payson, Jr.....	442,273	Dec. 9	1001	264	53	1465
Door-hanger.....	E. T. Prindle.....	423,952	Mar. 25	2405	638	50	1616
Door-hanger.....	C. A. Reynolds.....	432,247	July 15	1887	486	52	382
Door-hanger.....	M. C. Richards.....	438,587	Oct. 14	1377	373	53	272
Door-hanger.....	J. Schlutter.....	423,280	Mar. 11	1406	366	50	1410
Door-hanger.....	L. Schmeitz.....	425,524	Apr. 15	1667	444 445	51	342
Door-hanger.....	A. L. Swett.....	436,197	Sept. 9	1276	333	52	1623
Door-hanger.....	L. Terry.....	443,638	Dec. 30	3283	846	53	1934
Door-hanger.....	J. C. Wands.....	438,510	Oct. 14	1266	342	53	240
Door-hanger.....	J. C. Wands.....	441,910	Dec. 2	437	117	53	1351
Door-hanger.....	G. W. Warner.....	429,295	June 3	282	68	51	1524
Door-hanger.....	T. J. Weaver.....	425,477	Apr. 15	1597	427	51	328
Door-hanger roller.....	N. Clark.....	439,112	Oct. 28	2227	598	53	444
Door-hanger. Sliding.....	G. A. Colton.....	433,721	Aug. 5	412	106	52	835
Door-hanger. Sliding.....	A. B. Pullman.....	438,325	Oct. 14	1003	272	53	198
Door-hanger track. Adjustable.....	H. P. Talbot.....	424,145	Mar. 25	2682	713 714	50	1669
Door-hanger wheel.....	W. J. Lane.....	422,305	Feb. 25	2761	727	50	1110
Door-hanger wheel.....	W. J. Lane.....	423,782	Mar. 18	2138	564	50	1557
Door-hanging gage.....	C. Le François.....	435,089	Aug. 26	2563	676	52	1281
Door-indicator.....	H. Hinkle.....	424,112	Mar. 25	2640	703	50	1660
Door-lock.....	R. G. Ping and H. Mendenhall.....	431,674	July 8	1009	250	52	207
Door-lock.....	J. F. Thompson.....	427,131	May 6	164	44	51	844
Door lock and latch.....	H. Morton.....	425,237	Apr. 8	1234	328	51	250
Door lock. Sliding.....	G. A. Colton.....	443,899	Dec. 30	3678	947	53	2011
Door lock. Sliding.....	C. E. Legg, O. G. Alexander, and G. W. Legg.....	439,163	Oct. 28	2301	618	53	457
Door-mat.....	G. E. Eggert.....	424,867	Apr. 1	676	178	51	130
Door-mat.....	H. Patthert.....	428,627	May 27	2121	616	51	1321
Door-mat. Metallic.....	T. V. Allis and R. H. Wolf.....	421,040	Feb. 11	925	239	50	748
Door-mat. Metallic.....	M. H. Hickey and W. R. Remme.....	422,780	Mar. 4	600	154	50	1251
Door. Metallic.....	D. L. Baroes.....	421,652	Feb. 18	1907	472	50	923
Door. Metallic.....	E. W. M. Hughes.....	420,513	Feb. 4	122	30	50	587
Door. Metallic.....	W. R. Sterling.....	433,376	July 29	3625	935	52	732
Door-opener.....	D. Hawksworth.....	424,060	Mar. 25	2563	685	50	1646
Door-opener.....	A. Hotaling.....	427,082	May 6	87	23	51	828
Door-opener.....	C. H. Woodcock.....	435,109	Aug. 26	2592	684	52	1286
Door opener and closer.....	W. M. Leavens.....	442,444	Dec. 9	1268	327 328	53	1517
Door-opener. Electric.....	A. Glaeser.....	419,766	Jan. 21	1662	441 442	50	350
Door-opener. Electric.....	W. L. Godfrey.....	425,777	Apr. 15	2044	544	51	416
Door-opener. Electric.....	G. A. Seib.....	420,834	Feb. 4	592	152	50	676
Door-opener. Pneumatic.....	D. A. Palmer.....	442,198	Dec. 9	896	239	53	1444
Door-opening device.....	W. H. Means.....	418,736	Jan. 7	116	28	50	25
Door or analogous device.....	H. J. Berners.....	443,350	Dec. 23	2827	726	53	1838
Door or like paneled article.....	C. M. Thompson and J. W. Lane.....	422,851	Mar. 4	714	183	50	1274
Door or shutter. Fire-proof.....	H. S. Shufelt.....	435,461	Sept. 2	118	33, 34	52	1398
Door or shutter straightener.....	J. Kaiser.....	430,032	June 10	1411	351	51	1754
Door or window casing for frame buildings.....	S. F. Lee and W. Johnson.....	426,414	Apr. 22	3029	793	51	617
Door. Screen.....	W. R. Lyle.....	443,448	Dec. 23	2973	765	53	1866
Door. Screen.....	G. W. Slawson.....	434,485	Aug. 19	1595	418	52	1088
Door-securer.....	G. G. Baker.....	432,009	July 15	1525	388	52	313
Door-securer.....	J. M. Kern.....	438,626	Oct. 21	1447	389	53	290
Door-securer.....	S. McLean.....	436,611	Sept. 16	1920	505	52	1754
Door-securer.....	A. D. Norton.....	436,940	Sept. 23	2523	661	52	1877
Door-securer.....	B. J. O'Quinn.....	435,589	Sept. 2	320	89	52	1437
Door-securer.....	M. Renshaw.....	423,343	Mar. 11	1487	389	50	1426
Door. Sliding.....	J. R. Bodell.....	442,944	Dec. 16	2119	545	53	1693
Door. Sliding.....	C. O. Brown.....	421,547	Feb. 18	1653	428	50	893
Door. Sliding.....	C. D. Fey.....	431,570	July 8	831	207	52	174
Door. Sliding.....	T. J. Gillette.....	433,678	Aug. 5	352	90	52	825
Door-spring.....	L. Barget.....	439,236	Oct. 28	2434	653	53	481
Door-spring.....	I. F. Field.....	438,802	Oct. 21	1731	464	53	342
Door-spring.....	G. Focht.....	432,027	July 15	1554	395	52	318
Door-spring.....	I. R. Gilbert.....	441,547	Nov. 25	3105	797	53	1227
Door-spring.....	A. D. Goodwin.....	432,398	July 15	2116	544	52	423
Door-spring.....	J. D. Hovermale.....	435,498	Sept. 2	181	50	52	1410
Door-spring.....	R. O. Wood.....	422,678	Mar. 4	468	120	50	1226
Door stop, holder, and closer.....	J. W. Gosling.....	439,296	Oct. 28	2546	680	53	503
Door. Storm.....	F. E. Shuck.....	421,034	Feb. 11	915	236	50	746
Door support. Sliding.....	J. R. Payson, Jr.....	432,314	Apr. 22	2855	752	51	583
Doors. Automatic apparatus for opening and closing.....	A. McWilliams.....	432,210	July 15	1842	473	52	373

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Doors. Constructing sliding	A. H. Ford	442,220	Dec. 9	998	{ 245 246 }	{ 53 53 }	1451
Doors. Counterbalancing device for	J. J. Graves	438,435	Oct. 14	1160	313	53	228
Doors. Device for opening and closing	E. H. Hemenway	426,181	Apr. 22	2669	701	51	543
Dope-cup	J. Robinson	433,149	July 29	3311	855	52	669
Dope-cup	P. G. Van Wie	432,100	July 15	1669	429	52	340
Double bag	C. McCaffrey and C. W. Biglow	428,853	May 27	2774	705	51	1388
Double-pole switch	G. H. Alton	428,586	May 27	2365	601	51	1311
Doubletree	M. B. Morrison	419,535	Jan. 14	1322	353	50	278
Doubletree. Plow	J. Kelly and L. F. Horrell	425,676	Apr. 15	1905	507	51	388
Doubletree. Wagon	J. Kelly and L. F. Horrell	425,677	Apr. 15	1905	507	51	388
Doubling and twisting machines. Coupling mechanism for draw-drum of	W. Stell	435,528	Sept. 2	223	62	52	1418
Doubling and winding machine	J. E. Tynan	422,667	Mar. 4	454	{ 115 116 }	{ 50 50 }	1223
Doubling machine. Thread	A. M. White	423,847	Mar. 18	2228	589	50	1575
Doubling-machines. Thread-breaking mechanism for	W. E. Walsh	436,064	Sept. 9	1060	275	52	1585
Dough. Machine for forming loaves of	F. Westerman	425,278	Apr. 8	1300	348	51	262
Dough-mixer	A. Moody and E. A. Delano	442,448	Dec. 9	1272	329	53	1518
Dough-sheeting machine. Continuous	J. H. Mitchell	443,662	Dec. 30	3628	934	53	2002
Dovetail joint	H. L. Andrews, D. Schustek, and T. H. Costello	419,133	Jan. 7	720	189	50	151
Dovetail joint	E. Marter	435,750	Sept. 2	585	156	52	1487
Dowel-pins. Apparatus for manufacturing	C. F. Stewart	435,463	Sept. 2	120	34	52	1398
Draft-adjusting stay for vehicles	J. D. Shaul	430,890	June 24	2809	689	51	2042
Draft and land gage for plows, &c	O. T. Owens	429,920	June 3	173	42	51	1504
Draft attachment for vehicles	H. Dufresno	415,739	Sept. 2	552	147	52	1482
Draft attachment. Plow	G. Richter	427,481	May 6	683	171	51	947
Draft attachment. Vehicle	T. H. Brigg	439,468	Oct. 28	2801	746	53	550
Draft attachment. Vehicle-tongue	S. E. Harper	430,945	June 24	2889	710	51	2056
Draft-chain spreader	S. P. and E. Windsor	428,708	May 27	2561	649	51	1345
Draft. Device for creating	C. H. Scharar	418,818	Jan. 7	237	58	50	51
Draft device for vehicles	A. B. Webster	428,981	May 27	2960	760	51	1426
Draft-equalizer	E. G. Boynton and A. G. Brown	431,547	July 8	798	199	52	167
Draft-equalizer	B. M. Connor	421,909	Feb. 25	2169	569	50	1001
Draft-equalizer	A. R. Dillehay	442,960	Dec. 16	2140	550	53	1697
Draft-equalizer	T. Dugdale	438,725	Oct. 21	1613	433	53	320
Draft-equalizer	H. J. Gunn	430,641	June 24	2399	584	51	1962
Draft-equalizer	H. Hitchcock	428,608	May 27	2395	609	51	1316
Draft-equalizer	I. K. Hopkins	434,901	Aug. 19	2265	594	52	1218
Draft-equalizer	A. Hunt	421,279	Feb. 11	1260	325	50	812
Draft-equalizer	A. Hunt	424,987	Apr. 8	858	228	51	175
Draft-equalizer	G. J. Kaplan	429,035	May 27	3047	786	51	1442
Draft-equalizer	H. Kroner	425,514	Apr. 15	1647	439	51	338
Draft-equalizer	J. L. Powles	422,154	Feb. 25	2518	665	50	1065
Draft-equalizer	R. L. Prestholdt	433,579	Aug. 5	205	54	52	796
Draft-equalizer	W. H. Reeves	430,753	June 24	2600	636	51	2001
Draft-equalizer	J. Ryan and W. A. McDonald	420,360	Jan. 28	2595	689	50	537
Draft-equalizer	O. W. Sanborn	435,457	Sept. 2	113	32	52	1397
Draft-equalizer	J. Stigman	440,287	Nov. 11	1019	262	53	815
Draft-equalizer	I. J. Stoner	429,222	June 3	175	42	51	1505
Draft-equalizer	S. H. Tinsman	436,443	Sept. 16	1665	437	52	1707
Draft-regulator	C. D. Howard	439,595	Oct. 28	2983	792	53	587
Drafting-triangle	C. A. Smith	437,870	Oct. 7	300	89	53	59
Draftsman's easel	E. Dummer	418,666	Jan. 7	326	79	50	68
Drain for stalls	M. Legan	428,848	May 27	2764	702	51	1386
Drain-testing machine	P. Fyfe and J. Dobson	421,922	Feb. 25	2188	{ 573 574 }	{ 50 50 }	1004
Drain-trap	F. D. Crowner	441,751	Dec. 2	196	51	53	1301
Drains or sewers. Construction of	B. W. Murray	419,277	Jan. 14	912	248	50	200
Drainage and sewerage system	W. Hallock	424,196	Mar. 25	2753	724	50	1682
Drainage connection. Surface-water	C. P. K. Kahler	428,342	May 20	1999	503	51	1221
Drainage. System of road	A. Mitchell	442,072	Dec. 2	701	188	53	1399
Drainer. Vegetable	C. W. and J. W. Sparks	419,729	Jan. 21	1606	428	50	339
Dramatic effects. Apparatus for producing illusory	J. W. Knell	423,171	Mar. 11	1239	322	50	1379
Drapers. Slat-protector for	W. D. Nelson	434,565	Aug. 19	1715	448	52	1112
Drapery-holder	J. J. Connelly	443,133	Dec. 23	2440	624	53	1763
Draw-bar	J. H. Elliott	425,308	Apr. 8	1346	360	51	270
Draw-bar-spring pocket	C. T. Schoen	426,143	Apr. 22	2620	688	51	534
Draw-bars. Follower-plate for	C. T. Schoen	437,940	Oct. 7	406	115	53	78
Draw-head	T. W. Heintzelman	421,495	Feb. 18	1572	407	50	878
Drawer	E. J. Brown	419,496	Jan. 14	1269	338	50	267
Drawer and sales-recorder. Cash	D. J. Johnston	427,424	May 6	603	{ 150 151 }	{ 51 51 }	931
Drawer attachment	E. W. Stone	442,496	Dec. 9	1350	347	53	1533
Drawer-check	C. T. Kenney	441,308	Nov. 25	2739	708	53	1156
Drawer-equalizer	J. H. Knaus	427,331	May 6	462	119	51	962
Drawer fittings. Furniture	G. A. Biddell	437,556	Sept. 30	3500	913	52	2074
Drawer for furniture	G. D. Watt	426,972	Apr. 29	3841	1003	51	783
Drawer. Furniture	D. M. Estey	434,044	Aug. 12	885	233	52	938
Drawer. Furniture	J. H. Knaus	427,475	May 6	677	169	51	945
Drawer. Furniture	E. F. Waller	423,196	Mar. 11	1268	330	50	1385
Drawer-guide and runner	E. E. Mayhew and A. C. Brandon	423,877	Mar. 18	2281	602	50	1555
Drawer-guide equalizer	A. Linders and H. D. Le Roy	419,963	Jan. 21	1971	518	50	412
Drawer-guide equalizer	L. A. Williams	430,908	June 24	2837	696	51	2047
Drawer guide for bureaus or like articles of furniture	D. C. Clapp	432,372	July 15	2072	533	52	415
Drawers. Adjustable partition for sliding	J. H. F. Dixon	436,626	Sept. 16	1943	510	52	1759
Drawers-pattern	R. E. Lowe	430,532	June 17	2214	545	51	1919
Drawing and shading pictures	D. Fausel	432,994	July 29	3065	787	52	621
Drawing-board	C. E. Sajous	429,203	June 3	147	36	51	1499
Drawing-board	C. E. Sajous	429,586	June 3	732	177	51	1613
Drawing-board	B. E. Sawyer	435,980	Sept. 9	930	245	52	1560
Drawing-board	J. T. Warden	434,690	Aug. 19	1941	504	52	1154

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Drawing irregular curves, ellipses, &c. Instrument for	C. W. Reeves	434,465	Aug. 19	1562	406	52	1080
Drawing-knife	E. Snyder	443,874	Dec. 30	3642	937	53	2005
Drawing-pad	C. A. Case	435,395	Sept. 2	21	6, 7	52	1379
Drawings. Producing line	L. O. Vincent	437,063	Sept. 23	2686	702	52	1910
Dredge	W. S. Fickett	427,165	May 6	222	56	51	855
Dredge or excavator buckets. Apparatus for operating	F. B. Barrows	430,561	June 17	2249	552	51	1925
Dredge or excavator. River	J. M. Sherman	431,405	July 1	566	142	52	115
Dredger	C. Lardner	429,351	June 3	379	89, 90	51	1543
Dredger-derrick	C. H. Sage	425,257	Apr. 8	1263	337	51	256
Dredger. Grab or clam-shell	E. Y. Harrison	423,427	Mar. 18	1615	{ 423 424 }	50	1459
Dredgers. Joint-connection for suction-pipes and protectors of	W. P. Humphreys	433,943	Aug. 12	749	195	52	913
Dredging and other machinery. Roller way or track for	D. C. Kingman	432,947	July 22	2980	765	52	597
Dredging apparatus. Hydraulic	H. W. Brown	441,055	Nov. 18	2281	{ 591 592 }	53	1064
Dredging device	E. E. Swett and A. Rasmussen	434,099	Aug. 12	984	207	52	959
Dredging. Hydraulic	J. McFarlane	426,846	Apr. 29	3676	{ 957 958 }	51	751
Dredging-machine	W. B. Pless	426,681	Apr. 29	3421	897	51	701
Dredging-machine	A. W. Robinson	428,141	May 20	1691	429	51	1161
Dredging-machine spindle-actuating device	W. S. Carlin	428,163	May 20	1716	435	51	1166
Dredging-machines. Bearing for rollers of	D. Urie	440,076	Nov. 4	673	179	53	739
Drenching-bit	S. A. Cox	432,513	July 22	2292	593	52	467
Dress-form	J. R. Hebert	427,510	May 6	728	182	51	956
Dress-form	T. W. Hohday	427,991	May 13	1466	372	51	1107
Dress-form	G. R. Sherman	424,230	Mar. 25	2797	746	50	1692
Dress-lifter	N. Douglas	437,357	Sept. 30	3177	830	52	2009
Dress-maker's fitting apparatus	J. L. Garcelon	439,500	Oct. 28	2846	758	53	559
Dress-shield	P. P. Guillaume	427,985	May 13	1459	370	51	1106
Dress-stays. Machine for covering	F. Rockett	428,142	May 20	1693	429	51	1161
Dress-steel	M. E. Whalen	425,558	Apr. 15	1712	458	51	351
Dressing and thread-cutting tool	S. T. Harrison	442,480	Dec. 9	1319	341	53	1527
Dressing-case or bureau attachment	W. H. Hall	429,683	June 10	875	213	51	1650
Drier:							
See Bagasse-drier.	Lace-drier.						
Brick-drier.	Lumber-drier.						
Clothes-drier.	Pulp-drier.						
Fruit-drier.	Steam-drier.						
Hop-drier.							
Drier	J. Bond	440,786	Nov. 18	1848	{ 476 477 }	53	980
Drier	J. M. Charnock	423,670	Mar. 18	1981	522	50	1528
Drier	E. R. Shaw	427,198	May 6	264	68, 69	51	863
Drier	J. C. Winters and J. M. Prophet	425,842	Apr. 15	2145	572	51	434
Drier	G. A. Young	442,213	Dec. 9	918	243	53	1449
Drier and conveyer	J. H. Duncan	423,598	Mar. 18	1853	429	50	1503
Drier and digester. Combined	P. C. Vogellus	428,978	May 27	2957	759	51	1425
Drier for drying sugar, grain, &c	J. M. Charnock	423,671	Mar. 18	1983	523	50	1528
Drier for fruit and other materials	H. H. Taylor	430,762	June 24	2612	640	51	2004
Drier for grain, seed, &c	H. A. Hogel	431,055	July 1	42	9, 10	52	10
Drier for humid materials	C. L. F. A. Büttner and C. Meyer	426,361	Apr. 22	2928	769	51	597
Drill:							
See Coal-drill.	Metal-drill.						
Coal or rock drill.	Power-machine drill.						
Corn-drill.	Press-drill.						
Dental drill.	Ratchet-drill.						
Electric drill.	Rock-drill.						
Expansion-drill.	Rock or earth drill.						
Grain-drill.	Upright drill.						
Grinding machine.	Well-drill.						
Twist-drill.							
Drill	G. A. Menendez	423,620	Mar. 18	1891	498	50	1510
Drill	J. Muirhead	439,972	Nov. 4	530	139	53	710
Drill	F. H. Richards	419,883	Jan. 21	1859	489	50	390
Drill	L. W. Rupp	419,563	Jan. 14	1356	363	50	285
Drill-blanks. Grooving	J. C. Taft	434,139	Aug. 12	1051	272	52	971
Drill-blanks. Machine for swaging	J. C. Taft	431,925	July 8	1391	353	52	280
Drill-feed. Automatic	J. Ulrich	429,073	May 27	3102	800	51	1451
Drill-frame. Adjustable	W. Smith	422,648	Mar. 4	427	107	50	1218
Drill-operating device	J. W. Miller	420,692	Feb. 4	372	98	50	637
Drill or auger	G. H. Sellers	423,297	Dec. 23	2739	703	53	1821
Drill press. Corner	F. Schoff	439,567	Oct. 28	2940	781	53	578
Drill-rods. Tool for	A. Ball	426,613	Apr. 29	3320	871	51	683
Drill, seeder, and cultivator. Combined	J. W. Rogers	431,919	July 8	1381	{ 350 351 }	52	278
Drill-support	F. Schoff	441,509	Nov. 25	3044	784	53	1215
Drill swaging stock	A. Laundry and H. H. Warren	428,498	May 20	2225	562	51	1264
Drill system. Electro-magnetic	H. N. Marvin	431,170	July 1	206	51	52	43
Drill-tube coupling	M. C. Bullock	430,617	June 24	2356	576	51	1954
Drills. Apparatus for testing and straightening	O. Smalley, Jr	427,805	May 13	1186	298	51	1053
Drills. Machine for making twist	S. Moore	427,635	July 22	2477	637	52	502
Drills. Machine for straightening and sizing twist	S. Moore	432,636	July 22	2479	{ 637 638 }	52	503
Drills. Manufacture of twist	S. Fenner and J. C. Taft	437,187	Sept. 30	2912	758	52	1959
Drilling and reaming machine	W. B. Hughes	429,526	June 3	637	{ 156 157 }	51	1594
Drilling apparatus	J. T. Cowley	431,107	July 1	113	29, 30	52	24
Drilling apparatus	I. E. Storey	418,854	Jan. 7	307	74	50	64
Drilling holes in metallic wheels. Machine for	G. H. Everson	420,379	Jan. 28	2621	696	50	542
Drilling-machine	C. A. Bell	431,319	July 1	431	107	52	88

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Drilling-machine	W. E. Canedy	422,569	Mar. 4	295	75	50	1192
Drilling-machine	J. T. Cowley	431,108	July 1	117	30	52	25
Drilling-machine	T. Farmer, Jr.	423,864	Mar. 18	2258	596	50	1581
Drilling-machine	S. and W. Garbrant ..	441,756	Dec. 2	202	53	53	1302
Drilling-machine	W. H. James	418,950	Jan. 7	469	{ 116 117 }	50	98
Drilling-machine	B. G. Luther	438,014	Oct. 7	525	{ 147 148 }	53	190
Drilling-machine	J. H. Miedler	421,416	Feb. 18	1456	377	50	856
Drilling-machine	G. W. Midgley and H. E. Harbaugh.	431,606	July 8	881	219	52	184
Drilling-machine	F. B. Miles	430,082	June 10	1498	{ 371 372 }	51	1771
Drilling-machine	F. H. Richards	419,070	Jan. 7	636	165	50	134
Drilling-machine	F. H. Richards	419,071	Jan. 7	638	165	50	134
Drilling-machine	F. H. Richards	421,517	Feb. 18	1604	414	50	8-4
Drilling-machine	F. H. Richards	422,540	Mar. 4	252	65	50	1184
Drilling-machine	F. H. Richards	426,571	Apr. 29	3253	{ 853 854 }	51	670
Drilling-machine	J. Ross	441,900	Dec. 2	425	113	53	1348
Drilling-machine	J. H. Smith	438,027	Oct. 7	552	152	53	104
Drilling-machine	D. E. and L. E. Whitou ..	426,347	Apr. 22	2900	763	51	592
Drilling-machine	H. B. Wyman	484,576	Aug. 19	1726	452	52	1114
Drilling-machine attachment ..	S. R. Payne	423,269	Mar. 11	1384	361	50	1406
Drilling-machine. Portable	J. G. Downie	441,540	Nov. 25	3094	795	53	1225
Drilling-machine. Portable	C. L. Smith and C. H. Westerman ..	430,700	June 24	2501	{ 611 612 }	51	1982
Drilling-machine. Steam	W. J. Pearce	434,883	Aug. 19	2230	585	52	1211
Drink-mixer	O. Smith	423,706	Mar. 18	2032	536	50	1537
Drinks. Apparatus for supplying hot and cold ..	J. V. D. Coon, C. C. Morian, and M. C. Follett.	441,628	Nov. 25	3235	834	53	1253
Drinking-basin for animals. Sanitary and automatic ..	J. A. Quigley	434,072	Aug. 12	937	246	52	949
Drinking-fountain. Automatic	J. D. Houston	437,031	Sept. 23	2647	692	52	1903
Driving-wheel. Machinery	G. D. Munsing	428,728	May 27	2591	657	51	1351
Dropper: See Harvester-dropper. Seed-dropper. Medicine-dropper.							
Drum	J. D. Legault	423,060	Mar. 11	1066	276	50	1346
Drum	G. Petter, Jr.	440,192	Nov. 11	857	221	53	787
Drum	M. Woodman	438,670	Oct. 21	1510	407	53	392
Drum and damper. Heating-	G. G. Burton	438,297	Oct. 14	965	262	51	189
Drum-clamp. Adjustable	L. N. De Longé	422,742	Mar. 4	551	141	50	1241
Drum. Driving	S. Diescher	438,250	Oct. 14	883	240	53	175
Drum. Heating	R. Babcock	436,452	Sept. 16	1681	443	52	1710
Drum. Heating	E. P. Johnston	428,756	May 27	2632	666	51	1360
Drum. Heating	G. Ott	431,782	July 8	1181	295	52	239
Drum. Hot-air	E. T. Whiting	442,846	Dec. 16	1945	500	53	1659
Drum-snare	H. Theophil	436,590	Sept. 16	1899	498	52	1750
Drums. Oven attachment for	W. H. Ryer	427,799	May 13	1180	296	51	1053
Drums. Water-heating attachment for ..	W. H. Ryer	427,798	May 13	1179	296	51	1052
Dry battery	W. L. F. Hellesen	439,151	Oct. 28	2282	612	53	451
Dry closet	W. H. Johnson and T. Kruse ..	440,895	Nov. 18	2024	521	53	1014
Dry closet	W. E. Stevens	431,824	July 8	1251	313	52	253
Dry closet	F. F. Street	430,154	June 17	1606	399	51	1802
Drying apparatus	J. Blumer	434,652	Aug. 19	1875	490	52	1142
Drying apparatus	J. K. Proctor and J. H. Knowles ..	433,094	July 29	3228	{ 830 831 }	52	652
Drying apparatus	H. M. Sciple	439,328	Oct. 28	2588	{ 690 691 }	53	511
Drying apparatus	A. Guillaume	442,806	Dec. 16	1875	484	53	1646
Drying apparatus	H. W. Rappleye	443,150	Dec. 23	2484	634	53	1769
Drying apparatus	C. Sentz	421,058	Feb. 11	952	{ 244 245 }	50	753
Drying apparatus. Collar and cuff ..	J. G. Dixon	431,766	July 8	1155	{ 287 288 }	52	234
Drying fabrics	F. Stiner and E. R. Darling	426,970	Apr. 29	3837	1003	51	783
Drying fabrics. Machine for	F. Stiner and E. R. Darling	426,969	Apr. 29	3835	{ 1002 1003 }	51	782
Drying fish and other articles. Apparatus for ..	E. Robinson	432,900	July 22	2894	{ 741 742 }	52	583
Drying-kiln	W. S. Mayo	433,800	Aug. 5	544	140	52	862
Drying-kiln	S. W. Peregrine	435,258	Aug. 26	2904	743	52	1327
Drying-kiln	S. W. Peregrine	438,423	Oct. 14	1146	309	53	225
Drying-machine	J. K. Proctor and J. H. Knowles ..	426,321	Apr. 22	2865	{ 754 755 }	51	585
Drying-machine	J. K. Proctor and J. H. Knowles ..	432,282	July 15	1950	499	52	393
Drying-machine. Centrifugal	A. F. Doremus	430,632	June 24	2378	551	51	1958
Drying-machine. Fabric	B. Stefson	430,215	Jan. 28	2380	633	50	498
Drying starch or other solid matter. Apparatus for ..	F. M. F. Cazin	424,760	Apr. 1	504	136	51	98
Dumb-waiter	R. R. Bright	433,931	Aug. 12	733	190	52	910
Dumb-waiter	G. M. Emerick	434,437	Aug. 19	1523	{ 397 398 }	52	1072
Dumb-waiter regulator	G. W. Hennion	422,409	Mar. 4	64	17, 18	50	1149
Dumb-waiters, &c. Indicator for	L. Friess	426,257	Apr. 22	2780	730	51	567
Dumping apparatus	J. E. Curry	425,596	Apr. 15	1769	{ 474 475 }	51	361
Dumping-bucket	W. E. and E. S. Ludlow	424,989	Apr. 8	860	228	51	175
Dumping-cage. Automatic	B. Russell and H. T. Parsons	432,568	July 22	2377	613	52	484
Dumping-receptacle	B. F. Singer	428,731	May 27	2594	657	51	1352
Duplex tube	E. J. Steele	435,193	Aug. 26	2714	717	52	1310
Dust-arrester	E. W. Hoover	432,200	July 15	1824	469	52	370
Dust-arrester	J. B. Martin	431,951	July 8	1430	363	52	288
Dust-arrester	C. F. Vorrell	434,216	Aug. 12	1167	303	52	994
Dust arresting and collecting device	A. Hunter	419,954	Jan. 21	1960	515	50	410

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Dust box or pan	M. W. Schumacher	435,251	Aug. 26	2795	741	52	1325
Dust-collector	W. E. Allington	418,535	Jan. 7	273	67	50	58
Dust-collector	W. E. Allington	418,536	Jan. 7	276	67, 68	50	59
Dust-collector	W. E. Allington and W. H. Curtis	418,534	Jan. 7	272	66	50	57
Dust-collector	J. S. Ash	435,165	Aug. 26	2672	706	52	1302
Dust-collector	E. Bretney	438,523	Oct. 14	1284	347	53	253
Dust-collector	G. A. and J. P. Culver	441,140	Nov. 25	2439	632	53	1103
Dust-collector	W. H. Curtis	420,296	Jan. 28	2507	665	50	521
Dust-collector	H. Farrar	435,057	Aug. 26	2516	665	52	1272
Dust-collector	L. W. Haskell	429,347	June 3	374	89	51	1542
Dust-collector	J. E. and O. M. Johnson	420,072	Jan. 28	2144	567	50	454
Dust-collector	O. Kutsche	432,491	July 15	2256	583	52	453
Dust-collector	W. D. Smith	430,444	June 17	2076	513	51	1893
Dust-collector	R. Whitehill	421,215	Feb. 11	1174	301 302	50	795
Dust-collector	A. N. Wolf	432,350	July 15	2044	526	52	409
Dust-collector	J. A. and E. F. Woodbury	424,157	Mar. 25	2702	719	50	1672
Dust-collectors. Ventilating-hood for	J. T. Briggs	428,067	May 20	1579	401	51	1139
Dust-guard	A. Twyman and H. G. Bird	437,370	Sept. 30	3209	835	52	2015
Dust-pan	G. A. W. Cage, Jr.	424,461	Apr. 1	28	8	51	8
Dust-pan	G. H. Ennis	419,115	Jan. 7	695	183	50	146
Dust-pan	C. H. Marshall	422,240	Feb. 25	2658	702	50	1092
Dust-pan	W. D. Martin	443,327	Dec. 23	2791	717	53	1831
Dust-pans. Brush attachment for	J. B. Dean and H. H. Earle	439,744	Nov. 4	169	44	53	641
Dust-proof joint	E. F. Roberts	425,050	Apr. 8	953	255	51	192
Dwelling-house	L. E. Ladd	430,480	June 17	2133	524	51	1903
Dye	F. C. Weiss	443,026	Dec. 16	2239	53	53	1718
Dye. Azo	P. Ott	423,569	Mar. 18	1816	50	50	1496
Dye. Blue	R. Bohn	440,536	Nov. 11	1430	53	53	893
Dye. Blue	C. Duisberg	432,989	July 29	3058	52	52	620
Dye. Blue	M. Hoffmann and A. Weinberg	442,680	Dec. 16	1639	53	53	1600
Dye. Blue	B. Homolka	418,916	Jan. 7	423	50	50	88
Dye. Blue	W. Majert	440,953	Nov. 18	2127	53	53	1033
Dye. Blue	C. A. Mayer	440,359	Nov. 11	1122	53	53	834
Dye. Blue	J. Mohler	420,164	Jan. 28	2292	50	50	483
Dye. Blue	T. Reissig	431,541	July 1	787	52	52	156
Dye. Blue	A. Weinberg	434,493	Aug. 19	1606	52	52	1090
Dye. Blue	O. N. Witt	420,372	Jan. 28	2612	50	50	541
Dye. Blue azo	A. Weinberg	421,640	Feb. 18	1791	50	50	920
Dye. Blue-black	L. Gans	442,369	Dec. 9	1152	53	53	1493
Dye. Blue-black azo	R. Lauch and M. Kahn	440,639	Nov. 18	1600	53	53	935
Dye. Blue carbon	M. Ulrich	423,970	Mar. 25	2436	50	50	1622
Dye. Blue-green	A. Herrmann	422,018	Feb. 25	2312	50	50	1028
Dye. Blue-green	A. Herrmann. (Reissue)	11,116	Oct. 14	1390	53	53	274
Dye. Brown	J. Walter	440,288	Nov. 11	1019	53	53	816
Dye. Brown carbon	R. Nietzki	424,019	Mar. 25	2510	50	50	1635
Dye. Dark blue	O. N. Witt	420,374	Jan. 28	2614	50	50	541
Dye for leather	E. O. and S. M. Wallace	425,919	Apr. 15	2251	51	51	453
Dye. Green	A. F. Poirrier	423,341	Mar. 11	1484	50	50	1426
Dye. Greenish-blue	A. Herrmann	437,989	Oct. 7	488	53	53	93
Dye. Nitroso	A. F. Poirrier	420,311	Jan. 28	2525	50	50	525
Dye. Red	C. Dreyfus	441,945	Dec. 2	491	53	53	1360
Dye. Red	R. Gnehm	425,504	Apr. 15	1630	51	51	335
Dye. Red	G. Koerner	429,350	June 3	378	51	51	1543
Dye. Red	C. Schranbe	430,975	June 24	2935	51	51	2064
Dye. Red	A. Weinberg	426,345	Apr. 22	2897	51	51	592
Dye. Red to brown	C. L. Müller	430,534	June 17	2217	51	51	1919
Dye. Substantive yellow	W. Pützinger	428,629	May 27	2423	51	51	1321
Dye-stuffs. Manufacture of	R. Lauch and C. Krekeler	438,438	Oct. 14	1162	53	53	228
Dye-vat	E. Remy	433,632	Aug. 5	279	74, 75	52	810
Dye-vat	C. A. G. Schmidt	425,703	Apr. 15	1944	516	51	396
Dye. Violet	H. Boedeker	438,053	Oct. 7	590	53	53	112
Dye. Yellow	C. L. Müller	430,535	June 17	2218	51	51	1919
Dye. Yellow	C. Ris	440,281	Nov. 11	1009	53	53	814
Dye. Yellow-red	C. Schranbe	443,408	Dec. 23	2910	748	53	1854
Dyes. Making azo	M. Kahn	425,885	Apr. 15	2204	51	51	445
Dyes. Making blue	C. Duisberg	423,550	Mar. 18	1791	50	50	1492
Dyes. Preparing diazo	C. L. Müller	430,533	June 17	2215	51	51	1919
Dyeing	T. Ingham	433,790	Aug. 5	526	52	52	859
Dyeing	F. Zeman	440,414	Nov. 11	1228	53	53	855
Dyeing and washing machine. Pneumatic	F. Stiner and E. R. Darling	426,875	Apr. 29	3716	970 971	51	759
Dyeing apparatus	C. Corron	430,925	June 24	2858	702	51	2051
Dyeing apparatus	L. Ducros and E. Tymeson	434,864	Aug. 19	2180	571 572	52	1202
Dyeing apparatus	W. D. Jones	420,877	Feb. 4	665	172 173	50	690
Dyeing apparatus	C. L. Klauder	425,614	Apr. 15	1802	483	51	368
Dyeing apparatus	C. L. Klauder	428,614	May 27	2401	610	51	1317
Dyeing apparatus	J. H. Lorimer	418,801	Jan. 7	214	53	50	47
Dyeing apparatus	J. F. Willmot	441,528	Nov. 25	3072	790	53	1220
Dyeing apparatus. Hide	J. Kristen	442,628	Dec. 16	1563	404	53	1584
Dyeing, bleaching, and washing yarn. Apparatus for	W. Maybury	439,966	Nov. 4	518	137	53	708
Dyeing bides. Apparatus for	J. Kristen	427,697	May 13	1013	255	51	1021
Dyeing machine. Yarn	D. Dunn	433,398	July 29	3652	943	52	738
Dyeing machine. Yarn	J. J. Fearon	424,190	Mar. 25	2747	732	50	1681
Dyeing machine. Yarn	L. Weldon	439,708	Nov. 4	121	33	53	631
Dyeing skeins. Apparatus for	C. Corron	437,173	Sept. 30	2891	753	52	1955
Dyeing yarn in cops. Machine for	I. F. Peck	436,433	Sept. 16	1646	433	52	1703
Dyeing yarn in cops. Spindle-holder for	I. F. Peck	434,136	Aug. 12	1047	270 271	52	970
Dynamite	W. D. Borland	443,035	Dec. 16	2259	53	53	1721
Dynamite	P. Germain	427,679	May 13	976	51	51	1014
Dynamite	E. Judson	420,626	Feb. 4	285	50	50	619

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Dynamo.....	E. H. Johnson.....	431,812	July 8	1237	368	52	250
Dynamo and motor regulator.....	W. T. Peel.....	426,570	Apr. 29	3251	853	51	669
Dynamo-brush clamp.....	T. Reese, Jr.....	441,256	Nov. 25	2645	687	53	1139
Dynamo or motor.....	L. Gutmann.....	419,661	Jan. 21	1530	{ 403 404 }	{ 50 50 }	322
Dynamo-regulator.....	H. W. Cooley.....	423,909	Mar. 25	2337	616	50	1604
Dynamo-regulator.....	W. H. Elkins.....	427,163	May 6	219	56	51	854
Dynamo-regulator.....	W. H. Elkins.....	427,164	May 6	220	56	51	855
Dynamo-regulator.....	W. H. Elkins.....	430,634	June 24	2384	582	51	1959
Dynamo-regulator.....	E. and F. W. Heymann.....	421,048	Feb. 11	936	242	50	750
Dynamo-regulator.....	J. J. Wood.....	420,138	Jan. 28	2250	596	50	475
Dynamo-regulator.....	J. J. Wood.....	426,699	Apr. 29	3451	{ 904 905 }	{ 51 51 }	707
Dynamo safety device.....	E. P. Clark.....	426,108	Apr. 22	2565	675	51	523
Dynamo safety device.....	E. P. Clark.....	426,109	Apr. 22	2567	675	51	523
Dynamo safety device.....	E. P. Clark.....	426,110	Apr. 22	2568	{ 675 676 }	{ 51 51 }	523
Dynamo-stations. Safety device for.....	C. E. Ongley.....	443,727	Dec. 30	3426	880	53	1961
Dynamo support. Vertically-adjustable.....	T. Wrigley.....	434,011	Aug. 12	841	221	52	929
Dynamo. Welding or other.....	E. Thomson.....	432,652	July 22	2505	644	52	507
Dynamos and motors. Automatic regulator for.....	F. J. Cleaver and G. Fassold.....	440,016	Nov. 4	595	157	53	724
Dynamos and motors. Rotating part of.....	E. A. Sperry.....	434,096	Aug. 12	975	255	52	957
Dynamos. Brush-holder for.....	P. Clans and E. Gengenbach.....	418,685	Jan. 7	26	7	50	7
Dynamos. Contact-brush for.....	E. Franklin.....	435,296	Aug. 26	2882	763	52	1339
Dynamos. Method of and apparatus for connecting.....	C. T. Child.....	439,929	Nov. 4	451	118	53	697
Dynamos or motors. Governor for.....	A. G. Waterhouse.....	420,398	Jan. 28	2649	702	50	548
Dynamos. Speed-regulator for.....	S. E. Nutting.....	436,901	Sept. 23	2464	643	52	1866
Dynamometer.....	J. Emerson.....	423,863	Mar. 18	2254	{ 595 596 }	{ 50 50 }	1580
Dynamometer. Belt.....	J. D. Riggs.....	431,077	July 1	74	18	52	17
Dynamometer or power-scale.....	J. Emerson.....	423,862	Mar. 18	2251	595	50	1579
Ear and bail.....	F. Z. Hicks.....	434,829	Aug. 19	2129	557	52	1192
Ear-drum. Artificial.....	J. W. Cousins.....	419,420	Jan. 14	1165	309	50	246
Ear-muff.....	C. Moore.....	428,511	May 20	2242	567	51	1268
Ear-muffle.....	F. P. Kaiser.....	437,602	Sept. 30	3559	929	52	2086
Ear-phon rest.....	G. E. Christie.....	418,682	Jan. 7	23	6	50	7
Ear-protector.....	G. B. Hamilton.....	432,612	July 22	2429	626	52	494
Ear-ring.....	E. Ciner.....	435,354	Aug. 26	2976	789	52	1357
Ear-ring.....	H. Rees.....	421,433	Feb. 18	1479	388	50	860
Ear-ring.....	W. H. Whittemore and G. Müller.....	439,457	Oct. 28	2785	742	53	517
Ear-rings. Ear-wire for.....	E. A. Lehmann.....	427,265	May 6	371	96	51	883
Ear-trumpet.....	F. M. Blodgett.....	439,099	Oct. 28	2206	592	53	440
Ear-trumpet.....	J. Boyd.....	438,369	Oct. 14	1065	290	53	210
Earth. Apparatus for raising and moving.....	R. T. White.....	428,437	May 20	2143	539	51	1249
Earth-closet.....	F. E. Wolff.....	426,896	Apr. 29	3742	977	51	765
Earth-closet. Dry.....	T. W. Carrico.....	420,332	Jan. 28	2554	676	50	530
Earth-closet. Portable.....	C. H. Leonard.....	440,611	Nov. 11	1556	400	53	916
Earth-moving machine.....	W. W. Lemmon.....	439,074	Oct. 21	2162	579	53	425
Earthenware building material. Porous.....	W. Lenderoth.....	426,642	Apr. 29	3364	.....	51	691
Earthenware. Manufacturing porous.....	W. Lenderoth.....	426,643	Apr. 29	3365	.....	51	691
Easel.....	O. Berg.....	428,796	May 27	2687	682	51	1371
Easel.....	G. L. Hann.....	423,151	Mar. 11	1209	315	50	1373
Easel.....	E. A. Jeffery.....	425,177	Apr. 8	1157	305	51	234
Easel.....	E. Werner.....	422,673	Mar. 4	463	118	50	1225
Easel. Alarm.....	M. K. Paine.....	430,084	June 10	1501	373	51	1771
Easel and phonograph-horn tripod. Combined.....	K. J. Minot.....	434,286	Aug. 12	1279	332	52	1016
Easel for the use of china-decorators.....	A. H. Mason.....	429,858	June 10	1136	{ 281 282 }	{ 51 51 }	1700
Easter-egg.....	B. Wilmsen.....	419,391	Jan. 14	1118	296	50	236
Easy-chair.....	J. Busch.....	430,829	June 24	2714	665	51	2023
Eaves-trough.....	T. C. Belding.....	428,822	May 27	2731	693	51	1379
Eaves-trough.....	L. S. Bonbrake.....	438,519	Oct. 14	1276	315	53	251
Eaves-trough.....	L. C. Sims.....	419,568	Jan. 14	1364	365	50	287
Eaves-trough.....	J. Woek.....	434,310	Aug. 12	1313	342	52	1023
Eaves-trough angle or molding.....	J. P. Abbott.....	435,552	Sept. 2	267	74	52	1426
Eaves-trough-beading machine.....	T. C. Belding.....	428,549	May 20	2294	583	51	1277
Eaves-trough hanger.....	J. P. Abbott.....	425,591	Apr. 15	1762	473	51	360
Eaves-trough hanger.....	T. C. Belding.....	435,169	Aug. 26	2678	707	52	1303
Eaves-trough hanger.....	M. F. Mahin.....	441,429	Nov. 25	2922	753	53	1193
Eaves-trough hanger.....	C. Van Horn.....	420,366	Jan. 28	2605	693	50	539
Eaves-trough hanger.....	W. S. Wakeley.....	420,176	Jan. 28	2318	612	50	486
Eccentric-rod.....	W. Wright.....	428,542	May 20	2283	580	51	1275
Eccentric. Shifting.....	J. M. Branch.....	425,293	Apr. 8	1321	353	51	266
Eccentric. Variable.....	D. Best.....	432,594	July 22	2408	620	52	490
Ecraseur.....	H. Haussmann.....	422,777	Mar. 4	597	153	50	1251
Ecraseur.....	F. J. Mesle.....	421,082	Feb. 11	981	252	50	758
Ecraseur. Castration.....	J. Fergen and J. T. Macwhinnie.....	437,148	Sept. 23	2848	740	52	1940
Edge-tools. Sharpener for.....	H. L. Johnson.....	435,697	Sept. 2	499	132	52	1471
Edge-trimming cutter.....	J. F. Freeman.....	443,434	Dec. 23	2948	759	53	1862
Edger. Gang.....	P. B. Hand.....	437,925	Oct. 7	386	110	53	74
Edger. Gang.....	A. E. Roe.....	431,483	July 1	694	{ 173 174 }	{ 52 52 }	139
Edgers. Guard for gang.....	J. Korbel.....	440,829	Nov. 18	1927	495	53	994
Educational appliance.....	F. E. Meyers.....	421,956	Feb. 25	2230	586	50	1012
Effervescing drinks or other liquids. Draft-tube for.....	W. P. Clark.....	442,611	Dec. 16	1541	398	53	1580
Egg-beater.....	A. J. Anstin.....	428,999	May 27	2984	765	51	1430
Egg-beater.....	T. W. Brown.....	419,631	Jan. 21	1465	394	50	313
Egg-beater.....	J. J. Fletcher.....	442,429	Dec. 9	1245	321	53	1512
Egg-beater.....	F. Hallam.....	424,108	Mar. 25	2636	702	50	1660
Egg-carrier.....	H. L. Anderson and W. Witte.....	419,621	Jan. 21	1449	389	50	310
Egg-carrier.....	M. J. Benjamin.....	433,228	July 29	3422	883	52	691
Egg-carrier.....	F. Benoit.....	433,161	July 29	3326	860	52	672
Egg-carrier.....	E. H. Flory.....	422,197	Feb. 25	2583	683	50	1078
Egg-carrier.....	S. H. Houghton.....	429,854	June 10	1127	279	51	1699

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Egg-carrier	A. D. Linn and A. A. Lytle	426,943	Apr. 29	3798	992	51	775
Egg-carrier	J. L. Reeves	430,219	June 17	1706	424	51	1821
Egg-case	C. F. A. Eddy	430,227	June 17	1722	428	51	1824
Egg-case	C. E. Grapewine	419,252	Jan. 11	911	241	50	195
Egg-case, Wire	G. E. Raymond	433,925	Aug. 5	714	185	52	896
Egg-holder	D. H. Mathias	437,706	Oct. 7	37	12	53	10
Egg-lifter	A. E. Smith	433,546	Aug. 5	147	42	52	785
Egg-preserving apparatus	J. Ford	438,073	Oct. 7	623	170	53	119
Egg-sirup. Preparing	P. Thorpe	433,832	Aug. 5	588		52	871
Egg-tester	F. and C. Buehrig	430,334	June 17	1928	472	51	1863
Egg-tester	F. Herrick	423,685	Mar. 18	1997	527	50	1531
Egg-tester	F. H. Juergens	431,591	July 8	863	215	52	180
Egg-tester	O. E. Kjesbu and H. Stenson	430,476	June 17	2129	523	51	1903
Egg-tester	J. L. Ritter	437,245	Sept. 30	2994	783	52	1975
Egg-tester	A. H. Stille	422,991	Mar. 11	961	253	50	1327
Egg-tester	C. Yäkel	434,141	Aug. 12	1054	272	52	972
Egg-testing device	R. A. Galbraith	441,656	Dec. 2	39	11	53	1269
Egg-transporting crate and tray	O. E. Kjesbu and H. Stenson	430,477	June 17	2130	523	51	1903
Egg-tray	E. L. Mitchell	436,538	Sept. 16	1823	480	52	1735
Egg-tray	B. F. Whittaker	441,459	Nov. 25	2980	767	53	1202
Egg-tray machine	W. S. Lowe	424,068	Mar. 25	2573	688	50	1647
Eggs. Composition for preserving	S. C. Matteson	432,060	July 15	1607		52	323
Eggs. Device for opening hot boiled	G. W. King	426,281	Apr. 22	2812	738	51	574
Eggs. Device for use in boiling	J. Verdam	440,980	Nov. 18	2166	561	53	1041
Ejector	L. B. Fulton	440,803	Nov. 18	1875	482	53	986
Ejector. Fluid	T. E. Jones	419,126	Jan. 7	710	187	50	149
Ejector for oil-wells	W. O'Neil	425,624	Apr. 15	1820	487	51	372
Ejector for vacuum-brakes	A. F. Massey	428,621	May 27	2414	613	51	1310
Elastic chisel	G. H. Blakesley	439,375	Oct. 28	2661	704	53	524
Elastic endless band. Covered	J. Ashworth	423,713	Mar. 18	2042	538	50	1539
Elastic fabric	A. C. Woodward	419,395	Jan. 14	1124	297	50	237
Elastic or corded fabric	W. Lapworth	440,743	Nov. 18	1765	454	53	967
Elastic roll	J. Brinkerhoff	418,886	Jan. 7	363	87	50	76
Elastic woven fabric	J. W. Green, Jr. and E. H. Sawyer	436,872	Sept. 23	2416	630	52	1857
Elastic woven fabric	G. C. Moore	440,868	Nov. 18	1982	511	53	1005
Elastic woven fabric	G. C. Moore	441,107	Nov. 18	2373	615	53	1081
Elbow-blanks. Machine for trimming	D. A. Ritchie	432,564	July 22	2373	611	52	483
Election-booth	O. H. Hasselmau	438,624	Oct. 21	1444	329	53	290
Election-booth. Folding	G. Blair	438,797	Oct. 21	1726	463	53	341
Electric accumulator-plates. Apparatus for preparing	C. F. Pollak	431,617	July 8	898	225	52	187
Electric alarm	A. Tschira	437,369	Sept. 30	3208	835	52	2014
Electric alarm for letter-boxes	W. G. Reed	424,219	Mar. 25	2783	742	50	1689
Electric and gas lighting. Bracket for combined	J. Gunn	442,666	Dec. 16	1617	417	53	1596
Electric apparatus. Coin-operated	J. S. Wallace	423,361	Mar. 11	1509	396	50	1431
Electric-apparatus switch	S. L. Barriett	423,891	Mar. 18	2299	607	50	1589
Electric-arc interrupter	A. Wurts	434,166	Aug. 12	1094	282	52	980
Electric-arc-light circuits. Regulation of	D. Higham. (Reissue)	11,108	Aug. 26	3028	800	52	1367
Electric battery	E. M. G. Hewett	421,169	Feb. 11	1109	285	50	784
Electric battery	M. W. Parrish	431,072	July 1	69	16	52	15
Electric battery	C. Willms and G. A. Liebig, Jr.	421,801	Feb. 18	2000	527	50	960
Electric body-battery	O. S. Hall	420,936	Feb. 11	770	199	50	719
Electric cable	D. Brooks, Jr.	437,330	Sept. 30	3127	817	52	1999
Electric cable	W. L. Candee	428,745	May 27	2616	663	51	1356
Electric-cable conduit	W. P. Tyler	421,088	Feb. 11	993	254	50	761
Electric-cable subway	W. L. Parsley	431,780	July 8	1177	293	52	238
Electric-cable terminal	J. A. Hanagin	428,046	May 13	1549	332	51	1123
Electric cable. Underground	W. R. Patterson	430,297	June 17	1861	457	51	1850
Electric cables. Apparatus for hauling through	J. F. Munroe	426,196	Apr. 22	2696	708	51	548
Electric cables. Protective covering for	J. H. Cheever	431,104	July 1	110		52	24
Electric call	J. B. Currier	425,594	Apr. 15	1765	474	51	361
Electric call	D. H. Rice	425,630	Apr. 15	1833	490	51	374
Electric call	F. B. Wood	424,635	Apr. 1	302	78	51	60
Electric-circuit-controlling apparatus	E. R. Gill, Jr.	430,636	June 24	2387	582	51	1959
Electric-circuit safety device	H. Lemp	421,177	Feb. 11	1117	287	50	785
Electric-circuit switch	P. Lange	434,152	Aug. 12	1072	275	52	975
Electric-circuit switch	P. Lange and O. B. Shallenberger	434,151	Aug. 12	1071	275	52	975
Electric circuits. Automatic regulation of	G. B. Prescott, Jr.	435,545	Sept. 2	252	70	52	1424
Electric circuits. Automatic safety cut-off for	G. M. Guernant	420,198	Jan. 28	2356	625	50	493
Electric circuits. Automatic safety cut-out for	G. T. Woods	438,590	Oct. 14	1381	374	53	273
Electric circuits. Magazine fuse-box for	W. F. Bossert	439,859	Nov. 4	343	89	53	674
Electric circuits. Maintaining a uniform current in	J. M. Bradford	429,333	June 3	351	83, 84	51	1538
Electric circuits. Regulation system for	C. O. Mailloux	430,668	June 24	2777	681	51	2035
Electric circuits. Safety device for	C. G. Young	424,665	Apr. 1	354	94	51	69
Electric circuits. Safety-fuse for	A. Wurts	434,168	Aug. 12	1096	283	52	980
Electric circuits. System for	F. Stitzel	435,105	Aug. 26	2585	682	52	1285
Electric collecting device or brush	H. P. Brown	440,691	Nov. 18	1682	433	53	950
Electric compound push	J. F. Wollensak	421,340	Feb. 11	1348	349	50	828
Electric conducting-wires. Suspending device for	W. M. Davis	430,926	June 24	2860	702	51	2052
Electric conductor	E. Clark	437,568	Sept. 30	3513	917	52	2077
Electric conductor	H. B. Cobb	429,304	June 3	305	72	51	1528
Electric conductor	H. B. Cobb	429,305	June 3	306	72	51	1528
Electric conductor	W. E. Oehrle	436,432	Sept. 16	1645	432	52	1703
Electric conductor	E. F. Phillips	421,968	Feb. 25	2243	590	50	1015
Electric conductor	W. A. Phillips	434,885	Aug. 19	2933	586	52	1211
Electric conductor	P. Seubel	425,961	Apr. 15	2334	619	51	469
Electric conductor	J. A. Stoughton	421,781	Feb. 18	1974	519	50	955
Electric conductor	E. Tortora	425,917	Apr. 15	2249	596	51	453

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.-g.	Vol.	Page.
Electric-conductor joint.....	H. B. Cobb.....	429,306	June 3	307	73	51	1529
Electric-conductor joint.....	G. L. Wiley and E. G. Acheson.....	433,920	Aug. 5	707	183	52	895
Electric-conductor joint.....	G. L. Wiley and E. G. Acheson.....	433,921	Aug. 5	709	184	52	895
Electric-conductor joint.....	G. L. Wiley and E. G. Acheson.....	433,922	Aug. 5	710	184	52	895
Electric-conductor subway.....	G. Westinghouse, Jr.....	434,165	Aug. 12	1093	281 282	52	979
Electric-conductor support.....	J. B. Smith.....	418,766	Jan. 7	165	40	50	37
Electric-conductor support and protector.....	E. M. Boynton.....	427,221	May 6	300	77	51	871
Electric-conductor terminal.....	C. A. Lieb.....	433,948	Aug. 12	756	197	52	914
Electric conductors. Aerial conduit for.....	A. A. Knudson.....	438,003	Oct. 7	507	143	53	96
Electric conductors. Apparatus for laying.....	T. J. Cope.....	443,823	Dec. 30	3587	922	53	1993
Electric conductors at crossings. Device for suspending.....	S. H. Short.....	422,096	Feb. 25	2428	641	50	1048
Electric conductors. Attaching device for.....	E. T. Greenfield.....	441,838	Dec. 2	328	87	53	1328
Electric conductors. Attachment for span-wires for suspended.....	F. Mansfield.....	442,232	Dec. 9	943	249	53	1454
Electric conductors. Bracket for supporting.....	J. A. Duggan.....	418,704	Jan. 7	80	18	50	18
Electric conductors. Closed conduit for.....	C. J. Van Depoele.....	434,410	Aug. 12	1471	383 384	52	1056
Electric conductors. Conduit for.....	E. T. Greenfield.....	441,837	Dec. 2	327	87	53	1328
Electric conductors. Connector for.....	G. J. Brennan.....	438,400	Oct. 14	1116	302	53	219
Electric conductors. Crossing for.....	H. A. Seymour.....	423,405	Mar. 18	1714	451	50	1478
Electric conductors. Device for applying a coating to.....	J. T. Whittlesey.....	439,916	Nov. 4	434	112	53	693
Electric conductors. Device for suspending.....	H. I. Pierce.....	429,058	May 27	3086	796	51	1448
Electric conductors. Duct for.....	J. F. Munroe.....	426,199	Apr. 22	2702	709	51	549
Electric conductors. Duct for.....	J. F. Munroe.....	426,205	Apr. 22	2710	710	51	551
Electric conductors. Introducing compositions into.....	D. Brooks, Jr.....	427,039	May 6	11	3	51	813
Electric conductors. Laying.....	T. J. Cope.....	423,134	Mar. 11	1181	308	50	1367
Electric conductors. Manufacturing.....	E. P. Warner.....	433,917	Aug. 5	704	182	52	894
Electric conductors of combined gas and electric fixtures. Shield or protector for.....	J. C. Hollings.....	419,674	Jan. 21	1537	409	50	326
Electric conductors. Support for overhead.....	C. K. Stearns and G. K. Wheeler.....	422,164	Feb. 25	2532	669	50	1068
Electric conductors. Suspending device for overhead.....	E. Thomson.....	435,870	Sept. 2	751	201	52	1521
Electric conductors. Underground conduit for.....	J. S. Du Bois.....	442,868	Dec. 16	1986	509	53	1667
Electric conduit.....	H. N. Curtis.....	435,536	Sept. 2	237	65, 66	52	1420
Electric conduit.....	W. R. Elliott.....	435,487	Sept. 2	162	45, 46	52	1406
Electric conduit. Underground.....	A. Bruner.....	423,023	Mar. 11	1003	264	50	1334
Electric conduit. Underground.....	H. Flad.....	430,010	June 10	1374	341 342	51	1747
Electric conduit. Underground.....	C. E. Loth.....	437,126	Sept. 23	2791	727 728	52	1931
Electric conduit. Underground.....	H. H. Young.....	442,162	Dec. 9	842	225 226	53	1435
Electric conduit. Underground.....	F. G. C. Zöpke.....	434,076	Aug. 12	942	247	52	950
Electric connection.....	H. Sanche.....	430,974	June 24	2933	720	51	2064
Electric connection. Flexible.....	C. J. Van Depoele.....	429,745	June 10	964	237	51	1668
Electric connector.....	J. F. Wollensak.....	421,802	Feb. 18	2002	527	50	960
Electric connector.....	W. H. Garland.....	442,370	Dec. 9	1153	301	53	1493
Electric connector.....	E. L. Orcutt.....	434,943	Aug. 26	2353	623	52	1241
Electric connector.....	C. McIntire.....	422,058	Feb. 25	2371	627	50	1038
Electric connector.....	J. A. Seely.....	419,365	Jan. 14	1083	286	50	229
Electric connector.....	H. Studte.....	431,412	July 1	575	144	52	117
Electric controlling and operating device.....	E. H. Johnson.....	435,898	Sept. 2	813	215	52	1532
Electric converter.....	G. Westinghouse, Jr.....	436,200	Sept. 9	1280	334	52	1624
Electric crossing-gate.....	H. Gillette.....	438,620	Oct. 21	1439	388	53	290
Electric-current controller.....	M. O. Sargent.....	433,744	Aug. 5	449	116	52	843
Electric-current-generator regulator.....	G. Pfannkuche.....	428,317	May 20	1961	492	51	1213
Electric-current regulator.....	E. P. Warner.....	427,530	May 6	760	188	51	962
Electric-current indicator.....	A. B. Herrick.....	415,695	Sept. 2	497	131 132	52	1471
Electric-current regulator.....	E. H. Johnson.....	435,899	Sept. 2	814	216	52	1532
Electric currents. Apparatus for rectifying.....	F. Anderson.....	429,109	June 3	3	2	51	1473
Electric currents. Apparatus for the rhythmic generation of.....	C. Langdon-Davies.....	439,017	Oct. 21	2075	556	53	409
Electric currents. Automatic regulator for.....	W. Morrison.....	439,417	Oct. 28	2718	725	53	535
Electric currents. Converting continuous into pulsating.....	C. J. Van Depoele.....	422,858	Mar. 4	732	187	50	1277
Electric currents. Device for transforming and controlling.....	O. A. Enholm.....	441,542	Nov. 25	3099	796	53	1226
Electric currents. Distribution and regulation of.....	F. Wilking and H. Müller.....	437,272	Sept. 30	3040	797 424	52	1984
Electric currents. Distribution of.....	E. Thomson.....	425,470	Apr. 15	1587	425	51	325
Electric currents. Meter for alternating.....	O. B. Shallenberger.....	419,367	Jan. 14	1085	287	50	229
Electric currents. Producing alternating.....	M. S. Conly.....	428,042	May 13	1541	390	51	1122
Electric currents. Producing alternating.....	L. Gutmann.....	419,663	Jan. 21	1524	405 406	50	323
Electric cut-out.....	G. H. Alton and E. W. Rice, Jr.....	440,685	Nov. 18	1669	431	53	948
Electric cut-out.....	E. E. Bailey and G. J. Galbraith.....	437,324	Sept. 30	3120	519	52	1998
Electric cut-out.....	D. J. Cartwright and J. S. Potter.....	443,068	Dec. 16	2303	589	53	1730
Electric cut-out.....	H. A. Chase.....	432,978	July 29	3039	780 781	52	615
Electric cut-out.....	H. A. Chase.....	432,979	July 29	3041	787	52	616
Electric cut-out.....	L. Daft.....	431,035	July 1	11	3	52	4
Electric cut-out.....	S. D. Field.....	432,521	July 22	2305	596	52	469
Electric cut-out.....	C. Heisler.....	435,223	Aug. 26	2751	726 727	52	1317
Electric cut-out.....	W. J. Jenks.....	437,362	Sept. 30	3195	833	52	2012
Electric cut-out.....	J. F. Wollensak.....	419,487	Jan. 14	1257	334	50	265
Electric cut-out. Automatic.....	E. M. Bentley.....	427,724	May 13	1052	263	51	1028
Electric cut-out. Automatic.....	M. Waddell.....	430,096	June 10	1520	377 378	51	1775
Electric drill.....	G. Buchanan.....	438,837	Oct. 21	1805	481	53	355
Electric drill.....	I. E. Storey.....	420,500	Feb. 4	104	25	50	584

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Electric drill system	H. N. Marvin	429,730	June 10	942	232	51	1664
Electric drill system	H. N. Marvin	429,731	June 10	943	232	51	1664
Electric elevator	F. B. Perkins	439,180	Oct. 28	2327	624	53	462
Electric energy. Distribution of.	S. Z. de Ferranti	440,224	Nov. 11	915	235	53	799
Electric energy. Means for distributing	S. Z. de Ferranti	435,114	Aug. 26	2599	686	52	1288
Electric energy. Means for generation and conversion of	A. De Castro	432,022	July 15	1547	393	52	318
	R. W. Thompson	426,650	Apr. 29	3374	885	51	693
	C. J. Van Depoele	431,492	July 1	707	177	52	142
Electric engine. Reciprocating	C. J. Van Depoele	431,493	July 1	709	178	52	142
Electric engine. Reciprocating	C. J. Van Depoele	431,495	July 1	716	179	52	143
Electric engine system. Reciprocating	C. J. Van Depoele	431,494	July 1	713	178	52	143
Electric engine system. Reciprocating	C. J. Van Depoele	431,496	July 1	717	179	52	143
Electric furnace for melting metals	E. A. Colby	428,378	May 20	2059	518	51	1234
Electric gate	H. Gillette	442,114	Dec. 9	767	206	53	1420
	T. A. Edison	434,586	Aug. 19	1746	457	52	1118
Electric generator	W. M. Mordey	437,501	Sept. 30	3412	893	52	2058
Electric generator and motor regulator	R. Lundell	437,704	Oct. 7	34	10, 11	53	10
Electric generator. Pulsating	C. J. Van Depoele	422,855	Mar. 4	719	184	50	1275
Electric generator. Pyromagneto-	N. Tesla	428,057	May 13	1567	396	51	1128
Electric generator. Self-exciting alternating-current	W. Stanley, Jr.	431,218	July 1	287	71	52	59
Electric generator. Self-regulating dynamo-	W. Stanley, Jr.	431,217	July 1	284	71	52	58
	H. W. Leonard	435,700	Sept. 2	503	133	52	1472
Electric generators. Device for controlling the current of	G. F. Ransom	437,798	Oct. 7	195	60	53	39
Electric guest-call	A. Striemer	438,653	Oct. 21	1482	401	53	298
Electric hand-switch	J. W. Battershall	437,352	Sept. 30	3163	828	52	2007
Electric heater	E. Abshagen	436,861	Sept. 23	2400	627	52	1854
Electric heater	C. W. Drew and E. R. Francis	426,437	Apr. 29	3061	801	51	632
Electric heater	C. W. Drew and E. R. Francis	439,724	Nov. 4	145	38	53	636
Electric heater	B. C. Howard	427,574	May 13	833	208	51	986
Electric heater	J. F. McLaughlin	432,305	July 15	1833	471	52	371
Electric heater	C. H. Talmage	440,071	Nov. 4	668	178	53	738
Electric heater	C. H. Talmage	442,649	Dec. 16	1589	411	53	1590
Electric indicator	L. O. Chatfield	440,013	Nov. 4	589	156	53	723
Electric indicator	F. A. Lane	427,879	May 13	1298	328	51	1075
	P. Lange	434,154	Aug. 12	1075	275	52	976
Electric indicator	M. D. Porter	424,725	Apr. 1	442	117	51	87
Electric indicator	M. D. Porter	424,726	Apr. 1	445	118	51	88
	E. A. Colby	428,379	May 20	2061	519	51	1234
Electric induction device	C. H. Simmons	429,067	May 27	3096	798	51	1450
Electric light and conductor support	T. B. Atterbury	427,951	May 13	1413	357	51	1096
Electric-light bulb. Incandescent	F. H. Aldrich	432,965	July 29	3017	775	52	611
Electric-light fixture	J. E. Brown	437,551	Oct. 7	271	81	53	53
Electric-light globes. Guard for	R. M. Gardiner	435,116	Aug. 26	2602	688	52	1288
Electric-light globes. Guard for incandescent	J. Mino	443,071	Dec. 2	700	188	53	1399
Electric-light hanger	C. L. Jeffers	428,723	May 27	2583	655	51	1350
Electric-light holder	J. B. Moore	443,685	Dec. 16	1649	424	53	1602
Electric light. Marine	A. G. Donnelly	424,544	Apr. 1	166	47	51	35
Electric-light pole	P. J. Dinn	438,773	Oct. 21	1692	454	53	335
Electric-light shade	J. H. Gehst	432,826	July 22	2795	714	52	563
Electric-light-shade holder	L. J. Atwood	437,008	Sept. 23	2613	683	52	1895
Electric-light shade. Incandescent	J. H. Huber	419,524	Jan. 14	1306	349	50	274
Electric lights. Elevating and lowering	A. A. McCreary	438,419	Oct. 14	1142	308	53	224
Electric lights. Filament for incandescent	R. Kinney and J. P. Hebedahl	423,873	Mar. 18	2274	600	50	1584
Electric lights. Means for hanging	L. N. P. Poland	432,710	July 22	2609	667	52	528
Electric lights. Safety-hook for	T. J. Lynch	441,248	Nov. 25	2635	683	53	1137
Electric-lighting device	J. Dalton	426,778	Apr. 29	3574	933	51	731
Electric lighting. Isolated system for	E. E. Flora and P. R. Hoy	422,196	Feb. 25	2581	683	50	1077
Electric-lighting system	J. F. McLaughlin	424,339	Mar. 25	2973	792	50	1725
Electric-lighting system	A. H. Baucor	435,084	Aug. 26	2556	674	52	1279
Electric-lighting system	E. T. Cooke and W. H. Mackay	432,745	July 22	2662	681	52	538
Electric-lighting system	T. A. Edison	430,934	June 24	2870	705	51	2054
Electric-lighting system	T. A. Edison	438,301	Oct. 14	970	263	53	191
Electric-lighting system	T. A. Edison	439,389	Oct. 28	2684	714	53	528
Electric-lighting system	T. A. Edison	439,390	Oct. 28	2685	715	53	528
Electric-lighting system	T. A. Edison	439,392	Oct. 28	2691	716	53	529
Electric-lighting system	F. Johnson	425,801	Apr. 15	2077	555	51	422
Electric lighting. System of arc and incandescent	H. P. Brown	422,910	Mar. 11	832	216	50	1303
Electric-lighting systems. Switch-board for	R. F. Sawyer	437,516	Sept. 30	3435	899	52	2062
Electric-lighting systems. Terminal switch or cut-out device for	W. F. Smith	438,118	Oct. 7	685	186	53	132
Electric lighting. Tower for	D. Maxwell	434,639	Aug. 19	1843	481	52	1137
Electric line-hook	F. M. Locke and J. Lapp	441,849	Dec. 2	351	92, 93	53	1333
Electric lines. Apparatus for testing	B. E. Waters	427,208	May 6	281	72	51	867
Electric lock	C. B. Beers and W. B. Tuttle	430,764	June 24	2614	641	51	2004
Electric lock	W. Grah, Jr.	421,567	Feb. 18	1679	434	50	898
Electric locomotion. Means for	J. F. McLaughlin	432,204	July 15	1829	470	52	371
	F. Wheeler	421,535	Feb. 18	1634	421	50	889
Electric locomotion. Switch for systems of	F. Wheeler	431,092	July 1	91	23	52	20
Electric locomotion. System of	F. Wheeler	431,093	July 1	93	23	52	21

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Electric log	W. P. Granville	439,840	Nov. 4	315	79	53	669
Electric loop-switch	C. E. Scribner	427,123	May 6	154	41	51	842
Electric machine and motor. Dynamo	F. V. Andersen and J. O. Girdlestone	440,908	Nov. 18	2048	{ 529 530 }	53	1018
Electric machine. Dynamo	D. B. Brace	421,479	Feb. 18	1544	399	50	873
Electric machine. Dynamo	D. B. Brace	427,294	May 6	411	106	51	892
Electric machine. Dynamo	W. F. Collins	435,015	Aug. 26	2452	649	52	1260
Electric machine. Dynamo	R. Eickemeyer	422,511	Mar. 4	212	57	50	1177
Electric machine. Dynamo	J. B. Entz	434,590	Aug. 19	1754	459	52	1120
Electric machine. Dynamo	S. Z. de Ferranti	423,991	Mar. 25	2462	{ 654 655 }	50	1626
Electric machine. Dynamo	S. D. Field	436,408	Sept. 16	1608	425	52	1697
Electric machine. Dynamo	W. K. Freeman	440,424	Nov. 11	1254	324	53	858
Electric machine. Dynamo	W. K. Freeman	440,557	Nov. 11	1462	377	53	898
Electric machine. Dynamo	W. K. Freeman	441,793	Dec. 2	258	68, 69	53	1314
Electric machine. Dynamo	W. Hochhausen	437,360	Sept. 30	3188	{ 831 832 }	52	2011
Electric machine. Dynamo	C. D. Jenney	424,065	Mar. 25	2570	687	50	1647
Electric machine. Dynamo	M. Pfatischer	421,967	Feb. 25	2242	589	50	1014
Electric machine. Dynamo	F. A. Perret	432,169	July 15	1781	457	52	362
Electric machine. Dynamo	R. Pfund	429,736	June 10	950	234	51	1665
Electric machine. Dynamo	C. P. Scheuritzel and J. L. Hess	443,407	Dec. 23	2908	748	53	1854
Electric machine. Dynamo	O. B. Shallenberger	431,235	July 1	311	77	52	63
Electric machine. Dynamo	H. W. Spang	432,577	July 22	2387	615	52	486
Electric machine. Dynamo	H. W. Spang	433,051	July 29	3157	811	52	639
Electric machine. Dynamo	E. Thomson	432,655	July 22	2513	646	52	509
Electric machine. Dynamo	J. Wenström	426,576	Apr. 29	3263	856	51	672
Electric machine. Dynamo	M. J. Wightman and E. Thomson	426,348	Apr. 22	2903	{ 763 764 }	51	593
Electric machine. Dynamo	C. F. Winkler	431,134	July 1	145	38	52	31
Electric machine. Dynamo	C. F. Winkler	433,557	Aug. 5	171	46	52	790
Electric machine. Dynamo or magneto	T. A. Edison	431,018	June 24	3006	737	51	2078
Electric machine. Magneto	L. C. Atwood	436,113	Sept. 9	1145	299	52	1599
Electric machine. Magneto	A. E. Colgate	431,559	July 8	814	203	52	170
Electric machine. Magneto	C. E. Scribner	427,122	May 6	153	40	51	842
Electric machine or motor. Dynamo	M. Mayer	437,160	Sept. 23	2265	{ 744 745 }	52	1943
Electric machine or electric motor. Dynamo	E. Croasdale	428,380	May 20	2062	519	51	1235
Electric machine or electric motor. Dynamo	E. B. Parkhurst	422,148	Feb. 25	2506	{ 662 663 }	50	1063
Electric machine or motor. Dynamo	N. H. Edgerton	442,870	Dec. 16	1989	510	53	1668
Electric-machine protector	L. B. Stillwell	434,163	Aug. 12	1089	281	52	979
Electric-machine regulation. Dynamo	W. Stanley, Jr.	431,216	July 1	282	70	52	57
Electric-machine regulator. Dynamo	P. P. Belt	433,269	July 29	3480	{ 898 899 }	52	704
Electric-machine regulator. Dynamo	W. K. Freeman	441,794	Dec. 2	259	69, 70	53	1315
Electric-machine regulator. Dynamo	G. A. Polson	431,618	July 8	899	225	52	187
Electric-machine regulator. Dynamo	C. E. Scribner	435,525	Sept. 2	215	59, 60	52	1416
Electric-machine regulator. Dynamo	C. E. Scribner	435,526	Sept. 2	218	60, 61	52	1417
Electric-machine regulator. Dynamo	C. E. Scribner	435,527	Sept. 2	221	61	52	1417
Electric-machine regulator. Dynamo	W. Stanley, Jr.	435,982	Sept. 9	932	245	52	1560
Electric-machine regulator. Dynamo	E. Thomson	428,705	May 27	2557	648	51	1245
Electric-machine regulator. Dynamo	E. Thomson	430,327	June 17	1913	469	51	1861
Electric machine. Steam dynamo	E. C. Newton	436,148	Sept. 9	1196	313	52	1608
Electric machines. Brush-holder for dynamo	F. A. Weller	428,735	May 27	2601	659	51	1353
Electric machines. Brush-holder for dynamo	C. F. Winkler	428,668	Oct. 21	1506	407	53	301
Electric machines. Collecting-contact for	A. Schmid and E. C. Means	421,320	Feb. 11	1324	342	50	823
Electric machines. Commutator collector or block for dynamo	C. F. Brush	428,742	May 27	2612	662	51	1356
Electric machines. Commutator collector or block for dynamo	C. F. Brush	428,743	May 27	2613	662	51	1356
Electric machines. Current-collector for dynamo	W. K. Freeman	440,425	Nov. 11	1255	325	53	858
Electric machines. Iron core for dynamo	M. Deprez	427,405	May 6	572	142	51	925
Electric machines or motors. Brush-holder for dynamo	F. A. La Roche	425,435	Apr. 15	1531	410	51	316
Electric meter	W. J. Bagby	424,401	Mar. 25	3097	822	50	1750
Electric meter	J. H. Barnard	429,751	June 10	974	239	51	1670
Electric meter	J. D. Bishop	420,762	Feb. 4	462	123	50	654
Electric meter	W. H. Bristol	439,381	Oct. 28	2669	{ 710 711 }	53	525
Electric meter	J. Cauderay	431,248	July 1	327	80, 81	52	66
Electric meter	J. Cauderay	434,501	Aug. 19	1619	{ 424 425 }	52	1092
Electric meter	S. C. C. Currie	427,748	May 13	1101	276	51	1038
Electric meter	R. N. Dyer	437,183	Sept. 30	2906	756	52	1958
Electric meter	J. Einstein and S. Kornprobst	437,754	Oct. 7	121	36	53	26
Electric meter	C. P. Eliason	443,642	Dec. 30	3289	848	53	1936
Electric meter	S. Z. de Ferranti	440,627	Nov. 18	1583	{ 407 408 }	53	931
Electric meter	A. Frager	428,084	May 20	1602	{ 407 408 }	51	1144
Electric meter	P. H. Korst	432,053	July 15	1599	409	52	326
Electric meter	E. Maré	440,431	Nov. 11	1265	327	53	860
Electric meter	W. McKinney	424,338	Mar. 25	2972	792	50	1725
Electric meter	J. F. Mehren	428,280	May 20	1901	479	51	1202
Electric meter	A. W. Meston	442,705	Dec. 16	1690	{ 433 434 }	53	1609
Electric meter	J. Oulton and J. Edmondson	430,432	June 17	2061	508	51	1890
Electric meter	V. Popp	425,579	Apr. 15	1741	467	51	356
Electric meter	A. Reckenzaun	437,763	Oct. 7	140	44	53	29
Electric meter	E. W. von Siemens	428,290	May 20	1920	483	51	1205
Electric meter	W. F. Smith	420,214	Jan. 28	2380	632	50	498
Electric meter	M. E. Thompson	425,269	Apr. 8	1279	343	51	259

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Electric meter.	M. E. Thompson.	425,270	Apr. 8	1282	343	51	259
Electric meter.	E. Thomson.	428,649	May 27	2453	625	51	1327
Electric meter.	E. Thomson.	432,654	July 22	2508	644 645 646	52	508
Electric meter.	G. H. Wade.	430,551	June 17	2237	549	51	1922
Electric meter.	J. J. Wood.	442,501	Dec. 9	1359	349	53	1535
Electric motor. Alternating-current.	G. Westinghouse, Jr.	427,489	May 6	696	174 175	51	949
Electric motor for alternating currents.	O. T. Bláthy.	423,210	Mar. 11	1287	335 336	50	1389
Electric motor.	H. H. Blades.	435,639	Sept. 2	409	110	52	1452
Electric motor.	L. Bock, Jr.	424,535	Apr. 1	149	43	51	32
Electric motor.	L. Bock, Jr.	440,821	Nov. 18	1909	490	53	991
Electric motor.	C. S. Bradley.	438,603	Oct. 21	1406	381	53	223
Electric motor.	C. S. Bradley.	439,102	Oct. 28	2208	592 593	53	441
Electric motor.	W. H. Chapman.	428,454	May 20	2166	514 545	51	1253
Electric motor.	S. C. C. Currie.	419,245	Jan. 14	901	236 237	50	193
Electric motor.	F. E. Davis and J. Scott, Jr.	425,991	Apr. 22	2396	634	51	490
Electric motor.	C. E. Dressler.	440,699	Nov. 18	1701	437	53	953
Electric motor.	L. Duncan.	427,503	May 6	715	179 180	51	954
Electric motor.	T. A. Edison.	436,127	Sept. 9	1163	303 304	52	1603
Electric motor.	J. Emmer, Jr.	437,832	Oct. 7	245	75	53	49
Electric motor.	T. M. Foote.	434,180	Aug. 12	1113	289	52	984
Electric motor.	H. Groswith.	435,744	Sept. 2	560	149	52	1483
Electric motor.	H. Groswith.	441,953	Dec. 2	505	135	53	1363
Electric motor.	H. Humbert.	432,707	July 22	2605	666	52	527
Electric motor.	R. M. Hunter.	429,094	May 27	3138	808	51	1459
Electric motor.	G. and G. J. Little.	437,835	Oct. 7	249	76, 77	53	49
Electric motor.	H. B. Niles.	419,059	Jan. 7	620	161	50	130
Electric motor.	E. B. Parkhurst.	422,149	Feb. 25	2509	663	50	1064
Electric motor.	H. B. Pullman.	440,776	Nov. 18	1836	473	53	978
Electric motor.	L. T. Smith.	424,734	Apr. 1	458	122	51	91
Electric motor.	E. Thomson.	438,204	Oct. 14	809	220	53	162
Electric motor.	E. Thomson.	438,656	Oct. 21	1489	403	53	299
Electric motor.	C. J. Van Depoele.	443,980	Dec. 30	3817	973 974	53	2037
Electric motor.	P. B. Walsh.	421,790	Feb. 18	1985	522 523	50	957
Electric motor.	H. E. Walter.	422,556	Mar. 4	278	71	50	1189
Electric motor.	L. S. White.	419,808	Jan. 21	1730	458	50	363
Electric motor and cloth-cutting machine. Portable.	E. D. Weyburn.	442,654	Dec. 16	1595	413	53	1591
Electric motor and dynamo.	J. C. Heury.	426,380	Apr. 22	2955	776 777	51	603
Electric motor and frame.	A. Schmid.	442,459	Dec. 9	1289	333 334	53	1521
Electric motor and generator.	C. E. Dressler.	440,700	Nov. 18	1704	437	53	954
Electric motor and generator.	A. Gartner.	439,775	Nov. 4	217	57	53	651
Electric motor and generator.	F. J. Sprague.	428,732	May 27	2505	658	51	1352
Electric motor and regulator therefor.	E. A. Sperry.	420,117	Jan. 28	2215	587	50	469
Electric-motor apparatus.	S. C. C. Currie.	431,649	July 8	961	240	52	199
Electric motor. Continuously-operated.	W. D. MacQuisten.	429,314	June 3	323	76	51	1532
Electric-motor controller.	M. J. Wightman.	423,975	Mar. 25	2441	649	50	1623
Electric-motor coupling.	E. W. Rice, Jr.	422,975	Mar. 11	942	247	50	1323
Electric-motor gearing.	J. J. Sprague.	437,259	Sept. 30	3022	792	52	1980
Electric-motor mechanism.	S. E. Mower.	433,903	Aug. 5	685	178	52	890
Electric-motor mechanism.	S. E. Mower.	440,717	Nov. 18	1730	443 444	53	959
Electric-motor mechanism.	S. E. Mower.	440,718	Nov. 18	1732	444	53	959
Electric-motor mechanism.	S. E. Mower and G. J. Spencer.	433,904	Aug. 5	687	178	52	891
Electric motor. Multiple-circuit.	C. J. Van Depoele.	434,816	Aug. 19	2113	554	52	1189
Electric motor or dynamo-electric machine.	C. E. Dressler.	442,173	Dec. 9	857	230	53	1438
Electric motor or dynamo-electric machine.	S. M. Potter and H. E. Morgan.	428,782	May 27	2669	677	51	1367
Electric motor or generator.	H. Groswith.	428,481	May 20	2208	558	51	1260
Electric motor or generator.	I. E. Storey.	418,853	Jan. 7	307	74	50	64
Electric-motor regulating apparatus.	P. Diehl.	421,911	Feb. 25	2170	570	50	1001
Electric-motor regulation.	S. Bergmann and G. B. Scott.	424,595	Apr. 1	244	65	51	50
Electric-motor regulation.	L. W. Serrell and H. L. Lufkin.	420,469	Feb. 4	70	16	50	577
Electric-motor regulation.	W. Stanley, Jr.	426,574	Apr. 29	3260	855	51	671
Electric-motor regulator.	W. E. Hyer.	441,665	Dec. 2	55	15	53	1272
Electric-motor regulator.	W. H. Knight.	428,169	May 20	1724	436	51	1167
Electric motor. Synchronous alternating-current.	C. Zepernowsky, M. Déri, and O. T. Bláthy.	439,459	Oct. 28	2787	743	53	547
Electric motors. Automatic lubricating device for.	S. L. Barriett.	432,927	July 22	2937	752	52	591
Electric motors. Brush-reverser for.	A. Reckenmann.	432,561	July 22	2367	610	52	482
Electric motors. Magnetic shield for.	C. J. Van Depoele.	443,019	Dec. 16	2223	573	53	1715
Electric motors. Mounting for.	A. L. Riker.	443,227	Dec. 23	2629	675	53	1800
Electric motors. Operating.	H. Groswith.	441,954	Dec. 2	505	135	53	1363
Electric motors or dynamos. Brush-holder for.	W. S. Patterson.	441,695	Dec. 2	99	26	53	1282
Electric motors. Regulating.	G. A. Washburn.	422,862	Mar. 4	741	189	50	1279
Electric motors. Regulation of.	E. W. Rice, Jr.	442,668	Dec. 16	1619	417	53	1596
Electric motors. Speed-regulator for.	W. W. Schiffmann.	442,208	Dec. 9	909	242	53	1447
Electric motors. Starting-switch for.	W. A. Anthony.	421,090	Feb. 11	998	255 256	50	761
Electric or other apparatus. Casing for.	L. S. Woodbury.	423,014	Mar. 11	991	261	50	1332
Electric or other lights. Device for raising and lowering.	D. B. Matson.	439,023	Oct. 21	2082	558	53	410
Electric or other lights. Shade and reflector for.	W. S. Fraser.	442,577	Dec. 9	1483	381	53	1560
Electric-power system.	E. Thomson.	434,489	Aug. 19	1600	419	52	1089

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. of	Vol.	Page.
Electric-power transmission	E. Thomson	434,488	Aug. 19	1599	419	52	1089
Electric prod-pole	J. M. Burton	427,549	May 13	790	197	51	978
Electric protective and signaling system	C. E. Ongley	443,790	Dec. 30	3522	903	53	1981
Electric protective system	A. C. Robbins	419,710	Jan. 21	1585	423	50	335
Electric push-button	P. Hathaway	434,596	Aug. 19	1764	461	52	1122
Electric reciprocating tool	H. N. Marvin	419,861	Jan. 21	1817	480	50	380
Electric reciprocating tool	H. N. Marvin	420,079	Jan. 23	2153	569	50	456
Electric reciprocating tool	H. N. Marvin	420,080	Jan. 25	2154	569	50	456
Electric regulating apparatus. Motor for	F. Ross and A. Frauen	421,195	Feb. 11	1150	294	50	791
Electric regulating mechanism	H. Lemp and M. J. Wightman	420,882	Feb. 4	673	174	50	691
Electric regulator	E. Wagemann	429,825	June 10	1087	267	51	1691
Electric regulator. Alternating-current	L. Gutmann	423,553	Mar. 18	1797	473	50	1492
Electric safety-fuse box	A. Wurts	434,169	Aug. 12	1097	233	52	981
Electric signal	J. Haas, Jr.	427,762	May 13	1125	282	51	1042
Electric signal	J. D. Taylor	420,255	Jan. 23	2446	650	50	510
Electric signal-circuit	O. W. Hart	425,095	May 20	1622	412	51	1147
Electric snap-switch	C. J. Hamilton	425,507	Apr. 15	1634	435	51	336
Electric stop mechanism. Magneto-	W. H. Kilbourn	443,646	Dec. 30	3297	850	53	1938
Electric street-light	G. M. Kim	443,097	Dec. 23	2382	608	53	1752
Electric-subway cover	J. Stafford	429,251	June 3	210	52	51	1512
Electric switch	E. T. Barberie and J. Des Brisay	440,614	Nov. 18	1565	403	53	927
Electric switch	J. W. Battershall	435,132	Aug. 26	2625	694	52	1293
Electric switch	A. R. Bush	440,303	Nov. 11	1044	268	53	820
Electric switch	F. E. Fisher	442,030	Dec. 2	631	171	53	1386
Electric switch	A. C. Frey	432,234	July 15	1874	482	52	379
Electric switch	C. H. Herrick	435,093	Aug. 26	2370	678	52	1282
Electric switch	C. H. Herrick	440,845	Nov. 18	1950	500	53	999
Electric switch	C. W. Huntington	435,424	Sept. 2	64	21	52	1387
Electric switch	O. P. Loomis	431,118	July 1	128	33	52	27
Electric switch	N. Marshall	442,588	Dec. 9	1500	386	53	1564
Electric switch	T. F. McEvoy	423,488	Mar. 18	1701	449	50	1476
Electric switch	J. A. K. McGregor	439,602	Oct. 28	3002	796	53	590
Electric switch	J. F. McLaughlin	428,934	May 27	2890	730	51	1412
Electric switch	J. F. McLaughlin	428,935	May 27	2892	740	51	1412
Electric switch	J. F. McLaughlin	432,207	July 15	1837	472	52	372
Electric switch	J. F. McLaughlin	433,360	July 29	3601	929	52	738
Electric switch	J. A. Norton	430,252	June 17	1761	438	51	1331
Electric switch	J. P. Norton	426,049	Apr. 22	2472	654	51	504
Electric switch	J. A. Norton	435,152	Aug. 26	2652	702	52	1298
Electric switch	J. O'Brien	442,996	Dec. 16	2198	565	53	1710
Electric switch	W. E. Parker and H. E. Temple	422,147	Feb. 25	2505	661	50	1063
Electric switch	C. G. Perkins	436,107	Sept. 9	1137	297	52	1598
Electric switch	C. A. Pfinger	440,720	Nov. 18	1734	445	53	960
Electric switch	O. S. Platt	427,522	May 6	746	185	51	959
Electric switch	O. S. Platt	427,523	May 6	747	186	51	960
Electric switch	O. S. Platt and J. M. Orford	427,521	May 6	744	185	51	959
Electric switch	C. W. Smith and C. J. Lyons	438,260	Oct. 14	896	243	53	177
Electric switch	E. Thomson	428,704	May 27	2556	648	51	1345
Electric switch	C. S. Van Nuis	424,739	Apr. 1	465	124	51	92
Electric switch	E. P. Warner	425,963	Apr. 15	2337	619	51	470
Electric switch	M. Wheless	440,213	Nov. 11	892	229	53	793
Electric switch	G. H. Whittingham	423,462	Mar. 18	1662	439	50	1468
Electric switch	C. E. Wilson	434,899	Aug. 19	2261	593	52	1217
Electric switch	J. J. Wood	443,693	Dec. 30	3372	866	53	1951
Electric switch and cut-off. Automatic	C. B. Doyle	432,988	July 29	3056	785	52	619
Electric switch and signal mechanism	J. Ramsey, Jr., and F. C. Weir	440,503	Nov. 11	1378	356	53	883
Electric switch. Automatic	T. M. Foote	435,490	Sept. 2	167	47	52	1407
Electric switch. Automatic	A. S. Kissell	427,237	May 6	330	85	51	876
Electric switch for motors	H. H. Blades	418,678	Jan. 7	16	5	50	6
Electric system. Overhead	W. Vogler	423,004	Mar. 11	979	257	50	1330
Electric traction-increasing system	M. W. Dewey	442,365	Dec. 9	1146	299	53	1491
Electric train signal and controlling device. Automatic	W. H. Wilson	435,340	Aug. 26	2948	782	52	1352
Electric tramway and car	A. L. Lineff	429,277	June 3	241	60	51	1518
Electric transformer	E. Thomson	420,396	Jan. 23	2646	702	50	547
Electric transmitter. Magneto-	A. E. Todd	438,870	Oct. 21	1860	494	53	365
Electric trap	F. Scherer	424,729	Apr. 1	453	121	51	90
Electric-wire cleat	L. Furlong	433,561	Aug. 5	176	47	52	791
Electric-wire coupling	W. E. Banta	441,919	Dec. 2	447	119	53	1352
Electric-wire coupling	J. J. Hinchey	437,116	Sept. 23	2765	723	52	1926
Electric-wire coupling	F. R. Jones	436,857	Sept. 23	2392	624	52	1852
Electric-wire covering	D. Brooks, Jr.	437,913	Oct. 7	362	104	53	70
Electric-wire-covering apparatus	A. G. Holcombe	435,629	Sept. 2	394	106	52	1449
Electric-wire-distribution box	W. H. Eckert and W. H. Gregory	438,592	Oct. 14	1384	375	53	273
Electric-wire molding	J. A. Seely	423,449	Mar. 18	1643	443	50	1465
Electric-wire pole	L. R. Greene	425,071	Apr. 8	985	264	51	199
Electric-wire support	A. L. Hallbauer and E. L. Hiller	433,896	Aug. 5	678	176	52	889
Electric-wire supporter	W. F. Rothenberg	423,632	Mar. 18	1922	506	50	1517
Electric-wire-suspending device	W. B. Marks, J. G. Lauer, and R. R. Ralston	441,312	Nov. 25	2743	709	53	1157
Electric wires and their coverings. Apparatus for painting	R. W. Heppell	443,237	Dec. 23	2644	679	53	1803
Electric wires. Elevated conduit for	H. N. Ruttan	428,145	May 20	1695	430	51	1162
Electric wires. Junction-box for	T. A. Edison	439,391	Oct. 28	2688	715	53	529
Electric wires, &c. Metallic pole for	J. F. Schnieder and D. K. Carson	431,955	July 8	1440	365	52	290
Electric wires, &c. Pole for	E. Verstraete	435,872	Sept. 2	754	202	52	1521
Electric wires, &c. Pole for	E. Verstraete	438,036	Oct. 7	565	154	53	107
Electric wires. Pole for supporting	L. Atwood	433,266	July 29	3477	897	52	703

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Electric wires. Underground conduit for.....	H. B. Cobb.....	429,307	June 3	309	73	51	1529
Electric wires. Underground conduit for.....	E. T. Greenfield.....	441,840	Dec. 2	331	87, 88	53	1328
Electric wires. Underground conduit for.....	E. L. Witthaus.....	429,104	May 27	3155	813	51	1463
Electrical amusement-reporting apparatus.....	M. D. Compton.....	435,964	Sept. 9	907	239	52	1555
Electrical and vapor face-bath.....	N. Lyke.....	443,580	Dec. 30	3190	819 } 820 }	53	1917
Electrical apparatus. Core for.....	C. A. Terry.....	434,164	Aug. 12	1092	281	52	979
Electrical apparatus. Cut-out and connection for.....	C. J. Klein.....	434,149	Aug. 12	1067	274	52	974
Electrical apparatus. Impregnating parts of.....	F. L. Rawson.....	437,044	Sept. 23	2662	.....	52	1906
Electrical call-box.....	G. F. Gale.....	431,141	July 1	158	40	53	34
Electrical call, lighting, and alarm system.....	C. A. Hale.....	441,157	Nov. 25	2459	637 } 638 }	53	1107
Electrical circuits. Adjustable resistance for.....	C. Wirt.....	440,384	Nov. 11	1163	300	53	842
Electrical collecting device.....	G. Forbes.....	427,259	May 6	362	94	51	881
Electrical communicating system.....	A. G. Holcombe.....	420,384	Jan. 28	2628	698	50	543
Electrical communicating system.....	A. G. Holcombe.....	432,618	July 22	2438	628	52	496
Electrical communication.....	J. L. Cutler.....	421,371	Feb. 11	1390	359	50	834
Electrical communication.....	J. L. Cutler.....	433,619	Aug. 5	261	70	52	808
Electrical communication. Apparatus for.....	J. L. Cutler.....	426,989	Apr. 29	3863	1011	51	787
Electrical conductor.....	J. A. Barrett.....	424,751	Apr. 1	485	132	51	95
Electrical conductor.....	H. H. Carpenter.....	419,023	Jan. 21	1914	504	50	402
Electrical conductor.....	G. E. Miller.....	423,527	Mar. 18	1763	463	50	1487
Electrical conductors. Apparatus for automatically grounding or cutting out of circuit exposed.....	F. W. Jones.....	443,527	Dec. 30	3098	798	53	1900
Electrical conductors. Staple for.....	L. Stieringer.....	420,635	Feb. 4	298	79	50	622
Electrical conductors. Trolley-line switch for overhead.....	W. L. Emmet.....	439,746	Nov. 4	172	45	53	641
Electrical conductors with lead. Machine for covering.....	F. H. Stillman.....	443,551	Dec. 30	3144	808	53	1908
Electrical conduit.....	G. Sprague.....	427,445	May 6	638	160	51	938
Electrical conduit-pipes. Apparatus for cutting.....	S. P. Denison.....	431,564	July 8	822	205	52	172
Electrical controlling and operating apparatus.....	E. H. Johnson.....	435,897	Sept. 2	811	215	52	1332
Electrical conversion. Apparatus for.....	E. N. Dickerson, Jr.....	431,879	July 8	1337	336	52	269
Electrical converter.....	S. Z. de Ferranti.....	427,751	May 13	1109	277 } 278 }	51	1039
Electrical converter.....	G. Pfannkuche.....	429,583	June 3	728	176	51	1612
Electrical converter.....	W. Stanley, Jr.....	428,574	May 20	2333	592	51	1285
Electrical converters. Building.....	W. Stanley, Jr.....	428,575	May 20	2334	592	51	1285
Electrical cut out.....	W. J. Jenks.....	428,564	May 20	2317	588	51	1282
Electrical distribution system.....	L. Bell.....	427,541	May 13	781	194	51	976
Electrical distribution system.....	E. Thomson.....	428,651	May 27	2459	626	51	1327
Electrical distribution. System of.....	E. M. Bentley.....	430,060	June 10	1459	362	51	1762
Electrical distribution. System of.....	T. A. Edison.....	438,308	Oct. 14	978	265	53	192
Electrical distribution. System of.....	L. Gutmann.....	431,460	July 1	657	164 } 165 }	52	132
Electrical distribution. System of.....	C. J. Kintner.....	426,127	Apr. 22	2589	681	51	527
Electrical distribution. System of.....	F. B. Rae.....	437,512	Sept. 30	3430	898	52	2061
Electrical distribution. System of.....	W. S. Richards.....	440,326	Nov. 11	1075	276 } 277 }	53	826
Electrical distribution. System of.....	H. A. Rowland and L. Duncan.....	443,181	Dec. 23	2530	647 } 648 }	53	1779
Electrical distribution. System of.....	O. B. Shallenberger and H. M. Byllesby.....	434,162	Aug. 12	1088	280	52	979
Electrical distribution. System of.....	H. E. Walter.....	434,614	Aug. 19	1790	467 } 468 }	52	1127
Electrical energy. Transforming and utilizing.....	M. W. Dewey.....	418,912	Jan. 7	415	102	50	86
Electrical generator.....	F. L. McGahan.....	439,974	Nov. 4	534	140 } 141 }	53	711
Electrical governor.....	F. D. Hardy.....	440,590	Nov. 11	1513	390	53	908
Electrical heater.....	J. I. Ashbaugh.....	428,443	May 20	2152	541	51	1251
Electrical heater.....	J. V. Capek.....	424,921	Apr. 1	749	200	51	145
Electrical indicator.....	L. Bock, Jr.....	421,851	Feb. 18	2083	548	50	974
Electrical indicator.....	J. W. Howell.....	435,896	Sept. 2	809	215	52	1331
Electrical indicator.....	H. W. Leonard.....	430,865	June 24	2773	680	51	2034
Electrical induction apparatus or transformer.....	M. von Dolivo-Dobrowolsky.....	422,746	Mar. 4	556	142	50	1242
Electrical locomotion. System of.....	F. Wheeler.....	431,095	July 1	96	24	52	21
Electrical machine. Static.....	H. Tirmann.....	423,708	Mar. 18	2035	537	50	1538
Electrical machines. Brush and holder for.....	E. W. Rice, Jr.....	426,471	Apr. 29	3106	815	51	641
Electrical machines. Brush-holder for.....	W. S. Belding.....	433,390	July 29	3640	939	52	735
Electrical spray and vapor bath.....	N. Lyke.....	421,294	Feb. 11	1278	330	50	815
Electrical switch.....	F. D. Gould.....	436,412	Sept. 16	1615	426	52	1698
Electrical switch.....	F. B. Rae.....	437,513	Sept. 30	3432	898	52	2061
Electrical switch.....	G. Schultz.....	441,588	Nov. 25	3168	816	53	1239
Electrical switch.....	L. T. Stanley and H. B. Cutter.....	437,667	Sept. 30	3647	952	52	2104
Electrical transformer or induction device.....	N. Tesla.....	433,702	Aug. 5	384	98	52	811
Electrical translating devices. Cut-out for.....	C. G. Perkins.....	436,087	Sept. 9	1098	285	52	1591
Electrical transmitter and indicator.....	D. Kelley and M. C. Parkhurst.....	437,859	Oct. 7	282	85	53	55
Electrical transportation. System of.....	A. L. Parcelle.....	433,181	July 29	3356	868	52	678
Electrically-controlled elevator.....	W. J. Paine.....	422,968	Mar. 11	925	244 } 245 }	50	1321
Electrically-operated mechanism. Regulating.....	M. J. Wightman.....	435,958	Sept. 9	898	236 } 237 }	52	1554
Electrically-reciprocated tool.....	H. N. Marvin.....	420,816	Feb. 4	564	144	50	671
Electrically-reciprocated tools. Generator for.....	H. N. Marvin.....	429,729	June 10	940	232	51	1664
Electrically-reciprocated tools. Generator for.....	H. N. Marvin.....	429,732	June 10	945	232	51	1664
Electricity by secondary batteries. Distribution of.....	G. B. Prescott, Jr.....	418,748	Jan. 7	130	32	50	29
Electricity. Process of and apparatus for generating.....	T. A. Edison.....	435,688	Sept. 2	487	129	52	1468
Electro-deposition.....	D. Garrett.....	428,087	May 20	1607	.....	51	1144
Electro-magnetic cut-out.....	B. J. Noyes.....	433,022	July 29	3112	798	52	629
Electro-magnetic instrument.....	P. B. Delany.....	426,247	Apr. 22	2767	725	51	563
Electro-magnetic motor.....	N. Tesla.....	424,036	Mar. 25	2532	674	50	1640
Electro-magnetic motor.....	N. Tesla.....	433,703	Aug. 5	386	98	52	831
Electro-magnetic motor. Alternating-current.....	N. Tesla.....	433,700	Aug. 5	381	97	52	830

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Electro-magnetic traction-increasing system	M. W. Dewey	441,828	Dec. 2	315	85	53	1326
Electro-magnetic transmitter	J. T. Williams	419,166	Jan. 7	775	205	50	160
Electro-magnetic transmitter	J. T. Williams	433,381	July 29	3630	936	52	733
Electro-magneto therapeutic chair	F. H. Brown	435,376	Aug. 26	3006	796	52	1364
Electro-matrix machine	G. A. Goodson	427,681	May 13	980	{ 247 } 248	51	1015
Electro-mechanical combination-lock	W. W. Alexander	430,607	June 24	2338	573	51	1951
Electro-mechanical combination-lock	W. W. Alexander	430,608	June 24	2341	573	51	1951
Electro-mechanical movement	S. E. Nutting	420,954	Feb. 11	791	206	50	723
Electro-mechanical movement	S. E. Nutting	420,955	Feb. 11	794	206	50	723
Electro-medical chair	M. A. MacMaster	424,012	Mar. 25	2502	{ 664 } 665	50	1634
Electro-therapeutic appliance	C. E. Brunning	423,549	Mar. 18	1790	470	50	1491
Electro-therapeutic appliance	A. W. Jackson	431,978	July 8	1477	373	52	297
Electro-therapeutic appliance	G. Monrath and W. M. Gibbons	434,024	Aug. 12	457	226	52	932
Electro-thermal current-regulator	F. C. Wagner	419,740	Jan. 21	1620	432	50	342
Electrode and making the same. Carbon	I. L. Roberts	442,336	Dec. 9	1103	288	53	1483
Electrode for arc lamps	L. Sanderson	433,041	July 29	3145	808	52	636
Electrode for batteries and the method of making the same.	D. Pepper, Jr.	434,457	Aug. 19	1551	404	52	1078
Electrode for galvanic batteries. Zinc	G. d'Infeville	422,925	Mar. 11	857	{ 223 } 224	50	1308
Electrode for secondary batteries	W. Shapleigh	438,116	Oct. 7	683	.....	53	132
Electrode for secondary batteries. Making	P. Schoop	434,301	Aug. 12	1300	338	52	1020
Electrode. Galvanic-battery	G. H. Felt	429,896	June 10	1198	.....	51	1712
Electrode. Galvanic-battery	W. P. Kookogey	425,135	Apr. 8	1077	286	51	217
Electrode. Male-genital	A. R. Sommerville	429,068	May 27	3097	799	51	1450
Electrode. Secondary-battery	J. Y. Bradbury and F. J. Stone	441,818	Dec. 2	302	81	53	1323
Electrode. Secondary-battery	H. H. Carpenter	421,666	Feb. 18	1826	477	50	927
Electrode. Secondary-battery	J. B. Entz and W. A. Phillips	440,023	Nov. 4	601	159	53	725
Electrode. Secondary-battery	C. J. Hartmann	422,301	Feb. 25	2755	726	50	1109
Electrode. Secondary-battery	C. Hering	429,272	June 3	235	.....	51	1517
Electrode. Secondary-battery	C. W. Kennedy	441,959	Dec. 2	513	137	53	1364
Electrode. Secondary-battery	I. Kitsee	443,454	Dec. 23	2985	767	53	1869
Electrode. Secondary-battery	I. Kitsee	443,455	Dec. 23	2987	767	53	1869
Electrode. Secondary-battery	F. M. Lyte	422,308	Feb. 25	2763	.....	50	1110
Electrode. Secondary-battery	J. F. McLaughlin	424,809	Apr. 1	582	154	51	113
Electrode. Secondary-battery	J. F. McLaughlin	425,819	Apr. 15	2105	563	51	427
Electrode. Secondary-battery	J. F. McLaughlin	427,785	May 13	1157	290	51	1049
Electrode. Secondary-battery	J. F. McLaughlin	432,202	July 15	1827	469	52	370
Electrode. Secondary-battery	C. Sorley	419,728	Jan. 21	1605	.....	50	339
Electrode. Secondary-battery	E. B. Weed	440,210	Nov. 11	888	228	53	793
Electrode. Storage-battery	C. J. Hartmann	422,300	Feb. 25	2753	726	50	1109
Electrodes. Assembling secondary-battery	J. F. McLaughlin	429,049	May 27	3072	{ 793 } 794	51	1025
Electrodes. Composition for supports for secondary-battery	W. F. Smith	427,710	May 13	1033	.....	51	956
Electrodes for batteries. Manufacturing metallic	F. Marx	425,335	Apr. 8	1377	.....	51	277
Electrodes for microphones. Grinding	S. H. Bartlett and H. E. Waite	422,174	Feb. 25	2546	673	50	1070
Electrodes for secondary batteries. Making	J. B. Entz and W. A. Phillips	440,024	Nov. 4	602	159	53	726
Electrodes for secondary batteries. Making	G. E. Hevl	426,724	Apr. 29	3495	.....	51	716
Electrodes for secondary batteries. Manufacturing	L. Epstein	425,999	Apr. 22	2407	.....	51	492
Electrodes for secondary batteries. Method of and apparatus for preparing	C. D. P. Gibson	439,240	Oct. 28	2439	654	53	483
Electrodes. Making secondary-battery	C. Hering	429,274	June 3	238	.....	51	1518
Electrodes. Method of and apparatus for manufacturing secondary-battery	J. G. Johnston	442,187	Dec. 9	879	235	53	1442
Electrolier	E. W. Little and J. T. Robb	433,687	Aug. 5	366	93	52	827
Electrolier. Extension	J. E. and J. F. Brown	420,552	Feb. 4	173	43	50	597
Electrolier. Extension	J. T. Robb	435,368	Aug. 26	2995	794	52	1361
Electrolysis. Apparatus for use in	I. L. Roberts	442,333	Dec. 9	1099	288	53	1482
Electrolyte for galvanic batteries	F. K. Irving and F. M. Hill	436,001	Sept. 9	962	252	52	1566
Electrolyte for secondary batteries	B. Renault and M. Desvernay	440,505	Nov. 11	1384	358	53	884
Electrolytic apparatus	I. L. Roberts	442,332	Dec. 9	1097	288	53	1482
Electrolytic apparatus	I. L. Roberts	442,334	Dec. 9	1100	288	53	1483
Electrolytic apparatus	I. L. Roberts	442,396	Dec. 9	1188	309	53	1500
Electrolytic apparatus	I. L. Roberts	442,594	Dec. 9	1508	387	53	1565
Electrolytic cells. Diaphragm for	I. L. Roberts	442,204	Dec. 9	904	241	53	1446
Electrolytic cells. Separating-diaphragms for	I. L. Roberts	442,203	Dec. 9	902	240	53	1446
Electrolytic meters. Making	A. E. Kennelly	419,264	Jan. 14	926	244	50	198
Electrolyzer. Bipolar prostatic	R. M. Bache	420,710	Feb. 4	390	104	50	641
Electromotor	H. R. Butterfield	422,911	Mar. 11	834	217	50	1303
Electromotor-engine	S. Z. de Ferranti	422,755	Mar. 4	568	145	50	1245
Electromotor traction-wheel	A. L. Parcell	433,180	July 29	3355	867	52	677
Electroplating. Apparatus for	W. J. Possons	441,892	Dec. 2	407	{ 107 } 108	53	1344
Electroplating. Apparatus for	W. J. Possons	441,893	Dec. 2	409	{ 108 } 109	53	1345
Electroplating-bath for copper	W. B. Hollingshead	427,513	May 6	732	.....	51	956
Electroplating carbons or other articles. Apparatus for	W. J. Possons	441,894	Dec. 2	412	{ 109 } 110 111	53	1345
Electroplating non-metallic articles	W. H. Winslow	423,101	Mar. 11	1127	294	50	1357
Electrotype	W. T. Barnum	441,920	Dec. 2	448	119	53	1353
Electrotype	E. H. Hanson	443,278	Dec. 23	2701	693	53	1814
Electrotype and casting stereotype plates. Mold for backing	W. Scott	442,276	Dec. 9	1006	265	53	1466
Electrotype-plate-bending machine	J. J. Clause	437,420	Sept. 30	3288	859	52	2031
Electrotype-plates. Method of and means for handling	P. M. Furlong	435,036	Aug. 26	2483	657	52	1266
Elevated carrier	C. Lardner	422,231	Feb. 25	2634	698	50	1087
Elevated carrier	W. P. Walling	421,211	Feb. 11	1169	300	50	794
Elevated or bridge structure	I. S. McGiehan	429,470	June 3	560	{ 136 } 137	51	1580

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Elevator:							
See Barrel-elevator.	Hay-elevator.						
Chain elevator.	Hydraulic elevator.						
Clay-elevator.	Hydropneumatic elevator.						
Dental elevator.	Ice-elevator.						
Electric elevator.	Loading-elevator.						
Electrically-controlled elevator.	Skirt-elevator.						
Excavating-elevator.	Sprocket-and-chain elevator.						
Grain-elevator.	Store-service-apparatus elevator.						
Grain-separator elevator.	Sucker-rod elevator.						
Harvester-elevator.	Water-elevator.						
Elevator	R. C. Andersen	434,372	Aug. 12	1404	{ 368 369 }	52	1041
Elevator	N. Beckwith	433,268	July 29	3478	898	52	703
Elevator	R. Butterworth	441,824	Dec. 2	310	83	53	1325
Elevator	C. A. Case	433,762	Aug. 5	479	124	52	848
Elevator	J. H. Clark	420,771	Feb. 4	476	126	50	656
Elevator	B. N. Deblieux	438,913	Oct. 21	1919	510	53	377
Elevator	C. J. Dudley	430,339	June 17	1934	473	51	1864
Elevator	S. C. Evans	424,869	Apr. 1	679	179	51	131
Elevator	M. H. Fogarty and C. A. Buchanan	430,011	June 10	1377	342	51	1747
Elevator	T. P. Ford	427,065	May 6	50	14, 15	51	819
Elevator	C. E. Foster	443,273	Dec. 23	2695	691	53	1812
Elevator	C. W. Fowler	439,647	Nov. 4	37	10	53	614
Elevator	Z. Goodell	419,041	Jan. 7	588	150	50	124
Elevator	F. Gutzkow	431,164	July 1	197	49	52	41
Elevator	W. E. Hale and N. C. Bassett	419,148	Jan. 7	743	{ 196 197 }	50	155
Elevator	O. S. Harmon	421,569	Feb. 18	1682	{ 435 436 437 }	50	898
Elevator	W. D. Harrison and D. C. Burford	428,841	May 27	2754	700	51	1385
Elevator	A. S. Humphrey	434,599	Aug. 19	1768	462	52	1122
Elevator	M. T. Kenney	423,564	Mar. 18	1810	477	50	1495
Elevator	P. L. Kimball	430,655	June 24	2426	591	51	1967
Elevator	S. J. Martin and H. C. Hadstate	442,632	Dec. 16	1568	405	53	1586
Elevator	A. H. McLean	432,952	July 22	2987	767	52	599
Elevator	F. B. Perkins	442,199	Dec. 9	897	239	53	1445
Elevator	W. A. Sawyer	424,904	Apr. 1	727	194	51	140
Elevator	R. C. Smith	418,878	Jan. 7	351	85	50	73
Elevator	R. C. Smith	438,388	Oct. 14	1093	297	53	215
Elevator	R. C. Smith	439,734	Nov. 4	157	41	53	638
Elevator	J. B. Taft	440,834	Nov. 18	1932	{ 496 497 }	53	995
Elevator	C. F. Taylor	425,152	Apr. 8	1109	295	51	223
Elevator	C. E. Torrance	441,718	Dec. 2	139	38	53	1289
Elevator	H. R. Tracy	434,849	Aug. 19	2156	565	52	1197
Elevator-alarm	A. L. Brice	426,104	Apr. 22	2561	674	51	521
Elevator and conveyer	C. J. Seymour	423,821	Mar. 18	2190	{ 578 579 }	50	1568
Elevator and hoist	A. Gross	426,531	Apr. 29	3197	838	51	658
Elevator apparatus	E. B. Coxo	441,288	Nov. 25	2702	{ 701 702 }	53	1149
Elevator attachment for operating gates	F. N. Hallett	425,174	Apr. 8	1152	304	51	233
Elevator-building construction	J. S. Metcalf	422,029	Feb. 25	2325	614	50	1030
Elevator-car	J. E. Snelvly	430,354	June 17	1954	{ 480 481 }	51	1868
Elevator-controller	J. Reilly	432,767	July 22	2709	693	52	546
Elevator-controlling device	H. A. Beldler	420,760	Feb. 4	458	122	50	654
Elevator-controlling device	T. P. Ford	423,236	Mar. 11	1324	{ 343 344 }	50	1396
Elevator-controlling device	S. E. Stokes	439,440	Oct. 28	2757	735	53	542
Elevator-door-operating mechanism	G. A. Whiting	420,525	Feb. 4	138	35	50	591
Elevator for letters, &c.	C. E. Reid	426,418	Apr. 22	3035	{ 794 795 }	51	618
Elevator for water, sand, &c.	A. Hogeland	436,036	Sept. 9	1017	265	52	1577
Elevator-gate	J. G. Zeller	424,917	Apr. 1	744	199	51	144
Elevator-gates. Means for operating	A. Newell	428,126	May 20	1672	424	51	1157
Elevator-gate-operating device	W. H. Golder	439,940	Nov. 4	472	123	53	700
Elevator-guard	D. Fraser	421,395	Feb. 18	1429	371	50	851
Elevator-guard	C. J. Latz	421,940	Feb. 25	2210	{ 579 580 }	50	1008
Elevator-guard	C. J. Latz	439,844	Nov. 4	323	83	53	671
Elevator-guard	W. O. Taylor	438,294	Oct. 14	962	261	53	186
Elevator-indicator	J. P. Cushing	429,189	June 3	125	31	51	1495
Elevator-indicator	J. Lynn	435,232	Aug. 26	2762	729	52	1319
Elevator-lock	L. F. Tebel	425,268	Apr. 8	1278	343	51	258
Elevator-lubricator	J. M. Arnold	437,351	Sept. 30	3161	827	52	2006
Elevator mechanism	C. Whittier	421,150	Feb. 11	1078	277	50	778
Elevator mechanism	C. Whittier	435,957	Sept. 9	896	236	52	1553
Elevator-operating mechanism	R. L. Teed	440,412	Nov. 11	1225	317	53	854
Elevator-operating mechanism	C. Whittier	442,344	Dec. 9	1116	291	53	1485
Elevator or bridge gate	A. Eberle	438,991	Oct. 21	2041	{ 545 546 }	53	402
Elevator or fire-escape	H. A. St. Marie	418,827	Jan. 7	260	63	50	55
Elevator or hoist fire-escape	H. V. Appley	425,924	Apr. 15	2258	{ 598 599 }	51	454
Elevator reversing mechanism	E. T. Young	428,196	May 20	1762	445	51	1175
Elevator safety attachment	F. Handel	430,017	June 10	1385	344	51	1749
Elevator safety device	S. G. Bennett	426,100	Apr. 22	2556	672	51	520
Elevator safety device	W. Deering	437,444	Sept. 30	3385	887	52	2053
Elevator safety device	J. Hatch	439,061	Oct. 21	2177	585	53	428
Elevator safety device	C. Klinik and F. Zawisch	419,265	Jan. 14	927	{ 244 245 }	50	198

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Elevator safety device	E. F. Moenning	434,453	Aug. 19	1547	403	52	1077
Elevator safety device	P. Schmidt	432,443	July 15	2173	559	52	435
Elevator safety device	B. H. Stean and G. Dyes	441,778	Dec. 2	236	60, 61	53	1310
Elevator-shafts. Device for operating shutters for	H. D. Ranlett and G. Provost	439,823	Nov. 4	266	73	53	664
Elevator-shafts. Device for operating the doors to	W. E. Marlett	433,901	Aug. 5	683	177	52	890
Elevator signaling apparatus	R. P. Garsed	441,150	Nov. 25	2450	635	53	1106
Elevator valve-controlling mechanism	L. M. Hosea	430,125	June 17	1568	390	51	1794
Elevator-well doors. Device for operating	W. C. Stephen	434,486	Aug. 19	1596	418	52	1089
Elevator-wells. Device for operating the doors of	W. Bausch	420,856	Feb. 4	629	162	50	682
Elevator-wells. Mechanism for operating the doors of	O. L. Davis	420,866	Feb. 4	646	167	50	686
Elevators. Electric safety device for	H. E. Holmes and C. F. Grosvenor	443,282	Dec. 23	2709	695	53	1815
Elevators. Electric safety device for	H. E. Holmes and C. F. Grosvenor	443,283	Dec. 23	2711	696	53	1815
Ellipsograph	A. W. Leighton	426,288	Apr. 22	2820	741	51	575
Ellipsograph	A. E. Rawson	422,252	Feb. 25	2673	706	50	1094
Embalming and cooling apparatus	E. D. Whipple	434,368	Aug. 12	1398	367	52	1040
Embalming or laying-out table	P. J. Doherty	438,146	Oct. 14	733	201	53	148
Embalming-table	G. Ferguson	421,393	Feb. 18	1427	370	50	850
Embossing and the like. Apparatus for	T. J. Palmer	425,826	Apr. 15	2116	565	51	429
Embossing-machine	S. Ross, Jr.	441,980	Dec. 2	543	116	53	1369
Embossing-machine	G. Valiant and C. Dancel	441,263	Nov. 25	2666	692	53	1143
Embossing-machine. Metal	W. E. Hawkins	437,432	Sept. 30	3305	863	52	2035
Embossing-machine. Thimble	J. Browning	426,407	Apr. 22	3017	790	51	614
Embossing paper and like impressible material. Die for	H. M. Kitchell	440,166	Nov. 11	825	213	53	780
Embroidered flounced fabric	L. Loeb, Jr.	430,347	June 17	1942	476	51	1867
Embroidering and other machines. Jacquard apparatus and connected mechanism for use in	C. H. Willcox and R. Weiss	435,875	Sept. 2	758	203	52	1522
Embroidering-machine	W. Birks and H. S. Cropper	424,846	Apr. 1	639	168	51	124
Embroidering-machine	E. Buss and A. Saurer	443,820	Dec. 30	3578	169	53	1992
Embroidering-machine	F. J. Perry	433,815	Aug. 5	567	918	52	867
Embroidering-machine	A. M. Schneider	419,221	Jan. 14	866	919	50	185
Embroidering-machine	C. H. Willcox and R. Weiss	435,876	Sept. 2	765	920	52	1523
Embroidering-machines. Automatic stitch-adjusting mechanism for	R. T. Smith	422,894	Mar. 4	799	921	50	1288
Embroidering-machines. Machine for threading needles of	A. Saurer and V. Kobler	438,448	Oct. 14	1178	147	53	231
Embroidery-frame	J. Anrig	437,912	Oct. 7	361	104	53	70
Embroidery-stand	E. Przewdzink	437,240	Sept. 30	2985	780	52	1974
Embryotome	S. H. Swain	439,908	Nov. 4	425	109	53	691
Emery grinding-machines. Journal-bearing for	G. G. Crowell	441,139	Nov. 25	2434	632	53	1103
Emery polishing-wheels. Finishing	F. Kohnle	431,774	July 8	1171	291	52	237
Emery-wheel-dressing tool	J. H. Bennett	425,485	Apr. 15	1608	429	51	330
Emery-wheel-dressing tool	A. A. Reed	442,782	Dec. 16	1832	474	53	1638
Emery-wheel hopper	J. F. Leonard	433,735	Aug. 5	432	110	52	840
Emery-wheels and grindstones. Dressing-tool for	T. Wrigley	430,204	June 17	1667	415	51	1813
Enamel. Manufacture of translucent	J. Valère	441,514	Nov. 25	3050	53	1216	
End-board. Vehicle	T. H. Brown	439,104	Oct. 28	2212	594	53	442
End-gate	S. A. Bartlett	437,415	Sept. 30	3281	856	52	2030
End-gate	I. Baughman	437,474	Sept. 30	3373	883	52	2050
End-gate	W. C. Blee	429,006	May 27	2991	768	51	1432
End-gate	R. Cameron	442,217	Dec. 9	924	245	53	1450
End-gate	G. J. Carpenter	426,768	Apr. 29	3560	928	51	728
End-gate	O. McDowell	425,620	Apr. 15	1814	485	51	370
End-gate	C. C. Miller and J. W. Rowe	441,575	Nov. 25	3147	809	53	1234
End-gate	J. W. Sly	423,348	Mar. 11	1495	392	50	1428
End-gate fastener	W. E. Flynn	433,338	July 29	3575	922	52	723
End-gate fastening	J. Dion	430,798	June 24	2664	653	51	2014
End-gate rod	D. Coyle	437,642	Sept. 30	3611	944	52	2097
End-gate. Wagon	W. Beckwith	432,688	July 22	2577	660	52	521
End-gate. Wagon	A. F. Behrman	431,318	July 1	430	107	52	88
End-gate. Wagon	W. W. Boner	422,875	Mar. 4	761	194	50	1282
End-gate. Wagon	L. Brodsky and S. A. Ott	424,171	Mar. 25	2719	725	50	1676
End-gate. Wagon	H. Bussel	429,011	May 27	3007	772	51	1434
End-gate. Wagon	W. E. George and J. A. McGinness	433,593	Aug. 5	228	60	52	800
End-gate. Wagon	J. W. Lesan	443,099	Dec. 23	2389	610	53	1754
End-gate. Wagon	H. M. Purdy	432,897	July 22	2889	740	52	583
End-gate. Wagon	A. G. Samuelson	440,062	Nov. 4	658	175	53	737
End-gate. Wagon	P. Steurwald and A. Cording	423,189	Mar. 11	1260	328	50	1384
Endless-apron guide	H. E. Smith	441,983	Dec. 2	549	147	53	1371
Engine:					148		
See Air-engine. Explosive engine.							
Ammonia-engine. Fire-engine.							
Atmospheric engine. Gas-engine.							
Carding-engine. Gas and air engine.							
Compound engine. Gas and hydrocarbon engine.							
Cylinder-engine. Gas.							
Cylinder and piston motor-engine. Gas and steam engine.							
Dental engine. Gas and steam motor engine.							
Direct-acting engine. Gas-motor engine.							
Disk engine. Gas or oil motor engine.							
Electric engine. Gasoline-engine.							
Electromotor-engine. High-speed engine.							

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Engine—Continued.							
See Hoisting-engine.	Reversible engine.						
Hot-air engine.	Rose-engine.						
Hydrocarbon motor-engine.	Rotary engine.						
Hydraulic engine.	Rotary steam-engine.						
Locomotive-engine.	Single-acting engine.						
Marine engine.	Steam-engine.						
Motor-engine.	Steam or other engine.						
Multiple-cylinder engine.	Steering-engine.						
Petroleum-engine.	Toy engine.						
Petroleum or oil motor engine.	Traction-engine.						
Piston-engine.	Vapor-engine.						
Pneumatic engine.	Vapor and ammonia engine.						
Pulp-engine.	Vertical anti-friction engine.						
Pumping-engine.	Wind-engine.						
Engine.....	A. Ball.....	424,450	Apr. 1	7	4	51	4
Engine.....	A. J. Bates.....	436,768	Sept. 23	2186	{ 575 576 }	52	1813
Engine.....	P. Chouteau.....	434,976	Aug. 26	2394	634	52	1250
Engine.....	E. Field.....	442,027	Dec. 2	625	{ 168 169 170 }	53	1385
Engine.....	J. M. Sailer.....	424,505	Apr. 1	100	28, 29	51	22
Engine.....	F. Steinmann.....	420,839	Feb. 4	604	155	50	675
Engine.....	A. F. Stephenson.....	434,364	Aug. 12	1393	366	52	1039
Engine.....	J. C. H. Stut.....	442,835	Dec. 16	1929	{ 495 496 }	53	1656
Engine.....	L. Tobey.....	438,034	Oct. 7	563	154	53	107
Engine attachment. Steam.....	C. F. Baker.....	432,111	July 15	1634	433	52	344
Engine circuits. Generator for electric.....	C. J. Van Depoele.....	435,261	Aug. 26	2811	744	52	1328
Engine-connection.....	P. Hartrampf.....	443,046	Dec. 16	2271	583	53	1724
Engine connection. Steam.....	G. W. Carey.....	433,645	Aug. 5	301	79	52	815
Engine cut-off. Compound.....	J. W. Eisenhuth.....	430,311	June 17	1884	{ 462 463 }	51	1855
Engine driving-gear. Steam.....	J. Baird.....	425,971	Apr. 22	2363	{ 626 627 }	51	484
Engine driving-gear. Traction.....	J. N. Britz.....	421,902	Feb. 25	2157	566	50	998
Engine eccentrics. Balance for steam.....	D. P. Davis.....	419,836	Jan. 21	1781	472	50	372
Engine gearing. Traction.....	F. M. Walker.....	424,383	Mar. 25	3059	312	50	1742
Engine indicator. Steam.....	A. B. Calkins.....	442,102	Dec. 9	747	{ 202 203 }	53	1416
Engine indicator. Steam.....	E. Garst.....	419,326	Jan. 14	1022	271	50	216
Engine indicator. Steam.....	W. S. McKay.....	428,933	May 27	2687	739	51	1412
Engine indicators. Device for operating steam.....	J. D. Davies.....	441,142	Nov. 25	2441	633	53	1103
Engine lubricator. Steam.....	J. T. Case.....	441,093	Nov. 18	2350	609	53	1077
Engine lubricator. Steam.....	J. A. Mumford.....	431,704	July 8	1067	267	52	217
Engine or motor operated by explosive mixtures.....	A. E. Tavernier.....	428,764	May 27	2640	669	51	1362
Engine piston-rod connection. Steam.....	E. H. Johnson.....	433,986	Aug. 12	814	213	52	924
Engine reversing-gear. Steam.....	D. A. Frazer.....	439,592	Oct. 28	2980	791	53	586
Engine reversing-lever. Steam.....	C. Phillips.....	427,268	May 6	376	98	51	884
Engine reversing-lever. Steam.....	T. M. Shearer and J. W. McKee.....	418,760	Jan. 7	153	37	50	33
Engine reversing mechanism. Steam.....	H. T. Farnsworth.....	440,553	Nov. 11	1456	{ 375 376 }	53	897
Engine-starter.....	A. H. Wallis.....	439,449	Oct. 28	2771	738	53	544
Engine-stop.....	F. G. Tushingham and H. Dubois.....	439,445	Oct. 28	2765	736	51	543
Engine system. Adjustable-current reciprocating.....	C. J. Van Depoele.....	436,276	Sept. 9	1383	360	52	1646
Engines. Apparatus for governing gas or petroleum motor.....	N. A. Otto.....	433,808	Aug. 5	557	{ 144 145 }	52	865
Engines. Apparatus for regulating the exhaust for condensing.....	C. T. Main.....	438,272	Oct. 14	925	250	53	182
Engines. Apparatus for regulating the speed of gas or oil motor.....	N. A. Otto.....	425,692	Apr. 15	1927	513	51	392
Engines. Automatic cut-off for.....	H. Beddoe.....	436,646	Sept. 16	1986	520	52	1766
Engines. Automatic cut-off for rotary.....	N. Wallerich.....	429,204	June 3	149	36	51	1500
Engines. Automatic cut-off for steam.....	J. H. Wheat.....	439,709	Nov. 4	122	33	53	632
Engines. Bed-plate for steam.....	H. C. White.....	440,674	Nov. 18	1654	427	53	945
Engines. Boiler-leveling device for road.....	F. Saxou.....	436,267	Sept. 9	1372	{ 357 358 }	52	1643
Engines. Condenser for steam.....	J. B. Hutchison.....	439,661	Nov. 4	60	16	53	618
Engines. Cut-off for steam.....	G. Fussell, Jr.....	440,103	Nov. 4	711	189	53	747
Engines. Dash-pot for steam.....	J. T. Lindstrom.....	434,602	Aug. 19	1772	463	52	1123
Engines. Electric signal for.....	M. Conley.....	442,104	Dec. 9	755	203	53	1418
Engines. Igniting device for gas.....	W. Heckert.....	425,879	Apr. 15	2196	584	51	444
Engines. Indicator-gear for pressure.....	F. D. Hart.....	433,939	Aug. 12	744	194	52	912
Engines. Journal-box for steam.....	G. Fussell, Jr.....	440,102	Nov. 4	711	189	53	747
Engines. Mechanism for governing the speed of gas or similar motor.....	H. Williams.....	441,085	Nov. 18	2337	605	53	1074
Engines. Operating gas.....	W. von Oechelhaeuser.....	440,922	Nov. 18	2075	536	53	1023
Engines. Shut-off device for.....	T. Conroy and L. P. Fuhrman.....	442,956	Dec. 16	2135	549	53	1696
Engines. Wheel for road.....	R. B. Page.....	442,780	Dec. 16	1830	{ 473 474 }	53	1637
Engines with hot gases and steam. Working motor.....	E. Field.....	437,586	Sept. 30	3536	{ 923 924 }	52	2082
Engraver's block.....	H. U. Seaman.....	420,969	Feb. 11	818	212	50	727
Engraver's vise.....	H. U. Seaman.....	420,970	Feb. 11	819	212	50	728
Engraver's vise or block.....	H. U. Seaman.....	420,968	Feb. 11	816	212	50	727
Engraving and mezzotinting printing-surfaces.....	J. L. Mills.....	424,073	Mar. 25	2582	690	50	1650
Engraving apparatus.....	J. L. Mills.....	429,280	June 3	246	61	51	1519
Engraving apparatus.....	V. L. Ourdan and C. A. Kolb.....	435,243	Aug. 26	2775	{ 733 734 }	52	1322

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Engraving-machine	C. C. Bruckner and S. W. Balch.....	425,929	Apr. 15	2272	{ 602 603 }	51	457
Engraving-machine	C. H. Field, Jr.	428,770	May 27	2649	731	51	1363
Engraving-machine	V. L. Ourdan	435,244	Aug. 26	2780	676	52	1323
Engraving-machine	V. L. Ourdan	435,246	Aug. 26	2785	{ 737 738 739 }	52	1324
Engraving-machine	V. L. Ourdan and C. A. Kolb	435,245	Aug. 26	2782	{ 736 737 }	52	1323
Engraving-machine	J. C. Parmerlee	430,542	June 17	2327	{ 546 547 }	51	1921
Engraving-machines. Graver-holder for	A. E. Francis	435,416	Sept. 2	56	19	52	1385
Engraving-machines. Turning-point attachment for	A. E. Francis	437,137	Sept. 23	2807	731	52	1934
Engravings. Making	D. C. Roberts	436,047	Sept. 9	1038	52	52	1581
Envelope	E. A. Dubéy	443,611	Dec. 30	3238	832	53	1927
Envelope	S. Duryee	423,226	Mar. 11	1311	341	50	1393
Envelope	J. H. Parkhurst	440,650	Nov. 18	1617	416	53	938
Envelope	A. R. Spear	433,052	July 29	3158	812	52	639
Envelope	J. West	442,840	Dec. 16	1939	499	53	1658
Envelope	J. West	442,842	Dec. 16	1941	499	53	1658
Envelope and finger moistener	D. J. Corcoran	419,419	Jan. 14	1164	309	50	246
Envelope-blank-gumming machine	I. W. Huckins	434,446	Aug. 19	1535	{ 400 401 }	52	1075
Envelope-blanks having opening-threads. Machine for forming	J. D. Flammer	435,817	Sept. 2	677	{ 179 180 181 }	52	1506
Envelope-blanks. Machine for gumming	E. Rau	439,639	Oct. 21	2105	{ 564 565 }	53	414
Envelope. Bottle	A. G. Beale	422,366	Mar. 4	8	3	50	1138
Envelope clasp and tag	A. L. Sewell	425,053	Apr. 8	956	256	51	193
Envelope-closer	D. I. Byers	420,620	Feb. 4	277	74	50	618
Envelope. Coin	A. F. J. H., A. W., and C. M. Rolfe	426,331	Apr. 22	2881	758	51	588
Envelope. Duplex safety	A. K. Minton	424,123	Mar. 25	2654	707	50	1663
Envelope-fastener. Reversible	O. A. De Long	427,226	May 6	308	79	51	872
Envelope. Letter-sheet	J. W. Follett and L. F. Marsh	424,413	Mar. 25	3115	826	50	1753
Envelope-machine	S. W. Balch	430,057	June 10	1452	{ 360 361 }	51	1761
Envelope-machine	J. Ball	442,091	Dec. 9	727	{ 197 198 }	53	1413
Envelope-machine	J. Ball	442,092	Dec. 9	732	198	53	1414
Envelope-machine	L. P. Bouvier	422,286	Feb. 25	2730	719	50	1104
Envelope-machine	I. T. Elst	437,813	Oct. 7	216	66	53	43
Envelope-machine	J. D. Flammer	435,816	Sept. 2	674	{ 177 178 179 }	52	1505
Envelope-machine	S. A. Grant	432,749	July 22	2668	{ 682 683 684 }	52	539
Envelope-machine	A. D. Tyrrel	436,618	Sept. 16	1929	507	52	1756
Envelope-machine	R. G. Ward	423,646	Mar. 18	1942	{ 511 512 513 }	50	1521
Envelope-machine	J. West	442,839	Dec. 16	1934	{ 497 498 }	53	1657
Envelope-machine gumming device	E. Rau	425,629	Apr. 15	1831	490	51	374
Envelope-moistener	J. Dawson	432,606	July 22	2424	625	52	493
Envelope-moistener and sealer	J. Maret	426,728	Apr. 29	3500	915	51	717
Envelope-moistening device	C. H. Burton	422,714	Mar. 4	514	131	50	1234
Envelope-moistening pad	A. Stelzner	433,634	Aug. 5	282	75	52	811
Envelope-opener	M. Prossinger	426,189	Sept. 9	1262	329	52	1620
Envelope-opener	D. W. Sholes	425,587	Apr. 15	1756	471	51	359
Envelope-opener	N. R. Streeter	423,351	Mar. 11	1498	393	50	1428
Envelope or bag machine	G. R. Clark	430,728	June 24	2545	{ 622 623 624 }	51	1991
Envelope. Reversible	A. A. Maley	437,705	Oct. 7	36	12	53	10
Envelope. Reversible	E. R. Mathis	442,234	Dec. 9	946	250	53	1455
Envelope. Rolled	S. Wheeler	422,865	Mar. 4	745	190	50	1379
Envelope-sealer	M. H. Watson	431,091	July 1	90	22	52	20
Envelope, stamp, and finger-moistener	A. Bushnell	441,132	Nov. 25	2422	627	53	1100
Envelopes. Device for feeding	W. Heidelmann	443,093	Dec. 23	2375	606	53	1751
Envelopes. Machine for making and printing	C. H. Heywood	420,792	Feb. 4	508	{ 133 134 135 }	50	662
Envelopes. Making	J. West	442,841	Dec. 16	1940	499	53	1658
Envelopes, &c. Moistening device for	C. H. Burton	442,510	Dec. 9	1377	352	53	1539
Eophone	F. Della Torre	441,860	Dec. 2	364	96	53	1336
Equalizer	E. Leslie	434,795	Aug. 19	2080	544	52	1182
Eraser	A. F. G. Daniels	434,505	Aug. 19	1626	427	52	1094
Eraser	G. F. Deunertlöh	436,891	Sept. 23	2445	639	52	1262
Eraser	H. C. Goodrich	424,107	Mar. 25	2635	702	50	1659
Eraser	J. H. Thompson	435,869	Sept. 2	750	201	52	1520
Eraser	C. L. Woolley	432,588	July 22	2401	618	52	488
Eraser. Blackboard	F. Fanning	428,585	May 20	2357	599	51	1290
Eraser. Blackboard	H. E. Gardner	437,106	Sept. 23	2752	719	52	1924
Eraser, envelope-opener, and cigar-cutter. Combined	J. H. Spring	421,874	Feb. 18	2116	555	50	981
Eraser. Ink	M. D. Fowler	423,238	Mar. 11	1327	344	50	1396
Eraser. Ink	W. L. Gundlach	425,783	Apr. 15	2053	547	51	417
Eraser. Ink	O. M. Solberg	429,704	June 10	911	222	51	1658
Eraser. Noiseless blackboard	M. S. Smith and M. R. Wright	423,534	Mar. 18	1774	465	50	1489
Eraser. Pencil	M. A. L. Thomas	428,324	May 20	1972	{ 495 496 }	51	1215
Eraser. Rubber	A. S. Fitch	443,613	Dec. 30	3242	833	53	1927
Eraser. Rubber	W. Friend	443,615	Dec. 30	3244	833	53	1928

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Eraser. Rubber.....	W. Friend.....	443,616	Dec. 30	3245	833	53	1928
Eraser. Rubber.....	W. Friend.....	443,617	Dec. 30	3246	834	53	1928
Eraser. Slate.....	S. S. Sloan.....	436,863	Sept. 23	2400	626	52	1854
Erasive purposes. Utilizing rubber for.....	W. Friend.....	443,614	Dec. 30	3243		53	1928
Etching. Machine for preparing the surface of steel for.....	G. J. B. Rodwell.....	429,644	June 10	819	200	51	1640
Etching on lithographic stones or zinc.....	F. Kraupa and L. Moser.....	437,306	Sept. 30	3090		52	1993
Evaporating and condensing water. Apparatus for.....	H. Ferguson.....	439,132	Oct. 23	2257	606 607	53	449
Evaporating apparatus.....	T. Gaunt.....	431,574	July 8	836	208	52	174
Evaporating apparatus.....	T. Gaunt.....	434,441	Aug. 19	1528	399	52	1073
Evaporating apparatus.....	T. Gaunt.....	435,090	Aug. 26	2564	676 677	52	1281
Evaporating apparatus.....	S. M. Lillie.....	422,235	Feb. 25	2642	699	50	1088
Evaporating apparatus.....	S. M. Lillie.....	440,231	Nov. 11	924	238	53	800
Evaporating apparatus.....	A. Miller.....	428,281	May 20	1904	479	51	1202
Evaporating apparatus.....	C. C. Peck.....	426,140	Apr. 22	2614	686 687	51	533
Evaporating apparatus.....	C. C. Peck.....	438,384	Oct. 14	1084	296	53	213
Evaporating apparatus.....	R. G. Peters.....	420,426	Jan. 23	2684	711 712	50	554
Evaporating apparatus.....	L. W. Tracy.....	420,749	Feb. 4	414	118	50	651
Evaporating apparatus. Condenser with multiple effect.....	S. M. Lillie.....	422,234	Feb. 25	2637	698 699	50	1088
Evaporating apparatus. Liquid.....	J. A. Morrell.....	441,318	Nov. 25	2751	711	53	1158
Evaporating apparatus. Liquid.....	J. A. Morrell.....	441,320	Nov. 25	2753	712	53	1159
Evaporating apparatus. Liquid.....	J. A. Morrell.....	441,321	Nov. 25	2754	712	53	1159
Evaporating apparatus. Multiple-effect.....	T. Gaunt.....	430,183	June 17	1641	409	51	1808
Evaporating apparatus. Vacuum.....	H. S. Firman.....	438,266	Oct. 14	915	248	53	180
Evaporating device. Liquid.....	J. U. Lloyd.....	433,528	Aug. 5	124	36	52	781
Evaporating liquids.....	J. A. Morrell.....	441,319	Nov. 25	2752	711	53	1159
Evaporating liquids.....	C. C. Peck.....	438,385	Oct. 14	1086	296	53	214
Evaporating maple-sap or other fluids.....	G. E. Wheeler.....	438,787	Oct. 21	1709	459	53	339
Evaporating-pan.....	J. M. Duncan. (Reissue).....	11,061	Feb. 18	2133	559	50	985
Evaporating-pan.....	G. H. Grimm.....	422,400	Mar. 4	54	15	50	1148
Evaporating-pan and furnace for operating the same.....	W. S. Gilmore.....	441,001	Nov. 18	2195	567 568	53	1047
Evaporator: See Hot-air-register Vacuum-evaporator. evaporator.							
Evaporator.....	G. H. Brower.....	442,478	Dec. 9	1316	340	53	1526
Evaporator.....	W. O. Johnson.....	442,122	Dec. 9	777	209 210	53	1422
Evaporator and skimmer.....	J. H. B. Butts.....	442,013	Dec. 2	600	162	53	1380
Evener. Four-horse.....	K. K. Solberg.....	437,730	Oct. 7	83	27	53	19
Excavated or other material. Apparatus for dis- charging or throwing.....	F. Nouailhae-Pioch.....	426,848	Apr. 29	3678	958 959	51	751
Excavating apparatus.....	H. Casebolt.....	432,116	July 15	1696	436	52	345
Excavating-elevator.....	W. L. Smyth.....	421,113	Feb. 11	1026	262 263	50	768
Excavating-machine.....	A. W. Robinson.....	435,547	Sept. 2	255	71	52	1424
Excavations. Apparatus for subaqueous.....	A. Fairchild.....	433,279	July 29	3494	901 301 302 303 304	52	707
Excavator.....	H. O. Baldry and J. T. Pullon.....	419,401	Jan. 14	1136	301 302 303 304	50	238
Excavator.....	J. Cable.....	440,912	Nov. 18	2055	531 532	53	1019
Excavator.....	J. N. and J. E. Foye.....	429,027	May 27	3027	777 778	51	1438
Excelsior-cutting machine.....	N. Henry.....	439,007	Oct. 21	2060	551 552	53	406
Excelsior-cutting machine.....	C. G. Smith.....	424,366	Mar. 25	3020	801 802	50	1733
Excelsior-machine.....	A. L. and G. D. Moore.....	436,255	Sept. 9	1357	353 354	52	1641
Exercising apparatus.....	R. Reach.....	420,415	Jan. 28	2669	708	50	552
Exercising apparatus.....	G. S. Sanborn.....	419,285	Jan. 14	957	252	50	203
Exercising-machine.....	W. J. O. Bryon, Jr.....	432,598	July 22	2412	622	52	490
Exercising-machine.....	D. L. Dowd.....	434,771	Aug. 19	2054	537	52	1177
Exercising-machine.....	J. E. Dowd.....	426,249	Apr. 22	2769	726	51	564
Exercising-machine.....	W. E. Forest.....	434,439	Aug. 19	1526	398	52	1073
Exercising-machine.....	J. R. Hamilton.....	443,631	Dec. 30	3274	843	53	1933
Exercising-machine.....	E. J. Kerns.....	435,934	Sept. 9	863	227	52	1548
Exercising-machine.....	L. J. Pennoek.....	433,960	Aug. 12	777	203	52	917
Exercising-machine. Universal.....	F. W. Howe.....	435,180	Aug. 26	2694	711 712	52	1306
Exhaust-head.....	P. R. Crawford.....	434,042	Aug. 12	883	233	52	938
Exhaust-head.....	J. J. Stein.....	421,017	Feb. 11	889	229	50	741
Exhaust mechanism.....	P. F. White.....	440,525	Nov. 11	1412	365	53	889
Exhaust-nozzle.....	L. P. Garner.....	426,260	Apr. 22	2783	731	51	567
Exhaust. Utilizing.....	W. Schmidt.....	429,774	June 10	1065	247	51	1676
Exhibiting device.....	J. Thome.....	439,210	Oct. 28	2386	641	53	473
Exhibiting device for show-windows, &c.....	E. G. Blake.....	440,991	Nov. 18	2178	563	53	1044
Exhibiting goods. Means for.....	A. Pratel.....	443,664	Dec. 30	3322	856	53	1942
Exhibiting rack for cloaks, &c.....	J. H. Eyles.....	430,340	June 17	1935	473	51	1865
Exhibiting-stand for oil-cloths, &c.....	W. Doerflinger.....	426,174	Apr. 22	2662	699	51	542
Exhibitor-form.....	J. J. Wolf.....	434,102	Aug. 12	966	257	52	939
Exhibitor. Goods.....	A. C. Krause and C. B. Wright.....	428,111	May 20	1649	418	51	1153
Exhibitor. Merchandise.....	S. T. Culp.....	434,415	Aug. 12	1487	387 388	52	1058
Expander and flue-cutter. Combined.....	J. N. Murray.....	426,044	Apr. 22	2465	651	51	502
Expanding-tool.....	J. A. Seaman.....	428,786	May 27	2676	678	51	1368
Expansible wheel.....	H. F. Hall.....	443,276	Dec. 23	2699	692	53	1813

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Expansion-coil. Ammonia	E. T. Skiukle and J. M. Westerlin ..	426,690	Apr. 29	3437	901	51	704
Expansion-drill	C. E. Bowe	434,241	Aug. 12	1208	314	52	1002
Expansion-drill	C. A. Seley	440,065	Nov. 4	661	176	53	737
Explorer's instrument	J. L. Simmons	441,777	Dec. 2	233	60	53	1309
Explosive	S. H. Emmens	423,230	Mar. 11	1315	.....	50	1394
Explosive	D. Mindeleff	440,921	Nov. 18	2074	.....	53	1023
Explosive charges. Manufacturing	C. Lamm	435,842	Sept. 2	714	191	52	1513
Explosive charges. Mold for	C. Lamm	425,680	Apr. 15	1908	508	51	388
Explosive compound	B. Broncs	421,662	Feb. 18	1818	.....	50	926
Explosive compound	B. Broncs	421,753	Feb. 18	1936	.....	50	948
Explosive compound	H. S. Maxim	434,049	Aug. 12	890	.....	52	939
Explosive compound	D. Mindeleff	437,499	Sept. 30	3407	.....	52	2057
Explosive compound	S. D. Smolianinoff	432,336	July 15	2028	.....	52	406
Explosive engine	J. W. Eisenhuth	436,936	Sept. 23	2518	659	52	1876
Explosive engine. Double-acting	J. W. Eisenhuth	430,310	June 17	1882	462	51	1855
Explosive engine. Single-acting	J. W. Eisenhuth	430,312	June 17	1887	463	51	1856
Explosive. Gelatinous	F. A. Abel and J. Dewar	425,648	Apr. 15	1858	.....	51	379
Explosive-mixer	W. R. Quinan	427,707	May 13	1029	252	51	1024
Explosive staff	W. L. Heiskell and F. E. Drake ..	421,708	Feb. 18	1881	493	50	938
Explosives. Manufacture of	S. H. Emmens	422,514	Mar. 4	218	.....	50	1177
Explosives. Manufacture of	S. H. Emmens	422,515	Mar. 4	219	.....	50	1178
Explosives. Manufacture of	C. O. Lundholm and J. Sayers ..	438,816	Oct. 21	1766	.....	53	350
Explosives. Manufacture of	H. S. Maxim	430,212	June 17	1692	421	51	1818
Explosives. Manufacture of	H. S. Maxim	436,898	Sept. 23	2456	.....	52	1865
Explosives. Recovering solvents from ..	H. S. Maxim	430,215	June 17	1701	423	51	1820
Express-messenger's box	T. S. Spivey	429,657	June 10	842	204	51	1644
Extension-bracket	L. R. Schmalhausen	441,513	Nov. 25	3048	785	53	1216
Extension-clamp	J. J. Tanner	420,216	Jan. 28	2383	633	50	498
Extension-handle	J. E. Finley	419,761	Jan. 21	1655	439	50	349
Extension-screen	J. A. Baldwin	430,559	June 17	2247	552	51	1924
Extension-table	J. A. Glanton	440,261	Nov. 11	966	247	53	808
Extension-table	W. Hodge	410,356	Nov. 11	1118	287	53	834
Extension-table	H. S. Lee	422,599	Mar. 4	343	86	50	1202
Extension-table	L. Oppenheim	442,997	Dec. 16	2199	566	53	1710
Extension-table	L. G. Smith	436,196	Sept. 9	1275	332	52	1623
Extension-table	W. Williams	436,622	Sept. 16	1935	508	52	1757
Extension-top	C. Hauser	442,223	Dec. 9	932	246	53	1452
Extract. Obtaining meat	J. Van Ruyambeke	431,730	July 8	1105	.....	52	225
Extracts. Apparatus for making	G. S. Andres	436,623	Sept. 16	1937	509	52	1757
Extracts. Apparatus for making	G. S. Andres	436,624	Sept. 16	1939	509	52	1758
Extracts. Apparatus for making fluid ..	J. W. Hyatt	423,869	Mar. 18	2265	597	50	1582
Extracting apparatus	T. Scully	419,224	Jan. 14	871	229	50	186
Extractor:							
See Bolt-extractor. Honey-extractor.							
Bottle-stopper ex- Lemon-juice extractor.							
tractor. Pen-extractor.							
Bung-extractor. Spike-extractor.							
Cartridge-extractor. Stump-extractor.							
Centrifugal ex- Tack-extractor.							
tractor. Watch-maker's roller-ex-							
Cork-extractor. tractor.							
Faucet-extractor.							
Eye-bars. Die for upsetting the heads of ..	W. Mitchell	438,112	Oct. 7	679	185	53	131
Eye-bars. Manufacture of	G. M. Heller	424,783	Apr. 1	548	146	51	107
Eyebolts and hooks. Machine for making ..	J. W. Bowen	439,809	Nov. 4	263	66, 67	53	659
Eyeglass	G. W. Schoeller	433,372	July 29	3619	934	52	731
Eyeglass-case	C. F. Prentice	432,214	July 15	1846	474	52	374
Eyeglass-case	J. W. Sanborn	438,363	Oct. 14	1059	288	53	208
Eyeglass-frame	G. Johnston	420,662	Feb. 4	332	86	50	629
Eyeglass-holder	S. E. Kelley	421,099	Feb. 11	1010	258	50	764
Eyeglass-holder	J. H. Knowles	436,831	Sept. 23	2312	609	52	1818
Eyeglass-holder	C. D. Waite	434,964	Aug. 26	2380	630	52	1247
Eyeglasses	W. Bowker	440,392	Nov. 11	1189	306	53	847
Eyeglasses	J. Currin	425,595	Apr. 15	1768	474	51	361
Eyeglasses	F. W. Emons and C. B. Bishop ..	436,971	Sept. 23	2565	670	52	1886
Eyeglasses	E. B. Fox	437,396	Sept. 30	3242	845	52	2022
Eyeglasses	J. King	437,121	Sept. 23	2781	726	52	1929
Eyeglasses	H. D. Martin	424,217	Mar. 25	2781	741	50	1688
Eyeglasses	H. D. Martin	434,832	Aug. 19	2132	558	52	1193
Eyeglasses	S. B. Odydyke	426,025	Apr. 29	3338	875	51	687
Eyeglasses. Nose-guard for	W. Dengler	442,022	Dec. 2	615	165	53	1383
Eyeglasses. Sliding guard for	L. Alexander	441,917	Dec. 2	444	119	53	1352
Eyelet for traces, &c.	D. Cinnamon	431,105	July 1	111	28	52	24
Eyelet-setting machine	E. D. Welton	424,745	Apr. 1	477	130	51	94
Eyeletting-machine	L. C. Emerson	423,589	Mar. 18	1854	489	50	1503
Eyeletting-machine	F. W. Merrick	422,351	Feb. 25	2834	747	50	1124
Eyeletting-machine	F. W. Merrick	427,340	May 6	475	748	51	905
Fabric:							
See Carpet fabric. Looped fabric.							
Carpet or upholster- Pile fabric.							
ing fabric. Plush fabric.							
Cotton fabric. Rooting fabric.							
Elastic fabric. Textile fabric.							
Elastic or corded Tufted fabric.							
fabric. Water-proof gossamer							
Elastic woven fabric. fabric.							
Embroidered Wire fabric.							
floated fabric. Woven fabric.							
Knit fabric. Woven pile fabric.							
Fabric-clasp	F. W. Mallett	433,297	July 29	3520	908	52	712

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Fabric-cutting apparatus. West-pile.....	W. Gadd.....	438,538	Oct. 14	1305	353	53	258
Fabric holding and stretching clamp.....	A. N. Wilson.....	433,756	Aug. 5	470	121	52	847
Fabric-testing machine.....	E. Morrison and J. P. Herron.....	422,145	Feb. 25	2500	{ 660 661 310 311 }	50	1062
Fabrics by means of a needle and looper. Machine for making and attaching loops to the edges of }	G., J. G., and M. O. Rehfuß.....	438,427	Oct. 14	1150	{ 683 311 }	53	226
Fabrics. Finishing.....	D. Gessner.....	424,055	Mar. 25	2558	683	50	1645
Fabrics. Machine for folding and pressing the edges of }	J. F. Fellows.....	435,137	Aug. 26	2633	{ 696 697 }	52	1294
Fabrics. Making.....	J. I. Wood.....	431,426	July 1	603	.....	52	122
Fabrics. Making two-ply.....	T. B. Dornan.....	438,065	Oct. 7	611	166	53	117
Fabrics. Manufacture of ornamental.....	H. Levy.....	436,366	Sept. 16	1547	406	52	1686
Fabrics. Manufacturing transparent.....	L. L. Perry.....	420,696	Feb. 4	375	.....	50	638
Fabrics. Producing tucks on.....	L. Loeb, Jr.....	424,652	Apr. 1	375	99	51	73
Fabrics. Renovating.....	A. Mautner.....	429,791	June 10	1032	.....	51	1680
Face-plate jaw.....	A. F. Cushman.....	435,405	Sept. 2	44	15	52	1383
Face-wheel or crank-disk.....	D. C. D. Whitcomb.....	435,576	Sept. 2	303	84	52	1433
Fair-leader.....	W. N. Gesner.....	428,391	May 20	20-7	524	51	1239
Fan.....	H. S. Carley.....	429,884	June 10	1181	293	51	1709
Fan.....	J. M. Curtice.....	427,054	May 6	29	10	51	816
Fan.....	P. Murray, Jr.....	428,779	May 27	2662	{ 675 676 }	51	1366
Fan.....	E. W. and J. F. Snow.....	421,626	Feb. 18	1773	463	50	916
Fan.....	F. W. Tuerk, Jr.....	420,024	Jan. 21	2665	544	50	430
Fan.....	F. W. Tuerk, Jr.....	423,839	Mar. 18	2217	585	50	1573
Fan attachment.....	G. S. Nickum.....	425,449	Apr. 15	1555	416	51	320
Fan attachment for chairs.....	R. Taggart.....	421,206	Feb. 11	1163	{ 298 299 }	50	793
Fan attachment for chairs, &c.....	R. Taggart.....	421,330	Feb. 11	1337	346	50	826
Fan attachment for velocipedes or other vehicles.....	C. W. Sommerville.....	418,933	Jan. 7	447	110	50	93
Fan. Automatic.....	W. R. Polk, Jr.....	421,014	Feb. 11	886	229	50	740
Fan. Dust-catching.....	J. M. Case.....	419,316	Jan. 14	1006	266	50	213
Fan. Electric.....	P. Diehl.....	425,995	Apr. 22	2401	{ 635 636 }	51	490
Fan. Exhaust.....	A. M. Doane.....	435,602	Sept. 2	337	94	52	1440
Fan. Exhaust.....	J. M. Seymour, Jr.....	420,470	Feb. 4	71	16	50	578
Fan. Fly.....	W. R. Fowler.....	437,921	Oct. 7	373	107	53	72
Fan for elevator-cars.....	A. Richter and J. H. Lancaster.....	432,768	July 22	2710	693	52	547
Fan for ventilation. Rotary.....	J. T. and L. J. Hope and L. C. Alexander.....	420,156	Jan. 28	2280	604	50	481
Fan-hub.....	J. M. Seymour, Jr.....	425,585	Apr. 15	1754	470	51	358
Fan. Portable.....	W. H. Curtice.....	422,737	Mar. 4	546	140	50	1240
Fan. Rotary.....	B. F. Perkins.....	420,310	Jan. 28	2524	670	50	525
Fan-supporting bracket. Adjustable.....	J. J. Schmidt and C. A. Jonson.....	421,146	Feb. 11	1071	275	50	777
Fan. Toilet.....	B. R. Maybeck.....	432,541	July 22	2337	603	52	476
Fan. Ventilating.....	W. M. Smith and J. Caldwell.....	427,375	May 6	518	132	51	914
Fans. Means for reversing the motion of.....	D. J. Omstead.....	439,036	Oct. 21	2101	563	53	413
Fanning-mill.....	R. K. Floeter.....	429,565	June 3	700	170	51	1607
Fanning-mill. Automatic.....	G. J. Schlosser.....	441,331	Nov. 25	2768	715	53	1162
Fanning-mills. Air-blast-regulating device for.....	J. S. Ady.....	472,352	July 15	2046	527	52	410
Faradic battery. Portable.....	L. T. Stanley.....	419,731	Jan. 21	1607	429	50	339
Fare-box.....	J. Bricker.....	420,265	Jan. 28	2462	{ 653 654 }	50	513
Fare-box. Conductor's.....	T. W. Moore.....	439,600	Oct. 28	2999	{ 795 796 }	53	590
Fare-collecting apparatus.....	R. L. Irvine.....	426,817	Apr. 29	3633	948	51	742
Fare-collector.....	A. W. Berne.....	431,430	July 1	609	152	52	123
Fare-collector.....	A. W. Berne.....	431,431	July 1	610	152	52	123
Fare collector. Passenger.....	J. Ring.....	437,622	Sept. 30	35-3	937	52	2091
Fare collector. Passenger.....	J. Ring.....	437,623	Sept. 30	3585	937	52	2091
Fare-conveyer pocket.....	A. A. Anderson.....	438,832	Oct. 21	1798	479	53	354
Fare-register.....	J. W. Meaker.....	423,436	Mar. 18	1626	{ 427 428 }	50	1461
Fare-register.....	J. H. Rose.....	436,805	Sept. 23	2265	{ 597 598 598 }	52	1829
Fare-registers. Apparatus for operating.....	R. O. Belles.....	438,908	Oct. 21	1913	{ 509 509 }	53	375
Farm-gate.....	S. S. Alspach.....	443,843	Dec. 30	3607	928	53	1998
Farm-gate.....	F. W. Beardslee.....	422,491	Mar. 4	184	50, 51	50	1171
Farm-gate.....	L. R. Bender.....	419,002	Jan. 7	535	133	50	113
Farm-gate.....	W. S. Day.....	441,752	Dec. 2	197	52	53	1301
Farm-gate.....	W. A. Downs.....	425,411	Apr. 15	1496	402	51	309
Farm-gate.....	S. W. Lane.....	423,330	Mar. 11	1474	386	50	1424
Farm-gate.....	A. J. Mercer.....	420,460	Feb. 4	60	13	50	575
Farm-gate.....	J. C. and L. Merrill.....	431,275	July 1	373	93	52	75
Farm-gate.....	O. E. H. N. Reichling.....	424,576	Apr. 1	217	59	51	44
Farm-gate.....	F. W. Ryder.....	434,404	Aug. 12	1463	381	52	1054
Farm-gate.....	M. E. Smith.....	430,702	June 24	2507	613	51	1983
Farm-gate.....	J. Stephenson.....	428,537	May 20	2276	578	51	1274
Farm-gate.....	D. Walker.....	441,513	Nov. 25	3056	786	53	1217
Farm-gate. Automatic.....	W. W. Watson.....	420,482	Feb. 4	84	19	50	580
Farming-machine.....	J. J. Sizafos.....	420,364	Jan. 28	2603	692	50	539
Fastener-driver.....	J. M. Hering.....	428,721	May 27	2580	654	51	1349
Fastener for shoe-strings, bags, &c.....	F. W. Starr.....	428,701	May 27	2549	646	51	1444
Fasteners. Making corrugated.....	H. L. Potts.....	423,808	Mar. 18	2174	575	50	1564
Fastening device.....	F. W. Starr.....	427,632	May 13	910	229	51	1001
Fastening device.....	W. J. Boda.....	428,063	May 20	1575	400	51	1138
Fastening device.....	A. Epple.....	433,890	Aug. 5	674	175	52	888
Fastening device.....	M. Hamburger.....	432,938	July 22	2951	756	52	594
Fastening device.....	F. W. Starr.....	419,375	Jan. 14	1095	289	50	231
Fastening device.....	J. A. Turnbull.....	425,115	Apr. 8	1040	277	51	210
Fastening for gloves, shoes, &c.....	B. Bernstein.....	424,754	Apr. 1	491	{ 133 134 }	51	96
Fastening or clasping device.....	J. A. Turnbull.....	423,000	Mar. 11	973	256	50	1329

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Fastenings. Machine for driving headed	M. Brock	442,418	Dec. 9	1228	{ 317 318 }	53	1509
Fats and oils. Extracting	M. Schroeder	433,152	July 29	3315	857	52	670
Fats from emulsions. Separating	C. D. Hellström	436,133	Sept. 9	1172	306	52	1604
Fatty products. Recovering	M. L. Griffin, E. S. Thayer, and E. S. Buffum	443,940	Dec. 30	3749	53	53	2024
Faucet	N. Davis	423,596	Mar. 18	1851	488	50	1502
Faucet	M. N. Maloney	423,503	May 20	2231	564	51	1266
Faucet	G. W. Miller	419,153	Jan. 7	752	199	50	157
Faucet	D. A. Ripley	436,151	Sept. 9	1200	313	52	1609
Faucet	G. C. Sawyer	427,191	May 6	254	66	51	861
Faucet	H. Schwachheim	434,094	Aug. 12	972	255	52	956
Faucet	J. Sommer, Jr.	421,627	Feb. 18	1774	464	50	916
Faucet	R. F. Stahl	428,644	May 27	2443	622	51	1325
Faucet	W. Vanderman	430,712	June 24	2524	618	51	1286
Faucet and bung	E. F. Dieterichs	438,611	Oct. 21	1423	385	53	286
Faucet attachment	C. C. E. Van Alstine and H. Munzer ..	432,152	July 15	1756	451	52	357
Faucet. Beer	J. B. Hogan	439,510	Oct. 28	2862	761	53	562
Faucet. Beer or ale	J. S. Smart	421,770	Feb. 18	1961	515	50	952
Faucet. Can	G. J. Record	442,916	Dec. 16	2076	533	53	1684
Faucet-extractor	R. D. Black	441,864	Dec. 2	373	98	53	1338
Faucet-fastener	G. W. Aldrich	431,791	July 8	1200	299	52	243
Faucet. Measuring	F. Keiser	422,530	Mar. 4	237	62	50	1181
Faucet. Measuring	J. A. Kendall	419,778	Jan. 21	1684	447	50	354
Faucet. Measuring	C. Skinner	424,691	Apr. 1	390	103	51	76
Faucet or stop-cock	L. Brandeis	433,320	July 29	3554	917	52	719
Faucet. Self-closing	J. P. Farley	434,823	Aug. 19	2122	556	52	1191
Faucet. Self-closing	A. W. Straight	440,581	Nov. 11	1498	387	53	905
Faucet. Siphon	M. M. Davis	423,031	Mar. 11	1015	266	50	1337
Faucet. Vent	B. Frey and H. Loges ..	429,433	June 3	504	121	51	1569
Faucet. Whey	E. Wagner, Jr.	418,774	Jan. 7	174	42	50	39
Faucets. Pail-holder for	H. Kellner	443,771	Dec. 30	3495	896	53	1975
Feather duster	J. T. Hair	442,433	Dec. 9	1250	323	53	1513
Feather-renovator	J. H. Bruen	435,170	Aug. 26	2679	707	52	1393
Feathers. Machine for removing down from ..	J. M. Pickering	426,955	Apr. 29	3815	997	51	778
Feed apparatus or carrier	H. La Casse and S. Wile	443,098	Dec. 23	2383	{ 608 609 610 }	53	1752
Feed-bag	C. A. Bartliff	440,785	Nov. 18	1847	{ 475 476 }	53	960
Feed-bag support	W. Barley	426,654	Apr. 29	3381	888	51	694
Feed-beater. Rotary	F. F. Gueths	432,126	July 15	1802	463	52	366
Feed-block for animals	G. F. Brott	422,370	Mar. 4	14	5	50	1139
Feed-boiler and water-heater	J. Naylor	430,673	June 24	2459	690	51	1973
Feed-cutter	F. F. Drinkhouse	440,021	Nov. 4	600	159	53	725
Feed-cutter	S. and M. Freeman and W. E. Davis ..	429,432	June 3	503	120	51	1569
Feed-cutter	E. W. Ross	439,429	Oct. 28	2741	{ 731 732 }	53	539
Feed-cutter	E. W. Silver	424,434	Mar. 25	3150	{ 835 836 }	50	1760
Feed-cutter	J. B. Sykes and T. A. Foust	421,632	Feb. 18	1782	466	50	918
Feed-cutter	H. Wiese	432,845	July 22	2815	721	52	568
Feed-cutter and corn-husker. Combined	W. Gutenkunst	440,826	Nov. 18	1919	{ 492 493 }	53	993
Feed-cutter and corn-husker. Combined	A. Rosenthal	440,818	Nov. 18	1905	489	53	990
Feed-cutter, thrasher, and separator. Combined ..	P. B. Still	437,803	Oct. 7	201	62, 63	53	40
Feed-gage	E. L. McGill	438,382	Oct. 14	1082	295	53	213
Feed-grinder	E. D. Phillips	443,000	Dec. 16	2203	566	53	1711
Feed-mill or grinding-machine	G. V. Clink	419,750	Jan. 21	1638	{ 435 436 }	50	345
Feed or carrier mechanism	S. Wile and H. La Casse ..	443,184	Dec. 23	2535	{ 649 650 }	53	1780
Feed-rack	J. X. Mills	427,343	May 6	482	123	51	907
Feed-regulator	E. Decollogne	428,768	May 27	2647	670	51	1363
Feed-regulator	W. Gribben	443,139	Dec. 23	2461	629	53	1765
Feed-regulator	J. J. Horan	420,385	Jan. 28	2631	698	50	544
Feed-regulator	C. W. Hunt	438,377	Oct. 14	1077	294	53	212
Feed-regulator	C. J. Pithod	422,623	Mar. 4	394	98	50	1212
Feed-roller	D. C. Sweet	420,522	Feb. 4	133	33	50	590
Feed-roller mechanism	E. D. Hostetler	438,886	Oct. 21	1886	500	53	370
Feed-table roller	W. A. Hourphill	436,525	Sept. 16	1780	469	52	1729
Feed-trough	W. S. Barker	426,426	Apr. 29	3048	798	51	629
Feed-trough	G. D. Burton	422,007	Feb. 25	2299	608	50	1025
Feed-trough	G. D. Burton	436,397	Sept. 16	1592	424	52	1694
Feed-trough	W. H. Daniel	443,503	Dec. 30	3070	791	53	1894
Feed-trough	C. Justesen	423,777	Mar. 18	2129	561	50	1555
Feed-trough	F. E. Kent	432,671	July 22	2542	651	52	515
Feed-trough	J. Klink	436,483	Sept. 16	1729	456	52	1720
Feed-trough	W. J. Musser	436,458	Sept. 16	1688	444	52	1712
Feed-trough	F. O. Reed	434,806	Aug. 19	2098	{ 549 550 }	52	1186
Feed-trough	M. A. Rogers	420,168	Jan. 28	2298	608	50	483
Feed-trough	R. J. Woodworth	421,465	Feb. 18	1523	394	50	869
Feed-trough fender	H. Nisson	424,020	Mar. 25	2511	668	50	1635
Feed trough or rack. Folding	J. O. Atkinson	436,112	Sept. 9	1144	{ 298 299 }	52	1599
Feed-water. Device for automatically regulating boiler	C. B. Bosworth	442,098	Dec. 9	740	200	53	1415
Feed-water. Extractor for removing air, grease, and sediment from	H. See	439,695	Nov. 4	102	27	53	628
Feed-water for steam-boilers. Preparing	F. G. Fowler	423,423	Mar. 18	1609	421	50	1458
Feed-water heater	C. Canienne	434,319	Aug. 12	1326	345	52	1025
Feed-water heater	J. C. C. Davol	424,764	Apr. 1	512	138	51	100
Feed-water heater	E. Goss. (Reissue)	11,090	June 24	3017	741	51	2081

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Feed-water heater.	C. E. Hudson	426,123	Apr. 22	2584	679	51	526
Feed-water heater	G. F. Knox	419,530	Jan. 14	1312	351	50	275
Feed-water heater.	F. L. McGahan	427,266	May 6	371	97	51	883
Feed-water heater	F. J. Oakes	419,213	Jan. 14	853	224	50	183
Feed-water heater	D. Stark	442,244	Dec. 9	958	253	53	1458
Feed-water heater.	E. R. Stilwell.	427,019	Apr. 29	3913	1021	51	797
Feed-water heater and cleaner	W. A. Taylor.	426,881	Apr. 29	3723	972	51	761
Feed-water heater and filter	J. B. Churchill	426,918	Apr. 29	3768	984	51	769
Feed-water heater and purifier.	M. Abrams	423,653	Mar. 18	1958	515	50	1523
Feed-water heater and purifier.	C. E. Ferreira	434,591	Aug. 19	1755	460	52	1120
Feed-water heater and purifier.	A. Krumholz	434,667	Aug. 19	1895	494	52	1146
Feed-water heater and purifier.	G. F. Lynch	431,231	July 1	305	75	52	61
Feed-water heater and purifier.	A. R. Smith	433,104	July 29	3245	535	52	656
Feed-water heater and purifier.	W. J. Smith. (Reissue)	11,080	June 24	3016	740	51	2081
Feed-water heater for steam-generators.	C. H. Fish.	438,267	Oct. 14	918	248	53	180
Feed-water. Heating	G. H. Burpee	441,392	Nov. 25	2861	739	53	1179
Feed-water. Heating	C. H. Uhler	436,845	Sept. 23	2334	614 615	52	1842
Feed-water heating and purifying apparatus.	R. Learmonth	432,055	July 15	1602	409 410	52	327
Feed-water injectors. Attachment for	C. Phillips	433,028	July 29	3122	802	52	632
Feed-water purifier	B. F. Field	432,026	July 15	1553	395	52	318
Feed-water purifier	E. F. Peacock and H. C. Reagan, Jr.	428,131	May 20	1679	426	51	1159
Feed-water purifier.	J. S. Roake	428,695	May 27	2537	644	51	1342
Feed-water purifier. Live-steam	C. G. Haskins	423,606	Mar. 18	1866	492	50	1505
Feed-water purifier. Live-steam	E. R. Stilwell	427,018	Apr. 29	3912	1020	51	797
Feed-water-regulating device	C. B. Bosworth	441,741	Dec. 2	174	46	53	1296
Feed-water regulator	H. Campbell	437,914	Oct. 7	362	105	53	70
Feed-water regulator	R. J. Hoffman	434,784	Aug. 19	2068	540	52	1180
Feed-water regulator	D. C. Walter	420,979	Feb. 11	832	215	50	730
Feed-water regulator for steam-boilers. Automatic.	F. T. Kent.	443,577	Dec. 30	3185	818 819	53	1916
Feed-water strainer for boilers.	L. O. Crocker	432,793	July 22	2749	703	52	554
Feed-water to boilers. Device for supplying	C. B. Bosworth	441,740	Dec. 2	173	46	53	1296
Feeder and hand-cutter	G. W. Morris	410,180	Nov. 11	841	217	53	783
Feeder. Automatic reagent.	J. W. Hyatt	434,392	Aug. 12	1439	375	52	1049
Feeder for sheets of paper, &c	G. R. Clarke	419,501	Jan. 14	1274	340	50	267
Feeding and justifying mechanism.	J. A. Watson	435,338	Aug. 26	2944	782	52	1351
Feeding-trough	A. Wright	434,856	Aug. 19	2164	567	52	1199
Fellies for vehicle-wheels. Machine for forming	A. J. Hanks	433,286	July 29	3504	904 905	52	709
Fellies of metallic wheels. Machine for drilling holes in the	G. H. Everson	420,338	Jan. 28	2563	680	50	531
Felly-polishing machine	P. Kettenring	427,695	May 13	1010	254 255	51	1020
Felt articles. Machine for making wool.	J. S. Tapley	424,661	Apr. 1	345	91, 92	51	67
Felt by electricity. Shrinking and furling	F. C. Taylor and J. R. Hard	428,026	May 13	1518	385	51	1118
Felting boots, &c. Composition for.	A. D. Kizer.	423,479	Mar. 18	1689		50	1474
Felting-machine.	H. W. French	425,604	Apr. 15	1784	478 479	51	364
Fence.	G. W. Alexander	422,684	Mar. 4	476	121	50	1227
Fence.	J. A. E. Anderson	423,201	Mar. 11	1276	332	50	1387
Fence.	E. M. Andrews	422,046	Feb. 25	2354	621	50	1035
Fence.	D. K. Briggs	428,265	May 20	1878	472	51	1197
Fence.	W. M. Britton	420,987	Feb. 11	847	218	50	733
Fence.	G. J. Brown	438,402	Oct. 14	1120	303	53	220
Fence.	C. C. Carpenter.	430,064	June 10	1468	364	51	1764
Fence.	G. J. Cline	420,717	Feb. 4	403	107	50	643
Fence.	A. Deal.	422,574	Mar. 4	305	78	50	1194
Fence.	A. F. Dickey	442,769	Dec. 16	1815	470	53	1633
Fence.	L. F. Finley	435,291	Aug. 26	2860	756	52	1338
Fence.	L. Freas	435,297	Aug. 26	2883	763	52	1339
Fence.	W. G. Frost	425,774	Apr. 15	2040	543	51	415
Fence.	J. F. Fulkerson.	441,546	Nov. 25	3104	797	53	1227
Fence.	J. H. Hammer	442,039	Dec. 2	649	174	53	1389
Fence.	E. L. Hammond	441,362	Nov. 25	2808	725	53	1169
Fence.	H. and D. S. Hartwell	429,685	June 10	877	213	51	1650
Fence.	J. W. Haynes	436,286	Sept. 9	1400	364	52	1650
Fence.	H. A. Holibangh	441,873	Dec. 2	385	101	53	1340
Fence.	H. Huffman	425,892	Apr. 15	2200	585	51	445
Fence.	J. Kerr, Sr.	429,038	May 27	3055	787	51	1443
Fence.	W. S. Kline	422,422	Mar. 4	86	23	50	1153
Fence.	J. Knoblock	434,562	Aug. 10	1710	447	52	1110
Fence.	P. Lightner	427,773	May 13	1140	286	51	1046
Fence.	J. Ligon	422,813	Mar. 4	650	166	50	1262
Fence.	W. Longden.	423,785	Mar. 18	2144	566	50	1558
Fence.	L. S. Newman	431,706	July 8	1070	267	52	218
Fence.	J. H. Power	419,706	Jan. 21	1580	422	50	333
Fence.	H. C. Pratt	424,498	Apr. 1	92	26	51	21
Fence.	C. R. Price	441,072	Nov. 18	2316	599	53	1070
Fence.	J. W. Roberts	429,773	June 10	1004	246	51	1676
Fence.	J. J. Sassaman	437,248	Sept. 30	3001	784	52	1977
Fence.	J. C. Simmons and W. H. Turner	419,567	Jan. 14	1363	365	50	286
Fence.	J. and C. Sloan	437,522	Sept. 30	3445	900	52	2063
Fence.	J. A. Sparks and W. S. Brown	428,763	May 27	2639	668	51	1362
Fence.	M. T. Swope	436,904	Sept. 23	2468	644	52	1867
Fence.	W. W. Thomas	439,209	Oct. 28	2365	641	53	473
Fence.	V. E. Wilder	422,675	Mar. 4	465	119	50	1225
Fence.	B. F. and S. C. Wolfe	410,681	Nov. 18	1663	429	53	946
Fence. Apparatus for making woven wire	W. Delain	426,493	Apr. 29	3143	825	51	648
Fence barb. Wire.	E. W. Robinson	421,055	Feb. 11	948	244	50	752
Fence. Barbed metallic	O. Huffman	442,525	Dec. 9	1400	357	53	1543
Fence-bracket	N. Kramer and W. H. Gee	427,476	May 6	678	170	51	946
Fence-building machine	P. C. Miller	433,299	July 29	3523	909	52	712

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Fence construction	W. H. White	438,905	Oct. 21	1909	507	53	375
Fence-coping	J. T. Shimer	432,000	July 8	1508	352	52	303
Fence. Flood-	W. J. Vertrees	438,366	Oct. 14	1062	229	53	209
Fence gate. Wire-	A. D. Neff	443,146	Dec. 23	2475	632	53	1768
Fence guard. Barb-wire-	G. Eddy	430,931	June 24	2568	704	51	2053
Fence. Hedge-	J. A. Grove	437,689	Oct. 7	19	6	53	6
Fence. Hedge-	W. T. Harris, Jr.	428,754	May 27	2630	666	51	1360
Fence. Hedge and wire-weven-	M. L. Main	426,291	Apr. 22	2823	742	51	576
Fence joint. Wire-	J. M. Fellows	419,758	Jan. 21	1632	{ 438 439 }	50	348
Fence-link	I. N. Elliott, J. W. Collins, and P. A. Reid.	430,177	June 17	1632	408	51	1807
Fence looper. Wire-	W. P. Yeoman	431,222	July 1	292	72	52	59
Fence-machine	R. J. Aultman	418,667	Jan. 7	4	2	50	3
Fence-machine	G. W. Begole	419,175	Jan. 14	796	210	50	172
Fence-machine	H. J. Gehhardt	435,540	Sept. 2	245	68	52	1422
Fence-machine	F. W. Kremer	436,004	Sept. 9	965	{ 252 253 }	52	1567
Fence-machine	J. C. Kremer	422,304	Feb. 25	2759	727	50	1110
Fence-machine	E. A. Leinard and G. W. Sheets.	438,007	Oct. 7	512	144	53	97
Fence-machine	O. J. Linendoll	421,945	Feb. 25	2217	581	50	1009
Fence-machine	C. Skinner	420,113	Jan. 28	2309	{ 584 585 }	50	468
Fence-machine	W. Smith and J. H. Wilson	423,395	Mar. 11	1359	409	50	1440
Fence-machine	J. H. Vertrees	422,267	Feb. 25	2698	711	50	1099
Fence-machine	D. E. Wise and B. F. Jones.	419,578	Jan. 14	1376	{ 368 369 }	50	289
Fence-machine. Automatic	W. P. Shattuck	418,759	Jan. 7	147	36, 37	50	32
Fence-machine. Hand	M. F. Connett	434,378	Aug. 12	1415	371	52	1044
Fence machine. Picket-	W. R. Harmon	419,438	Jan. 14	1189	316	50	250
Fence machine. Picket-	T. J. Smith	418,990	Jan. 7	520	130	50	110
Fence machine. Portable-	F. S. Huckins	420,800	Feb. 4	529	137	50	665
Fence-machine tension device	S. Lutz	436,006	Sept. 9	966	253	52	1567
Fence machine. Wire-	G. J. Cline	419,502	Jan. 14	1277	340	50	268
Fence machine. Wire-	D. E. Deeter	429,232	June 3	185	45	51	1507
Fence machine. Wire-	A. Land	435,042	Aug. 26	2494	{ 659 660 }	52	1268
Fence machine. Wire-	E. S. Morgan	432,951	July 22	2986	767	52	599
Fence machine. Wire-and-picket-	J. M. Belote	419,136	Jan. 7	723	190	50	151
Fence machine. Wire-and-picket-	H. J. Gebhardt	435,539	Sept. 2	241	67	52	1421
Fence machine. Wire-and-picket-	S. Jarvis	433,792	Aug. 5	529	137	52	859
Fence machine. Wire-and-picket-	J. Kelley	431,772	July 8	1165	{ 290 291 }	52	236
Fence-machines. Tension device for	W. Peeper	431,673	July 8	1007	250	52	206
Fence-machines. Twisting-wheel for	H. D. Robinson	422,977	Mar. 11	946	248	50	1324
Fence-making machine	G. Q. Adams	422,172	Feb. 25	2541	{ 671 672 }	50	1069
Fence-making machine	G. L. Banks and P. P. Belt.	440,457	Nov. 11	1299	336	53	867
Fence-making machine	J. E. Fisher	437,344	Sept. 30	3151	825	52	2005
Fence-making machine	M. Gleason	423,316	Mar. 11	1452	380	50	1419
Fence-making machine	S. A. Henkel, Sr.	438,727	Oct. 21	1617	434	53	321
Fence-making machine	T. P. Madill	436,180	Sept. 9	1246	325	52	1617
Fence-making machine	W. H. Smith	429,655	June 10	840	204	51	1643
Fence-making machine. Iron-	C. Hanika	423,426	Mar. 18	1612	423	50	1458
Fence-making machine. Wire-	J. H. Stringer	422,262	Feb. 25	2687	709	50	1097
Fence-making machine. Wire-	J. H. Tracy	438,450	Oct. 14	1186	{ 321 322 }	53	233
Fence-making machine. Wire-and-picket-	M. F. Connett	424,276	Mar. 25	2851	{ 763 764 }	50	1702
Fence-making machine. Wire-and-slat-	J. Edmondson	422,749	Mar. 4	559	143	50	1243
Fence ornament	L. G. Beers and P. Drendul	425,926	Apr. 15	2268	601	51	456
Fence. Picket	H. W. Volck	431,759	July 8	1145	285	52	233
Fence-pickets. Device for wiring	D. Hershberger	424,824	Apr. 1	695	184	51	134
Fence-pickets. Die for shearing	J. E. Emerson and J. S. Kurtz.	422,929	Mar. 11	864	225	50	1309
Fence-pickets. Machine for pointing	J. M. Vance	423,806	Dec. 30	3552	910	53	1987
Fence. Plashed hedge	P. Geiser	421,132	Feb. 11	1054	270	50	773
Fence. Portable	J. W. Bruton	439,343	Oct. 28	2611	696	53	515
Fence. Portable	R. North	431,820	July 8	1246	312	52	252
Fence. Portable	J. R. Swickard	420,475	Feb. 4	77	18	50	579
Fence-post	G. W. Bond	432,930	July 22	2941	753	52	592
Fence-post	E. Butterick	430,830	June 24	2714	665	51	2023
Fence-post	J. Copenhaver	428,300	May 20	1937	487	51	1208
Fence-post	O. F. A. Faulkner	443,848	Dec. 30	3611	929	53	1999
Fence-post	W. C. Gholson	425,317	Apr. 8	1356	362	51	272
Fence-post	S. H. Gregg	441,004	Nov. 18	2199	568	53	1047
Fence-post	A. C. Harrison	420,537	Feb. 4	156	39	50	594
Fence-post	H. J. Hower	429,627	June 10	795	194	51	1635
Fence-post	V. C. Huey	430,126	June 17	1570	390	51	1795
Fence-post	G. R. King and P. Chapman.	419,018	Jan. 7	563	141	50	119
Fence-post	A. L. Kitselman	442,189	Dec. 9	882	235	53	1442
Fence-post	J. Leever	442,290	Dec. 9	1027	271	53	1469
Fence-post	J. W. McCool	434,454	Aug. 19	1548	404	52	1077
Fence-post	J. McKee, Jr.	436,539	Sept. 16	1824	480	52	1736
Fence-post	J. McKee	440,323	Nov. 11	1072	276	53	825
Fence-post	L. F. Norton	422,034	Feb. 25	2330	615	50	1031
Fence-post	L. F. Norton	442,636	Dec. 16	1573	407	53	1587
Fence-post	H. A. Peabody	436,634	Sept. 16	1960	514	52	1762
Fence-post	C. A. Peterson	437,165	Sept. 23	2871	746	52	1944
Fence-post	C. R. Price and F. M. Gallup	423,809	Mar. 18	2175	575	50	1564
Fence-post	R. B. Robbins	433,038	July 29	3141	307	52	635
Fence-post	E. Robertson and J. M. Reese, Jr.	426,472	Apr. 29	3108	815	51	642
Fence-post	W. H. Rogers	429,547	June 3	676	165	51	1602
Fence-post	S. J. Saxon and W. H. James	423,633	Mar. 18	1924	506	50	1517
Fence-post	W. A. Shaw	424,139	Mar. 25	2676	712	50	1667

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Fence-post.....	E. Sims.....	419,080	Jan. 7	649	170	50	137
Fence-post.....	E. Sims Jr.....	437,050	Sept. 23	2669	698	52	1907
Fence-post.....	W. H. Thomson.....	426,745	Apr. 29	3528	921	51	722
Fence-post anchor.....	F. Underwood.....	443,018	Dec. 16	2222	572	53	1715
Fence-post base.....	J. H. Jr., and A. Ramer.....	435,978	Sept. 9	929	244	52	1560
Fence-post bottom.....	I. V. Wolf.....	427,815	May 13	1201	302	51	1056
Fence-post-driving machine.....	W. S. Morden and R. Hoffman.....	437,500	Sept. 30	3408	892	52	2057
Fence-post holder.....	L. Heiland.....	432,043	July 15	1581	404	52	323
Fence-post. Iron.....	W. D. Stillman.....	420,122	Jan. 28	2224	588	50	471
Fence-post. Metal.....	T. J. Thorp.....	438,122	Oct. 7	689	187	53	133
Fence-posts. Iron or steel.....	J. S. Merritt.....	434,549	Aug. 19	1692	443	52	1107
Fence-posts. Wire-fastener for.....	W. Hellenberger.....	437,155	Sept. 23	2857	742	52	1941
Fence rails. Coupling-bar for wire.....	T. B. Tollefsen.....	438,205	Oct. 14	814	221	53	163
Fence reel. Wire.....	J. A. and J. D. Henderson.....	423,764	Mar. 18	2109	556	50	1551
Fence-staples. Tool for pulling.....	H. Raymond.....	426,854	Apr. 29	3688	962	51	753
Fence stay. Wire.....	L. W. Lindley.....	420,833	Feb. 4	677	175	50	692
Fence stay. Wire.....	M. S. Tarkington.....	436,950	Sept. 23	2535	664	52	1880
Fence. Straight portable.....	J. W. Viges.....	427,135	May 6	172	45	51	845
Fence stretcher. Wire.....	F. H. Bissell.....	422,494	Mar. 4	188	51	50	1172
Fence-tightener.....	F. E. Coffeen.....	423,514	Mar. 18	1739	458	50	1483
Fence-tool.....	W. M. Hyde.....	440,598	Nov. 11	1538	396	53	912
Fence-weaving machine.....	I. Lehmer.....	434,281	Aug. 12	1273	330	52	1014
Fence-weaving machine. Wire.....	J. M. Snyder.....	419,480	Jan. 14	1250	{ 331 332 }	50	263
Fence. Wire.....	T. E. Beals.....	440,530	Nov. 11	1421	367	53	891
Fence. Wire.....	W. K. Fraley.....	422,052	Feb. 25	2361	623	50	1036
Fence. Wire.....	S. H. Gregg.....	441,003	Nov. 18	2197	568	53	1047
Fence. Wire.....	S. H. Gregg.....	441,005	Nov. 18	2200	569	53	1048
Fence. Wire.....	H. Hollensbe.....	429,032	May 27	3044	785	51	1441
Fence. Wire.....	P. Mast.....	426,623	Apr. 29	3335	874	51	686
Fence. Wire.....	J. A. McCarthy.....	429,244	June 3	205	51	51	1511
Fence. Wire.....	H. S. Moran.....	423,336	Mar. 11	1480	388	50	1425
Fence. Wire.....	M. M. Shellabarger.....	422,842	Mar. 4	704	181	50	1272
Fence. Wire.....	E. Sims.....	437,005	Sept. 23	2609	682	52	1894
Fence. Wire.....	P. Spalding.....	431,758	July 8	1144	285	52	233
Fence. Wire.....	D. W. Weiser.....	436,279	Sept. 9	1389	361	52	1647
Fence-wire tightener.....	J. M. Kelly.....	423,382	Mar. 11	1540	405	50	1437
Fence-wires. Machine for fastening pickets to.....	D. S. Frackelton.....	431,043	July 1	25	6	52	7
Fence-wrench.....	C. H. Van Epps.....	424,912	Apr. 1	740	197	51	143
Fences. Device for applying tighteners to wire.....	C. Knopp.....	433,476	Aug. 5	56	17	52	767
Fences. Device for building wire-and-picket.....	J. E. Remington.....	431,915	July 8	1377	349	52	277
Fences. Machine for applying stay-wires to wire.....	W. C. Böing.....	433,195	July 29	3377	873	52	682
Fences. Machine for making iron picket.....	H. O. Nelsen.....	442,822	Dec. 16	1909	{ 490 491 498 }	53	1652
Fences. Machine for making stay-pieces and guards for wire.....	S. F. Duncan and A. M. Willard.....	432,123	July 15	1706	{ 438 439 440 }	52	347
Fences. Machine for making wire-and-picket.....	W. A. Ingalls.....	430,524	June 17	2202	{ 541 542 }	51	1916
Fences. Machine for resetting rail.....	P. M. Brown.....	424,855	Apr. 1	652	172	51	126
Fences. Making metallic.....	W. Livingstone.....	429,095	May 27	3141	809	51	1460
Fences. Metal picket for.....	J. E. Emerson.....	421,685	Feb. 18	1847	483	50	931
Fences. Straining device for wire.....	J. N. Merchant.....	420,819	Feb. 4	568	145	50	672
Fences. Tension-governor for wire.....	B. O. Haugh.....	443,575	Dec. 30	3179	817	53	1915
Fences. Tightener for wire.....	C. Knopp.....	433,475	Aug. 5	55	17	52	767
Fences. Tool for weaving wire-and-picket.....	A. J. Bigelow and G. E. Prosser.....	443,892	Dec. 30	3668	945	53	2010
Fencing.....	G. P. Rishel.....	438,183	Oct. 14	783	213	53	157
Fencing.....	C. C. Ward and C. W. Warren.....	434,965	Aug. 26	2300	630	52	1247
Fencing. Machine for making barbed-wire.....	A. E. Gorse.....	441,237	Nov. 25	2618	{ 678 679 680 }	53	1134
Fencing. Standard for wire.....	M. Amos.....	413,622	Dec. 30	3254	836	53	1929
Fencing-strand.....	W. E. and E. F. Hathaway and A. B. Woodard.....	433,940	Aug. 12	745	194	52	912
Fencing-strand.....	W. E. and E. F. Hathaway and A. B. Woodard.....	440,632	Nov. 18	1589	409	53	932
Fender:							
See Car-fender. Grate-fender.							
Carriage-fender. Plow-fender.							
Clod-fender. Stove-pipe fender.							
Cultivator-fender. Vehicle-wheel fender.							
Feed-trough fender.							
Fender.....	H. Adler.....	420,853	Feb. 4	625	160	50	681
Fermented liquids. Apparatus for the manufacture of.....	H. Götter.....	443,190	Dec. 23	2560	657	53	1787
Fermenting.....	E. Carez.....	432,861	July 22	2838	.....	52	573
Fermenting-tank wine-strainer.....	J. C. Jones.....	441,419	Nov. 25	2906	749	53	1189
Fermenting-vats. Mat for.....	C. Bazus.....	434,014	Aug. 12	843	222	52	929
Ferrule.....	W. M. Jackson. (Reissue).....	11,114	Oct. 7	703	191	53	136
Ferrule.....	C. S. Smith.....	425,464	Apr. 15	1581	422	51	324
Ferrule.....	O. M. Smith.....	438,497	Oct. 14	1245	337	53	245
Ferrule for canes, umbrellas, &c.....	S. W. Evans, Jr.....	422,753	Mar. 4	565	144	50	1344
Ferrule for canes, umbrellas, &c.....	S. W. Evans, Jr.....	435,215	Aug. 26	2744	724	52	1315
Ferrule for canes, umbrellas, &c.....	S. W. Evans, Jr.....	435,216	Aug. 26	2744	724	52	1316
Ferrule for canes, umbrellas, &c.....	S. W. Evans, Jr.....	435,217	Aug. 26	2744	724	52	1316
Ferrule for umbrellas or parasols.....	C. E. Metzger.....	436,251	Sept. 9	1352	332	52	1639
Ferrule-plug and machine for making the same.....	O. M. Smith.....	438,498	Oct. 14	1246	338	53	245
Ferrules. Manufacturing tips for.....	G. M. Taylor and C. S. Smith.....	436,388	Sept. 16	1576	415	52	1692
Fertilizer.....	J. Patterson.....	438,859	Oct. 21	1844	.....	53	363
Fertilizer and insecticide. Combined.....	L. J. Carille and G. B. Rumph.....	434,243	Aug. 12	1210	.....	52	1002
Fertilizer-distributor.....	W. A. Davis.....	441,791	Dec. 2	256	68	53	1314
Fertilizer-distributor.....	W. M. Dorman.....	430,248	June 17	1756	437	51	1830
Fertilizer-distributor.....	H. A. and J. W. Elffert.....	419,756	Jan. 21	1649	438	50	348
Fertilizer-distributor.....	S. H. Everett.....	439,495	Oct. 28	2838	756	53	557
Fertilizer-distributor.....	R. Galloway.....	435,037	Aug. 26	2484	657	52	1266

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fertilizer-distributor	S. Johnston	439,955	Nov. 4	495	129	53	705
Fertilizer-distributor	J. S. Kemp	425,512	Apr. 15	1643	437 438 439	51	337
Fertilizer-distributor	L. Lamborn	440,481	Nov. 11	1337	346	53	875
Fertilizer-distributor	J. R. McCord	429,859	June 10	1140	282	51	1701
Fertilizer-distributor	F. P. Morrison	431,608	July 8	885	220	52	184
Fertilizer-distributor	C. W. Nicholson	443,864	Dec. 30	3630	935	53	2003
Fertilizer distributor and mixer	J. Walter	423,645	Mar. 18	1939	511	50	1520
Fertilizer-distributor. Automatic	G. H. Hathaway	441,54	Nov. 25	3115	799	53	1228
Fertilizer from sewage-sludge. Making	C. G. Moor	442,490	Dec. 9	1341	345	53	1532
Fertilizer from tank-water. Making	H. T. Yaryan	443,559	Dec. 30	3156		53	1911
Fertilizer. Phosphatic	J. D. Simmons	432,091	July 15	1653		52	337
Fertilizers. Apparatus for transmitting	W. H. Brown	419,242	Jan. 14	897	235	50	192
Fertilizers. Machine for distributing	D. T. Taylor	435,465	Sept. 2	122	35	52	1399
Fertilizers. Making phosphatic	E. R. Hodgkins	423,320	Mar. 11	1463		50	1422
Fertilizers. Manufacture of	P. B. Rose	438,646	Oct. 21	1474		53	296
Fertilizers. Preparing	C. Clifford	434,977	Aug. 26	2396		52	1250
Fertilizing material. Apparatus for spreading	W. T. Butler	437,419	Sept. 30	3287	858	52	2031
Fiber. Apparatus for transferring	W. C. McBride	436,719	Sept. 16	2093	551	52	1788
Fiber cleaning and polishing machine. Vegetable	W. F. Falconer	439,870	Sept. 23	2413	629	52	1856
Fiber-cleaning machine	N. L. Brown	419,632	Jan. 21	1466	394	50	313
Fiber from aquatic plants. Machine for obtaining	J. Graner	425,318	Apr. 8	1357	362	51	272
Fiber from fibrous plants. Machine for extracting	J. J. Weicher	439,913	Nov. 4	430	111	53	692
Fiber. Machine for cleaning vegetable	W. C. McBride	436,720	Sept. 16	2094	551 552	52	1789
Fiber. Machine for working vegetable	A. L. Washburn	418,632	Jan. 7	269	65	50	57
Fiber. Producing	S. Fritch	432,825	July 22	2791		52	563
Fiber-rubbing machine	A. Scott	425,006	Apr. 8	893	236	51	181
Fiber-washing machine	F. G. Sargent	439,195	Oct. 28	2350	632	53	466
Fibers. Machine for treating textile or other	J. H. Lorimer	426,828	Apr. 29	3652	952	51	746
Fibrating-machine	R. R. Roberts	418,899	Jan. 7	393	96	50	82
Fibrous material and making the same. Article of chemically-treated	R. P. Frist	422,760	Mar. 4	574	147	50	1246
Fibrous material. Apparatus for compressing	A. L. Blackman	430,986	June 24	2952	725	51	2068
Fibrous material. Treating	I. W. Marshall	428,925	May 27	2880	737	51	1410
Fibrous materials. Device for preventing singles in machines for preparing, &c.	T. Bentley	426,903	Apr. 29	3749	979	51	766
Fibrous materials. Machine for opening and cleaning	S. Crighton	440,221	Nov. 11	911	234	53	798
Fibrous materials. Transmitter for	G. Beekman	427,219	May 6	298	77	51	870
Fibrous plants. Apparatus for treating	W. T. Forbes	439,032	Oct. 21	2095	561	53	412
Fibrous plants. Disintegrating	H. H. Doty	443,904	Dec. 30	3626	948	53	2013
Fibrous plants. Machine for scraping the pulp, &c., from	R. G. Ward	428,325	May 20	1974	496 497	51	1215
Fibrous plants. Machine for treating	H. H. Coles	443,037	Dec. 16	2261	580	53	1722
Fibrous substances. Disintegrating	G. M. Rose	429,647	June 10	821		51	1641
Fibrous vegetable substances. Machine for breaking	W. C. McBride	436,718	Sept. 16	2091	550 551	52	1788
Fifth-wheel	E. P. Gaines	440,804	Nov. 18	1877	482	53	986
Fifth-wheel	A. E. Herman	426,271	Apr. 22	2799	735	51	571
Fifth-wheel	F. Hildreth	430,648	June 24	2413	587	51	1965
Fifth-wheel	H. P. Kelly	419,679	Jan. 21	1547	412	50	328
Fifth-wheel	J. Scandlan, Jr., and G. A. Gross	431,152	July 1	175	45	52	37
Fifth-wheel	M. Tompkins	419,736	Jan. 21	1615	431	50	341
Fifth-wheel	D. Wilcox	439,826	Nov. 4	293	74	53	665
Fifth-wheel	H. B. Yaryan	433,844	Aug. 5	603	156	52	874
Fifth-wheel. Carriage	S. M. Cook	420,423	Jan. 28	2681	710	50	554
Fifth-wheel. Vehicle	H. Barney and H. Rahn	439,621	Nov. 4	5	2	53	607
Fifth-wheel. Vehicle	J. J. Black	423,590	Mar. 18	1844	466	50	1501
Fifth-wheel. Vehicle	J. J. Black	426,757	Apr. 29	3546	925	51	726
Fifth-wheel. Vehicle	R. Daves	421,166	Feb. 11	1106	284	50	783
Fifth-wheel. Vehicle	A. Gilbert	425,938	Apr. 15	2294	607	51	461
Fifth-wheel. Vehicle	H. G. Olds	437,505	Sept. 30	3420	894	52	2059
Fifth-wheel. Vehicle	H. W. Pell	435,707	Sept. 2	513	135 136	52	1474
Fifth-wheel. Vehicle	J. Retzbach	419,708	Jan. 21	1583	423	50	334
Fifth-wheel. Vehicle	H. H. Uckotter	435,988	Sept. 9	941	247	52	1502
Fifth-wheel. Vehicle	J. W. Williams and J. G. Capps	424,397	Mar. 25	3090	821	50	1749
File	E. W. Johnson	438,270	Oct. 14	923	249	53	181
File	L. Müller	424,018	Mar. 25	2510	668	50	1635
File and binding-case. Combined letter	W. I. Ohmer	440,646	Nov. 18	1613	415	53	937
File and other tools. Handle for	D. Wilcox	436,515	Sept. 16	1766	466	52	1727
File and perforator. Letter	E. S. Smith	419,160	Jan. 7	766	203	50	159
File-band and confining-clasp therefor	E. J. Hall and H. I. Norton	434,926	Aug. 26	2329	615	52	1237
File. Bill	C. W. Bowne	438,909	Oct. 21	1913	509	53	376
File. Bill	F. Butler	443,130	Dec. 23	2437	623	53	1762
File. Bill	H. Johnson	426,906	Apr. 29	3881	1014	51	791
File. Bill	W. D. Martin	438,352	Oct. 14	1044	294	53	206
File. Bill	L. A. Merk	436,533	Sept. 16	1816	480	52	1734
File. Bill	M. L. B. Seaman	420,468	Feb. 4	69	76	50	577
File. Bill	T. B. and C. D. Smith	440,904	Nov. 18	2043	527 528	53	1018
File. Bill	A. J. Wells	423,647	Mar. 18	1947	513	50	1522
File. Bill and letter	S. H. Fish	435,412	Sept. 2	50	17	52	1384
File. Bill and letter	S. H. Fish	435,413	Sept. 2	52	18	52	1385
File. Bill or paper	C. R. Hinkle	439,507	Oct. 28	2857	760	53	561
File-binder	M. F. Berry	421,041	Feb. 11	926	239	50	748
File-binder	M. M. Coppuck	434,625	Aug. 19	1812	474	52	1132
File-box	M. R. Jewell	421,078	Feb. 11	976	251	50	758
File. Cabinet	J. Muhlhauser	418,957	Jan. 7	479	119	50	101
File. Cabinet	J. Muhlhauser	420,239	Jan. 28	2416	643 644	50	505
File. Cabinet	J. Muhlhauser	439,971	Nov. 4	525	138 139	53	709

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
File-cabinet catch	W. I. Ohmer	433,997	Aug. 12	825	217	52	926
File cabinet. Paper	P. J. Pauly, Sr	428,941	May 27	2900	{ 741 742 }	51	1414
File-case. Rotary letter and paper	E. B. Munday	418,809	Jan. 7	227	55	50	49
File-cleaner	G. A. Colton	438,098	Oct. 7	650	179	53	127
File-cutting machine	C. M. Fairbanks	424,053	Mar. 25	2557	683	50	1644
File. Document	W. I. Ohmer	425,825	Apr. 15	2114	565	51	429
File for drawings, plans, and heavy documents	C. H. Driver	431,110	July 1	119	30	52	26
File-holder	E. W. Johnson	438,271	Oct. 14	923	250	53	181
File. Letter	B. Brower	422,181	Feb. 25	2554	{ 675 676 }	50	1072
File. Letter	J. F. Lash	421,409	Feb. 18	1448	375	50	854
File. Letter and bill	G. H. Dietz	423,805	May 27	2699	685	51	1373
File. Newspaper	G. W. Hoss	426,272	Apr. 22	2800	736	51	571
File or binder	W. H. Porter	440,499	Nov. 11	1373	355	53	882
File or cabinet for newspapers, &c	W. R. Brooks	423,982	Mar. 25	2452	651	50	1624
File or holder for letters or similar papers	P. Hartmann	438,154	Oct. 14	743	204	53	149
File, package-holder, and binder. Combined	W. H. Woodward	441,607	Nov. 25	3197	824	53	1245
File. Paper	E. H. Babbitt and L. Stockstrom	419,999	Jan. 21	2031	536	50	423
File. Paper	H. G. Coffman	436,214	Sept. 9	1298	338	52	1628
File. Paper	F. S. Cooley	434,379	Aug. 12	1415	372	52	1044
File. Paper	A. Dom	428,555	May 20	2304	585	51	1279
File. Paper	J. A. Fournier	436,766	Sept. 16	2181	573	52	1804
File. Paper	J. A. Fresco	421,827	Feb. 18	2036	538	50	966
File. Paper	E. H. and C. Morgan	429,938	June 10	1254	310	51	1724
File. Paper	L. Ordner	428,937	May 27	2395	740	51	1413
File. Paper	P. J. Pauly, Jr	428,517	May 20	2253	571	51	1269
File. Paper	W. Scheu	442,829	Dec. 16	1921	493	53	1655
File. Rotating steel	J. M. Willis	437,071	Sept. 23	2699	705	52	1913
File. Temporary	J. C. Powell	426,320	Apr. 22	2864	754	51	585
Files. Apparatus for recutting	A. Dom	438,574	Oct. 14	1359	368	53	268
Files. Paper-holding device for	C. C. Peters	434,884	Aug. 19	2232	585	52	1211
Filing cabinet. Paper	C. H. Besly	423,589	Mar. 18	1843	486	50	1501
Filing case or cabinet. Metallic	M. R. Jewell	427,998	May 13	1475	375	51	1110
Filing papers. Safety-hook for	P. H. Yawman	435,877	Sept. 2	777	207	52	1525
Filter. Collar	L. M. Devore	418,973	Jan. 7	496	124	50	104
Filter. Transparent	G. B. N. Dow	419,142	Jan. 7	729	192	50	153
Filter	J. A. Skerry and J. Derosier	424,080	Mar. 25	2593	59	50	1651
Filter	W. D. P. Aims, Jr.	433,710	Aug. 5	396	101	52	833
Filter	J. L. Bach	439,091	Oct. 28	2198	589	53	439
Filter	E. Bourne	428,162	May 20	1715	434	51	1165
Filter	J. A. Bowden	429,112	June 3	7	2, 3	51	1474
Filter	A. L. Bush and W. C. Clark	421,238	Feb. 11	1202	309	50	800
Filter	W. P. Chapline, J. P. Dutton, and J. E. Campbell	438,060	Oct. 7	602	164	53	115
Filter	W. Connolly	426,489	Apr. 29	3139	824	51	647
Filter	W. D. Cummings	424,762	Apr. 1	509	{ 137 138 }	51	99
Filter	J. G. Divoll	419,843	Jan. 21	1792	473	50	374
Filter	T. S. E. Dixon	431,448	July 1	641	161	52	129
Filter	C. B. Elliott	425,374	Apr. 8	1435	384	51	287
Filter	W. M. Hough	423,767	Mar. 18	2113	557	50	1552
Filter	O. H. Jewell	423,430	Mar. 18	1619	425	50	1460
Filter	O. H. and W. M. Jewell	425,573	Apr. 15	1730	{ 464 465 }	51	354
Filter	E. M. Knight	419,266	Jan. 14	928	246	50	198
Filter	F. Lascar	424,679	Apr. 1	370	93	51	72
Filter	P. A. Maignen	426,945	Apr. 29	3801	993	51	776
Filter	W. Mailler	423,615	Mar. 18	1883	496	50	1508
Filter	E. Mertz	437,443	Sept. 30	3330	869	52	2040
Filter	T. A. Myers	432,546	July 22	2343	605	52	477
Filter	C. G. Purdy	427,906	May 13	1344	340	51	1084
Filter	C. V. Roberts	419,023	Jan. 7	568	143	50	120
Filter	H. Roeko	442,397	Dec. 9	1190	309	53	1500
Filter	W. H. Sargent	434,570	Aug. 19	1719	449	52	1113
Filter	W. H. Sargent	434,571	Aug. 19	1720	450	52	1113
Filter	J. Seabrooks	421,521	Feb. 18	1611	415	50	885
Filter	G. Vécsey and T. Davidson	443,246	Dec. 23	2653	681	53	1805
Filter. Fancet	F. T. Weldaw and W. E. Kane	422,357	Feb. 25	2845	750	50	1126
Filter of porous fabric	F. Bardez	427,029	Apr. 29	3931	1025	51	801
Filter	J. W. Hyatt	425,431	Apr. 15	1526	408	51	315
Filter. Oil	C. G. Bryant	421,093	Feb. 11	1002	{ 256 257 }	50	762
Filter or separator. Oil	J. Johnson	442,896	Dec. 16	2046	525	53	1678
Filter or strainer	W. A. Hepburn	418,719	Jan. 7	97	22	50	21
Filter-press	F. Kleemann	434,831	Aug. 19	2131	558	52	1192
Filter-press	B. Remmers	427,794	May 13	1173	294	51	1052
Filter-presses. Construction of	S. H. Johnson and C. C. Hutchinson	419,775	Jan. 21	1676	445	50	353
Filter. Pressure	J. Carter	430,797	June 24	2661	653	51	2014
Filter. Rain-water	C. A. Bartliff	441,121	Nov. 25	2408	623	53	1097
Filter. Rain-water	N. H. Long	424,651	Apr. 1	329	86	51	64
Filter. Sirup	O. H. and W. M. Jewell	435,971	Sept. 9	916	242	52	1557
Filter. Water	H. J. Becker	426,756	Apr. 29	3545	925	51	725
Filter. Water	C. H. Dirmitt and G. W. Walters	425,537	Apr. 15	1680	448	51	344
Filter. Water	W. T. Floyd	439,645	Nov. 4	36	10	53	613
Filter. Water	H. Hegner and J. M. Skinner	437,433	Sept. 30	3307	863	52	2035
Filter. Well or cistern	J. F. and C. G. Ziegler	436,763	Sept. 16	2175	571	52	1803
Filters. Chemical-feeder for	B. H. Coffey	441,284	Nov. 25	2697	700	53	1148
Filters. Chemical-feeder for	O. H. and W. M. Jewell	440,162	Nov. 11	813	211	53	779
Filters. Preparing iron ore for	F. Candy	440,539	Nov. 11	1434	53	53	893
Filters, &c. Simple means for scouring	W. Berkefeld	422,112	Feb. 25	2459	650	50	1054
Filtering and percolating stand. Adjustable	A. P. Yarnall	422,484	Mar. 4	177	49	50	1170
Filtering apparatus	M. Cole	440,239	Nov. 11	935	241	53	802

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Filtering apparatus.....	H. J. E. Jensen.....	424,303	Mar. 25	2904	776	50	1712
Filtering apparatus.....	O. H. and W. M. Jewell.....	431,229	July 1	301	74, 75	52	61
Filtering apparatus.....	W. M. Jewell.....	427,236	May 6	328	85	51	875
Filtering apparatus.....	R. E. Miller.....	436,044	Sept. 9	1034	269	52	1580
Filtering apparatus.....	T. Stewart.....	424,375	Mar. 25	3068	806 807	50	1737
Filtering apparatus. Beer.....	J. W. Hyatt.....	426,995	Apr. 29	3880	1013	51	790
Filtering apparatus. Beer.....	P. Seibel.....	426,965	Apr. 29	3829	1001	51	781
Filtering apparatus. Oil.....	J. Dooner.....	429,340	June 3	365	86	51	1540
Filtering apparatus. Water.....	J. H. Blessing.....	442,601	Dec. 16	1527	394	53	1577
Filtering apparatus. Water.....	J. H. Blessing.....	442,602	Dec. 16	1530	394 395	53	1578
Filtering can and receptacle.....	J. V. Burke.....	426,911	Apr. 29	3760	982	51	768
Filtering-joint and cut-off.....	E. L. Detwiler.....	436,171	Sept. 9	1230	330	52	1614
Filtering machine.....	J. A. Crocker.....	424,464	Apr. 1	33	9, 10	51	9
Filtering oil.....	C. F. Baker.....	420,428	Feb. 4	1	1	50	565
Filtering press.....	D. Licht.....	421,503	Feb. 18	1585	409	50	880
Filtering wine. Apparatus for.....	H. B. and C. H. Fischer.....	430,120	June 17	1561	388	51	1793
Filtration.....	J. W. Hyatt. (Reissue).....	11,072	Apr. 15	2351	623	51	473
Filtration.....	J. W. Hyatt. (Reissue).....	11,073	Apr. 15	2353	623 624	51	473
Filtration of water for city or town supplies. System of.....	J. A. Crocker.....	426,988	Apr. 29	3862	1010 1011	51	787
Finger-bar.....	R. Emerson.....	436,734	Sept. 16	2114	557	52	1793
Finger-guard bolt.....	D. Woehrl.....	437,072	Sept. 23	2701	705	52	1913
Finger-nail cutter.....	J. H. Crowell.....	442,247	Dec. 9	961	254	53	1458
Finger-ring.....	R. Fouchs.....	425,096	Apr. 8	1017	272	51	205
Finger-ring.....	H. Lehr.....	441,425	Nov. 25	2912	751	53	1191
Finger-ring.....	W. Meerbott, Jr.....	442,271	Dec. 9	998	263	53	1465
Finger-ring.....	F. A. Schlosstein.....	442,757	Dec. 16	1797	465	53	1630
Finger-rings. Forming.....	W. H. Peckham.....	433,578	Aug. 5	203	54	52	796
Fire-alarm.....	J. H. Earles.....	436,869	Sept. 23	2411	629	52	1856
Fire-alarm and extinguishing apparatus. Electric.....	C. E. Ongley.....	429,318	June 3	329	78	51	1533
Fire-alarm and extinguishing system. Electrical.....	C. E. Ongley.....	443,724	Dec. 30	3418	878	53	1950
Fire-alarm and night-call. Electric.....	C. J. Vining.....	433,584	Aug. 5	214	57, 58	52	798
Fire-alarm. Automatic.....	C. A. and J. F. Cox.....	424,860	Apr. 1	658	174	51	127
Fire-alarm. Automatic.....	H. E. Jacobs.....	431,979	July 8	1477	373	52	297
Fire-alarm. Automatic.....	J. T. Turner.....	436,617	Sept. 16	1928	506	52	1755
Fire-alarm. Automatic.....	E. Wider.....	419,902	Jan. 21	1884	495	50	395
Fire-alarm. Automatic safety.....	A. B. Griswold and J. M. Bradbury.....	422,205	Feb. 25	2592	685 686	50	1080
Fire-alarm box.....	J. J. Raddick.....	443,182	Dec. 23	2531	648	53	1779
Fire-alarm boxes. Lightning-arrester for.....	R. Hudie.....	437,397	Sept. 30	3243	845	52	2092
Fire-alarm. Electric.....	C. H. Shaffer.....	426,688	Apr. 29	3432	900	51	703
Fire-alarm or fire and heat indicator.....	C. W. Summerskill.....	439,441	Oct. 28	2759	735	53	543
Fire-alarm. Portable electric.....	F. R. Upton and F. J. Dibble.....	436,901	Sept. 23	2347	667	52	1882
Fire-alarm regulator.....	C. J. Spike and H. V. McLeod.....	427,711	May 13	1034	259	51	1025
Fire-alarm signal-box.....	J. Young.....	437,668	Sept. 30	3649	952 954	52	2104
Fire-alarm signal-box. Non-interference.....	P. V. Merrifield.....	442,383	Dec. 9	1170	304 305	53	1496
Fire-alarm system.....	F. T. Feary and J. Speicher.....	443,478	Dec. 23	3028	778	53	1878
Fire-alarm system.....	T. Johnson.....	424,558	Apr. 1	188	51, 52	51	39
Fire-alarm system. Automatic.....	G. F. Bulen.....	421,853	Feb. 18	2086	548 549	50	975
Fire-alarm system. Electric.....	J. Speicher.....	420,173	Jan. 28	2306	610 611 612	50	485
Fire-alarm system. Electrical automatic.....	W. F. Singer.....	436,640	Sept. 16	1969	517	52	1763
Fire-alarm transmitter. Automatic.....	G. F. Bulen.....	421,854	Feb. 18	2091	549	50	976
Fire and burglar alarm.....	C. C. Henderson.....	432,613	July 22	2430	626 627	52	494
Fire apparatus. Locked joint for.....	F. Grinnell.....	432,403	July 15	2121	545	52	424
Fire-arm.....	W. W. Arrington and H. A. Briggs.....	429,110	June 3	5	2	51	1473
Fire-arm.....	O. W. Bergman.....	430,614	June 24	2351	575	51	1953
Fire-arm.....	H. M. Caldwell.....	425,979	Apr. 22	2373	629	51	485
Fire-arm.....	H. M. Caldwell.....	427,833	May 13	1223	309	51	1061
Fire-arm.....	H. Comstock.....	422,731	Mar. 4	533	136	50	1238
Fire-arm.....	H. F. Wheeler.....	430,243	June 17	1746	435	51	1828
Fire-arm.....	F. von und zu Zwergern.....	426,977	Apr. 29	3848	1005 1006	51	784
Fire-arm. Breech-loading.....	J. Frick.....	428,597	May 27	2379	605	51	1313
Fire-arm. Breech-loading.....	D. M. Lefever and J. H. Brown.....	423,521	Mar. 18	1748	461	50	1485
Fire-arm. Breech-loading.....	C. Röstel.....	430,973	June 24	2931	719 720	51	2063
Fire-arm. Breech-loading magazine.....	C. E. Snelder.....	422,846	Mar. 4	707	182	50	1273
Fire-arm lock.....	G. H. Fox and H. F. Wheeler.....	422,930	Mar. 11	865	226	50	1309
Fire-arm lock.....	G. W. McClintock.....	430,396	June 17	2015	497	51	1881
Fire-arm lock.....	G. W. McClintock.....	430,397	June 17	2017	497	51	1881
Fire-arm. Magazine.....	J. H. Brown.....	430,061	June 10	1460	362 363	51	1763
Fire-arm. Magazine.....	J. M. and M. S. Browning.....	421,663	Feb. 18	1819	476 477	50	926
Fire-arm. Magazine.....	J. M. and M. S. Browning.....	428,887	May 27	2822	717 718 719	51	1398
Fire-arm. Magazine.....	A. Odcolek.....	422,327	Feb. 25	2794	735	50	1116
Fire-arm. Magazine.....	M. Sporer.....	423,453	Mar. 18	1647	434 435	50	1465
Fire-arm. Repeating.....	A. von Wehrstedt.....	437,541	Sept. 30	3479	908	52	2071
Fire-arm. Revolving.....	D. B. Wesson.....	429,397	June 3	455	107	51	1558
Fire-arms. Barrel-catch mechanism for.....	D. B. Wesson.....	421,798	Feb. 18	1997	526	50	960
Fire-arms. Electrically-controlled lock for.....	A. von Derschau.....	430,055	Oct. 21	2130	572	53	419

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Fire-arms. Magazine for breech-loading	L. F. Bruce	439,833	Nov. 4	304	76, 77	53	667
Fire-arms. Safety-catch for	J. F. Mauhan	436,062	Sept. 9	1056	274	52	1584
Fire-arms. Safety-lock for	A. von Derschau	443,747	Dec. 30	3454	836	53	1968
Fire-arms. Safety-lock for	L. H. Mayott	436,100	Sept. 9	1115	290	52	1595
Fire-arms. Sight for military and other	G. A. Lewes	421,943	Feb. 25	2215	581	50	1009
Fire-bar	T. E. Caddy	425,405	Apr. 15	1486	399	51	306
Fire-box. Revolving	J. C. Henderson	443,850	Dec. 30	3613	930	53	1999
Fire-box. Steam-generating	M. D. Beardslee and J. H. Hand	425,200	Apr. 8	1184	314	51	240
Fire-box. Water-leg	J. J. Hogan	425,943	Apr. 15	2303	610	51	463
Fire-chambers. Door-opening apparatus for	F. W. Mills	424,072	Mar. 25	2581	689	50	1649
Fire departments. Hook-and-ladder turn-table truck for	G. M. Kim	443,096	Dec. 23	2378	607	53	1751
Fire-engine. Chemical	R. T. Van Valkenburg	432,778	July 22	2721	696	52	549
Fire-escape	E. B. Allen	422,685	Mar. 4	477	122	50	1227
Fire-escape	S. S. Andrews	433,115	July 29	3259	839	52	658
Fire-escape	L. Anidjah	418,879	Jan. 7	353	85	50	74
Fire-escape	L. H. Bacheller	440,244	Nov. 11	943	243	53	804
Fire-escape	M. D. Baker	436,071	Sept. 9	1075	278	52	1587
Fire-escape	S. Barry	437,552	Sept. 30	3495	912	52	2074
Fire-escape	A. Boettcher	426,230	Apr. 22	2745	719	51	559
Fire-escape	G. W. Bowman	443,388	Dec. 23	2883	741	53	1849
Fire-escape	C. Bresnahan	441,819	Dec. 2	303	82	53	1323
Fire-escape	W. A. Buckley	419,108	Jan. 7	685	181	50	144
Fire-escape	J. S. Burris and M. Bierline	438,224	Oct. 14	844	229	53	168
Fire-escape	J. Burt	424,460	Apr. 1	26	8	51	8
Fire-escape	A. A. Cameron	430,225	June 17	1719	427	51	1823
Fire-escape	J. D. Carr	437,091	Sept. 23	2731	713	52	1920
Fire-escape	E. W. Dixon	442,961	Dec. 16	2141	551	53	1697
Fire-escape	W. L. Dougherty	438,575	Oct. 14	1360	368	53	268
Fire-escape	J. H. Earles	434,416	Aug. 12	1469	388	52	1059
Fire-escape	T. Ellison	431,566	July 8	826	206	52	173
Fire-escape	D. A. Fraser	431,572	July 8	834	208	52	174
Fire-escape	P. Goldmann	421,269	Feb. 11	1246	321	50	809
Fire-escape	S. J. Grey	438,542	Oct. 14	1310	355	53	259
Fire-escape	J. E. Harman	422,345	Feb. 25	2827	745	50	1122
Fire-escape	J. F. Hill	432,045	July 15	1553	405	52	323
Fire-escape	J. Himmelberger	434,709	Aug. 19	1969	511	52	1159
Fire-escape	W. Hubart	432,877	July 22	2803	734	52	577
Fire-escape	W. A. Jeffers	440,161	Nov. 11	812	211	53	778
Fire-escape	J. S. Lewis	440,045	Nov. 4	635	169	53	732
Fire-escape	T. W. Mann	436,834	Sept. 23	2317	610	52	1839
Fire-escape	R. Matthes	426,540	Apr. 29	3210	841	51	661
Fire-escape	C. Nittinger	419,542	Jan. 14	1330	355	50	280
Fire-escape	G. F. Oehrl	439,976	Nov. 4	537	141	53	712
Fire-escape	W. J. Pratt	432,556	July 22	2362	609	52	481
Fire-escape	E. Rank	430,592	June 17	2304	566	51	1936
Fire-escape	S. H. Roper	439,191	Oct. 28	2343	630	53	465
Fire-escape	H. C. Rose	422,159	Feb. 25	2524	667	50	1067
Fire-escape	A. Sample	428,635	May 27	2430	618	51	1323
Fire-escape	J. M. Stiver and G. A. Hilton	425,554	Apr. 15	1706	456	51	350
Fire-escape	O. Stoddard	435,778	Sept. 2	618	163	52	1493
Fire-escape	R. G. Strother	443,552	Dec. 30	3145	809	53	1909
Fire-escape	W. M. and G. Taylor	421,115	Feb. 11	1029	264	50	768
Fire-escape	H. Van Scoy	425,716	Apr. 15	1962	522	51	399
Fire-escape	H. Viereg	435,266	Aug. 26	2823	747	52	1330
Fire-escape	J. H. Waldron	425,644	Apr. 15	1855	495	51	378
Fire-escape	C. G. Wheeland	435,874	Sept. 2	757	202	52	1522
Fire-escape	J. W. Wein and J. Reichelt	439,263	Oct. 28	2475	664	53	489
Fire-escape. Block-tackle	J. A. P. Hepting	432,044	July 15	1581	405	52	323
Fire-escape device for live stock	L. K. Bartley	435,028	Aug. 26	2470	654	52	1263
Fire-escape ladder	L. J. Chase	430,173	June 17	1627	406	51	1806
Fire-escape ladder	F. E. Davis	431,878	July 8	1356	336	52	269
Fire-escape ladder	C. F. Shain	438,387	Oct. 14	1091	297	53	215
Fire-escape lowering-gear	W. P. Smith and R. Maynard	439,438	Oct. 28	2756	734	53	542
Fire-escape. Portable	D. McCree	440,322	Nov. 11	1071	275	53	825
Fire-escape. Portable	T. Ross	434,888	Aug. 19	2237	587	52	1212
Fire-escape tower	F. J. A. Hoffman	440,827	Nov. 18	1922	493	53	993
Fire-escape. Window	G. Arons	433,061	July 29	3171	816	52	641
Fire-extinguisher	F. M. Beckford and E. C. Covell	430,822	June 24	2708	663	51	2022
Fire-extinguisher	A. Durand	432,481	July 15	2244	580	52	450
Fire-extinguisher	J. A. Guinn	440,630	Nov. 18	1587	408	53	932
Fire-extinguisher	J. J. Harden	425,221	Apr. 8	1214	322	51	246
Fire-extinguisher	B. J. C. Howe	443,983	Dec. 30	3829	975	53	2039
Fire-extinguisher	W. Linn	430,866	June 24	2774	680	51	2035
Fire-extinguisher	C. M. Martin	431,950	July 8	1429	363	52	288
Fire-extinguisher	S. G. Otis and C. F. Peirce	429,053	May 27	3078	795	51	1448
Fire-extinguisher	A. L. Pitoe	441,969	Dec. 2	523	140	53	1366
Fire-extinguisher	H. E. Safford	439,565	Oct. 28	2937	781	53	577
Fire-extinguisher	L. W. Taylor	423,354	Mar. 11	1501	393	50	1429
Fire-extinguisher	L. W. Taylor	423,355	Mar. 11	1502	394	50	1429
Fire-extinguisher and alarm	J. B. Godwin	438,726	Oct. 21	1614	433	53	320
Fire-extinguisher. Automatic	J. Bishop	441,923	Dec. 2	451	120	53	1353
Fire-extinguisher. Automatic	W. J. Fraser	439,293	Oct. 28	2534	678	53	499
Fire-extinguisher. Automatic	W. J. Fraser	439,294	Oct. 28	2536	678	53	500
Fire-extinguisher. Automatic	J. R. Freeman	440,704	Nov. 18	1710	432	53	955

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Fire-extinguisher. Automatic	W. S. Fuller	443,912	Dec. 30	3700	947	53	2015
Fire-extinguisher. Automatic	F. Grinnell	431,971	July 8	1468	371	52	296
Fire-extinguisher. Automatic	F. Grinnell	431,972	July 8	1470	371	52	296
Fire-extinguisher. Automatic	F. Grinnell	432,404	July 15	212	545	52	425
Fire-extinguisher. Automatic	J. Hill	427,418	May 6	595	148	51	929
Fire-extinguisher. Automatic	C. Kehr	427,846	Oct. 7	264	80	53	52
Fire-extinguisher. Automatic	J. Madden	426,832	Apr. 29	3659	953	51	747
Fire-extinguisher. Chemical	A. Durand	432,482	July 15	2246	580 581	52	451
Fire-extinguisher for car-stoves	S. S. Weinberg	424,743	Apr. 1	475	130	51	94
Fire-extinguisher for railway-car stoves. Automatic	J. A. Guinn	441,156	Nov. 25	2458	637	53	1107
Fire-extinguisher. Portable	W. H. Frear	428,596	May 27	2378	605	51	1313
Fire-extinguishers. Closing and sealing device for discharge-openings of	J. L. Bradley	421,347	Feb. 11	1358	352	50	829
Fire-extinguishers. Sprinkler for automatic	A. F. Nagle	419,705	Jan. 21	1577	422	50	333
Fire-extinguishing apparatus	E. R. and J. R. Moore	435,316	Aug. 26	2905	769	52	1344
Fire-extinguishing apparatus	J. E. Prunty	441,697	Dec. 2	103	27	53	1282
Fire-extinguishing apparatus	J. H. Scholding	432,906	July 22	2903	744	52	585
Fire-extinguishing apparatus	W. O. Stamps	433,053	July 29	3159	812	52	639
Fire-extinguishing apparatus for railway-cars	W. H. Beach	443,385	Dec. 23	2879	740 741	53	1848
Fire-extinguishing apparatus. Stationary	W. C. Smith	423,286	Mar. 11	1415	367	50	1411
Fire-extinguishing compound	C. M. Martin	431,985	July 8	1487	...	52	300
Fire-extinguishing compound	R. T. Van Valkenburg	432,777	July 22	2720	...	52	549
Fire in elevator-shafts. Apparatus for preventing	A. McLaughlin	437,229	Sept. 30	2970	776	52	1970
Fire indicator or alarm. Spring-actuated	S. D. Earl	424,545	Apr. 1	169	47	51	36
Fire-kindler	J. S. Becker	431,317	July 1	429	106	52	88
Fire-kindler	W. S. Denton	433,933	Aug. 12	736	191	52	911
Fire-kindler	S. J. Ford and R. Baird	432,934	July 22	2945	754	52	593
Fire-kindler	A. K. Murray	419,868	Jan. 21	1840	...	50	386
Fire-kindler	J. D. Pace	438,558	Oct. 14	1338	363	53	264
Fire-kindler	C. W. Walters	436,509	Sept. 16	1758	464	52	1726
Fire-kindler	W. A. White	439,767	Nov. 4	206	53	53	649
Fire-kindler. Automatic	C. C. Harris	435,892	Sept. 2	800	213	52	1529
Fire-lighter	C. P. Heal	429,908	June 10	1214	300	51	1716
Fire-lighter. Automatic	H. W. Borchers	425,740	Apr. 15	1996	532	51	406
Fire-pail	L. Lincoln	442,902	Dec. 16	2057	528	53	1680
Fire-pail	A. D. Warren	420,980	Feb. 11	834	215 216	50	731
Fire-place	H. Heim	421,073	Feb. 11	970	249	50	756
Fire-place	M. King	443,239	Dec. 23	2647	679	53	1804
Fire-place	M. King	443,240	Dec. 23	2648	679 680	53	1804
Fire-place	H. W. Libbey	438,319	Oct. 14	994	269	53	196
Fire-place	G. W. Lönholdt	423,693	Mar. 18	2017	532	50	1534
Fire-place	K. McKenzie	437,615	Sept. 30	3575	934	52	2089
Fire-place	C. M. McMahon	419,704	Jan. 21	1576	422	50	333
Fire-place	C. M. McMahon. (Reissue)	11,123	Nov. 18	2396	620	53	1086
Fire-place	C. L. Page	428,287	May 20	1913	481	51	1204
Fire-place	L. H. Teale	426,477	Apr. 29	3120	820	51	644
Fire-place and hollow mantel therefor	F. J. Scott	426,687	Apr. 29	3430	899	51	703
Fire-place back or lining	F. W. Keifel, Jr.	438,732	Oct. 21	1627	437	53	323
Fire-place backing and grate	J. A. Cornish	437,575	Sept. 30	3523	919	52	2079
Fire-place frame	E. T. Harris	424,059	Mar. 25	2562	684 685	50	1645
Fire-place heater	T. B. Jackson	427,767	May 13	1133	284	51	1044
Fire-place heater	A. E. Lytle	425,103	Apr. 8	1026	274	51	207
Fire-place protector	M. Siersdorfer	420,972	Feb. 11	821	213	50	728
Fire-places. Grate-setting for	P. M. Pursell	440,196	Nov. 11	861	222	53	788
Fire-proof. Composition for making fabrics	R. R. Graf	436,599	Sept. 16	1908	...	52	1751
Fire-proof construction for buildings	L. L. Sagedorff	420,282	Jan. 28	2490	661	50	517
Fire-proof structure	E. Hallowell and L. C. Hickman	422,207	Feb. 25	2596	687	50	1080
Fire-screen	J. W. Griswold	418,713	Jan. 7	90	20	50	20
Fire-screen	J. W. Griswold	418,714	Jan. 7	90	21	50	20
Fire-service. Life-saving apparatus for	A. Harley	428,603	May 27	2387	607	51	1315
Fire-set stand	W. T. Mersereau	426,624	Apr. 29	3338	874 875	51	686
Fire. Solidifying colored	H. O. Frank	420,642	Feb. 4	311	...	50	625
Fire-sprinkler. Automatic	A. Blauvelt	423,591	Mar. 18	1844	486	50	1501
Fire starter or lighter. Mechanical	M. McOmber	430,873	June 24	2786	683	51	2037
Fires. Telescopic stand-pipe for extinguishing	F. W. Brown and T. S. Wiles	423,663	Mar. 18	1971	520	50	1526
Fireman's safety-helmet	G. W. Barian	439,093	Oct. 28	2200	590	53	439
Fireproofing compound	H. W. Johns	441,164	Nov. 25	2475	...	53	1110
Fish and meat. Apparatus for smoking	M. Ams	418,666	Jan. 7	3	1	50	3
Fish-hook	J. P. Kestner	422,226	Feb. 25	2625	695	50	1085
Fish-hook	J. H. Lathrop	426,027	Apr. 22	2445	646	51	498
Fish-line float	G. T. Bond	427,730	May 13	1059	265	51	1029
Fish-line sinker	W. H. Tufts	418,995	Jan. 7	525	131	50	111
Fish-plate	J. Lamplugh	419,684	Jan. 21	1553	415	50	329
Fish-plate bolt	J. Tyzick and J. F. Lawton	428,431	May 20	2137	537	51	1248
Fish-scaler	A. W. Kavel	441,244	Nov. 25	2631	682	53	1136
Fish-string needle	J. Brower	430,826	June 24	2712	664	51	2023
Fish-trap	J. F. Allison	439,991	Nov. 4	556	147	53	716
Fish-trap	C. E. Ketcham	441,070	Nov. 18	2313	598 599	53	1070
Fish-trap	W. B. Mumford	424,494	Apr. 1	85	24	51	19
Fishing device	C. A. Künzel	443,286	Dec. 23	2717	697	53	1816
Fishing-float	T. Stahl	441,447	Nov. 25	2952	760	53	1198
Fishing-hook	B. A. Provost	440,721	Nov. 18	1735	445	53	960
Fishing-line attachment	C. K. Bradford	422,331	Feb. 25	2802	737	50	1118
Fishing-reel	D. Harris	431,142	July 1	159	41	52	34
Fishing-reel	E. Holzmänn	422,786	Mar. 4	610	157	50	1253
Fishing-reel	J. vom Hofe	430,022	June 10	1393	346	51	1750
Fishing-reel	W. H. Keach	426,279	Apr. 22	2809	738	51	573

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Fishing-reel.....	C. Nordenholt.....	425,243	Apr. 8	1243	331	51	251
Fishing-reel.....	E. F. Payne.....	432,764	July 22	2705	692	52	546
Fishing-reel.....	W. Slope.....	437,627	Sept. 30	3592	939	52	2093
Fishing-reel.....	C. J. Werner.....	437,542	Sept. 30	3482	909	52	2071
Fishing-reel attachment.....	W. H. Atkinson.....	442,302	Dec. 9	1046	275	53	1473
Fishing-reel support.....	H. J. Goggin.....	426,616	Apr. 29	3324	872	51	684
Fishing-rod.....	J. Brower.....	430,827	June 24	2712	664	51	2023
Fishing-rod.....	E. W. Edwards.....	427,162	May 6	218	55	51	854
Fishing-rod.....	L. N. Hawes.....	428,755	May 27	2631	666	51	1360
Fishing-rod and reel. Combined.....	C. B. Corbin.....	436,302	Sept. 9	1424	371	52	1654
Fishing-rod case.....	J. Kopf.....	442,269	Dec. 9	997	263	53	1465
Fishing-rod holder.....	C. A. Sheafe.....	440,727	Nov. 18	1745	447	53	962
Fishing-rod. Jointed.....	G. I. Varney.....	422,470	Mar. 4	159	43	50	1167
Fishing-rod rest.....	A. J. Dayton.....	420,592	Feb. 4	234	61	50	610
Fishing-rod support for boats.....	H. J. Welch.....	441,207	Nov. 25	2557	661	53	1125
Fishing-rods. Reel-fastener for.....	J. G. Landman.....	434,793	Aug. 19	2078	543	52	1181
Fishing-rods. Reel-seat for.....	S. M. Boone.....	441,126	Nov. 25	2415	625	53	1099
Fishing-tackle.....	C. Mayer.....	419,054	Jan. 7	613	158	50	129
Fishing. Tip-up for.....	C. W. Costellow.....	434,426	Aug. 19	1509	394	52	1069
Fishway.....	R. Hockin.....	437,202	Sept. 30	2930	763	52	1963
Flag and flag-staff.....	J. Hall.....	433,194	July 29	3274	843	52	661
Flags, &c. Binding for.....	R. Kelso.....	421,724	Feb. 18	1902	500	50	942
Flanging-machine.....	R. Munroe and W. M. Hamilton.....	418,983	Jan. 7	513	128	50	108
Flanging-machine.....	D. O. Paige.....	425,453	Apr. 15	1561	{ 418 419 }	{ 51 51 }	{ 321 615 }
Flash-light. Apparatus for producing instantaneous.....	A. Hemsley.....	426,411	Apr. 22	3023	792	51	615
Flashing filaments. Apparatus for.....	H. Lemp.....	440,759	Nov. 18	1801	466	53	972
Flask: See Dental flask. Molder's flask. Metallic flask. Molding-flask.							
Flask for foundry practice.....	W. E. Hughes.....	436,628	Sept. 16	1949	512	52	1760
Flat-iron.....	J. A. Cochrane.....	437,773	Oct. 7	155	48	53	32
Flat-iron.....	J. Davis.....	423,376	Mar. 11	1534	403	50	1435
Flat-iron. Electric.....	H. R. Butterfield and W. Mitchell.....	424,404	Mar. 25	3102	823	50	1751
Flax-thresher.....	J. McGrath and G. Y. Smith.....	439,889	Nov. 4	391	102	53	684
Flaxseed-separating machine.....	L. J. B. Easton.....	422,748	Mar. 4	558	143	50	1243
Flexible coupling.....	A. D. Pentz.....	433,304	July 29	3532	911	52	714
Flexible tube.....	T. R. Almond.....	424,044	Mar. 25	2543	678	50	1642
Flexible tube.....	T. R. Almond.....	434,748	Aug. 19	2017	527	52	1169
Float. Rotary.....	F. Deimel.....	439,124	Oct. 28	2242	{ 602 603 }	{ 53 53 }	{ 447 1495 }
Floating lock.....	F. Jebens.....	423,561	Mar. 18	1806	{ 476 477 }	{ 50 50 }	{ 1495 277 }
Flood, sand, tinsel, &c. Distributer for.....	G. Muller.....	425,338	Apr. 8	1380	368	51	277
Flood and stock gate.....	P. Walther.....	437,406	Sept. 30	3256	849	52	2024
Flood-gate.....	H. H. Baltzley.....	420,001	Jan. 21	2034	536	50	424
Flood-gate.....	J. A. Dunnham.....	425,869	Apr. 15	2185	581	51	441
Flood-gate.....	E. G. Ivey and M. McMichael.....	439,517	Oct. 28	2869	763	53	564
Flood-gate.....	D. N. Kratzer.....	425,179	Apr. 8	1159	305	51	234
Flood-gate.....	W. U. Robbins.....	431,917	July 8	1379	350	52	278
Flood-gate. Automatic.....	M. Quisenberry.....	433,366	July 29	3613	932	52	730
Flood or water gate.....	C. M. Hunt.....	427,084	May 6	88	24	51	899
Flood and partition thimble.....	J. Vosburgh.....	431,538	July 1	781	194	52	155
Floor-clamp.....	E. H. Burnson.....	442,607	Dec. 16	1535	396	53	1579
Floor-clamp.....	C. H. Warren and C. A. Jordan.....	420,288	Jan. 28	2498	663	50	519
Floor-cloths, &c. Machine for the manufacture of.....	H. M. Steinthal.....	420,634	Feb. 4	296	78, 79	50	621
Floor-cloths. Manufacturing.....	H. M. Steinthal.....	420,632	Feb. 4	293	50	50	621
Floor-covering. Slatted.....	O. W. Waycott.....	420,369	Jan. 28	2608	693	50	540
Floor. Fire-proof.....	H. W. Norcross.....	429,770	June 10	1000	245	51	1676
Floor for buildings.....	F. Furness.....	424,286	Mar. 25	2876	767	50	1707
Floor-jack.....	J. E. Bean.....	430,613	June 24	2350	575	51	1953
Floor-jack.....	H. E. Britton.....	435,031	Aug. 26	2476	655	52	1264
Floor-set.....	S. C. Hill.....	440,311	Nov. 11	1059	272	53	823
Floor structure. Tubular.....	F. Schmemann.....	435,155	Aug. 26	2656	703	52	1299
Floor-tightener.....	W. P. King.....	426,025	Apr. 22	2444	646	51	498
Flooring, &c.....	J. D. Finley.....	422,584	Mar. 4	320	81	50	1197
Flooring-clamp.....	J. H. Giesey.....	443,961	Dec. 30	3788	966	53	2030
Flour and middlings separator.....	C. F. Shumaker.....	437,942	Oct. 7	409	115	53	78
Flour bin and sifter.....	N. M. Beall.....	425,286	Apr. 8	1314	351	51	264
Flour bin and sifter. Combined.....	G. A. Markham.....	425,334	Apr. 8	1377	367	51	277
Flour-bolt.....	J. M. Case.....	429,998	June 10	1349	{ 334 335 }	{ 51 51 }	{ 1742 187 }
Flour-bolt.....	R. L. Hawkins.....	438,287	Oct. 14	950	{ 255 256 257 }	{ 53 53 53 }	{ 187 274 190 }
Flour-bolt.....	J. Johnston. (Reissue).....	11,117	Oct. 14	1391	{ 376 377 }	{ 53 53 }	{ 274 190 }
Flour-bolt.....	R. S. Williams.....	419,236	Jan. 14	888	233	50	190
Flour-chest.....	L. Ritchie.....	442,202	Dec. 9	901	240	53	1446
Flour-dresser.....	J. M. Lemmon.....	439,821	Nov. 4	284	72	53	663
Flour. Manufacturing.....	H. Tunte.....	440,975	Nov. 18	2158	559	53	1039
Flour, meal, or bran packer.....	C. Roehl.....	429,645	June 10	820	200	51	1640
Flour-mills. Feeder for.....	J. E. Welch.....	441,623	Nov. 25	3227	832	53	1251
Flour receptacle and sifter.....	N. M. Harrison.....	422,937	Mar. 11	874	928	50	1311
Flour-safe.....	C. S. Rogers.....	423,955	Mar. 25	2412	640	50	1617
Flour safe and sifter. Combined.....	H. Foster, Sr., and B. Fairchild.....	425,772	Apr. 15	2038	543	51	414
Flour-separating machine.....	W. G. Boorman and E. J. Donohue.....	440,301	Nov. 11	1041	{ 267 268 269 }	{ 53 53 53 }	{ 820 653 344 }
Flour-separator.....	P. Sadraevzt.....	433,096	July 29	3230	{ 831 832 }	{ 52 52 }	{ 653 344 }
Flower. Artificial.....	V. and L. Alpenburg.....	419,746	Jan. 21	1633	587	51	446
Flower-bed border.....	I. L. Landis.....	425,890	Apr. 15	2209	541	51	923
Flower or plant holder.....	M. H. Christie.....	427,402	May 6	565	141	51	923
Flower-pot.....	A. J. Byrne.....	437,565	Sept. 30	3510	915	52	2077

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Flower-pot machine.	C. McDonagh.	427,354	May 6	495	127	51	909
Flower-pot machine.	G. W. Rathsam.	434,200	Aug. 12	1138	296	52	989
Flower-pot. Metallic.	A. Emblème.	435,645	Sept. 2	420	112	52	1454
Flower-pot trellis.	J. S. Brown.	425,745	Apr. 15	2004	534	51	407
Flower-stand.	S. E. Covington.	422,297	Feb. 25	2751	725	50	1108
Flower-stand.	E. Wayland.	419,484	Jan. 14	1254	333	50	264
Flower-stand.	T. B. Weston.	435,470	Sept. 2	130	37	52	1400
Flower structure.	J. A. Dearborn.	440,141	Nov. 11	775	203	53	770
Flue beader. Boiler.	B. B. Farris.	439,496	Oct. 28	2839	756	53	558
Flue beader. Boiler.	B. B. Farris.	440,474	Nov. 11	1326	343	53	873
Flue-cleaner. Boiler.	T. J. Hart.	440,310	Nov. 11	1057	273	53	822
Flue-cleaner.	J. A. Hurley.	418,732	Jan. 7	100	23	50	22
Flue-cleaner.	L. I. Seymour.	433,100	July 29	3237	833	52	654
Flue-cleaner.	P. Smith.	419,976	Jan. 21	1992	524	50	416
Flue-cleaner.	W. H. Watson.	438,964	Oct. 21	1993	532	53	391
Flue cleaner. Boiler.	J. C. Bauer.	427,456	May 6	651	163	51	940
Flue cleaner. Boiler.	G. S. Smith.	441,858	Dec. 2	362	95	53	1335
Flue-cleaner rod.	T. R. Butman.	425,593	Apr. 15	1764	473	51	360
Flue-cleaner. Steam.	W. Doty.	425,165	Apr. 8	1137	301	51	229
Flue-cleaning device.	M. D. Osgood.	423,268	Mar. 11	1383	361	50	1405
Flue-cleaning rod.	T. R. Butman.	426,912	Apr. 29	3761	982	51	768
Flue-cutter.	G. and R. J. Bogusch.	419,310	Jan. 14	999	264	50	211
Flue-dust collector.	B. Rösing.	432,440	July 15	2168	559	52	434
Flue-hole cutter.	J. G. Erd.	438,230	Oct. 14	853	231	53	170
Flue. Fire-proof double-ventilated.	C. F. Hall.	440,475	Nov. 11	1327	343	53	873
Flue-protector.	J. H. Gilbert.	432,397	July 15	2115	543	52	423
Flue-scraper.	D. K. Strachan.	428,538	May 20	3277	578	51	1274
Flue scraper. Boiler.	T. Burke.	428,714	May 27	2572	652	51	1348
Flue-stop.	P. L. West.	425,479	Apr. 15	1601	427	51	328
Flue-stopper.	W. Chase.	429,718	June 10	929	228	51	1661
Flues. Machine for cutting, expanding, and beading boiler.	A. Vail.	440,797	Nov. 18	1867	481	53	984
Flues. Means for clearing ashes from.	G. H. Sellers.	426,648	Apr. 29	3371	884	51	692
Flues. Spiral smoke, heating, and ventilating.	T. T. Moore.	432,544	July 22	2341	605	52	477
Fluid-controller.	J. C. MacEvitt.	425,234	Apr. 8	1231	327	51	249
Fluid-meter.	C. N. Dutton.	441,614	Nov. 25	3212	827	53	1249
Fluid-meter.	C. N. Dutton.	442,024	Dec. 2	618	166	53	1384
Fluid-meter.	V. Popp.	438,766	Oct. 21	1683	452	53	333
Fluid-meters. Register-casing for.	C. N. Dutton.	441,095	Nov. 18	2355	610	53	1078
Fluid-motor.	B. B. Bower.	422,495	Mar. 4	189	52	50	1172
Fluid under pressure. Controlling the action of.	J. B. G. A. Canet.	425,657	Apr. 15	1874	501	51	381
Fluids, powder, &c. Apparatus for stirring and mixing.	R. Händel.	421,704	Feb. 18	1877	492	50	937
Flume.	F. L. Robinson.	419,887	Jan. 21	1863	490	50	391
Flush-tank and water-closet.	R. Gibson.	442,177	Dec. 9	862	231	53	1439
Flush-tank. Automatic.	E. O. Hunt.	435,039	Aug. 26	2491	658	52	1267
Flush-tank. Automatic.	A. Mayer.	426,033	Apr. 22	2453	648	51	500
Flush-tank. Automatic.	A. Mayer.	426,034	Apr. 22	2455	648	51	500
Flush-tank. Siphon.	H. H. Craigie.	433,447	Aug. 5	18	5	52	760
Flush-tank siphon.	O. Mulvey.	443,783	Dec. 30	3508	900	53	1978
Flushing-tank.	J. E. Boyle.	439,630	Nov. 4	15	4	53	609
Flushing-tank.	J. Greenhalgh.	440,589	Nov. 11	1512	389	53	908
Flushing-tank.	J. A. Morrison.	422,961	Mar. 11	913	239	50	1318
Flushing-tank.	A. Rosewater.	428,254	May 20	1859	466	51	1193
Flushing-tank.	A. Rosewater.	428,957	May 27	2922	748	51	1418
Flushing-tank for water-closets.	A. Haarlander.	441,097	Nov. 18	2357	611	53	1078
Fly-book leaf.	P. C. Hewitt.	435,094	Aug. 26	2572	679	52	1282
Fly-paper holder for windows.	T. Medford.	418,803	Jan. 7	218	53	50	47
Fly-paper packing-box.	H. Jarmuth.	428,277	May 20	1895	478	51	1201
Fly-paper. Sticky.	E. Krull.	438,417	Oct. 14	1141	308	53	224
Fly-paper. Sticky.	A. B. Trenner.	431,537	July 1	779	193	52	155
Fly-trap.	J. and F. Brunwasser.	419,003	Jan. 7	536	134	50	113
Fly-trap.	S. Huffman.	438,108	Oct. 7	673	183	53	130
Fly-trap.	J. Hunkeler.	433,348	July 29	3587	925	52	725
Fly-trap.	W. J. Kayser.	431,361	July 1	500	124	52	101
Fly-trap.	H. S. McKee.	439,545	Oct. 28	2911	774	53	572
Fly-trap for screen-doors.	W. A. Cox.	441,287	Nov. 25	2701	700	53	1149
Fly-wheel.	N. A. Cameron.	442,570	Dec. 9	1472	378	53	1558
Focimeter.	P. H. Maguire.	439,732	Nov. 4	154	40	53	638
Fodder-binder.	J. K. Iges and G. H. Earnest.	430,385	June 17	1996	493	51	1877
Fodder-binder.	G. W. Willison.	423,010	Mar. 11	985	259	50	1331
Fodder-cutter.	W. Betz.	426,632	Apr. 29	3350	878	51	688
Fodder-cutter.	J. Dick.	433,521	Aug. 5	115	33	52	779
Fodder-cutter.	R. B. Killin.	427,769	May 13	1135	284	51	1045
Fodder-cutting machine.	J. O. Catlett and T. A. Brant.	422,009	Feb. 25	2301	608	50	1026
Fodder-fork.	W. H. Crow.	422,922	Mar. 11	854	222	50	1307
Fodder-fork.	C. L. Kudiger.	427,271	May 6	380	99	51	885
Fog-horn. Mechanical.	F. E. Dyer.	436,651	Sept. 16	2067	552	52	1768
Roll-mills. Automatic lubricating apparatus for.	A. G. Hotchkiss.	425,795	Apr. 15	2067	552	51	420
Folding box.	C. F. Boyce.	437,769	Oct. 7	159	46	53	31
Folding box.	W. C. L. Burghardt.	438,403	Oct. 14	131	303	53	220
Folding chair.	A. E. Albert.	428,032	May 13	1328	387	51	1120
Folding chair.	W. B. Botsford.	427,964	May 13	1429	361	51	1089
Folding chair.	J. W. Bowen.	441,466	Nov. 25	2989	769	53	1203
Folding chair.	L. A. Chichester.	432,478	July 15	2240	579	52	450
Folding chair.	C. M. Petty.	419,116	Jan. 7	696	184	50	147

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Folding chair	H. Hill	430,952	June 24	2897	712	51	2058
Folding chair	B. F. Hunt	438,924	Oct. 21	1933	515	53	380
Folding chair	C. A. Merrill and A. D. Linn	442,128	Dec. 9	788	{ 212 213 }	{ 53 }	1424
Folding chair	C. H. Orcutt	442,591	Dec. 9	1503	387	53	1564
Folding chair	W. Schleicher	428,959	May 27	2926	750	51	1419
Folding chair and step-ladder	C. L. Knoeller	433,795	Aug. 5	533	138	52	860
Folding closet or wardrobe	J. J. Radcliffe	426,957	Apr. 29	3819	998	51	779
Folding screen	J. Jr. and A. K. Carey	421,383	Feb. 18	1412	366	50	847
Folding screen	G. L. Primrose	430,683	June 24	2475	604	51	1977
Folding seat or commode	J. W. Bowen	439,797	Nov. 4	250	64	53	657
Folding table	J. T. Bon	430,615	June 24	2353	576	51	1953
Folding table	J. T. Bon	434,240	Aug. 12	1207	{ 313 314 }	{ 52 }	1002
Folding table	A. J. Delavigne	433,277	July 29	3491	901	52	706
Folding table	A. Everiss	437,185	Sept. 30	2911	758	52	1959
Folding table	E. R. Golder	424,879	Apr. 1	690	183	51	133
Folding table	W. J. Moan	432,425	July 15	2149	553	52	430
Folding table	T. Schwencke	422,639	Mar. 4	416	104	50	1216
Folding table	R. Smith	424,830	Apr. 1	619	162	51	119
Folding table	M. K. Warner	423,973	Mar. 25	2439	647	50	1622
Folding table and step-ladder. Combined	L. Tobey	427,935	May 13	1386	{ 350 351 }	{ 51 }	1091
Food. Capsuled condensed	J. Magei	428,502	May 20	2930	564	51	1265
Food compound or condiment	M. B. Manwaring	427,779	May 13	1147	51	51	1047
Food-cutter	M. Fader	443,754	Dec. 30	3472	890	53	1971
Food. Preparing cattle	R. S. Baxter and G. D. Macdougald	425,727	Apr. 15	1982	51	403	
Food product.	A. W. Rehnström	442,593	Dec. 9	1507	53	1565	
Foot-bath	M. L. W. Martinot	438,931	Oct. 21	1944	518	53	382
Foot-cleaner	C. C. Birge	441,921	Dec. 2	449	120	53	1353
Foot. Extension	E. L. O'Connor	428,320	May 20	1801	452	51	1182
Foot-power	D. D. Weisell	424,389	Mar. 25	3069	814	50	1744
Foot-rest and stool. Combined	A. B. Heller	430,947	June 24	2891	711	51	2057
Foot-rest for use in shoe-stores	J. K. Phillips	442,781	Dec. 16	1832	474	53	1638
Foot-warmer	S. A. Harriman	421,930	Feb. 25	2199	576	50	1006
Foot-warmer	P. E. McKee	418,743	Jan. 7	124	30	50	27
Force-feeder	J. C. Riley	424,824	Apr. 1	610	160	51	117
Force-sprinkler	A. Speirs	428,234	May 20	1829	459	51	1188
Foretop-holder	W. J. Hall	440,894	Nov. 18	2024	521	53	1014
Forge. Blacksmith's	J. Malone	424,069	Mar. 25	2575	688	50	1648
Forge-pan. Dished	H. B. Keiper	423,168	Mar. 11	1234	321	50	1378
Forges. Fire-bowl for blacksmiths'	F. Breher	421,901	Feb. 25	2156	566	50	998
Forging car-couplers. Die for	J. Reiley	421,142	Feb. 11	1066	274	50	775
Forging apparatus	J. Kennedy	442,899	Dec. 16	2051	527	53	1679
Forging apparatus. Electric	G. Lauder and J. H. Simpson	437,654	Sept. 30	3627	948	52	2100
Forging die	T. O'Leary	435,855	Sept. 2	732	196	52	1516
Forging drills or reamers. Die for	C. Van Haagen	437,842	Oct. 7	250	79	53	51
Forging drills or reamers. Machine for	C. Van Haagen	437,841	Oct. 7	256	78	53	50
Forging-machine	R. W. Bayley	426,099	Apr. 22	2552	{ 671 672 }	{ 51 }	519
Forging-machine	R. W. Bayley	429,080	May 27	3120	{ 803 804 }	{ 51 }	1455
Forging-machine	G. J. H. Goehler	435,494	Sept. 2	173	48, 49	52	1408
Forging-machine	W. H. Johnson	430,029	June 10	1405	349	51	1753
Forging-machine. Electric	G. D. Burton	435,110	Aug. 26	2594	685	52	1286
Forging-machine. Electric	R. Ross	423,956	Mar. 25	2414	{ 640 641 }	{ 50 }	1617
Forging machine. Link	P. Byrne	427,458	May 6	653	{ 163 164 }	{ 51 }	941
Forging machine. Metal roller	G. W. Marble	425,951	Apr. 15	2321	615	51	467
Forging machines. Electric bar heating and feeding apparatus for	G. D. Burton	435,111	Aug. 26	2595	685	52	1287
Forging machines. Electric blank heating and feeding apparatus for	G. D. Burton	438,723	Oct. 21	1601	{ 429 430 }	{ 53 }	318
Forging machines. Hammer-die for drill	C. Van Haagen	437,840	Oct. 7	255	78	53	50
Forging pipe-coupling blanks. Die for	T. J. Bray	442,605	Dec. 16	1534	396	53	1578
Forging-press. Hydraulic	C. Davy	430,837	June 24	2727	{ 688 689 }	{ 51 }	2025
Forgings. Apparatus for and method of making rolled	G. F. Simonds	440,763	Nov. 18	1805	467	53	973
Forgings by electricity. Method of and apparatus for making rolled	G. D. Burton	427,151	May 6	200	51, 52	51	851
Forgings. Machine for making rolled	G. F. Simonds and J. J. Grant	427,125	May 6	156	41, 42	51	843
Fork:							
See Band-cutting fork.	Hay-fork.						
Barley-fork.	Hay-tedder fork.						
Bicycle-fork.	Loom weft-fork.						
Carving-fork.	Mail-bag-catching fork.						
Crushing-fork.	Velocipede-fork.						
Fodder-fork.	Weighing-fork.						
Fork and shovel. Combined	A. B. Vaag	421,364	Feb. 11	1381	357	50	833
Fork-guard	W. A. C. Oaks	424,021	Mar. 25	2512	668	50	1636
Form-setting and type-casting machine	G. Corsa	443,086	Dec. 23	2356	{ 601 602 603 604 }	{ 53 }	1747
Form-table. Adjustable	S. G. Goss	432,034	July 15	1566	400	52	320
Fortification for coast defense. Revolving	A. D. Huff	435,631	Sept. 2	398	107	52	1450
Founding-pattern	J. V. B. Carter	430,831	June 24	2715	665	51	2023
Fountain:							
See Poultry drinking-fountain.							
Fountain	C. P. F. Baillairgé	428,365	May 20	2034	512	51	1225
Fracture apparatus	T. M. Miller	432,888	July 22	2879	737	52	580

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Frame:							
See Backsaw-frame.	Picture-frame.						
Capsule-receiving frame.	Plow-frame.						
Crate-head frame.	Pocket-frame.						
Curtain-drying frame.	Pocket-book frame.						
Decorative frame.	Printing and vignetting frame.						
Display-frame.	Purse or bag frame.						
Door-frame.	Quilting-frame.						
Drill-frame.	Satchel-frame.						
Embroidery-frame.	Saw-frame.						
Eyeglass-frame.	Scrubbing-frame.						
Fire-place frame.	Seam-pressing frame.						
Glass cutting and drawing frame.	Sewing-machine frame.						
Grain-binder frame.	Sewing-machine quilting-frame.						
Grip-sack and traveling-bag frame.	Sign-frame.						
Hammer-frame.	Slate-frame.						
Harrow-frame.	Spectacle-frame.						
Harvester-frame.	Spinning-frame.						
Mosquito-bar frame.	Stove-frame.						
Mosquito-net frame.	Sun-print frame.						
Mowing-machine frame.	Tent-frame.						
Net-frame.	Truck-frame.						
Photo-engraving frame.	Umbrella-frame.						
Photographic-printing frame.	Vault-light frame.						
	Vehicle-frame.						
	Wheel-supporting frame.						
	Wagon-frame.						
	Window-frame.						
Frame-clamp	J. M. Wilson	433,506	Aug. 5	97	27	52	776
Frame for placards, &c	M. R. Funke	428,569	May 27	2383	605	51	1314
Frame house	G. H. Mercer	419,056	Jan. 7	615	159	50	129
Frame house	J. H. Shull	430,489	June 17	2146	527	51	1906
Frame-support	O. C. Blackmer	421,542	Feb. 18	1648	426	50	892
Frames. Combined back fastener and support for mirror or picture	L. C. Hiller	419,605	Jan. 14	1421	381	50	298
Freezing and refrigeration. Machine for producing artificial	R. G. Ward	443,020	Dec. 16	2324	573	53	1715
Freight. Apparatus for handling coal, ore, or other.	R. Thew	436,928	Sept. 23	2506	556	52	1874
Freight-handling machine	I. Henderson	431,262	July 1	344	86, 87	52	70
Freight-handling machine	M. F. C. O'Brien	443,054	Dec. 16	2383	585	53	1726
Friction-catch	W. Lewis	427,000	Apr. 29	3886	1015	51	791
Friction-grip. Intermittent	W. H. Wild	432,348	July 15	2041	525	52	409
Friction-surface	J. V. Beekman	429,991	June 10	1340	332	51	1740
Friction-wheel	J. Meier	443,102	Dec. 23	2395	612	53	1755
Friction-wrench	J. N. Farlow	440,473	Nov. 11	1325	342	53	873
Frieze or cornice	T. J. McGeary	436,487	Sept. 16	1733	457	52	1721
Frog for overhead wires	E. Thomson	432,581	July 22	2392	616	52	487
Frog-switch	V. A. Tyler	437,464	Sept. 30	3359	879	52	2046
Frogs, guard-rails, and switches. Foot-guard for.	E. S. Mahoney	427,884	May 13	1313	331	51	1078
Fruit assorting or sizing machine	J. A. Jones	430,031	June 10	1407	350	51	1753
Fruit-boiler	A. W. Miller	432,320	July 15	2009	514	52	403
Fruit-box	J. F. Hunt and F. A. Rappleye	420,157	Jan. 28	2281	604	50	481
Fruit-brushing machine	H. J. Williams and S. C. Warner	440,677	Nov. 18	1657	428	53	945
Fruit-can	R. C. Munger	430,349	June 17	1946	477	51	1867
Fruit cleaning, sifting, and stemming device	E. Olsen	438,940	Oct. 21	1947	522	53	384
Fruit-clipper	J. T. McMullen	435,240	Aug. 26	2770	731	52	1321
Fruit-dipping apparatus	D. D. Jones	439,072	Oct. 21	2159	579	53	425
Fruit-drier	W. A. Beck	422,897	Mar. 4	805	205	50	1289
Fruit-drier	J. A. Peirce and J. E. Gibbs	420,562	Feb. 4	190	49	50	602
Fruit-drier	G. W. Thurston	426,478	Apr. 29	3121	820	51	644
Fruit-drying tray	W. P. Hammon and C. J. Sechrist	441,871	Dec. 2	383	100	53	1340
Fruit-drying tray	S. A. Moulton	425,816	Apr. 15	2102	562	51	426
Fruit-gatherer	G. W. Blackburn	432,362	July 15	2058	530	52	412
Fruit-gatherer	C. J. Bloom	424,455	Apr. 1	13	5	51	5
Fruit-gatherer	J. W. Cain	435,206	Aug. 26	2734	721	52	1313
Fruit-gatherer	H. Caldwell	422,373	Mar. 4	16	6	50	1139
Fruit-gatherer	H. Caldwell	435,393	Sept. 2	18	5	52	1378
Fruit-gatherer	J. A. Chapman	424,271	Mar. 25	2847	761	50	1701
Fruit-gatherer	J. W. Emerson and A. C. Starbird	442,702	Dec. 16	1683	432	53	1608
Fruit-gatherer	W. W. Hays	424,645	Apr. 1	321	83	51	63
Fruit-gatherer	S. O. Hickok	438,158	Oct. 14	749	205	53	151
Fruit-gatherer	J. W. Peck	424,934	Apr. 1	770	205	51	150
Fruit-gatherer	A. A. Potter	441,971	Dec. 2	526	141	53	1366
Fruit-gatherer	D. B. and H. W. Randall	442,639	Dec. 16	1576	407	53	1587
Fruit-gatherer	H. D. Reeves	427,112	May 6	142	37	51	840
Fruit-gatherer	F. Stanke	441,859	Dec. 2	363	96	53	1335
Fruit-gatherer	W. B. B. Walker	442,928	Dec. 16	2100	541	53	1689
Fruit-grader	W. C. Hamilton	427,687	May 13	996	251	51	1018
Fruit-grader	D. D. Jones	424,002	Mar. 25	2483	661	50	1630
Fruit-grader	G. W. Thissell	431,176	July 1	215	53, 54	52	44
Fruit-jar	C. Fries and W. H. Richardson	442,431	Dec. 9	1248	322	53	1512
Fruit-jar	C. J. Murphy	439,170	Oct. 28	2311	621	53	459
Fruit-jar	G. C. Sawyer	423,957	Mar. 25	2416	641	50	1618
Fruit-jar	A. T. Schlichting and J. Smith	423,703	Mar. 18	2029	535	50	1537
Fruit-knife	W. W. Tyson	436,331	Oct. 14	1011	374	53	199
Fruit, &c. Machine for assorting and sizing	J. A. Jones	442,288	Dec. 9	1025	270	53	1469
Fruit, &c. Machine for pitting	A. A. Kent	420,907	Feb. 4	719	185	50	699
Fruit-packing case	R. J. Patterson	430,878	June 24	2792	684	51	2038

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Fruit-packing case	R. J. Patterson	430,880	June 24	2795	685	51	2038
Fruit-picker	J. W. Graham	424,880	Apr. 1	690	183	51	133
Fruit-picker	G. T. Ridlon	431,709	July 8	1075	268	52	219
Fruit-picker's knife	T. B. Jordan	443,178	Dec. 23	2526	646	53	1779
Fruit-picking stand	J. C. Greenlow	426,267	Apr. 22	2792	733	51	570
Fruit pitting and spreading machine	G. A. and C. F. Fleming and G. T. McLaughlin	424,771	Apr. 1	525	142	51	103
Fruit-pitting machine	C. W. Elkins and W. C. and S. Foreman	429,209	June 3	157	38	51	1501
Fruit-pitting machine	J. T. Ish	436,629	Sept. 16	1951	512	52	1760
Fruit-pitting machine	A. A. Kent	420,806	Feb. 4	549	{ 140 141	50	668
Fruit-press	R. Randall	442,494	Dec. 9	1347	346	53	1533
Fruit sizer and grader	C. H. Curtis	439,932	Nov. 4	457	{ 119 120	53	697
Fruit-stoning apparatus	J. H. Hunter	439,155	Oct. 28	2287	614	53	455
Fruit-stoning machine	P. Maisonneuve	435,051	Sept. 2	426	{ 113 114	52	1455
Fruit-stand	F. M. Barber	421,540	Feb. 18	1642	424	50	891
Fruit-wrapping machine	H. B. Stevens	443,550	Dec. 30	3138	{ 807 808	53	1907
Frying-pan	H. S. Brevington	433,231	July 29	3425	884	52	692
Fuel	J. Wiesner	421,878	Feb. 18	2121	.....	50	982
Fuel. Artificial	E. K. Baoyerlin	426,519	Apr. 29	3176	.....	51	654
Fuel. Artificial	J. Bowing	422,907	Mar. 11	828	.....	50	1302
Fuel. Artificial	H. K. Flagler	439,394	Oct. 28	2692	.....	53	530
Fuel. Artificial	W. B. McClure	437,164	Sept. 23	2870	.....	52	1944
Fuel. Artificial	A. K. Murray	419,869	Jan. 21	1842	.....	50	386
Fuel. Artificial	A. Pagenstecher	435,076	Aug. 26	2546	.....	52	1278
Fuel. Artificial	G. Y. Smith	425,351	Apr. 8	1398	.....	51	281
Fuel-block	A. K. Murray	419,866	Jan. 21	1839	.....	50	386
Fuel burner. Liquid	A. H. Calkins	437,354	Sept. 30	3170	829	52	2008
Fuel burner. Liquid	C. J. Edmonds	443,670	Dec. 30	3331	858	53	1944
Fuel-burning apparatus. Liquid	J. B. Hongh	432,884	Mar. 4	785	{ 200 201	50	1286
Fuel composition	A. K. Murray	419,867	Jan. 21	1840	.....	50	386
Fuel. Composition for treating	J. C. Cooper	424,961	Apr. 8	818	.....	51	167
Fuel-economizer	R. Newton	428,405	May 20	2106	528	51	1242
Fuel feeder. Pulverized	J. G. McAuley	441,688	Dec. 2	90	24	53	1280
Fuel-feeding apparatus	J. G. McAuley	441,689	Dec. 2	92	25	53	1280
Fuel-feeding apparatus. Pneumatic	W. E. Allington	426,611	Apr. 29	3312	{ 839 870	51	682
Fuel. Manufacturing artificial	W. B. McClure	437,163	Sept. 23	2869	746	52	1944
Fuel. Method of and apparatus for manufacturing artificial	G. Y. Smith	425,350	Apr. 8	1395	372	51	280
Fuel of coal, charcoal, or coke screenings. Lump	A. Mayer	433,653	Aug. 5	317	.....	52	817
Fuel press. Artificial	G. Y. Smith	430,701	June 24	2503	{ 612 613	51	1982
Fuel-receptacle	J. Lyth	442,382	Dec. 9	1169	304	53	1496
Fuel to fire. Feeding	F. W. Wieselbrock	439,738	Nov. 4	163	42	53	639
Fulling-mill	F. and G. Martin	443,722	Dec. 30	3416	877	53	1959
Fumigator	A. R. Bowker and J. D. Millen	428,880	May 27	2811	715	51	1396
Fumigator	C. Q. Hayes	430,018	June 10	1387	344	51	1749
Fumigator	A. McClain	441,690	Dec. 2	93	25	53	1280
Fumigator	L. Russell	435,860	Sept. 2	738	198	52	1518
Funereal carriage	R. A. McCauley	420,605	Feb. 4	252	68	50	614
Funnel	D. Bothwell	423,021	Mar. 11	1000	263	50	1334
Funnel	J. T. Brittin	426,165	Apr. 22	2648	696	51	539
Funnel	W. R. Cole	442,857	Dec. 16	1970	505	53	1664
Funnel	H. W. Hoops, Jr	435,096	Aug. 26	2573	679	52	1283
Funnel. Adjustable	J. Jones	427,874	May 13	1291	326	51	1074
Funnel. Measuring	W. A. Benton	422,700	Mar. 4	498	127	50	1231
Funnel. Measuring	W. H. Grissim	426,667	Apr. 29	3395	891	51	697
Funnel. Measuring	F. S. Richardson	423,954	Mar. 25	2411	640	50	1617
Fur, &c., from the skin. Separating	C. Puech	422,627	Mar. 4	399	.....	50	1212
Fur garment	F. O. Linder	421,292	Feb. 11	1276	329	50	815
Fur ornament	F. W. Hill	420,794	Feb. 4	520	136	50	664
Fur-robe-cleaning machine	F. Hosch	418,842	Jan. 7	288	70	50	61
Fur-skins. Machine for picking	W. A. Connolly	419,830	Jan. 21	1761	{ 465 466 467	50	369
Furs, &c., to woven fabrics, &c. Apparatus for applying	J. T. Tussaud	436,390	Sept. 16	1581	417	52	1693
Furs, &c., to woven fabrics, &c. Applying	J. T. Tussaud	436,389	Sept. 16	1578	{ 415 416	52	1692
Furnace:							
See Annealing-furnace. Metal-coating furnace.							
Blast cupola-furnace. Metal-heating furnace.							
Boiler-furnace. Metal heating and melting furnace.							
Boiler smoke-consuming furnace. Metallurgical furnace.							
Calcining or analogous furnace. Muffle-furnace.							
Glass-furnace. Oil-flame furnace.							
Glass-furnace. Regenerator-furnace.							
Glass-furnishing furnace. Roasting-furnace.							
Glass-melting furnace. Rotary furnace.							
Glory-hole furnace. Smoke-burning furnace.							
Hearth-furnace. Smoke-consuming furnace.							
Heating-furnace. Smoke-preventing furnace.							
Hot-air furnace. Soda-recovering furnace.							
Hydrocarbon-furnace. Steam-generator furnace.							
Furnace	M. E. Alley	431,928	July 8	1394	354	52	281

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Furnace.....	J. Bielenberg.....	436,283	Sept. 9	1396	{ 363 364 }	52	1648
Furnace.....	G. P. Denis.....	422,187	Feb. 25	2567	680	50	1074
Furnace.....	G. P. Denis.....	422,188	Feb. 25	2569	680	50	1075
Furnace.....	G. P. Denis.....	422,189	Feb. 25	2570	681	50	1075
Furnace.....	E. F. Edgar.....	425,759	Apr. 15	2023	{ 538 539 }	51	411
Furnace.....	E. F. Edgar.....	436,494	Sept. 16	1738	459	52	1722
Furnace.....	G. W. Ensinger.....	443,753	Dec. 30	3470	680	53	1970
Furnace.....	A. Francis and E. Manbré.....	419,007	Jan. 7	541	135	50	114
Furnace.....	P. Geyer.....	425,170	Apr. 8	1146	{ 302 303 }	51	231
Furnace.....	P. A. Goodwin.....	431,458	July 1	655	164	52	132
Furnace.....	G. C. Hagadone.....	440,562	Nov. 11	1468	379	53	899
Furnace.....	J. W. Hatch.....	423,926	Mar. 25	2367	630	50	1609
Furnace.....	W. Horsfall.....	429,626	June 10	793	193	51	1635
Furnace.....	W. Horsfall.....	435,837	Sept. 2	707	189	52	1512
Furnace.....	W. Lawrie and J. McMillan.....	421,589	Feb. 18	1713	446	50	905
Furnace.....	S. J. Miles.....	426,038	Apr. 22	2459	649	51	501
Furnace.....	C. F. Miller.....	418,955	Jan. 7	477	{ 118 119 }	50	100
Furnace.....	C. F. Miller.....	432,542	July 22	2338	604	52	476
Furnace.....	R. H. Nogar.....	425,821	Apr. 15	2108	{ 563 564 }	51	428
Furnace.....	P. Noonan.....	440,112	Nov. 4	726	192	53	750
Furnace.....	J. F. Pease.....	435,902	Sept. 2	818	217	52	1533
Furnace.....	B. F. Price.....	437,452	Sept. 30	3343	874	52	2042
Furnace.....	A. F. Slingerup and Z. T. Heap.....	419,478	Jan. 14	1248	331	50	263
Furnace.....	W. H. Strang.....	424,737	Apr. 1	463	124	51	91
Furnace.....	W. H. Switzer.....	420,636	Feb. 4	300	79	50	622
Furnace.....	G. H. Taylor.....	424,377	Mar. 25	3042	{ 808 809 }	50	1738
Furnace.....	T. A. Terteling.....	419,380	Jan. 14	1102	291	50	232
Furnace.....	G. A. Turnbull and W. Walters.....	424,039	Mar. 25	2536	676	50	1641
Furnace.....	R. L. Walker.....	439,705	Nov. 4	117	32	53	631
Furnace.....	R. L. Walker.....	439,706	Nov. 4	117	32	53	631
Furnace.....	J. Weber.....	425,393	Apr. 8	1467	393	51	293
Furnace and grate.....	J. Wodell.....	439,229	Oct. 28	2420	649	53	479
Furnace and hot-water casting-box. Combined.....	M. J. Hughes.....	442,440	Dec. 9	1261	326	53	1515
Furnace attachment.....	C. O. Arey.....	438,281	Oct. 14	939	253	53	185
Furnace bottom. Reducing.....	C. J. Eames.....	428,747	May 27	2618	51	1357	
Furnace-chamber.....	E. W. Wells.....	421,998	Feb. 25	2280	600	50	1022
Furnace charging and discharging apparatus.....	M. P. Higgins.....	436,856	Sept. 23	2391	624	52	1852
Furnace-charging device.....	J. M. Pagnoul.....	429,200	June 3	144	35	51	1498
Furnace-cover.....	S. R. Smythe.....	431,012	June 24	2992	735	51	2076
Furnace-door.....	J. Waters.....	441,083	Nov. 18	2334	604	53	1074
Furnace-door. Boiler.....	J. R. Alexander.....	436,555	Sept. 16	1842	455	52	1739
Furnace-door opener.....	A. H. Ballagh.....	419,748	Jan. 21	1635	435	50	344
Furnace-door opener.....	G. F. Moors.....	426,461	Apr. 29	3092	811	51	639
Furnace fire-pot.....	C. H. White.....	424,634	Apr. 1	301	78	51	60
Furnace for burning hydrocarbon fuels.....	J. Burns.....	440,098	Nov. 4	705	{ 187 188 }	53	746
Furnace for burning hydrocarbon oils.....	J. Schinneller.....	434,092	Aug. 12	968	254	52	956
Furnace for burning natural gas.....	F. T. Adams.....	422,562	Mar. 4	285	72	50	1190
Furnace for heating flat or sad irons.....	E. G. S. Ricker.....	421,434	Feb. 18	1479	{ 383 384 }	50	861
Furnace for heating metals.....	W. Sellers.....	429,776	June 10	1011	{ 248 249 }	51	1677
Furnace for heating purposes.....	A. Jahant.....	441,567	Nov. 25	3133	805	53	1232
Furnace fuel-feeding apparatus.....	W. S. Walker.....	441,725	Dec. 2	152	41	53	1291
Furnace-grate.....	F. D. Livermore.....	422,954	Mar. 11	905	237	50	1316
Furnace-grate.....	M. H. Moskovits. (Reissue).....	11,126	Nov. 18	2404	621	53	1087
Furnace-grate.....	W. J. Ogden.....	421,963	Feb. 25	2237	588	50	1014
Furnace-grate.....	W. H. Page.....	433,419	July 29	3682	951	52	745
Furnace-grate.....	R. S. Richards.....	433,491	Aug. 5	76	22	52	772
Furnace-grate.....	T. T. Rockett.....	436,194	Sept. 9	1273	{ 331 332 }	52	1622
Furnace-grate.....	T. T. Rockett.....	441,023	Nov. 18	2225	{ 574 575 }	53	1052
Furnace-grate.....	W. R. Ronney.....	429,797	June 10	1038	255	51	1681
Furnace-grate and sbaker therefor.....	E. Mather.....	433,952	Aug. 12	761	198	52	915
Furnace grate-bar.....	A. J. Bayley.....	425,199	Apr. 8	1184	314	51	239
Furnace grate-bar. Boiler.....	J. Livingstone.....	427,431	May 6	617	154	51	934
Furnace-grate. Rocking.....	E. S. Staples and R. H. Arnold.....	440,286	Nov. 11	1018	261	53	815
Furnace-linings. Apparatus for repairing.....	G. W. Goetz.....	436,976	Sept. 23	2569	672	52	1887
Furnace-mouth lining.....	B. B. Lamprey and A. C. Bugbee.....	421,588	Feb. 18	1712	446	50	905
Furnace-roof.....	H. Aiken.....	420,487	Feb. 4	89	21	50	581
Furnace roof. Nail or other.....	W. J. S. Sheibley.....	422,893	Mar. 4	798	204	50	1288
Furnace, stove, or range grate.....	W. Buck.....	419,178	Jan. 14	800	211	50	172
Furnace-tapping apparatus.....	J. Purves.....	436,461	Sept. 16	1691	445	52	1713
Furnaces. Air-feeding device for.....	J. Tobin.....	421,990	Feb. 25	2270	597	50	1020
Furnaces. Apparatus for charging.....	P. T. Berg.....	432,593	July 22	2406	620	52	489
Furnaces. Apparatus for generating and burning gaseous fuel in.....	E. P. Shetter.....	423,347	Mar. 11	1492	{ 391 392 }	50	1427
Furnaces. Apparatus for maintaining combustion in secondary chambers of boiler or other.....	J. Wilson and A. Mason.....	438,873	Oct. 21	1864	495	53	366
Furnaces. Automatic feed for blast.....	J. Richter.....	418,927	Jan. 7	438	107	50	91
Furnaces. Charging.....	S. T. Wellman.....	421,797	Feb. 18	1996	526	50	959
Furnaces. Device for supplying superheated steam to.....	M. E. Alley.....	431,682	July 8	1027	257	52	209
Furnaces. Draft-regulator for.....	J. S. Makin.....	421,591	Feb. 18	1718	448	50	906
Furnaces. Feed device for ore-roasting.....	A. C. Johnson.....	418,952	Jan. 7	472	117	50	99
Furnaces. Fire-brick lining for.....	J. J. Hogan.....	425,947	Apr. 15	2312	{ 613 614 }	51	464

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Invention.	Name.	No.	Date.	Monthly volume.		Official * Gazette.	
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Furnaces. Fuel crushing and feeding device for	N. W. Pratt	443,109	Dec. 23	2405	614	53	1757
Furnaces. Kindling fire in	H. Hackney	420,056	Jan. 28	2118	559	50	448
Furnaces. Maintaining combustion in secondary chambers of boiler or other	J. Wilson and A. Mason	438,872	Oct. 21	1862	494	53	366
Furnaces. Oil-feeding device for blast-	I. Eckert	434,706	Aug. 19	1966	510	52	1158
Furnaces. Smoke-preventing attachment for	A. J. Cliff	438,839	Oct. 21	1899	482	53	356
Furnaces with carbonaceous fuel. Supplying	R. N. R. Phelps	436,613	Sept. 16	1922	505	52	1754
Furniture	J. Gramke, Jr	428,090	May 20	1611	409	51	1145
Furniture	K. Miller	435,941	Sept. 9	874	229	52	1549
Furniture	J. A. Schenkel	426,686	Apr. 29	3428	899	51	703
Furniture-base	M. L. T. Bush	434,861	Aug. 19	2175	{ 569 510 }	{ 52 51 }	1201
Furniture-clamp	J. Benedict	427,035	May 6	6	2	51	812
Furniture. Convertible	E. E. Sell	430,442	June 17	2072	{ 511 512 }	{ 51 51 }	1892
Furniture fastening. Slatted-	S. W. Peregrine	436,259	Sept. 9	1361	355	52	1641
Furniture fastening. Slatted-	S. W. Peregrine	438,175	Oct. 14	774	211	53	155
Furniture. Household	M. J. Walsh	421,118	Feb. 11	1032	265	50	769
Furniture-joint. Detachable	D. J. C. Arnold	434,229	Aug. 12	1190	310	52	998
Furniture-joint. Detachable	A. W. Carl	430,111	June 17	1550	386	51	1790
Furniture-polish	J. M. Hall, C. Morris, and W. S. Hamilton	422,128	Feb. 25	2481	.....	50	1058
Furrower and coverer	E. Wyckoff	425,359	Apr. 8	1408	375	51	283
Fuse and fuse-block	J. G. S. Cunningham	433,770	Aug. 5	490	128	52	851
Fuse-block	C. F. Brush	427,548	May 13	789	196	51	978
Fuse-block	T. A. Edison	438,305	Oct. 14	975	264	53	192
Fuse-block	J. L. Kimball and H. C. Wirt	431,062	July 1	49	11	52	11
Fuse-block	T. Patterson	426,057	Apr. 22	2481	656	51	506
Fuse-block	N. S. Possons	435,102	Aug. 26	2579	681	52	1284
Fuse-block	F. G. Warrell	426,156	Apr. 22	2635	692	51	537
Fuse-block and lightning-arrester	H. A. Chase	432,980	July 29	3042	781	52	616
Fuse-block. Ceiling	E. E. Erickson	427,062	May 6	47	13	51	819
Fuse-box	C. E. Kammeier	429,133	June 3	40	9	51	1480
Fuse-box	N. S. Possons	429,584	June 3	729	176	51	1612
Fuse-cap fastener	N. W. Moody	432,427	July 15	2152	554	52	431
Fuse. Electrical	H. Tirmann	426,971	Apr. 29	3839	1003	51	783
Fuse for projectiles. Base-	T. Nordenfelt	423,802	Mar. 18	2167	573	50	1563
Fuse for projectiles. Percussion-	W. H. Driggs	419,143	Jan. 7	730	192	50	153
Fuse for shells	G. Phillips	426,210	Apr. 22	2717	711	51	552
Fuse. Percussion	A. Martin	431,273	July 1	365	90, 91	52	74
Fuse-plug	W. A. Anthony	427,823	May 13	1211	305	51	1058
Fuse-plug	J. A. Seely	424,229	Mar. 25	2795	745	50	1692
Fuse. Safety-	A. F. Andrews	424,449	Apr. 1	7	3	51	4
Fuses without exposing flames or sparks. Means for igniting	W. B. and G. J. Smith	429,587	June 10	752	181	51	1627
Fuses without exposing flames or sparks. Means for igniting	W. B. and G. J. Smith	429,598	June 10	752	181	51	1627
Gaff-jaw	J. Parker	429,474	June 3	567	139	51	1581
Gaff-joint for vessels	P. E. Frostad	435,926	Sept. 9	856	224	52	1546
Gage:							
See Carpenter's gage. Planter-gage.	J. A. Campbell	427,253	May 6	354	91	51	880
Carpenter's roll-gage. Press-slide gage.	P. Curran	440,621	Nov. 18	1572	405	53	928
Center and mortise gage. Pressure-gage.	C. O. Lambert	435,311	Aug. 26	2899	768	52	1343
Center and mortise gage. Printing-press feed-gage.	W. Littley	431,702	July 8	1064	206	52	217
Cigar-maker's gage. Ring-gage.	J. L. Murphy	435,348	Aug. 26	2962	706	52	1355
Cock-gage. Rule-gage.	J. L. Strahl	438,029	Oct. 7	557	152	53	106
Combination-gage. Saw-gage.	R. H. Greene	434,777	Aug. 19	2062	538	52	1179
Door-banging gage. Saw-table gage.	G. W. Duchemin	425,065	Apr. 8	975	262	51	197
Feed-gage. Sewing-machine welt-gage.	J. Mohring	435,632	Sept. 2	399	107	52	1450
Masonry-work gage. Spectacle-gage.	J. I. Hales	426,617	Apr. 29	3327	872	51	684
Measuring-gage. Surface-gage.	J. L. Getman	437,687	Oct. 7	17	6	53	6
Micrometer-gage. Threshold-gage.	G. H. Tansley	438,738	Oct. 21	1633	438	53	324
Pipe-testing gage. Track-gage.	P. C. Heinz	440,151	Nov. 11	788	207	53	772
Plait-gage. Water-gage.	A. M. Hill	423,154	Mar. 11	1214	316	50	1374
Gage	J. W. Baker	428,034	May 13	1530	387	51	1120
Gage	M. V. Nencki	443,402	Dec. 23	2992	.....	53	1853
Gage-bracket	W. C. Dillingham	440,348	Nov. 11	1108	284	53	831
Gage-knife	J. Phelan	442,540	Dec. 9	1419	362	53	1546
Gage-knife	J. Beattie, Jr	429,596	June 10	751	181	51	1627
Gage-lock	H. J. Brewer	432,973	July 29	3030	778	52	614
Gage-pin	H. J. Brewer	443,219	Dec. 23	2615	673	53	1798
Gages. Adjustable head for scratch-surface or other	W. Burnley	419,633	Jan. 21	1468	394	50	314
Gages. Steadying device for pressure-	M. M. Clark	423,594	Mar. 18	1849	{ 487 488 }	{ 50 50 }	1502
Gaging-rod	W. Cohlman	440,420	Nov. 11	1251	323	53	857
Gaining-machine	E. H. Crosby	437,393	Sept. 30	3239	844	52	2021
Gallacetophenone	J. H. Davis	430,990	June 24	2958	726	51	2069
Galley. Combined job and news	C. E. Dutton, Jr	442,516	Dec. 9	1383	354	53	1540
Galley-lock							
Galvanic battery							
Galvanic battery							
Galvanic battery							
Galvanic battery							

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Galvanic battery.....	O. A. Enholm.....	441,403	Nov. 25	2581	743	53	1184
Galvanic battery.....	G. H. Felt.....	429,895	June 10	1196	297	51	1712.
Galvauc battery.....	W. M. Fink.....	434,593	Aug. 19	1760	460	52	1121
Galvanic battery.....	F. Gendron.....	426,932	Apr. 29	3784	989	51	773
Galvanic battery.....	C. R. Goodwin.....	431,742	July 8	1125	220	52	229
Galvanic battery.....	C. A. Hitchcock.....	430,075	June 10	1484	368	51	1768
Galvanic battery.....	A. H. Hoy.....	441,843	Dec. 2	337	90	53	1329
Galvanic battery.....	C. J. Hubbell.....	435,346	Aug. 26	2959	785	52	1354
Galvanic battery.....	W. E. Irish.....	419,774	Jan. 21	1675	{ 444 445 }	50	352
Galvanic battery.....	G. A. Liebig and Q. Wilms.....	437,469	Sept. 30	3365	381	52	2048
Galvanic battery.....	J. H. Linville.....	422,534	Mar. 4	242	63	50	1182
Galvanic battery.....	A. J. MacDonald.....	423,116	May 20	1654	419	51	1154
Galvanic battery.....	S. W. Maquay.....	433,738	Aug. 5	434	{ 111 112 113 }	52	841
Galvanic battery.....	J. F. Mehren.....	421,031	Feb. 11	980	252	50	758
Galvanic battery.....	R. E. Murphy.....	438,586	Oct. 14	1376	373	53	271
Galvanic battery.....	J. S. Nowotny.....	428,781	May 27	2666	676	51	1366
Galvanic battery.....	C. G. de Peralta.....	441,967	Dec. 2	522	140	53	1366
Galvanic battery.....	L. M. J. C. C. Renard.....	425,959	Apr. 15	2331	618	51	469
Galvauc battery.....	J. Siliceo, Jr.....	429,703	June 10	910	222	51	1658
Galvanic battery.....	G. A. Smith.....	443,976	Dec. 30	3810	972	53	2036
Galvanic battery.....	L. T. Stanley.....	419,730	Jan. 21	1606	429	50	339
Galvanic battery.....	J. F. Wollensak and W. E. Gill.....	436,516	Sept. 16	1766	466	52	1727
Galvanic battery. Dry.....	L. Moorthamers.....	423,335	Mar. 11	1479	388	50	1425
Galvanic cell. Standard.....	E. Weston.....	439,737	Nov. 4	161	42	53	639
Galvanizing apparatus.....	C. E. Matteson.....	435,760	Sept. 2	586	156	52	1488
Galvanizing plates.....	E. A. Davies.....	425,661	Apr. 15	1884	503	51	384
Galvanometer.....	A. E. Colgate.....	428,746	May 27	2617	663	51	1356
Galvanometer.....	A. E. Colgate.....	429,837	June 10	1184	294	51	1709
Galvanometer.....	T. Harris.....	437,926	Oct. 7	387	110	53	74
Galvanometer.....	A. M. Ritchie.....	437,868	Oct. 7	298	89	53	58
Galvanometer.....	J. Waring.....	422,672	Mar. 4	462	118	50	1224
Galvanometer. Portable reflecting.....	C. P. Frey.....	438,882	Oct. 21	1877	498	53	369
Gambrel-stick.....	W. H. Walker.....	441,517	Nov. 25	3055	786	53	1217
Game.....	P. Bosche.....	431,762	July 8	1147	286	52	233
Game.....	J. Buchheit.....	430,915	June 24	2846	698	51	2048
Game.....	J. H. H. Burge.....	440,737	Nov. 18	1757	452	53	965
Game.....	A. Cousen.....	432,792	July 22	2749	703	52	554
Game.....	J. H. Donaldson.....	421,913	Feb. 25	2174	571	50	1002
Game.....	J. F. Fields.....	424,234	Mar. 25	2872	767	50	1706
Game.....	D. Haas.....	441,619	Nov. 25	3221	831	53	1250
Game.....	C. N. Hoyt.....	436,310	Sept. 9	1434	374	52	1656
Game.....	W. J. Irwin.....	435,065	Aug. 26	2529	668	52	1275
Game.....	P. Johnson.....	425,100	Apr. 8	1022	273	51	206
Game.....	C. E. Johnstone.....	429,531	June 3	654	160	51	1596
Game.....	W. H. Kelly.....	431,363	July 1	502	124	52	102
Game.....	W. H. Marshall.....	429,312	June 3	320	76	51	1532
Game.....	D. McCloskey.....	435,853	Sept. 2	728	195	52	1516
Game.....	C. W. Munz.....	434,674	Aug. 19	1910	492	52	1148
Game.....	G. Poggenburg.....	425,249	Apr. 8	1252	333	51	253
Game.....	F. W. Samuels.....	431,727	July 8	1102	274	52	224
Game.....	G. Scott.....	432,170	July 15	1782	458	52	362
Game.....	H. Shrimpton.....	432,287	July 15	1958	501	52	394
Game.....	G. W. Snell.....	429,326	June 3	341	80	51	1536
Game.....	G. N. Thompson.....	429,800	June 10	1043	256	51	1682
Game.....	J. S. Thompson.....	439,211	Oct. 28	2387	641	53	473
Game.....	N. W. Thornton.....	438,962	Oct. 21	1939	531	53	391
Game.....	C. B. Todd.....	443,604	Dec. 30	3228	830	53	1925
Game.....	A. Van Brakle.....	435,260	Aug. 26	2810	744	52	1328
Game.....	D. Walsh.....	433,110	July 29	3252	837	52	657
Game and appliance therefor.....	J. Malings and W. Muckle.....	424,322	Mar. 25	2943	784	50	1719
Game apparatus.....	E. D. Albertson.....	419,096	Jan. 7	671	176	50	141
Game apparatus.....	W. J. Armstrong.....	443,889	Dec. 30	3663	944	53	2009
Game apparatus.....	H. A. Behn.....	425,849	Apr. 15	2160	575	51	436
Game apparatus.....	H. A. Behn.....	425,850	Apr. 15	2161	{ 575 576 }	51	436
Game apparatus.....	H. R. Bender.....	424,260	Mar. 25	2831	757	50	1698
Game apparatus.....	D. Clement.....	443,668	Dec. 30	3329	858	53	1944
Game apparatus.....	S. A. Darrach.....	443,073	Dec. 16	2320	593	53	1733
Game apparatus.....	R. F. De Grain.....	435,805	Sept. 2	661	174	52	1502
Game apparatus.....	H. A. Doty.....	422,575	Mar. 4	306	78	50	1194
Game apparatus.....	W. C. Dunn.....	432,160	July 15	1767	454	52	360
Game apparatus.....	J. Elson.....	420,149	Jan. 28	2269	601	50	478
Game apparatus.....	J. S. Foster.....	430,228	June 17	1723	428	51	1824
Game apparatus.....	J. S. Foster.....	441,405	Nov. 25	2885	744	53	1185
Game apparatus.....	F. Gammeter.....	433,676	Aug. 5	349	89	52	824
Game apparatus.....	T. A. Goodwin.....	443,439	Dec. 23	2955	760	53	1863
Game apparatus.....	M. A. Greene.....	442,618	Dec. 16	1552	401	53	1582
Game apparatus.....	R. Hill, Jr.....	434,987	Aug. 26	2408	{ 637 638 611 612 }	52	1252
Game apparatus.....	C. N. Hoyt.....	441,099	Nov. 18	2359	611	53	1079
Game apparatus.....	M. Jacobs.....	433,624	Aug. 5	268	72	52	809
Game apparatus.....	W. C. Kantner.....	436,980	Sept. 23	2575	673	52	1888
Game apparatus.....	D. D. Lockwood.....	433,599	Aug. 5	238	62	52	802
Game apparatus.....	W. Ludlum and G. Stevens.....	424,321	Mar. 25	2942	784	50	1719
Game apparatus.....	T. C. Massey.....	423,066	Mar. 11	1074	279	50	1347
Game apparatus.....	W. McClure.....	435,237	Aug. 26	2767	731	52	1320
Game apparatus.....	R. M. Pancoast.....	420,732	Feb. 4	425	112	50	647
Game apparatus.....	S. S. Peters.....	434,721	Aug. 19	1931	515	52	1162
Game apparatus.....	W. A. Presbrey.....	439,425	Oct. 28	2735	729	53	538

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Game apparatus	F. Pries	436,637	Sept. 16	1964	516	52	1762
Game apparatus	J. A. Raud	420,959	Feb. 11	803	208	50	725
Game apparatus	T. Regensteiner and L. Braubach	424,132	Mar. 25	2668	710	50	1666
Game apparatus	W. H. Reiff	429,585	June 3	731	177	51	1612
Game apparatus	W. H. Reiff	441,090	Nov. 18	2345	607	53	1076
Game apparatus and sample-exhibitor	F. H. Smith	432,447	July 15	2179	{ 561 562 }	52	437
Game. Base-ball	J. W. Maxey	429,354	June 3	384	91	51	1544
Game-board	G. Bixler	424,667	Apr. 1	357	94	51	69
Game-board	J. P. Frankey	421,259	Feb. 11	1229	318	50	806
Game-board	N. Reiz	429,639	June 10	809	197	51	1637
Game-board	E. Ryder	420,737	Feb. 4	430	114	50	648
Game-board	H. Sperl	437,838	Oct. 7	254	77	53	50
Game-board	H. and H. Sperl	429,250	June 3	210	52	51	1512
Game. Card	E. E. Koehler	422,807	Mar. 4	642	164	50	1260
Game-counter	A. E. Arp	438,977	Oct. 21	2017	538	53	397
Game-counter	W. B. Atkinson	433,265	July 29	3475	897	52	703
Game-counter	F. F. Cooper	434,425	Aug. 19	1507	394	52	1069
Game-counter	F. J. Hall	424,551	Apr. 1	180	50	51	37
Game-counter	W. O. Harding	443,279	Dec. 23	2701	{ 693 694 }	53	1814
Game-counter	M. Hofheimer	431,893	July 8	1353	341	52	273
Game-counter	S. B. Jenkins	436,896	Sept. 23	2454	641	52	1865
Game-counter	F. D. Smith	440,374	Nov. 11	1145	295	53	839
Game-counter	S. Stieglitz	437,057	Sept. 23	2677	699	52	1909
Game-counter	J. D. Ward	439,450	Oct. 28	2772	738	53	545
Game. Field	W. W. Brown	443,427	Dec. 23	2938	755	53	1859
Game of spider. Counter for the	J. L. Schilling	434,572	Aug. 19	1721	450	52	1113
Game or educational device or appliance	E. E. Bliss	438,577	Oct. 21	1669	448	53	330
Game or puzzle	S. B. Dobbs	434,658	Aug. 19	1883	492	52	1144
Game or puzzle	A. H. Gaillard	433,919	Mar. 25	2353	619	50	1606
Game or puzzle	W. E. Goff	427,506	May 6	721	181	51	954
Game or puzzle	T. W. McGrath	437,932	Oct. 7	397	112	53	76
Game. Parlor or lawn	F. C. Whitman	437,741	Oct. 7	98	31	53	22
Game-puzzle	W. H. Fidler	432,483	July 15	2247	581	52	451
Game promoting the study of language. Card	E. E. Young	432,682	Mar. 4	473	121	50	1227
Game-table	H. Ganss, C. E. Clarke, and J. Den- gler.	424,193	Mar. 25	2750	733	50	1682
Game-table	E. Habrecht	420,786	Feb. 4	500	131	50	661
Game-wheel. Alarm	G. Wilkening	428,985	May 27	2965	761	51	1427
Games. Score device for base-ball and similar	W. A. Browne	437,562	Sept. 30	3507	915	52	2076
Gang-edgers. Shifter for	S. H. Pratt	421,609	Feb. 18	1746	{ 457 458 }	50	911
Gang-plank	D. C. McIntyre	426,209	Apr. 22	2716	711	51	552
Gangway and ship's ladder. Passenger-	C. Thomson	427,378	May 6	522	133	51	914
Garbage. Apparatus for treating	F. G. Wiseloge	442,298	Dec. 9	1041	274	53	1472
Garbage-receptacle	W. H. Buckley, Jr.	426,766	Apr. 29	3558	928	51	728
Garbage-receptacle	H. Kaufmann	431,058	July 1	45	10	52	11
Garbage-receptacle and ash-receiver	D. J. Quigley	436,543	Sept. 16	1829	481	52	1737
Garbage-receptacle. Dumping	V. D. Stockbridge and A. F. Ran- dall.	443,060	Dec. 16	2289	587	53	1727
Garbage-receiver	H. Byrom	433,233	July 29	3427	885	52	692
Garbage. Treating kitchen	G. Fleischman	425,603	Apr. 15	1782	478	51	363
Garden implement	J. H. and G. L. Baxter	430,821	June 24	2708	663	51	2622
Garden implement	A. W. Stiles	423,640	Mar. 18	1932	508	50	1519
Garment-clasp	J. G. and J. Schmidt and C. W. Har- ris.	421,145	Feb. 11	1070	275	50	776
Garment-fastener	W. A. Bernard	432,177	July 15	1789	460	52	364
Garment-fastening	J. Levi	443,774	Dec. 30	3498	897	53	1976
Garment. Fly-front	C. Dusenberry, Jr.	436,650	Sept. 16	1993	521	52	1768
Garment. Infant's	C. Guidotti	426,800	Apr. 29	3610	942	51	738
Garment. Netter	J. Spieldoch	425,914	Apr. 15	2246	595	51	452
Garment. Outer	A. M. Lougee	425,439	Apr. 15	1539	413	51	317
Garment-pattern. Adjustable	J. H. Moriarty	432,322	July 15	2012	{ 514 515 516 517 }	52	403
Garment-stay	L. M. Campbell	433,719	Aug. 5	410	105	52	835
Garment-stay	T. P. Taylor	425,835	Apr. 15	2131	568	51	432
Garment-stretcher	G. W. Wright and C. M. Grubb	440,385	Nov. 11	1165	300	53	843
Garment-supporter	G. D. Cluff	433,617	Aug. 5	260	69	52	807
Garment-supporter	J. G. Capers	422,719	Mar. 4	520	133	50	1236
Garment-supporter	E. A. Doty	429,208	June 3	156	38	51	1501
Garment-supporter	R. Gemmell	440,352	Nov. 11	1112	285	53	832
Garment-supporter	H. M. Griffin	430,640	June 24	2398	584	51	1961
Garment-supporter	G. H. Phelps	420,166	Jan. 25	2296	607	50	483
Garment-supporter	W. H. Plumb	437,043	Sept. 23	2661	696	52	1906
Garment-supporter	W. E. Pullen	432,558	July 22	2364	610	52	481
Garment-supporter	J. J. Seldner	443,465	Dec. 23	3003	771	53	1872
Garment-supporter	C. C. Shelby	429,778	June 10	1018	249	51	1677
Garment-supporter	C. C. Shelby	429,779	June 10	1019	249	51	1678
Garment-supporter	E. S. Smith	420,419	Jan. 28	2675	709	50	553
Garment-supporter	E. S. Smith	429,549	June 3	678	165	51	1602
Garment-supporter	C. A. Turner	440,449	Nov. 11	1288	333	53	865
Garment-supporting hook	C. A. Whitcler	431,861	July 8	1309	328	52	265
Garments. Device for fitting and drafting	M. E. Hall	435,301	Aug. 26	2887	764	52	1340
Gas and air burner	O. M. Shannon	428,798	June 10	1040	255	51	1682
Gas and air burner. Mixed	O. M. Shannon	429,066	May 27	3095	798	51	1450
Gas and air engine	G. B. Brayton	432,114	July 15	1688	{ 434 435 }	52	345
Gas and air mixer	J. W. Danforth and R. W. Clark	422,299	Feb. 25	2752	725	50	1108
Gas and electric-light fixture	C. Felton	443,487	Dec. 23	3041	782	53	1880
Gas and electric lights. Key-turner for	L. H. Rockafellow	443,543	Dec. 30	3125	804	53	1905

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Gas and hydrocarbon engine.....	A. W. Schleicher and P. A. N. Winand.	434,609	Aug. 19	1785	466	52	1126
Gas and hydrocarbon engine.....	P. A. N. Winand and L. V. Goebels.	435,637	Sept. 2	407	110	52	1451
Gas and liquid boiler.....	J. Flannery.....	419,845	Jan. 21	1795	474	50	375
Gas and liquid boiler.....	J. Flannery.....	420,193	Jan. 28	2342	619	50	491
Gas and petroleum motor.....	F. Dürr.....	442,248	Dec. 9	962	254	53	1459
Gas and steam engine. Compound.....	A. B. Drantz.....	423,224	Mar. 11	1307	340	50	1393
Gas and steam motor engine. Combined.....	H. Haedicke.....	433,563	Aug. 5	179	48	52	791
Gas and water box for streets.....	A. G. Anderson.....	439,048	Oct. 21	2117	568	53	417
Gas. Apparatus for generating illuminating water.	J. D. Averell.....	439,461	Oct. 28	2792	744	53	548
Gas. Apparatus for generating illuminating water.	J. D. Averell.....	443,951	Dec. 30	3767	962	53	2027
Gas. Apparatus for heating apartments by.....	O. M. Shannon.....	428,963	May 27	2935	753	51	1421
Gas. Apparatus for making hydrogen.....	J. W. Tallmadge.....	436,812	Sept. 23	2278	600	52	1832
Gas. Apparatus for making oil.....	T. and S. Alexander and R. Patterson.	419,098	Jan. 7	672	176 177	50	142
Gas. Apparatus for manufacturing.....	J. B. Archer.....	434,621	Aug. 19	1805	471 472	52	1130
Gas. Apparatus for manufacturing oil.....	H. H. Engleman.....	423,516	Mar. 18	1741	459	50	1484
Gas. Apparatus for manufacturing wood.....	J. Hanlon.....	432,939	July 22	2952	756 757	52	594
Gas. Apparatus for producing highly-heated.....	R. F. Nenninger.....	432,281	July 15	1947	498 499	52	393
Gas. Apparatus for separating liquids from natural.	W. Moore.....	438,399	May 20	2097	526	51	1240
Gas. Apparatus for the manufacture of.....	A. L. Allen and G. W. Harris.....	440,456	Nov. 11	1296	335 336	53	867
Gas. Apparatus for the manufacture of.....	J. B. Archer.....	433,926	Aug. 5	714	185 186	52	896
Gas. Apparatus for the manufacture of.....	J. B. Archer.....	435,720	Sept. 2	531	140 141	52	1478
Gas. Apparatus for the manufacture of.....	J. D. Averell.....	422,692	Mar. 4	487	124 125	50	1229
Gas. Apparatus for the manufacture of.....	W. T. Bate.....	431,932	July 8	1400	356	52	282
Gas. Apparatus for the manufacture of.....	H. Burgess.....	440,004	Nov. 4	578	152 153	53	721
Gas. Apparatus for the manufacture of.....	W. M. Cosh.....	427,747	May 13	1098	275 276	51	1037
Gas. Apparatus for the manufacture of.....	M. S. Greenough, E. C. Jones, and W. R. Addicks.	429,309	June 3	314	74	51	1530
Gas. Apparatus for the manufacture of.....	J. A. McCollum and B. F. Burt.....	430,807	June 24	2684	658	51	2018
Gas. Apparatus for the manufacture of.....	K. M. Mitchell.....	433,802	Aug. 5	546	141	52	863
Gas. Apparatus for the manufacture of.....	J. M. Rose.....	428,955	May 27	2915	747	51	1457
Gas. Apparatus for the manufacture of.....	J. M. Rose.....	428,956	May 27	2918	748	51	1418
Gas. Apparatus for the manufacture of.....	W. J. Taylor.....	431,535	July 1	774	193	52	154
Gas. Apparatus for the manufacture of.....	H. White.....	439,455	Oct. 28	2781	741 742	53	546
Gas. Apparatus for the manufacture of coal.....	J. J. Thomas.....	443,153	Dec. 23	2489	635 636	53	1771
Gas. Apparatus for the manufacture of illuminat- ing.....	P. W. Mackenzie.....	435,070	Aug. 26	2536	669 670	52	1276
Gas. Apparatus for the manufacture of oil.....	W. B. Frink.....	423,044	Mar. 11	1043	271	50	1342
Gas. Apparatus for the manufacture of oil.....	D. E. Teal.....	436,881	Sept. 23	2433	635	52	1861
Gas. Apparatus for the manufacture of wood-and-oil.	G. Ramsdell.....	442,493	Dec. 9	1345	346	53	1533
Gas. Apparatus for the purification of.....	W. C. Andrews.....	426,092	Apr. 22	2536	668	51	516
Gas blow-pipe.....	D. M. Monroe.....	418,807	Jan. 7	224	55	50	49
Gas-bracket.....	F. Hinkel.....	442,523	Dec. 9	1397	357	53	1542
Gas-burner.....	J. F. Barker.....	434,013	Aug. 12	842	222	52	929
Gas-burner.....	W. W. Canfield.....	431,716	July 8	1085	270	52	221
Gas-burner.....	G. K. Cooke.....	419,183	Jan. 14	807	213	50	174
Gas-burner.....	H. Cox, Jr.....	442,863	Dec. 16	1980	508	53	1666
Gas-burner.....	W. Dawson.....	433,675	Aug. 5	348	89	52	824
Gas-burner.....	W. F. Folmer.....	419,651	Jan. 21	1495	400	50	319
Gas-burner.....	W. F. Folmer.....	419,652	Jan. 21	1497	400	50	319
Gas-burner.....	T. Gordon.....	421,924	Feb. 25	2192	574	50	1005
Gas-burner.....	W. Hodgson and J. C. Brown.....	430,853	June 24	2752	674	51	2030
Gas-burner.....	E. Kempshall.....	436,760	Sept. 16	2170	570	52	1802
Gas-burner.....	W. S. Mead.....	419,784	Jan. 21	1691	449	50	355
Gas-burner.....	A. G. Morey.....	421,602	Feb. 18	1736	454	50	909
Gas-burner.....	E. F. Trent.....	427,379	May 6	524	133	51	915
Gas-burner.....	W. J. Ward.....	434,492	Aug. 19	1604	420	52	1090
Gas-burner. Bunsen.....	L. Paget.....	425,246	Apr. 8	1249	333	51	253
Gas burner. Coal-oil.....	G. Beck.....	436,865	Sept. 23	2403	627	52	1854
Gas-burner for bake-ovens.....	J. W. Bates.....	439,572	Oct. 28	2949	783	53	579
Gas-burner for heating and cooking purposes.....	J. H. Keyser.....	432,881	July 22	2869	735 736	52	579
Gas-burner for heating or cooking.....	G. E. Wright.....	427,651	May 13	936	235	51	1006
Gas-burner for stoves, &c.....	J. H. Keyser.....	418,846	Jan. 7	295	72	50	62
Gas-burner for stoves or other heaters.....	A. J. Doty.....	443,221	Dec. 23	2617	673	53	1798
Gas burner. Fuel.....	J. F. Mais.....	443,835	Dec. 30	3599	925	53	1996
Gas-burner. Incandescent.....	C. B. Harris.....	435,628	Sept. 2	393	106	52	1449
Gas-burner. Incandescent.....	L. Henkle.....	437,649	Sept. 30	3619	946	52	2098
Gas burner. Natural.....	C. H. Carpenter.....	427,299	May 6	416	108	51	893
Gas burner. Natural.....	O. F. Grant.....	435,299	Aug. 26	2885	764	52	1340
Gas-burner. Regenerative.....	T. Gordon.....	432,399	July 15	2117	544	52	424
Gas-burner. Regenerative.....	T. Gordon and W. R. Swift.....	422,587	Mar. 4	324	82	50	1198
Gas-burner. Regenerative.....	T. Gordon and W. R. Swift.....	422,589	Mar. 4	329	82	50	1199
Gas-burner. Regenerative.....	F. Stellwag.....	435,670	Sept. 2	437	121	52	1462
Gas burner. Regenerative.....	C. Westphal.....	429,398	June 3	456	108	51	1558
Gas-burner. Safety.....	A. P. Frechette and P. M. Dupuis.....	436,230	Sept. 9	1317	343	52	1632
Gas-burner. Self-closing.....	W. W. Sherman.....	440,443	Nov. 11	1282	332	53	864
Gas-burner. Self-lighting.....	J. W. Lyon.....	423,525	Mar. 18	1760	463	50	1487
Gas-burners. Device for lighting.....	F. Thiele.....	422,659	Mar. 4	445	111	50	1921
Gas-burners. Heating attachment for.....	J. A. Wilson.....	421,217	Feb. 11	1178	302	50	796

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Gas-burners. Making incandescing elements for	C. B. Harris	441,533	Nov. 25	3113	799	53	1228
Gas-burners. Manufacture of incandescing devices for	C. A. von Weisbach	438,125	Oct. 7	694	189	53	134
Gas-burners. Refractory compound for incandescing.	J. E. Blomén	430,508	June 17	2177		51	1912
Gas burning and heating apparatus	W. H. Bradley	424,852	Apr. 1	648	171	51	126
Gas-delivery mains. System of	F. Moore	442,326	Dec. 9	1087	285	53	1481
Gas-engine	H. J. Baker	421,473	Feb. 18	1532	396 397	50	870
Gas-engine	C. W. Baldwin	434,171	Aug. 12	1100	284	52	981
Gas-engine	M. M. Barrett and J. F. Daly	430,505	June 17	2173	534	51	1911
Gas-engine	M. M. Barrett and J. F. Daly	430,506	June 17	2174	535	51	1912
Gas-engine	J. C. Beckfeld	432,720	July 22	2622	671	52	531
Gas-engine	J. C. Beckfeld and A. Schmid	421,474	Feb. 18	1535	397	50	871
Gas-engine	J. C. Beckfeld and A. Schmid	421,475	Feb. 18	1538	397	50	871
Gas-engine	J. C. Beckfeld and A. Schmid	421,477	Feb. 18	1541	398	50	872
Gas-engine	E. H. Gaze	437,776	Oct. 7	158	49, 50	53	33
Gas-engine	J. Mohs	426,297	Apr. 22	2832	746	51	578
Gas-engine	E. Quack	441,582	Nov. 25	3161	813 814 815	53	1237
Gas-engine	D. S. Regan. (Reissue)	11,068	Apr. 1	785	209	51	153
Gas-engine	A. Schmid and J. C. Beckfeld	421,524	Feb. 18	1616	416	50	886
Gas-engine	H. K. Shanck	439,200	Oct. 28	2361	634 635	53	468
Gas-engine	W. S. Sharpneck	441,028	Nov. 18	2232	577	53	1053
Gas-engine	C. Sintz	426,337	Apr. 22	2866	760	51	590
Gas-engine	J. D. Smith	418,821	Jan. 7	242	59, 60	50	52
Gas-engine	E. A. Sperry	433,551	Aug. 5	159	41	52	787
Gas-engine	J. R. Valentine and A. T. Grigg	425,116	Apr. 8	1040	278	51	210
Gas-engine	C. W. Weiss	419,806	Jan. 21	1726	457	50	363
Gas-engine	C. White and A. R. Middleton	438,209	Oct. 14	819	222 223	53	164
Gas-engine ignitor	J. J. Pearson and J. Kunze	428,858	May 27	2780	707	51	1390
Gas-engine. Rotary	G. H. Chappell	441,865	Dec. 2	374	98	53	1338
Gas-engine. Rotary	J. H. Eichler	442,963	Dec. 16	2144	551	53	1698
Gas-engine. Rotary	G. E. Hibbard	424,000	Mar. 25	2476	658 659 660	50	1629
Gas-engine. Rotary	W. S. Sharpneck	428,762	May 27	2638	668	51	1361
Gas-engines. Gas regulator and equalizer for	W. C. Rossney	420,169	Jan. 28	2999	608	50	454
Gas-engines. Igniting apparatus for	E. F. Roberts	424,027	Mar. 25	2519	670	50	1637
Gas-engines. Ignitor for	C. W. Baldwin	439,232	Oct. 28	2423	650	53	479
Gas-engines. Operating	J. J. Pearson	426,736	Apr. 29	3514	918	51	719
Gas-extinguisher. Automatic	N. Newman	425,953	Apr. 15	2324	616	51	467
Gas for gas-engines. Preparation of	W. J. Ritchey	430,235	June 17	1731	430	51	1836
Gas from hydrocarbon oil. Apparatus for producing	J. McKay	437,315	Sept. 30	3105	813	52	1935
Gas from oil and steam. Apparatus for making	E. R. Ellsworth	438,071	Oct. 7	620	169	53	119
Gas-fuel burner	C. L. Holden	419,444	Jan. 14	1200	318	50	253
Gas-furnace	M. V. Smith	425,260	Apr. 8	1267	338 339	51	256
Gas-furnace for melting metals	H. H. Garrett	421,263	Feb. 11	1236	319 320	50	808
Gas-generating apparatus	W. S. Wright	438,213	Oct. 14	827	224	53	165
Gas-generating apparatus. Oil	M. C. Burt	429,675	June 10	865	210	51	1648
Gas-generator	C. W. Gibson	436,975	Sept. 23	2568	671	52	1887
Gas generators. Stand-pipe for ammonia	M. Poschinger and H. Vogt	436,994	Sept. 23	2592	678	52	1891
Gas. Governor for regulating the supply of	J. Shaw	426,148	Apr. 22	2627	689	51	535
Gas-governor. Volumetric	P. G. Van Wie	435,469	Sept. 2	129	37	52	1400
Gas-heater	A. Brown	431,326	July 1	439	109	52	90
Gas-holder	W. Gadd	433,462	Aug. 5	40	11, 12	52	764
Gas-holder	W. Gadd	433,463	Aug. 5	41	12 13 14	52	765
Gas-holder	F. Moore	442,324	Dec. 9	1084	284	53	1480
Gas-holder	A. Newell	428,125	May 20	1666	422 423	51	1157
Gas-holder	A. Newell and C. Kehr	428,127	May 20	1675	424 425	51	1158
Gas-holder	E. L. Pease	432,434	July 15	2159	556 557	52	433
Gas-holders. Guide-framing of	S. Cutler	438,472	Oct. 14	1215	329	53	239
Gas-holders. Means for regulating the movement of	E. L. Pease	435,186	Aug. 26	2706	715	52	1308
Gas-holders. Means for regulating the movement of	E. L. Pease	435,187	Aug. 26	2707	715 716	52	1308
Gas-jet tip	F. P. Butman	442,100	Dec. 9	743	201	53	1416
Gas-jets. Attachment for increasing the illuminating power of	V. E. Cohen	427,050	May 6	24	8	51	815
Gas-light. Incandescing	C. M. Lungren	439,882	Nov. 4	381	99	53	681
Gas lighter and extinguisher. Automatic	N. Newman	436,990	Sept. 23	2584	676	52	1890
Gas-lighter. Automatic electric	L. S. White	441,458	Nov. 25	2978	767	53	1202
Gas-lighter. Electric	C. H. Hinds	426,381	Apr. 22	2957	777	51	603
Gas-lighter. Electric	J. H. Lehman	432,884	July 22	2873	736	52	580
Gas-lighter. Electric	R. T. Walton	428,433	May 20	2139	538	51	1248
Gas-lighter. Time	A. J. Hauserbach	426,808	Apr. 29	3621	945	51	740
Gas-lighting device	J. H. Farrel	421,918	Feb. 25	2180	572	50	1003
Gas-lighting devices. Continuous self-consuming or ignitable strip for	J. H. Farrel	421,917	Feb. 25	2179	572	50	1003
Gas-machine	J. S. Wood	437,136	Sept. 23	2803	730	52	1933
Gas-mains. Cut-off and relief apparatus for	J. C. Conroy	424,761	Apr. 1	508	137	51	99
Gas-mains. Means for carrying off leakage from	H. Cowell	425,369	Apr. 8	1428	382	51	256
Gas. Manufacturing	A. O. Granger	418,711	Jan. 7	87	20	50	19
Gas. Manufacturing	L. Stevens	443,122	Dec. 23	2425	619	53	1760
Gas-manufacturing apparatus	G. Leisner	426,823	Apr. 29	3644	950	51	745

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Gas manufacturing apparatus. Heating or fuel.....	A. Kitson.....	440,950	Nov. 18	2119	{ 550 551	{ 53	1032
Gas-manufacturing apparatus. Water.....	C. E. Burdell.....	425,977	Apr. 22	2371	{ 628 462	{ 51	485
Gas. Manufacturing illuminating.....	E. de Beauharnais.....	440,754	Nov. 18	1790	{ 463 670	{ 53	970
Gas. Manufacturing illuminating.....	P. W. Mackenzie.....	435,071	Aug. 26	2538	{ 115 116	{ 52	1276
Gas-meter.....	J. W. Culmer.....	429,423	June 3	486	{ 116 117	{ 51	1564
Gas-meter.....	J. W. Culmer.....	429,424	June 3	490	{ 686 687	{ 51	1565
Gas-meter.....	J. W. Culmer.....	437,020	Sept. 23	2627	{ 948 949	{ 52	1899
Gas-meter.....	W. W. Goodwin, E. T. Lee, and J. H. Mansur.....	443,915	Dec. 30	3703	{ 551 552	{ 53	2016
Gas-meter.....	W. N. Milsted.....	430,431	June 17	2060	{ 508 321	{ 51	1890
Gas-meter.....	B. P. Moors.....	429,313	June 3	321	{ 76 722	{ 51	1532
Gas-meter register.....	L. Ehrlich.....	428,900	May 27	2840	{ 817 322	{ 51	1402
Gas-meters. Registering apparatus for.....	J. B. Wallace.....	438,208	Oct. 14	817	{ 322 323	{ 53	163
Gas-meters. Stop-motion register for.....	W. A. M. Valon.....	438,451	Oct. 14	1189	{ 323 124	{ 53	223
Gas mixer. Fuel.....	W. G. Taylor.....	424,738	Apr. 1	464	{ 124 624	{ 51	92
Gas mixer. Natural.....	A. A. Phillips.....	434,948	Aug. 26	2358	{ 624 663	{ 52	1242
Gas-motor engine.....	H. Campbell.....	428,801	May 27	2691	{ 663 638	{ 51	1372
Gas-motor engine.....	G. McGehee.....	432,638	July 22	2481	{ 638 597	{ 52	504
Gas-motor engine.....	J. Taylor.....	443,082	Dec. 16	2338	{ 597 645	{ 53	1736
Gas motor or engine. Ammoniacal.....	P. J. McMahon.....	420,241	Jan. 28	2425	{ 645 777	{ 50	506
Gas or air pipes. Safety device for.....	E. C. Jones.....	424,305	Mar. 25	2908	{ 777 281	{ 50	1713
Gas or gasoline burners. Steam-generating attachment for.....	J. Hilton.....	442,317	Dec. 9	1072	{ 281 695	{ 53	1478
Gas or lamps. Extension-fixture for.....	S. Bergmann.....	426,163	Apr. 22	2646	{ 695 482	{ 51	539
Gas or oil burner.....	F. S. Durand.....	438,840	Oct. 21	1811	{ 482 145	{ 53	356
Gas or oil motor engine.....	N. A. Otto.....	433,809	Aug. 5	558	{ 145 146	{ 52	865
Gas or oil motor engine.....	N. A. Otto.....	433,810	Aug. 5	559	{ 146 146	{ 52	865
Gas or oil motor engine.....	N. A. Otto.....	433,811	Aug. 5	561	{ 146 146	{ 52	866
Gas or oil motor engine.....	N. A. Otto.....	433,812	Aug. 5	562	{ 146 146	{ 52	866
Gas or oil motor engine.....	N. A. Otto.....	433,813	Aug. 5	564	{ 146 146	{ 52	866
Gas or oil motor engine.....	N. A. Otto.....	433,814	Aug. 5	565	{ 147 3423	{ 52	867
Gas or oil motor engine.....	N. A. Otto.....	437,508	Sept. 30	3423	{ 895 795	{ 52	2059
Gas or oil motor engines. Igniting apparatus for.....	N. A. Otto.....	424,345	Mar. 25	2928	{ 795 507	{ 50	1727
Gas or vapor engine attachment.....	M. M. Barrett and J. F. Daly.....	434,695	Aug. 19	1950	{ 507 406	{ 52	1155
Gas-pipe alarm.....	A. Miesse.....	423,385	Mar. 11	1544	{ 406 12, 13	{ 50	1437
Gas pipes and fittings. Apparatus for testing.....	S. Harrison and J. T. Sheard.....	441,659	Dec. 2	44	{ 12, 13 33	{ 53	1270
Gas-pipes. Device for sealing the joints of.....	W. Rogers.....	418,752	Jan. 7	135	{ 33 700	{ 50	30
Gas-pressure regulator.....	C. A. Jamison.....	428,843	May 27	2756	{ 700 135	{ 51	1385
Gas. Process of and apparatus for manufacturing heating and illuminating.....	C. F. Hadly.....	433,784	Aug. 5	517	{ 135 522	{ 52	857
Gas. Process of and apparatus for the manufacture of.....	B. Loomis.....	438,013	Oct. 7	522	{ 147 715	{ 53	99
Gas-producer.....	J. W. Culmer.....	437,098	Sept. 23	2738	{ 716 717	{ 52	1921
Gas-producer.....	J. W. Culmer.....	441,941	Dec. 2	483	{ 128 129	{ 53	1359
Gas-producer.....	W. J. Taylor.....	428,237	May 20	1834	{ 460 491	{ 51	1198
Gas-producers. Feed device for.....	C. W. Bildt.....	442,676	Dec. 16	1632	{ 491 597	{ 53	1599
Gas. Production of chlorine.....	C. Hornbostel.....	423,868	Mar. 18	2263	{ 597 844	{ 50	1582
Gas-purifier.....	J. Hearue.....	433,126	July 29	3276	{ 844 668	{ 52	601
Gas. Purifying.....	W. C. Andrews.....	426,093	Apr. 22	2537	{ 668 788	{ 51	516
Gas-regulator.....	J. Crawford.....	439,586	Oct. 28	2971	{ 789 367	{ 53	584
Gas-regulator.....	C. G. Dyott.....	427,979	May 13	1451	{ 367 735	{ 51	1104
Gas-regulator.....	W. Haskell.....	424,199	Mar. 25	2757	{ 735 416	{ 50	1683
Gas-regulator.....	C. P. Kolm.....	420,726	Feb. 4	416	{ 110 707	{ 50	646
Gas-regulator.....	J. H. Lehman.....	420,412	Jan. 28	2666	{ 707 176	{ 50	551
Gas-regulator.....	G. W. Wright.....	422,483	Mar. 4	176	{ 48 933	{ 50	1169
Gas-retort furnace.....	K. M. Mitchell.....	437,611	Sept. 30	3571	{ 933 493	{ 52	2088
Gas-retort lid.....	J. E. Floyd.....	438,040	Oct. 21	1875	{ 493 565	{ 53	369
Gas-retort lid.....	J. Ruscoe.....	439,040	Oct. 21	2107	{ 565 822	{ 53	414
Gas-retorts. Apparatus for charging inclined.....	L. Van Vestraut.....	426,483	Apr. 29	3129	{ 822 996	{ 51	646
Gas-retorts. Apparatus for charging inclined.....	L. Van Vestraut.....	436,029	Sept. 9	996	{ 261 736	{ 52	1573
Gas-scrubber.....	H. J. Remmert.....	426,326	Apr. 22	2873	{ 736 285	{ 51	566
Gas storage and delivery. System of.....	F. Moore.....	442,325	Dec. 9	1085	{ 285 794	{ 53	1480
Gas-stove burner.....	W. L. Cort.....	441,537	Nov. 25	3089	{ 794 658	{ 33	1224
Gas. System for distributing.....	J. C. Conroy.....	426,172	Apr. 22	2657	{ 658 548	{ 51	541
Gas trap for sinks. Sewer.....	F. Henkel.....	424,784	Apr. 1	548	{ 146 672	{ 51	107
Gas-washer.....	F. A. M. Alavoine.....	422,173	Feb. 25	2545	{ 672 621	{ 50	1070
Gas-washer.....	W. Morava.....	434,941	Aug. 26	2348	{ 621 757	{ 52	1241
Gas-washer.....	H. J. Remmert.....	426,327	Apr. 22	2876	{ 757 118	{ 51	587
Gas-washer.....	W. T. Walker.....	420,751	Feb. 4	447	{ 119 695	{ 50	652
Gas-washing apparatus.....	N. C. Dye.....	420,378	Jan. 28	2619	{ 695 281	{ 50	542
Gas-washing apparatus.....	M. A. Piedra.....	419,350	Jan. 14	1064	{ 281 437	{ 50	225
Gases and liquids to moving vehicles. Device for supplying.....	L. J. De Puy.....	432,121	July 15	1703	{ 437 286	{ 52	347
Gases from coke-ovens. Apparatus for utilizing waste.....	C. C. Wyllie.....	427,210	May 6	286	{ 73 669	{ 51	867
Gascon fuel. Apparatus for producing.....	J. M. Ayer.....	432,718	July 22	2616	{ 670 393	{ 52	530
Gaseous products. Apparatus for utilizing waste.....	E. Biedermann and E. W. Harvey.....	442,600	Dec. 16	1526	{ 393 2171	{ 53	1577
Gasoline-engine.....	M. M. Barrett and J. F. Daly.....	430,504	June 17	2171	{ 534 920	{ 51	1911
Gasoline-tank.....	C. A. Rice.....	426,740	Apr. 29	3521	{ 920 670	{ 51	721

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Gate:							
See Air-flue gate.	Hatchway-gate.						
Automatic gate.	Hinge-gate.						
Bridge-gate.	Hydraulic gate.						
Car-platform gate.	Lock-gate.						
Coal-conveyer gate.	Mixing-machine discharge-gate.						
Electric gate.	Overflow-gate.						
Electric crossing-gate.	Railway-gate.						
Elevator-gate.	Railway-crossing gate.						
Elevator or bridge gate.	Sliding gate.						
End-gate.	Sluiceway-gate.						
Farm-gate.	Swinging gate.						
Fence-gate.	Swinging and sliding gate.						
Flood-gate.	Tender-gate.						
Flood and stock gate.	Tilting gate.						
Flood or water gate.	Wagon-gate.						
	Water-way gate.						
Gate	J. Albers	435,785	Sept. 2	629	166	52	1496
Gate	J. Augspurger	430,610	June 24	2346	574	51	1952
Gate	T. J. Austin	439,460	Oct. 28	2790	744	53	548
Gate	J. A. Bacon	437,766	Oct. 7	146	45	53	30
Gate	J. W. Bain	420,489	Feb. 4	91	21	50	581
Gate	J. G. Barber	432,354	July 15	2048	527	52	411
Gate	W. N. Bates	442,093	Dec. 9	736	199	53	1414
Gate	A. C. Baumwart	430,507	June 17	2176	535	51	1912
Gate	F. J. Baxter	433,434	Aug. 5	2	1	52	757
Gate	W. F. Bennett	438,050	Oct. 7	587	160	53	111
Gate	M. E. Boughton	443,484	Dec. 23	3036	781	53	1879
Gate	J. E. Bourne	431,643	July 8	950	238	52	197
Gate	E. H. Boyce	437,085	Sept. 23	2720	710	52	1917
Gate	W. and T. E. Britton	440,992	Nov. 18	2180	564	53	1044
Gate	B. Buell	423,308	Mar. 11	1441	375	50	1417
Gate	J. S. Burgess	431,553	July 8	806	201	52	168
Gate	J. Chambers	423,216	Mar. 11	1296	338	50	1391
Gate	W. Chater	430,246	June 17	1752	436	51	1830
Gate	W. H. Clay	426,243	Apr. 22	2762	723 724	51	563
Gate	T. E. Coffin	440,620	Nov. 18	1571	404	53	928
Gate	S. M. and M. Coffman	438,987	Oct. 21	2037	544	53	401
Gate	E. S. Crawford	438,144	Oct. 14	727	199 200	53	147
Gate	J. C. Crawford	441,469	Nov. 25	2992	770	53	1204
Gate	W. L. Cromwell	436,596	Sept. 16	1904	500	52	1751
Gate	C. F. Darnell	428,716	May 27	2574	652	51	1348
Gate	J. Day and F. Handy	430,103	June 10	1532	381	51	1777
Gate	H. B. Doolittle	434,326	Aug. 12	1335	348	52	1028
Gate	G. B. Gilreath	436,702	Sept. 16	2071	545	52	1784
Gate	W. T. Grant	426,441	Apr. 29	3067	803 804	51	633
Gate	E. R. Guerra	428,905	May 27	2850	725	51	1404
Gate	J. Gunder	431,579	July 8	846	210	52	176
Gate	J. W. Harland	430,577	June 17	2278	559	51	1930
Gate	S. D. Hathaway	439,005	Oct. 21	2057	551	53	405
Gate	J. W. Hudelson	433,346	July 29	3585	924	52	725
Gate	M. D. Hunter	438,378	Oct. 14	1078	294	53	212
Gate	P. O. Hirsch	426,725	Apr. 29	3496	914	51	716
Gate	F. J. Johnston	428,777	May 27	2659	674	51	1365
Gate	T. A. Kearns	435,347	Aug. 26	2961	785	52	1355
Gate	J. S. Kurtz	432,314	July 15	2002	512	52	401
Gate	C. J. Langenbach	443,858	Dec. 30	3624	933	53	2001
Gate	J. Mason	430,605	June 17	2331	572	51	1941
Gate	W. McClelland	443,863	Dec. 30	3629	935	53	2003
Gate	E. D. Middlekauff and C. D. Harsin	440,177	Nov. 11	836	215	53	782
Gate	M. B. Mills	442,756	Dec. 16	1795	465	53	1629
Gate	C. Oesterling	438,939	Oct. 21	1956	522	53	384
Gate	B. H. Otis	419,546	Jan. 14	1336	357	50	281
Gate	W. A. Pierce	432,831	Mar. 4	687	175	50	1269
Gate	G. W. Sanford	424,134	Mar. 25	2671	711	50	1656
Gate	W. A. Scott	427,119	May 6	148	39	51	841
Gate	W. J. Shinn	430,220	June 17	1708	424 425	51	1821
Gate	J. S. Shobe	421,440	Feb. 18	1487	385	50	862
Gate	J. H. Slater	428,864	May 27	2789	709	51	1391
Gate	S. Smalley	441,336	Nov. 25	2775	718	53	1163
Gate	W. Smith	428,536	May 20	2275	577	51	1274
Gate	A. Snow	431,409	July 1	573	143	52	116
Gate	A. M. Spaulding	427,926	May 13	1375	347	51	1089
Gate	S. Stewart	435,382	Aug. 26	3023	799	52	1366
Gate	J. W. Stone	430,221	June 17	1709	425	51	1821
Gate	J. Thompson	435,127	Aug. 26	2619	693	52	1291
Gate	J. H. Tudor	425,273	Apr. 8	1287	344	51	260
Gate	J. Twedell	434,850	Aug. 19	2157	565	52	1198
Gate	G. Valentine	421,788	Feb. 18	1983	522	50	956
Gate	W. Van Nostrand	441,342	Nov. 25	2784	720	53	1165
Gate	G. W. Walters	434,536	Aug. 19	1670	437	52	1103
Gate	L. W. Webb	427,647	May 13	932	233	51	1005
Gate	J. Wilmoth	435,339	Aug. 26	2947	782	52	1352
Gate-closer. Automatic	S. H. Spencer	436,506	Sept. 16	1755	463	52	1725
Gate-fastening	L. E. Bradford	429,995	June 10	1345	333	51	1742
Gate-fastening. Wire.	J. M. Harnish	431,744	July 8	1127	280	52	229
Gate for draw-bridges, &c.	C. R. Brothwell	431,838	July 8	1271	319	52	257
Gate-hanger	M. Peak and J. B. Casaday	427,439	May 6	631	158	51	936
Gate or fence	E. Gilbert	420,681	Feb. 4	358	94	50	634

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Gate opening and closing attachment	F. W. Kimball	439,521	Oct. 28	2877	766	53	565
Gate or semaphore operating mechanism	J. W. Steele	443,729	Dec. 30	3429	880	53	1962
Gear	C. H. Trask	436,324	Sept. 9	1460	381	52	1662
Gear-cutter	W. W. Hastings	434,019	Aug. 12	850	224 225 607	52	930
Gear-cutting machine	R. Flanigan	439,134	Oct. 28	2261	608	53	449
Gear for rolls. Expansion	J. N. Wise	429,331	June 3	349	83	51	1538
Gear or cog wheel	L. T. Stanley	440,378	Nov. 11	1151	296	53	840
Gear pinion or wheel	R. N. Allen	429,108	June 3	2	1	51	1473
Gear. Reversal	G. C. Roberts	425,458	Apr. 15	1568	420	51	322
Gear. Reversing	G. R. Baldwin	436,072	Sept. 9	1076	279	52	1588
Gear. Reversing	G. C. Roberts	436,193	Sept. 9	1268	350 351	52	1621
Gear. Reversing	H. O. Thomas	433,499	Aug. 5	85	24, 25	52	773
Gear-wheel	L. Atwood	430,819	June 24	2705	662	51	2091
Gear-wheel	L. Atwood	441,460	Nov. 25	2981	767	53	1202
Gear-wheel	C. H. Morgan	427,103	May 6	118	32	51	835
Gear-wheels. Machine for dressing the teeth of	W. Curtiss	431,139	July 1	154	40	52	33
Gearing	F. B. Iac	431,124	July 1	135	35	52	29
Gearing. Chain	J. Baird	443,591	Dec. 30	3207	825	53	1921
Gearing. Changeable-speed	S. H. Everett and G. W. Kirkpatrick	438,231	Oct. 14	854	231 232	53	170
Gearing. Changeable-speed	A. J. Martin and E. J. Corser	443,370	Dec. 23	2858	735	53	1845
Gearing. Changeable-speed	A. J. Martin and L. Heath	432,418	July 15	2140	550	52	428
Gearing. Double intermittent grip	P. Hockett	430,020	June 10	1389	345	51	1750
Gearing for continuous-motion impression-cylinders	J. Brooks	437,417	Sept. 30	3284	857	52	2030
Gearing for continuous-motion impression-cylinders	J. Brooks	437,418	Sept. 30	3286	858	52	2031
Gearing for threaded rods. Anti-friction	C. A. Lieb	431,067	July 1	57	13, 14	52	13
Gearing. Reciprocating	J. Wenzin	421,533	Feb. 18	1632	421	50	889
Gearing. Reversible grip	P. Hockett	430,021	June 10	1391	246	51	1750
Gelatine plates. Manufacturing highly-sensitive isochromatic	H. W. Vogel	442,741	Dec. 16	1774	...	53	1624
Gem-setting	G. Armeny	432,007	July 15	1523	387	52	313
Generator:							
See Current-generator. Pyromagnetic generator.							
Current pulsating generator.	Steam-generator.						
Electric generator.	Steam and gas generator.						
Electrical generator.	Steam and hot-water generator.						
Gas-generator.	Thermo-electric generator.						
Hydrocarbon-generator.	Vapor-generator.						
Magnetic generator.							
Generators. System of	A. G. Waterhouse	420,924	Feb. 4	746	191	50	705
Geographical maps or globes. Manufacturing relief	T. Jones	431,469	July 1	669	...	52	135
Gig-mill	C. Wood	434,223	Aug. 12	1179	307	52	996
Girdor. Composite	J. D. Lazell	424,798	Apr. 1	568	151	51	111
Glass:							
See Magnifying-glass. Reading-glass.							
Opera-glass. Window-glass.							
Glass-annealing oven	A. Ferrari	430,937	June 24	2881	708	51	2055
Glass. Annealing-oven for plate	R. G. Guptill	437,027	Sept. 23	2640	689 690	52	1901
Glass. Apparatus for manufacturing plate or window	J. A. Kurtz	433,411	July 29	3670	948	52	742
Glass-beveling machine	R. R. Newton	423,799	Mar. 18	2163	571 572	50	1562
Glass-blowing apparatus	S. Sheppard, F. Hazlett, and S. J. Cluff	437,823	Oct. 7	232	71, 72	53	46
Glass bottles. Apparatus for making	J. Boyer	428,712	May 27	2569	651	51	1347
Glass bottles. Apparatus for the manufacture of	W. Ambler	443,033	Dec. 16	2254	579	53	1721
Glass bottles. Machine for making	H. M. Ashby	433,062	June 29	3172	816	52	641
Glass bottles or like articles. Mold for making	S. Washington	424,524	Apr. 1	134	35, 36	51	27
Glass-carrier	G. H. Dickey and W. Duster	429,847	June 10	1119	276	51	1697
Glass carrier. Plate	R. G. Guptill	430,283	June 17	1845	452 453	51	1847
Glass cutting and drawing frame	J. Glass	419,640	Jan. 21	1476	396	50	316
Glass-cutting box	J. G. C. Farnham	425,770	Apr. 15	2036	542	51	414
Glass-lifting machine	O. J. Michaels and C. Baeder	427,002	Apr. 29	3888	1015	51	792
Glass-finishing furnace	A. Ferrari	432,796	July 22	2757	705	52	556
Glass-finishing machine	G. F. Neale	419,468	Jan. 14	1237	328	50	260
Glass-flating ovens. Appliance for	T. A. Zellers	421,152	Feb. 11	1083	278 279	50	779
Glass from pots. Removing molten	H. Schulze-Berge	421,620	Feb. 18	1762	461	50	914
Glass-furnace	J. B. Archer	427,654	May 13	941	236	51	1006
Glass-furnace	A. Weyer	439,029	Oct. 21	2090	559 560	53	412
Glass. Handling and laying	G. H. Dickey and W. Duster	429,846	June 10	1118	276	51	1697
Glass-leer	A. Ferrari	431,884	July 8	1343	338	52	271
Glass-leer. Window	J. H. Lubbers	427,882	May 13	1310	331	51	1077
Glass-lifting device. Plate	W. S. Jarboe	438,584	Oct. 14	1373	372	53	271
Glass. Machine for the manufacture of plate	P. Simon	425,348	Apr. 8	1393	371	51	290
Glass. Making	F. Lannoy	435,936	Sept. 9	869	228	52	1540
Glass. Making plate	T. R. Settles and G. H. Schmitt	431,489	July 1	701	176	52	141
Glass manufacture. Mold for ornamental	H. Northwood	431,388	July 1	549	137	52	111
Glass. Manufacture of plate	J. T. Pennycook	434,400	Aug. 12	1453	378 379	52	1052
Glass. Manufacture of window or plate	J. A. Kurtz	433,410	July 29	3668	947	52	742
Glass. Means for transferring molten	F. Schofeld	424,825	Apr. 1	611	160	51	118
Glass. Means for transferring pots containing molten	F. Schofeld	424,826	Apr. 1	612	161	51	118
Glass-melting furnace	L. Houze	434,184	Aug. 12	1118	290	52	985
Glass-melting furnace	L. Houze	434,931	Aug. 26	2335	617	52	1238
Glass-melting pot	E. Kaye	426,820	Apr. 29	3640	949	51	744
Glass-mold	C. E. Beam	442,599	Dec. 16	1525	393	53	1577

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Glass-mold for casting feet to blown bowls	M. J. Morton, T. Blankensop, and S. Hipkins, Jr.	423,264	Mar. 11	1369	356	50	1403
Glass-pipe-casting machine	R. G. Guptill	438,806	Oct. 21	1736	{ 466 467 }	53	343
Glass-pipe-casting machine	R. G. Guptill	438,807	Oct. 21	1740	467	53	344
Glass-polisher	W. H. Ely	418,707	Jan. 7	83	19	50	18
Glass-polisher	C. G. Ffiek	423,749	Mar. 18	2081	552	50	1548
Glass-polishing wheel	W. Kimble	421,727	Feb. 18	1906	501	50	943
Glass-press	S. Hipkins, Jr.	442,890	Dec. 16	2034	522	53	1675
Glass-press	C. H. Read	442,350	Dec. 9	1094	267	53	1482
Glass-rolling mechanism. Plate.....	R. G. Guptill	437,028	Sept. 23	2643	{ 690 691 }	52	1902
Glass shades, &c. Mold for forming flanges on	G. H. Lomax	438,893	Oct. 21	1893	503	53	372
Glass. Traveler for transporting	R. G. Guptill	430,284	June 17	1847	453	51	1847
Glass. Treating plate	H. B. Niles and J. B. Ford	433,254	July 29	3461	893	52	700
Glass-tube cutter	F. McGar	433,537	Aug. 5	134	38	52	783
Glass vessels. Apparatus for making	C. N. Brady	428,713	May 27	2570	651	51	1347
Glass wash-boards. Press for making	C. Cornelius and H. Schildhauer	424,049	Mar. 25	2552	{ 680 681 }	50	1643
Glassware. Apparatus for reheating and finishing	M. R. Caldwell	442,855	Dec. 16	1966	505	53	1664
Glassware. Apparatus for the manufacture of	W. Buttler	431,874	July 8	1330	334	52	268
Glassware. Apparatus for the manufacture of	H. Schulze-Berge	439,196	Oct. 28	2352	633	53	466
Glassware. Apparatus for the manufacture of	H. Schulze-Berge	439,198	Oct. 28	2358	{ 633 634 }	53	467
Glassware grinding and polishing machine	H. C. Wood and A. J. Snoburger	428,195	May 20	1760	445	51	1174
Glassware. Machine for grinding	G. A. Macheth	426,671	Apr. 29	3406	894	51	699
Glassware. Machine for pressing and blowing	E. and J. A. Jones	436,790	Sept. 23	2226	586	52	1821
Glassware. Manufacture of	H. Schulze-Berge	421,621	Feb. 18	1765	462	50	914
Glassware. Manufacture of	H. Schulze-Berge	439,197	Oct. 28	2355	633	53	467
Glassware. Manufacture of	C. Ulfag	439,447	Oct. 28	2768	737	53	544
Glassware. Mold for casting hollow	M. J. Morton, T. Blankensop, and S. Hipkins, Jr.	424,331	Mar. 25	2958	{ 788 789 }	50	1722
Glassware. Press for forming lenses on articles of	G. B. Barnes	418,881	Jan. 7	357	86	50	75
Glassware. Revolving mold for	A. G. Neville	443,403	Dec. 23	2903	747	53	1853
Glassware. Tool for crimping	E. J. Rambo	438,019	Oct. 7	531	149	53	101
Glazed structure	W. H. Coulson	429,375	June 3	416	98, 99	51	1550
Glazed structure	A. Drummond	443,506	Dec. 30	3073	792	53	1895
Glazed structures. Sheet-metal bar for	W. F. Mills	437,129	Sept. 23	2795	729	52	1932
Glazier's diamond	J. E. Lloyd	442,062	Dec. 2	687	185	53	1397
Glaziers' points. Making	J. B. Hastings	438,582	Oct. 14	1370	371	53	270
Glazing-bar	T. W. Helliwell	439,066	Oct. 21	2149	577	53	423
Gleaner, binder, and swathing-machine. Combined	C. N. Owen	426,952	Apr. 29	3809	996	51	777
Globe and lamp shade	O. F. Wegener	440,212	Nov. 11	890	229	53	793
Globe or shade holder	L. Schlegelmilch	421,319	Feb. 11	1324	342	50	825
Globes. Mounting terrestrial	M. Wheeler	438,126	Oct. 7	696	189	53	134
Glory-hole furnace	G. Warner	424,386	Mar. 25	3063	813	50	1743
Glove	J. J. Kennedy	432,708	July 22	2607	667	52	528
Glove	M. Neuburger, M. A. Perlinsky, and G. H. Gaylord	433,630	Aug. 5	277	73	52	810
Glove	H. Urwick	421,993	Feb. 25	2273	{ 598 599 }	50	1021
Glove-adjuster	M. E. Towse	427,133	May 6	170	45	51	845
Glove. Ball-catcher's	H. L. Naramore	436,540	Sept. 16	1825	481	52	1736
Glove-band	C. E. McElroy	441,693	Dec. 2	97	26	53	1281
Glove. Base-ball	G. C. Kohler	425,887	Apr. 15	2206	586	51	446
Glove. Boxing	J. Stewart	421,447	Feb. 18	1496	388	50	864
Glove. Corn-husking	F. Bertreau and A. G. Hoegren	436,206	Sept. 9	1289	336	52	1626
Glove-donning implement	I. D. Crispell	429,890	June 10	1187	295	51	1710
Glove-fastener	C. A. Bryant	423,665	Mar. 18	1975	521	50	1527
Glove-fastener	C. A. Bryant	423,666	Mar. 18	1976	521	50	1527
Glove-fastener	T. R. Hyde, Jr.	436,137	Sept. 9	1180	308	52	1605
Glove-fastener	E. J. Kraetzer	424,794	Apr. 1	565	150	51	110
Glove-fastener	E. J. Kraetzer	424,795	Apr. 1	566	150	51	110
Glove-fastener	A. G. Mead	437,161	Sept. 23	2866	745	52	1943
Glove-fastener	E. Raudnitz	433,696	Aug. 5	377	96	52	829
Glove-fastener	A. J. Shipley	428,967	May 27	2940	754	51	1422
Glove-fastener	A. J. Shipley	437,004	Sept. 23	2608	681	52	1694
Glove-fastener	M. D. Shipman	429,179	June 3	110	26	51	1493
Glove-fastener	M. D. Shipman	437,254	Sept. 30	3013	790	52	1979
Glove-fastener	J. R. Smith	436,158	Sept. 9	1211	316	52	1611
Glove-fastener	E. B. Whitney	422,272	Feb. 25	2703	712	50	1099
Glove-fastening	W. F. Foster	437,296	Sept. 30	3076	806	52	1991
Glove-fastening	R. H. Hutchinson	428,100	May 20	1631	414	51	1150
Glove-fastening	A. C. Mather	433,689	Aug. 5	368	94	52	828
Glove-fastening	J. W. McIndoe and B. B. Emery	434,114	Aug. 12	1011	263	52	964
Glove-fastening	E. Pringle	429,177	June 3	106	25	51	1492
Glove-fastening	E. Pringle	443,792	Dec. 30	3527	905	53	1982
Glove-fastening	M. D. Shipman	438,866	Oct. 21	1854	492	53	364
Glove. Husking	L. H. Sholder	429,653	June 10	837	203	51	1643
Gloves, &c. Fastening for	J. B. Chase	437,750	Oct. 7	113	35	53	25
Gloves, &c. Fastening for	F. S. McKenney	439,034	Oct. 21	2099	562	53	413
Glue and gelatine molds. Treating	G. Koller	419,779	Jan. 21	1685	.....	50	354
Glue compound	R. W. Johnson	426,187	Apr. 22	2685	.....	51	546
Glue-stock. Apparatus for dissolving	T. P. Milligan	420,163	Jan. 28	2290	{ 606 607 }	50	482
Glycerine from spent soap-lye. Recovering	A. Domeier and O. C. Hagemann	428,468	May 20	2186	551	51	1256
Glycerine from spent soap-lye. Recovering	E. K. Mitting	428,509	May 20	2240	.....	51	1267
Glycerine from spent soap-lye. Recovering	E. K. Mitting	428,510	May 20	2241	.....	51	1267
Glycerine from spent soap-lyes. Recovering	C. L. Porter	420,830	Feb. 4	585	151	50	675
Glycerine. Purifying	O. C. Hagemann	428,484	May 20	2210	559	51	1261
Glycerine recovered from spent soap-lye. Distilling	A. Domeier and O. C. Hagemann	428,471	May 20	2194	554	51	1258
Goad	D. H. Talbot	423,353	Mar. 11	1500	393	50	1428
Gold and platinum from other metals in solution. Separating	E. Dodé	440,143	Nov. 11	778	204	53	770
Gold, &c. Apparatus for the solution of	S. H. Eumens	430,379	June 17	1990	491	51	1876

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Gold-saving apparatus	O. H. Bagley	419,908	Jan. 21	1891	497	50	397
Gold-saving device	C. Trafton	430,305	June 17	1875	461	51	1854
Gold, silver, and quicksilver. Apparatus for saving	F. A. Luckenbach	425,545	Apr. 15	1692	452	51	347
Gold wire. Seamless compound	L. L. Burdon	149,693	Nov. 18	1686	434	53	951
Gong. Alarm	A. E. Briggs	434,578	Aug. 19	1729	453	52	1115
Gong. Car	F. B. Rae	423,392	Mar. 11	1555	408	50	1439
Gong. Electro-mechanical	G. Doyle	436,560	Sept. 16	1848	487	52	1741
Goods from shelves. Device for lifting	J. H. Jeffrey	420,725	Feb. 4	414	110	50	645
Governor	O. K. Cole	423,221	Mar. 11	1303	339	50	1392
Governor	J. F. Kirby	436,938	Sept. 23	2521	660	52	1877
Governor. Engine	R. M. Beck	441,738	Dec. 2	169	45	53	1295
Governor. Engine	W. Dennis	435,923	Sept. 9	851	{ 223 } 224	52	1546
Governor. Engine	M. A. Green	442,774	Dec. 16	1821	471	53	1635
Governor for gas-engines and other like motors	E. F. Delamare-Deboutteville, and L. P. C. Malandin.	424,099	Mar. 25	2621	{ 698 } 699	50	1657
Governor for power-engines. Automatic	A. Willmer	425,118	Apr. 8	1046	279	51	211
Governor for steam-engines. Centrifugal	J. W. Brown	423,726	Mar. 18	2060	543	50	1542
Governor. Gas-engine	M. M. Barrett and J. F. Daly	443,064	Dec. 16	2296	588	53	1729
Governor. Gas-engine	W. S. Sharpneck	441,025	Nov. 18	2229	576	53	1053
Governor. Hydraulic	E. J. Wood	436,164	Sept. 9	1920	318	52	1612
Governor. Reaction-motor	P. M. Sharples	442,462	Dec. 9	1293	335	53	1522
Governor. Steam-engine	L. Anderson	441,630	Dec. 2	1	1	53	1263
Governor. Steam-engine	S. S. Babbitt	436,394	Sept. 16	1589	420	52	1694
Governor. Steam-engine	S. S. Babbitt and A. Randolph	435,083	Aug. 26	2553	{ 673 } 674	52	1279
Governor. Steam-engine	J. T. Case	437,641	Sept. 30	3609	944	52	2007
Governor. Steam-engine	W. J. Creelman	434,252	Aug. 12	1230	319	52	1006
Governor. Steam-engine	C. S. Dutton	426,585	Apr. 29	3276	860	51	674
Governor. Steam-engine	F. Hart	421,931	Feb. 25	2199	576	50	1006
Governor. Steam-engine	A. Hendey	439,950	Nov. 4	490	{ 127 } 128	53	704
Governor. Steam-engine	C. J. Rinderknecht	427,615	May 13	887	223	51	996
Governor. Steam-engine	T. and F. A. Scheffler	421,871	Feb. 18	2111	554	50	980
Governor. Steam-engine	S. T. Williams	432,781	July 22	2727	697	52	550
Governor. Steam-engine	W. O. Worth	434,575	Aug. 19	1724	451	52	1114
Governor. Stop	G. M. Bole and A. D. Hamilton	428,064	May 20	1576	400	51	1138
Grab-hook	O. Boiteau	443,473	Dec. 23	3016	774	53	1875
Grabs, buckets, &c. Apparatus for opening and closing	J. H. Morgan	426,600	Apr. 29	3297	865	51	678
Grader. Road	J. Fleming	433,780	Aug. 5	511	132	52	855
Grader. Road	J. M. Holland	442,975	Dec. 16	2163	557	53	1702
Grading and ditching machine	R. M. Thompson	429,368	June 3	407	96, 97	51	1548
Grading and ditching machine	W. C. Williams	422,870	Mar. 4	751	191	50	1281
Grading and leveling device. Road	J. S. Rutherford	442,549	Dec. 9	1437	368	53	1550
Grading and leveling instrument	D. D. Rogers	419,711	Jan. 21	1587	424	50	335
Grading-machine	J. C. Pate	435,767	Sept. 2	598	159	52	1490
Grading-machine	F. Scholes	438,863	Oct. 21	1851	491	53	363
Grading or road-scraping machine	C. E. Kilpatrick	431,470	July 1	671	168	52	135
Grain-adjuster	G. H. Flint	438,129	Oct. 7	701	190	53	135
Grain and seed separator and grader	W. S. Wood	429,749	June 10	971	238	51	1670
Grain-binder	F. G. Becker	423,115	Mar. 11	1148	298	50	1361
Grain-binder	C. Breuscher	433,644	Aug. 5	299	79	52	815
Grain-binder	C. Colahan	425,565	Apr. 15	1721	461	51	352
Grain-binder	P. P. Coler. (Reissue)	11,102	Aug. 19	2272	{ 595 } 596 597	52	1219
Grain-binder	P. P. Coler. (Reissue)	11,103	Aug. 19	2276	{ 597 } 598 599	52	1219
Grain-binder	J. G. Gilmer	443,176	Dec. 23	2522	{ 645 } 646 110	53	1778
Grain-binder	P. Hanson	424,709	Apr. 1	420	{ 111 } 112 512	51	83
Grain-binder	E. Hawley and C. L. Barrett	419,945	Jan. 21	1946	{ 513 } 513 177	50	408
Grain-binder	E. Hawley and C. L. Barrett	442,045	Dec. 2	654	{ 176 } 177	53	1391
Grain-binder	W. M. Holmes	422,414	Mar. 4	72	20, 21	50	1151
Grain-binder	E. M. Kellogg	422,947	Mar. 11	893	{ 234 } 235 462	50	1314
Grain binder	S. D. Locke	423,524	Mar. 18	1754	{ 463 } 463	50	1486
Grain-binder	G. A. Lowry	443,599	Dec. 30	3218	827	53	1923
Grain-binder	J. Miller	419,128	Jan. 7	712	{ 187 } 188 200	50	150
Grain-binder	L. Miller	419,154	Jan. 7	755	{ 201 } 201	50	157
Grain-binder	J. Miller	429,046	May 27	3068	792	51	1445
Grain-binder	J. P. Monroe	420,465	June 3	544	{ 131 } 132 133 134 357 358	51	1577
Grain-binder	M. L. Nichols	423,267	Mar. 11	1374	{ 359 } 360 361	50	1404
Grain-binder	M. L. Nichols	423,389	Mar. 11	1549	407	50	1438
Grain-binder	H. E. Pridmore	422,444	Mar. 4	113	31, 32	50	1158
Grain-binder	H. E. Pridmore	437,719	Oct. 7	63	20, 21	53	15
Grain-binder	H. E. Pridmore	442,544	Dec. 9	1427	365	53	1548
Grain-binder	H. E. Pridmore	442,545	Dec. 9	1429	{ 366 } 367	53	1549

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Grain-binder	J. F. Seiberling	426,867	Apr. 29	3702	966	51	756
Grain-binder	J. R. Severance	424,507	Apr. 1	103	30	51	23
Grain-binder	B. F. Stewart	428,645	May 27	2444	622	51	1325
Grain-binder	H. Stoffel	441,599	Nov. 25	3186	820	53	1243
Grain-binder	C. B. Withington	422,103	Feb. 25	2439	644	50	1050
Grain-binder cord-holder	W. Ogden	420,092	Jan. 28	2175	572	50	460
Grain-binder cord-holder	H. E. Pridmore	436,909	Sept. 23	2474	645	52	1868
Grain-binder frame	H. Tuttle	432,807	July 22	2771	709	52	558
Grain-binder knotting device	A. O. Carman	423,124	Mar. 11	1158	301	50	1363
Grain-binder knotting device	A. O. Carman	423,125	Mar. 11	1162	302	50	1364
Grain-binder mechanism trip	L. Miller and A. E. Ellinwood	438,703	Oct. 21	1568	421	53	312
Grain-binder needle	T. C. Wilkin	443,639	Dec. 30	3284	847	53	1935
Grain-binder packer	O. O. Storle	429,706	June 10	916	224	51	1659
Grain-binder trip mechanism	J. F. Seiberling	426,550	Apr. 29	3222	844	51	663
Grain-binder twine-holder	D. Gabel	427,844	May 13	1237	313	51	1064
Grain-binders. Bundle-carrier for	A. Lecheler	420,237	Jan. 28	2414	642	50	504
Grain-binders. Cord-holder for	J. F. Seiberling	430,697	June 24	2496	609	51	1981
Grain-binders. Cord-holder for	J. F. Seiberling	440,510	Nov. 11	1391	360	53	885
Grain-binders. Knot-tying mechanism for	M. A. Keller	422,798	Mar. 4	629	161	50	1257
Grain-binders. Relief-rake for	H. E. Pridmore	435,519	Sept. 2	206	162	52	1414
Grain-binders. Starting mechanism for	J. S. Davis	419,423	Jan. 14	1168	310	50	246
Grain-carrier	E. B. Keith	425,229	Apr. 8	1224	325	51	248
Grain-carrier	W. H. Knapp	432,052	July 15	1598	409	52	326
Grain-cleaner attachment	J. Grider	437,891	Oct. 7	328	96	53	64
Grain-cleaning machine	G. A. Gilbert and W. Richardson	442,805	Dec. 16	1871	433	53	1645
Grain-cleaning machine	A. Laidlaw	443,366	Dec. 23	2852	733	53	1843
Grain-conveyer	S. B. Hart	420,788	Feb. 4	503	132	50	661
Grain-conveyer. Pneumatic	A. Barclay and J. Walker	424,638	Apr. 1	310	78, 79	51	61
Grain cooling and drying apparatus	A. McDougall	432,145	July 15	1748	448	52	356
Grain-cradle	T. W. Orr	424,899	Apr. 1	721	192	51	139
Grain-drill	W. L. Acker and G. W. Kirkpatrick	437,373	Sept. 30	3213	838	52	2016
Grain-drill	G. W. Kirkpatrick	428,002	May 13	1481	376	51	1111
Grain-drill	M. L. Kissell	422,229	Feb. 25	2629	696	50	1086
Grain-drill	A. J. Martin	432,417	July 15	2139	550	52	428
Grain-drill	M. P. Motter	440,182	Nov. 11	844	217	53	784
Grain-drill	F. R. Packham	429,320	June 3	332	79	51	1534
Grain-drill	H. J. Phelps	433,027	July 29	3121	801	52	632
Grain-drill	J. H. Purdy	435,769	Sept. 2	599	159	52	1490
Grain-drill	J. W. Rhodes	420,521	Feb. 4	132	33	50	589
Grain-drill	J. W. Rhodes	433,036	July 29	3136	806	52	635
Grain-drill	J. T. Spieklemire	441,713	Dec. 2	133	35	53	1288
Grain-dump	A. H. Wehrli and F. J. Sanchez	422,102	Feb. 25	2437	643	50	1050
Grain-dumping machine	D. R. Springer	423,828	Mar. 18	2200	581	50	1570
Grain-elevator	H. M. Fulwider	436,348	Sept. 16	1505	392	52	1678
Grain-elevator	D. Wilde	442,159	Dec. 9	837	224	53	1433
Grain-elevator	F. Wyneken	430,558	June 17	2246	551	51	1924
Grain-elevators. Safety cut-off for	J. B. Soule	433,550	Aug. 5	155	43, 44	52	787
Grain-germinating apparatus	P. G. Toepfer	437,950	Oct. 7	420	118	53	80
Grain huller and scourer	J. Short	431,785	July 8	1185	297	52	240
Grain loader and weigher	H. Roberts, Jr.	418,751	Jan. 7	134	32	50	29
Grain-meter	P. Barker	418,780	Jan. 7	185	45	50	41
Grain-meter	J. S. Chase	438,370	Oct. 14	1066	290	53	210
Grain-meter	H. E. Hawk	440,354	Nov. 11	1114	286	53	833
Grain-meter	J. Henry	418,795	Jan. 7	204	50, 51	50	45
Grain-meter	G. B. Howland	429,589	June 3	738	178	51	1614
Grain-meter	M. A. Kidder	424,483	Apr. 1	61	18	51	15
Grain-meter	F. Orr	442,134	Dec. 9	798	215	53	1426
Grain-meter	F. H. Richards	442,718	Dec. 16	1723	444	53	1616
Grain-meter	J. Struble	421,875	Feb. 18	2117	555	50	981
Grain-meter. Automatic	L. A. Gillett	424,972	Apr. 8	835	223	51	170
Grain-meter. Rotary	S. Bollinger	419,176	Jan. 14	797	210	50	172
Grain-meter. Rotating	G. U. Pollard	422,832	Mar. 4	688	175	50	1269
Grain-mills. Safety device for	L. Wagner	419,162	Jan. 7	769	204	50	159
Grain packer and carrier	W. H. Knapp	435,143	Aug. 26	2641	699	52	1296
Grain-reduction machine	G. A. Buchholz	425,366	Apr. 8	1422	379	51	285
Grain registering and loading attachment	A. J. Miller	436,585	Sept. 16	1892	497	52	1748
Grain scalper, sheller, and peeling-machine	C. Franzel	426,796	Apr. 29	3605	940	51	737
Grain-scourer	H. Gschwender	421,369	Feb. 11	1387	358	50	834
Grain-scourer	P. Provost	439,555	Oct. 28	2924	777	53	574
Grain scourer and cleaner	D. M. McKinnon	429,945	June 10	1261	312	51	1725

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Grain scourer and cleaner.....	A. Moore.....	443,372	Dec. 23	2860	736	53	1845
Grain-scourers, &c. Device for operating the shaking-shoes of.....	W. W. Huntley.....	436,561	Sept. 16	1888	496	52	1748
Grain. Separating.....	J. M. King.....	435,542	Sept. 2	247	69	52	1423
Grain-separating screen.....	C. Closz.....	434,246	Aug. 12	1214	315	52	1003
Grain-separating screen.....	C. Closz.....	434,247	Aug. 12	1215	316	52	1003
Grain-separating screen.....	C. Closz.....	434,248	Aug. 12	1216	316	52	1003
Grain-separator.....	H. A. Barnard.....	435,167	Aug. 26	2674	{ 706 } 707	52	1302
Grain-separator.....	B. T. Boomer.....	423,304	Mar. 11	1435	374	50	1416
Grain-separator.....	J. H. Calkins.....	430,335	June 17	1929	472	51	1863
Grain-separator.....	E. E. Chapman.....	432,370	July 15	2069	532	52	414
Grain-separator.....	S. E. Chase.....	432,117	July 15	1698	436	52	346
Grain-separator.....	C. Closz.....	434,249	Aug. 12	1217	{ 316 } 317	52	1004
Grain-separator.....	W. L. Gilson.....	429,616	June 10	775	187	51	1632
Grain-separator.....	J. F. Hatfield.....	422,776	Mar. 4	596	153	50	1251
Grain-separator.....	O. M. Morse.....	429,634	June 10	804	196	51	1637
Grain-separator.....	F. Strobel.....	434,735	Aug. 19	1998	{ 521 } 522	52	1165
Grain-separator elevator.....	S. B. Hart.....	434,082	Aug. 12	955	250	52	953
Grain-shoveling apparatus.....	W. H. Cummings.....	422,123	Feb. 25	2474	{ 653 } 654	50	1057
Grain-spout.....	S. B. Hart.....	435,968	Sept. 9	913	240	52	1556
Grain tally or register.....	J. B. McCutcheon.....	419,281	Jan. 14	950	250	50	201
Grain-washing apparatus.....	H. Smith.....	439,905	Nov. 4	421	108	53	690
Graining. Apparatus for.....	D. Johnson.....	437,437	Sept. 30	3316	865	52	2036
Gramophone.....	W. Sness.....	427,279	May 6	391	102	51	887
Granular and powdered substances. Apparatus for separating, dressing, and finishing.....	E. V. Gardner.....	420,496	Feb. 4	99	24	50	583
Graphite. Separating metallic impurities from.....	M. W. Parrish.....	429,386	June 3	437	103	51	1554
Graphophone.....	J. Daniels.....	436,576	Sept. 16	1875	493	52	1746
Graphophone.....	M. L. Deering.....	428,273	May 20	1887	475	51	1199
Graphophone.....	R. H. St. John.....	430,750	June 24	2607	639	51	2002
Graphophone.....	J. H. White.....	424,914	Apr. 1	742	198	51	143
Graphophone.....	J. H. White.....	429,827	June 10	1090	269	51	1692
Graphophone.....	J. H. White.....	432,462	July 15	2212	571	52	414
Graphophone-tablet.....	C. S. Tainter.....	421,450	Feb. 18	1501	389	50	865
Graphophones. Machine for the manufacture of wax-coated tablets for.....	C. S. Tainter.....	428,646	May 27	2447	624	51	1325
Graphophony.....	D. W. Brown.....	424,956	Apr. 8	808	217	51	165
Grapple.....	A. H. Geer.....	423,754	Mar. 18	2097	554	50	1549
Grappling-hook.....	S. A. Saxon.....	435,590	Sept. 2	321	90	52	1437
Grass-receptacle.....	C. H. Latham.....	435,183	Aug. 26	2701	{ 713 } 714	52	1307
Grate.....	L. N. Emery.....	431,806	July 8	1222	306	52	247
Grate.....	A. C. Fletcher.....	432,391	July 15	2112	543	52	422
Grate.....	P. F. Gibbons.....	443,750	Dec. 30	3478	{ 892 } 893	53	1972
Grate.....	F. M. Goodall.....	422,763	Mar. 4	577	{ 148 } 149	50	1247
Grate.....	H. N. Hemingway.....	439,006	Oct. 21	2058	551	53	406
Grate.....	C. S. Keith.....	441,307	Nov. 25	2738	708	53	1156
Grate.....	S. Lanceskes.....	439,527	Oct. 28	2884	767	53	567
Grate.....	W. L. Mitchell.....	439,968	Nov. 4	521	137	53	709
Grate.....	W. J. Owens.....	440,605	Nov. 11	1546	398	53	914
Grate.....	J. P. Thomas.....	424,234	Mar. 25	2802	748	50	1693
Grate.....	J. Tontz.....	436,813	Sept. 23	2279	600	52	1832
Grate and heater. Open.....	W. S. Essick.....	423,141	Mar. 11	1193	312	50	1370
Grate and stove. Combination.....	M. Dallas.....	435,965	Sept. 9	909	240	52	1556
Grate and stove. Convertible open-fire.....	G. A. Smith.....	422,355	Feb. 25	2843	749	50	1125
Grate-bar.....	J. Ashcroft.....	423,465	Mar. 18	1667	443	50	1469
Grate-bar.....	D. U. Cory.....	433,519	Aug. 5	112	33	52	779
Grate-bar.....	S. W. Evans.....	428,595	May 27	2377	604	51	1313
Grate-bar.....	F. M. Ferguson.....	431,204	July 1	260	65	52	53
Grate-bar.....	C. E. Getchell.....	423,603	Mar. 18	1862	491	50	1505
Grate-bar.....	W. J. Owens.....	443,461	Dec. 23	2995	770	53	1871
Grate-bar.....	O. Reilly.....	434,722	Aug. 19	1982	516	52	1162
Grate-bar.....	G. V. Soulat and A. P. Trouard.....	438,499	Oct. 14	1247	338	53	246
Grate-bar. Steam-generating.....	W. H. Farris.....	439,131	Oct. 28	2255	606	53	448
Grate. Dumping.....	J. Thurell.....	437,529	Sept. 30	3455	903	52	2066
Grate fender. Open fire.....	D. S. Watson.....	423,843	Mar. 18	2322	587	50	1574
Grate. Fire.....	W. Musick.....	418,810	Jan. 7	227	55	50	49
Grate for burning sawdust, &c.....	J. M. R. Kennedy.....	421,288	Feb. 11	1272	328	50	814
Grate for gaseous fuel.....	C. G. Elwood.....	438,749	Oct. 21	1659	445	53	328
Grate-front.....	H. D. Pursell.....	419,064	Jan. 7	628	163	50	132
Grate. Parlor.....	C. J. Wadsworth.....	422,471	Mar. 4	161	43	50	1167
Grate. Parlor.....	C. J. Wadsworth.....	422,472	Mar. 4	162	43, 44	50	1167
Grate. Rotative fire.....	H. Born.....	421,378	Feb. 18	1407	364	50	846
Grate. Sectional.....	M. Hamlin.....	430,943	June 24	2888	710	51	2056
Grate. Ventilating.....	P. Miller.....	422,887	Mar. 4	789	202	50	1287
Grate. Ventilating.....	P. Miller.....	438,274	Oct. 14	930	251	53	183
Grater.....	S. T. Jull.....	437,695	Oct. 7	25	8	53	8
Grater.....	E. C. Roraback.....	438,588	Oct. 14	1378	374	53	272
Grater.....	F. A. Schaeetzke.....	440,901	Nov. 18	2038	525	53	1017
Grater.....	G. H. Thomas.....	429,663	June 10	849	206	51	1645
Grater and chopper. Culinary.....	E. Baltzey.....	419,103	Jan. 7	679	{ 178 } 179	50	143
Grater. Coconut.....	W. F. Turnbull.....	425,472	Apr. 15	1592	425	51	327
Grater. Nutmeg.....	J. E. Gironx.....	433,077	July 29	3197	821	52	646
Grater. Nutmeg.....	C. M. Maxson.....	435,235	Aug. 26	2764	730	52	1320
Grating.....	J. B. West.....	424,525	Apr. 1	126	36	51	28
Grating-machine.....	J. N. Colby.....	439,930	Nov. 4	455	119	53	697
Grave-decorating device.....	A. W. Anderson.....	423,546	Mar. 18	1787	469	50	1491

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Grave-marker and bouquet and flag holder	T. E. Barrow	443,741	Dec. 30	3447	884	53	1966
Gravel-washer	C. S. Clark	422,378	Mar. 4	27	8, 9	50	1142
Gravity-scalper	F. Noble	440,883	Nov. 18	2008	516	53	1010
Gravity shifting apparatus. Fluid-actuated	M. B. Mills	439,884	Nov. 4	384	100	53	682
Grease-box	J. Van Develde	436,679	Sept. 16	2041	533 534	52	1777
Grease-cup	E. H. Benners	425,484	Apr. 15	1606	429	51	330
Grease-cup	E. H. Benners	431,867	July 8	1321	331	52	266
Grease-cup	T. J. Hart	440,309	Nov. 11	1056	272	53	822
Grease lubricator	C. Verniard	428,657	May 27	2469	628	51	1329
Grease-trap	J. Demarest	436,124	Sept. 9	1157	302	52	1601
Griddle	A. Jacoby	434,788	Aug. 19	2073	542	52	1180
Gridiron	W. C. Perkins. (Reissue)	11,080	May 27	3161	814	51	1464
Grinder. Automatic scissors	F. Visscher	442,788	Dec. 16	1840	476	53	1639
Grinder. Cutter	F. Holz	439,154	Oct. 28	2285	613 614	53	454
Grinder for finger-bars and sickle-bars for mowing and reaping machines	W. S. Williams	434,124	Aug. 12	1029	267	52	967
Grinder for mowing, reaping, and binding machines. Knife	E. J. McQuaid	434,289	Aug. 12	1285	334	52	1017
Grinder for reaper and mower knives	W. A. White	434,123	Aug. 12	1027	266	52	967
Grinder. Sickle	H. Thibault	440,337	Nov. 11	1091	280	53	828
Grinder. Tool	L. B. Benton	422,874	Mar. 4	758	193	50	1281
Grinding and amalgamating machine	T. W. Watson and T. Denny	423,502	Mar. 18	1721	453	50	1480
Grinding and amalgamating mill	M. Crawford	433,163	July 29	3328	861	52	672
Grinding and polishing apparatus	W. J. Fisher	421,487	Feb. 18	1559	402	50	876
Grinding and polishing balls. Machine for	J. V. Clark	423,512	Mar. 18	1737	458	50	1483
Grinding and polishing machine	A. Manecke	439,300	Oct. 28	2550	681	53	503
Grinding. Ball	C. E. Gould	431,163	July 1	194	49	52	40
Grinding cutlery-handles. Machine for	A. Johnston	433,526	Aug. 5	121	35	52	780
Grinding. Device for holding tools for	J. Blakeslee	418,781	Jan. 7	187	45	50	41
Grinding flat surfaces. Machine for	J. F. Barber	437,747	Oct. 7	108	34	53	24
Grinding horseshoe-calks. Machine for	G. W. Barlan	428,878	May 27	2809	714	51	1396
Grinding lawn-mower knives. Machine for	C. E. Forry	418,977	Jan. 7	501	125	50	105
Grinding-machine	G. W. Brown	424,919	Apr. 1	747	199	51	145
Grinding-machine	G. W. Brown	437,640	Sept. 30	3609	944	52	2097
Grinding-machine	E. H. Fenton	428,204	May 20	1770	447 448	51	1176
Grinding-machine	T. Handloser	423,243	Mar. 11	1333	346 347	50	1398
Grinding-machine	H. E. Kay	437,996	Oct. 7	496	140 141	53	94
Grinding-machine	A. B. Landis	425,230	Apr. 8	1225	325 326	51	248
Grinding-machine	A. B. Landis	427,091	May 6	100	27, 28	51	832
Grinding-machine	A. H. Morton	439,418	Oct. 28	2719	725 726	53	536
Grinding-machine	C. H. Norton	429,697	June 10	895	218 219	51	1655
Grinding-machine	C. H. Norton	429,698	June 10	899	219 220	51	1656
Grinding-machine	C. H. Norton	434,115	Aug. 12	1012	263 264	52	964
Grinding-machine	E. H. Parks	429,700	June 10	903	220 221	51	1656
Grinding-machine	W. Porteous	427,904	May 13	1341	338 339	51	1083
Grinding-machine	G. J. Ridley	425,186	Apr. 8	1167	308	51	236
Grinding-machine	W. F. Steinhoff	420,022	Jan. 21	2061	543	50	429
Grinding-machine	H. H. Taylor	439,766	Nov. 4	205	53	53	648
Grinding-machine	G. E. Whitehead	441,997	Dec. 2	572	155	53	1375
Grinding machine. Bone	A. Lister	419,462	Jan. 14	1225	325 326	50	258
Grinding machine. Knife	W. D. Graves, Jr	425,781	Apr. 15	2050	546	51	417
Grinding machine. Metal	J. B. Hastings	438,581	Oct. 14	1369	371	53	270
Grinding machine. Twist-drill	O. S. Walker	425,839	Apr. 15	2138	571	51	433
Grinding-machines. Dust-collector for	E. King and H. Geisenhöner	438,001	Oct. 7	504	142	53	95
Grinding-machines. Means for operating	A. B. Benedict	442,349	Dec. 9	1125	293	53	1487
Grinding metallic forms. Machine for	C. E. Gould	435,495	Sept. 2	176	49	52	1409
Grinding-mill	M. J. Althouse	421,063	Feb. 11	957	246 247	50	754
Grinding-mill	W. Buchholz	437,087	Sept. 23	2721	711	52	1917
Grinding-mill	A. Cameron	443,485	Dec. 23	3037	781	53	1879
Grinding-mill	H. H. Coles	437,144	Sept. 23	2843	739	52	1939
Grinding-mill	H. Graepel	420,934	Feb. 11	767	199	50	718
Grinding-mill	D. R. Green and F. R. Fisher	437,756	Oct. 7	124	37	53	27
Grinding-mill	S. Hughes	438,728	Oct. 21	1619	435	53	321
Grinding-mill	S. Hughes	438,729	Oct. 21	1622	435 436	53	322
Grinding-mill	F. W. Ihne	429,529	June 3	651	159	51	1596
Grinding-mill	J. and A. J. Jones	422,223	Feb. 25	2621	694	50	1085
Grinding-mill	T. O. Perry	420,464	Feb. 4	64	14	50	576
Grinding-mill	L. Poulin	443,235	Dec. 23	2736	703	53	1820
Grinding-mill	O. Simpson	423,704	Mar. 18	2030	536	50	1537
Grinding-mill	D. C. Stover	430,299	June 24	2824	693	51	2044
Grinding-mill	H. C. Tayler	430,222	June 17	1711	425 426	51	1822
Grinding-mill	J. R. Tobin	440,072	Nov. 4	669	178	53	739
Grinding-mill	J. S. Woodcock	419,394	Jan. 14	1121	286 287	50	236
Grinding-mill	G. A. Young	442,848	Dec. 16	1947	501	53	1660
Grinding-mill for reducing old rubber stock	N. C. Mitchell	419,464	Jan. 14	1229	327	50	259
Grinding-mill. Roller	H. Bowman	421,658	Feb. 18	1813	475	50	925
Grinding-mill. Roller	T. W. Graham	434,707	Aug. 19	1967	511	52	1152

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Grinding-mill. Roller	W. D. Gray	436,234	Sept. 9	1323	{ 344 345 }	52	1633
Grinding mill-rollers. Machine for	H. N. J. Mansfield	426,192	Apr. 22	2688	{ 706 707 }	51	547
Grinding needle-shanks. Machine for	W. H. Dayton	434,432	Aug. 19	1516	{ 395 396 }	52	1071
Grinding pearl, ivory, &c. Machine for	J. H. Lawles	427,477	May 6	679	170	51	946
Grinding scissors or shears. Machine for	J. W. Simpson	436,156	Sept. 9	1209	315	52	1610
Grinding spherical balls. Machine for	W. D. Ormsby	422,966	Mar. 11	922	{ 243 244 }	50	1320
Grinding twist or other drills. Machine for	J. H. Storey and H. J. Bamford	428,426	May 20	2128	535	51	1246
Grinding wet material. Apparatus for	J. Hoffman	429,635	June 10	791	193	51	1634
Grindstone tool-holder	A. H. Dick	422,743	Mar. 4	552	141	50	1241
Grindstones. Cleaning the faces of	E. J. Bonett	440,616	Nov. 18	1567	463	53	927
Grip-carrier	J. Stephenson	421,629	Feb. 18	1778	465	50	917
Grip carrier or hanger	J. Volk	424,521	Apr. 1	120	34, 35	51	26
Grip device. Intermittent	W. E. Canedy	435,279	Aug. 26	2839	751	52	1334
Grip or clamp	J. W. Crawford	436,967	Sept. 23	2560	669	52	1885
Grip-sack and traveling-bag frame	F. A. Wittig	435,577	Sept. 2	305	84	52	1434
Grip-shoe	J. W. Dotson	424,644	Apr. 1	320	83	51	63
Grip-testing machine. Coin-controlled torsional	H. D. Hinckley	421,712	Feb. 18	1887	{ 495 496 }	50	940
Grommet	A. J. Robinson	422,633	Mar. 4	407	101	50	1214
Grooming device	J. S. Walker	431,497	July 1	719	179	52	144
Grooved switch	W. H. S. Wright	436,944	Sept. 23	2527	662	52	1873
Grooving-head. Adjustable	F. I. Matthews and D. J. Quinleam	423,618	Mar. 18	1887	497	50	1509
Ground-detector	C. H. Macloskie	428,050	May 13	1555	393	51	1124
Ground-roller	G. S. Burr and J. M. Cummings	426,431	Apr. 29	3054	800	51	630
GROUT	J. Murphy	442,132	Dec. 9	796	214	53	1425
Gumme-distributor and pea-planter. Combined	J. C. Fletcher	436,598	Sept. 16	1907	501	52	1751
Guard:							
<i>See</i> Bedstead-guard. Passenger-guard.							
Berth-guard. Railway cattle-guard.							
Bridge-guard. Railway-crossing stock-guard.							
Buckle-guard. Railway foot-guard.							
Car-guard. Railway safety-guard.							
Car-door guard. Railway-track foot-guard.							
Cattle-guard. Railway-trolley guard.							
Clipper sweat-guard. Razor-guard.							
Counter-guard. Rein-guard.							
Door-guard. Snow-guard.							
Dust-guard. Stove-pipe guard.							
Elevator-guard. Tail-guard.							
Fence-guard. Telephone-guard.							
Fork-guard. Watch-guard.							
Hatchway-guard. Wind-guard.							
Key-hole guard. Window-guard.							
Loom shuttle-guard. Mustache-guard.							
Guard or shield for projecting surfaces	R. L. Stickney	435,371	Aug. 26	3001	795	52	1363
Guide device	P. L. Day	438,683	Oct. 21	1526	412	53	305
Guitar	A. Le Plongeon	441,310	Nov. 25	2742	709	53	1156
Guitar	R. Lorang, J. Anderson, and P. Larsson	440,882	Nov. 18	2004	516	53	1010
Guitar or other similar stringed instrument	H. J. Casanova	425,864	Apr. 15	2180	579	51	440
Guitars. Fingering device for	W. E. Page	421,426	Feb. 18	1466	380	50	858
Gums, envelopes, &c. Moistening device for	R. E. Booraem	436,822	Sept. 23	2291	604	52	1834
Gun	E. A. Hyde	422,347	Feb. 25	2829	746	50	1123
Gun	T. J. Lovegrove	441,676	Dec. 2	71	19	53	1275
Gun	H. S. Maxim	424,119	Mar. 25	2647	706	50	1662
Gun. Air	S. D. Engle	422,025	Dec. 2	620	167	53	1384
Gun. Air	G. W. Weaver	421,793	Feb. 18	1991	524	50	958
Gun and appliance for operating the same. Dynamite	G. H. Reynolds	421,310	Feb. 11	1308	337	50	820
Gun and operating mechanism. Pneumatic	R. J. Gatling	427,848	May 13	1243	314	51	1065
Gun and operating the same. Gas-pressure	E. L. Zalinski	429,988	June 10	1336	331	51	1739
Gun and torpedo-boat. Pneumatic	R. J. Gatling	427,847	May 13	1241	314	51	1064
Gun. Automatic	H. S. Maxim	430,210	June 17	1679	{ 418 419 }	51	1816
Gun. Automatic	H. S. Maxim	436,899	Sept. 23	2458	642	52	1865
Gun. Automatic machine	H. S. Maxim	430,211	June 17	1686	{ 420 421 }	51	1817
Gun. Automatic quick-firing	E. von Skoda	429,819	June 10	1076	265	51	1688
Gun barrel. Pneumatic	G. H. Reynolds	421,314	Feb. 11	1317	341	50	821
Gun barrel. Spring air	C. J. Hamilton	427,313	May 6	435	112	51	897
Gun. Blow	W. M. Bunsen	429,499	June 3	607	149	51	1587
Gun. Breech-loading	J. M. and M. S. Browning	436,965	Sept. 23	2552	668	52	1883
Gun. Breech-loading	M. Bye	441,395	Nov. 25	2865	740	53	1180
Gun. Breech-loading	L. Conroy	437,574	Sept. 30	3521	{ 918 919 }	52	2079
Gun. Breech-loading	G. P. Gunn	421,492	Feb. 18	1567	405	50	877
Gun. Breech-loading	L. L. Hopburn	434,062	Aug. 12	907	239	52	943
Gun. Breech-loading	A. L. Hockett	435,533	Sept. 2	698	167	52	1510
Gun. Breech-loading	J. Jensen	418,951	Jan. 7	471	117	50	99
Gun. Breech-loading	O. H. J. Krag and E. Jørgensen	429,811	June 10	1062	{ 261 262 }	51	1686
Gun. Breech-loading	G. Perna	437,365	Sept. 30	3199	834	52	2013
Gun. Breech-loading	E. Pringle	439,895	Nov. 4	401	105	53	685
Gun. Breech-loading	M. F. Richardson and C. A. Woodbury	440,328	Nov. 11	1077	277	53	826
Gun. Breech-loading	C. Röstel	422,838	Mar. 4	698	179	50	1271
Gun. Breech-loading	F. H. Simonton	436,726	Sept. 16	2103	554	52	1790
Gun. Breech-loading	C. E. Sneider	435,329	Aug. 26	2923	{ 776 777 }	52	1348

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Gun. Breech-loading.....	J. Tonks.....	435,334	Aug. 26	2935	780	52	1350
Gun. Breech-loading breakdown.....	E. G. Parry.....	442,453	Dec. 9	1278	{ 330 331	{ 53	1519
Gun. Breech-loading breakdown.....	A. E. Whitmore.....	433,202	July 29	3470	896	52	702
Gun. Breech-loading magazine.....	L. F. Bruce.....	432,507	July 22	2276	{ 590 591	{ 52	463
Gun. Breech-loading safety.....	J. T. Walsh.....	433,260	July 29	3467	895	52	701
Gun. Canoe.....	J. Frick.....	426,373	Apr. 22	2542	773	51	600
Gun-carriage.....	J. B. G. A. Canet.....	425,656	Apr. 15	1871	500	51	380
Gun-carriage.....	S. H. Emmens.....	422,513	Mar. 4	216	58	50	1177
Gun-carriage.....	B. B. Hotchkiss.....	428,209	May 20	1777	449	51	1177
Gun-carriage.....	S. Seabury.....	420,170	Jan. 28	2300	{ 608 609	{ 50	484
Gun carriage and support.....	H. T. J. Thrensen.....	422,324	Feb. 25	2787	733	50	1115
Gun-carrier.....	W. C. Richards.....	439,562	Oct. 28	2934	780	53	577
Gun-charge indicator.....	G. K. Pheatt.....	439,551	Oct. 28	2920	776	53	574
Gun-lock.....	E. D. Decker.....	440,939	Nov. 18	2105	546	53	1029
Gun-lock.....	J. Frick.....	426,004	Apr. 22	2416	639	51	493
Gun. Machine.....	J. G. Accles.....	426,356	Apr. 22	2916	{ 766 767	{ 51	595
Gun. Machine.....	F. M. Garland.....	430,206	June 17	1669	{ 415 416	{ 51	1814
Gun. Machine.....	J. W. Greer.....	431,515	July 1	742	{ 185 186	{ 52	148
Gun. Machine.....	H. S. Maxim.....	439,248	Oct. 28	2447	{ 657 658	{ 53	484
Gun. Machine.....	J. L. Murphy.....	427,239	May 6	334	86	51	876
Gun. Magazine.....	J. M. and M. S. Browning.....	441,390	Nov. 25	2856	{ 737 738	{ 53	1179
Gun. Magazine.....	C. Engh.....	430,936	June 24	2876	{ 707 708	{ 51	2054
Gun. Magazine.....	M. E. Gregg.....	430,799	June 24	2665	654	51	2014
Gun. Magazine.....	K. Krnka.....	442,058	Dec. 2	680	{ 183 184	{ 53	1396
Gun. Magazine.....	H. A. Pitcher.....	433,420	July 29	3684	{ 951 952	{ 52	746
Gun. Magazine.....	S. B. Shaffer.....	435,905	Sept. 2	823	{ 218 219	{ 52	1534
Gun. Magazine spring.....	A. J. Emlaw.....	429,106	May 27	3158	814	51	1463
Gun. Magazine spring air.....	A. J. Emlaw.....	430,572	June 17	2271	558	51	1928
Gun mechanism. Breech-loading.....	L. M. R. Daudeteau and M. Darman- cier.....	426,779	Apr. 29	3575	{ 933 934	{ 51	731
Gun-mount. Jointed.....	E. W. Very.....	426,482	Apr. 29	3127	821	51	645
Gun-mounting for field artillery.....	T. Nordenfelt.....	418,925	Jan. 7	436	106	50	91
Gun. Pneumatic.....	N. W. Pratt.....	430,087	June 10	1506	374	51	1772
Gun. Pneumatic.....	G. H. Reynolds.....	421,306	Feb. 11	1292	{ 233 234 235	{ 50	817
Gun. Pneumatic.....	G. H. Reynolds.....	421,307	Feb. 11	1302	336	50	818
Gun. Pneumatic.....	G. H. Reynolds.....	421,308	Feb. 11	1303	{ 336 337	{ 50	819
Gun. Pneumatic.....	G. H. Reynolds.....	421,312	Feb. 11	1314	{ 339 340	{ 50	821
Gun. Quick-firing.....	C. Holmström and P. Nordenfelt.....	427,081	May 6	85	23	51	828
Gun-rack for tents.....	B. Watson.....	429,370	June 3	410	97	51	1549
Gun. Recoil-operated magazine.....	H. Leineweber.....	428,813	May 27	2709	{ 687 688	{ 51	1375
Gun. Recoil self-cocking.....	R. W. Cash and D. R. Brace.....	426,916	Apr. 29	3764	983	51	769
Gun-sight.....	C. Bunge.....	433,323	July 29	3558	918	52	719
Gun-sight.....	J. W. Carver.....	424,640	Apr. 1	316	82	51	62
Gun-sight.....	R. J. Cushing.....	439,271	Oct. 28	2489	667	53	492
Gun-sight.....	H. H. Grenfell.....	429,030	May 27	3031	{ 779 780	{ 51	1439
Gun-sight.....	O. A. Horner.....	434,785	Aug. 19	2070	541	52	1180
Gun-sight.....	D. S. West.....	426,887	Apr. 29	3731	974	51	762
Gun-sight. Adjustable tubular.....	J. S. Blankman.....	430,261	Jan. 28	2456	652	50	511
Gun-sight. Aligned circular.....	P. Kottlers.....	428,004	May 13	1487	378	51	1112
Gun. Spring.....	O. Pederson.....	440,190	Nov. 11	856	220	53	786
Gun. Spring.....	G. W. Seebach.....	441,512	Nov. 25	3047	784	53	1215
Gun. Spring air.....	C. H. Clement.....	434,862	Aug. 19	2176	570	52	1201
Gun. Spring air.....	H. C. Hart.....	437,491	Sept. 30	3397	890	52	2055
Gun. Spring air.....	C. M. Joslin.....	439,246	Oct. 28	2446	656	53	484
Gun. Spring air.....	A. B. Kleaber.....	440,638	Nov. 18	1597	412	53	934
Gun. Spring air.....	M. F. Stanley.....	420,316	Jan. 28	2531	671	50	526
Gun. Spring air.....	D. F. Vaughan.....	440,381	Nov. 11	1157	299	53	841
Gun. Straight-pull breech-loading.....	S. and K. Krnka.....	441,673	Dec. 2	66	18	53	1275
Gun. Submarine.....	V. F. Lássee.....	425,574	Apr. 15	1732	465	51	354
Gun. Target.....	J. W. Bruton.....	440,538	Nov. 11	1432	370	53	893
Gun valve. Pneumatic.....	R. J. Gatling.....	434,662	Aug. 19	1888	493	52	1145
Gun with reversible barrels.....	E. I. Herrick.....	426,015	Apr. 22	2430	642	51	496
Guns. Adjustable extractor for breech-loading.....	W. H. Davenport.....	442,106	Dec. 9	756	204	53	1418
Guns. Apparatus for checking or controlling the recoil of.....	J. B. G. A. Canet.....	430,920	June 24	2851	{ 699 700	{ 51	2049
Guns. Apparatus for controlling the recoil and running out of.....	P. Nordenfelt.....	436,375	Sept. 16	1560	409	52	1689
Guns. Apparatus for controlling the recoil and running out of.....	P. Nordenfelt.....	436,376	Sept. 16	1561	{ 409 410	{ 52	1689
Guns. Apparatus for pointing or laying.....	J. B. G. A. Canet.....	419,581	Jan. 14	1379	{ 369 370	{ 50	290
Guns. Apparatus for pointing or laying.....	J. B. G. A. Canet.....	430,062	June 10	1465	{ 363 364	{ 51	1764
Guns at any angle. Device for laying.....	J. Kelly.....	426,593	Apr. 29	3289	863	51	677
Guns at sea. Pointing.....	B. A. Fiske.....	435,925	Sept. 9	854	224	52	1546

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Guns. Auxiliary rifle-barrel for	J. W. McCandless	439,543	Oct. 28	2908	773	53	571
Guns. Bolt-stop with cartridge-shell ejectors for breech-loading	P. Manser	431,668	July 8	1000	249	52	205
Guns. Firing-valve-controlling mechanism for pneumatic	N. W. Pratt and M. W. Sewall	430,086	June 10	1504	{ 373 } 374	{ 51 } 51	1772
Guns in heavy ordnance. Hydro-pneumatic mechanism to check recoil of	H. A. Ramsay	437,797	Oct. 7	192	59	53	38
Guns in ships. Mounting for	N. Barnaby	436,685	Sept. 16	2050	535	52	1779
Guns. Loading and discharging	C. O. Yale	424,043	Mar. 25	2542	678	50	1642
Guns or rifles. Ejecting mechanism of sporting	J. W. Smallman	423,825	Mar. 18	2197	580	50	1569
Guns. Pointing or laying	J. B. G. A. Canet	426,239	Apr. 22	2756	732	51	561
Guns. Recoil-brake for	E. von Skoda	422,099	Feb. 25	2432	642	50	1049
Guns. Regulating firing-fluid delivery to pneumatic	E. L. Zalinski	430,101	June 10	1528	379	51	1776
Guns. Shell-extractor for bolt	P. Mauser	431,669	July 8	1002	249	52	206
Guns. Shell-extractor for bolt	P. Mauser	431,670	July 8	1003	249	52	206
Guns. Small lock for bolts of breech-loading	P. Mauser	440,955	Nov. 18	2131	552	53	1033
Gunpowder-can	N. M. Lee	424,115	Mar. 25	2644	704	50	1661
Gunstock. Manufacture of	R. von Freeden	429,516	June 3	624	51	51	1591
Gunstock	P. Long	429,631	June 10	800	195	51	1636
Gunstock. Skeleton	H. M. Quackenbush	436,997	Sept. 23	2595	679	52	1891
Gutter-bracket	A. F. Smith and H. W. Laut	419,724	Jan. 21	1601	428	50	338
Gutter-section fastener	W. H. Hawkins	426,446	Apr. 29	3073	806	51	634
Gymnasium apparatus. Parlor	J. Gloy	431,206	July 1	262	66	52	54
Gymnasium walking-track	W. L. Coop	437,887	Oct. 7	323	95	53	63
Gymnastic apparatus. Portable	E. F. Shaw	425,636	Apr. 15	1843	{ 492 } 493	{ 51 } 51	376
Gypsum. Calcining	J. Sickler	437,140	Sept. 23	2822	52	52	1936
Hair and wig	J. Y. Borden	431,837	July 8	1270	319	52	257
Hair-band	A. L. Hobbs	431,892	July 8	1352	341	52	272
Hair. Bleaching	F. G. Wiselogle	442,297	Dec. 9	1040	53	53	1472
Hair-braid and ribbon fastener	A. C. Dickinson	421,682	Feb. 18	1844	482	50	931
Hair-crimper	L. C. Wegefarth	429,984	June 10	1332	330	51	1739
Hair-crimper and the method of manufacture	I. W. Heysinger	440,154	Nov. 11	791	208	53	773
Hair-curler	J. B. Bray	426,907	Apr. 29	3754	980	51	767
Hair-curler	J. R. Cadwell	419,243	Jan. 14	898	236	50	192
Hair-curler	H. C. Guertin	420,574	Feb. 4	206	53	50	604
Hair-curler	K. A. Ryer	432,569	July 22	2379	613	52	484
Hair-curler and comb. Combined	A. C. Monfort and W. H. Peck	420,081	Jan. 23	2155	570	50	456
Hair curler and frizzer	J. H. Walbridge and J. P. Stepp	423,972	Mar. 25	2438	647	50	1632
Hair-curling device	W. E. Rushforth	421,869	Feb. 18	2108	553	50	980
Hair-drying appliance	A. C. Herring	440,153	Nov. 11	790	207	53	773
Hair-pin	M. Cashin	424,670	Apr. 1	360	95	51	70
Hair-pin and holder for eyeglasses. Combined	S. F. Merritt	423,438	Mar. 18	1630	429	50	1462
Hair-restorer	W. L. Crooks and T. Robin	421,675	Feb. 18	1836	50	50	929
Hair-separating machine. Plastering	H. A. Garvey	432,009	July 22	2427	636	52	483
Hair-singer	J. H. Bevington	433,439	Aug. 5	9	3	52	758
Halter	W. J. L. and A. Gethmann	434,182	Aug. 12	1116	290	52	985
Halter	J. Knight	432,414	July 15	2135	549	52	427
Halter	P. O'Connor	437,867	Oct. 7	297	88	53	58
Halter	W. E. Pruyne	423,626	Mar. 4	398	99	50	1212
Halter	G. J. Walbridge	431,828	July 8	1258	315	52	254
Halter	W. H. Wheeler	423,974	Mar. 25	2440	648	50	1632
Halter	A. H. Wilson and W. Harvey	441,732	Dec. 2	160	43	53	1293
Halter-tie	J. T. Johnson	437,693	Oct. 7	23	7	53	7
Hame	J. Ackerman	420,027	Jan. 23	2077	549	50	441
Hame	C. E. Berry	421,025	Feb. 11	900	232	50	743
Hame	J. E. Bull	420,433	Feb. 4	7	2	50	566
Hame	C. E. Carr	431,556	July 8	810	202	52	169
Hame	M. V. Nichols	427,891	May 13	1323	334	51	1079
Hame	D. Schoenmaker	420,361	Jan. 28	2596	690	50	538
Hame. Adjustable	A. V. Cronk	424,407	Mar. 25	3108	824	50	1752
Hame-clasp	J. E. Himmell	420,381	Jan. 28	2624	697	50	543
Hame-fastener	L. Anderson	428,059	May 20	1571	399	51	1137
Hame-fastener	J. Beeler	434,553	Aug. 19	1697	444	52	1108
Hame-fastener	F. R. Bostwick	424,499	Aug. 19	1617	423	52	1092
Hame-fastener	J. H. D. Everett	424,769	Apr. 1	517	140	51	101
Hame-fastener	J. B. Granger and W. H. Johnson	439,502	Oct. 28	2849	758	53	560
Hame-fastener	A. L. Hill	443,520	Dec. 30	3039	796	53	1898
Hame-fastener	W. H. Johnson and J. B. Granger	425,080	Apr. 8	997	267	51	201
Hame-fastener	E. Morgenroth	427,596	May 13	863	216	51	991
Hame-fastener	H. V. Padfield	440,054	Nov. 4	649	173	53	735
Hame-fastener	J. H. Parmelee	423,529	Mar. 18	1766	464	50	1487
Hame-fastener	J. H. Parmelee	442,824	Dec. 16	1914	{ 491 } 492	{ 53 } 53	1653
Hame-fastener	L. Wildhagen	434,967	Aug. 26	2382	631	52	1247
Hame-fastening	D. B. Baker	418,669	Jan. 7	6	2	50	4
Hame-fastening	J. E. Bull	427,041	May 6	12	4	51	813
Hame-hook	J. R. Griffith	435,659	Sept. 2	443	118	52	1459
Hame-hook	J. H. Watson	437,064	Sept. 23	2687	702	52	1911
Hame. Metallic	F. L. Crosby	433,980	Aug. 12	806	211	52	922
Hame-staple	P. W. Corcoran	442,105	Dec. 9	756	203	53	1418
Hame-staple and trace-tug clip	E. M. Crossan and M. L. Devers	421,558	Feb. 18	1669	432	50	896
Hame-trace attachment	C. E. Carr	422,377	Mar. 4	26	8	50	1141
Hammer	E. Gartzke	427,678	May 13	975	246	51	1013
Hammer	C. H. Newhall	436,612	Sept. 16	1921	505	52	1754
Hammer and box-opener combined. Folding	R. Steinecke	440,905	Nov. 18	2044	528	53	1018
Hammer and distributor. Combined tack	J. S. Bailey	426,095	Apr. 22	2541	669	51	516
Hammer and lifter. Combined	J. Lindley	441,879	Dec. 2	391	103	53	1341
Hammer and scraper. Combined	J. B. Mitchell	433,740	Aug. 5	438	113	52	841
Hammer. Bush	O. P. Howard	430,649	June 24	2415	598	51	1965
Hammer. Bush	J. O. Therien	425,153	Apr. 8	1110	295	51	923
Hammer. Bush	M. E. Ware	439,219	Oct. 28	2401	645	53	476
Hammer device Spring	J. L. McKee	419,702	Jan. 21	1575	421	50	333
Hammer. Drop	N. C. Stiles	421,327	Feb. 11	1333	345	50	825

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hammer. Electric power.....	C. J. Van Depoele.....	436,277	Sept. 9	1385	361	52	1646
Hammer. Foot-power.....	O. A. Busard.....	437,972	Oct. 7	458	129	53	87
Hammer-frame.....	J. Kennedy.....	442,893	Dec. 16	2050	526	53	1678
Hammer-handle attachment.....	M. E. Reilly.....	428,524	May 20	2260	574	51	1271
Hammer. Horseshoe.....	G. T. Peters.....	443,377	Dec. 23	2867	737	53	1847
Hammer. Power.....	F. W. Taylor.....	424,939	Apr. 1	776	207	51	151
Hammer. Reciprocating electric.....	C. J. Van Depoele.....	435,264	Aug. 26	2819	746	52	1330
Hammer spring. Power.....	P. D. Dupont.....	429,807	June 10	1055	259	51	1684
Hammer. Tilt or drop.....	J. Bee.....	428,766	May 27	2645	670	51	1362
Hammers, mallets, or other striking-tools. Handle for.....	J. W. Eaton.....	434,772	Aug. 19	2056	537	52	1177
Hammock.....	S. Sanders.....	419,361	Jan. 14	1078	285	50	228
Hammock and chair. Convertible.....	R. W. Messmore.....	424,329	Mar. 25	2952	766	50	1721
Hammock-canopy. Adjustable.....	W. F. Wright.....	428,993	May 27	2973	763	51	1428
Hammock-chair.....	L. L. Pearson.....	427,900	May 13	1336	337	51	1082
Hammock or bed support.....	W. M. Lyon.....	438,630	Oct. 21	1452	392	53	201
Hammock or chair support.....	F. O. Farwell.....	439,642	Nov. 4	32	9	33	612
Hammock-holder.....	A. Beals.....	429,409	June 3	468	111	51	1561
Hammock-stand. Portable curtained.....	J. J. Weston.....	427,490	May 6	697	175	51	949
Hammock-support.....	A. S. Boyum.....	435,793	Sept. 2	639	169	52	1498
Hammock-supporting structure.....	T. A. Rohrman.....	443,544	Dec. 30	3126	{ 804 805 }	{ 53 53 }	1905
Hammeck-supporting structure.....	J. Salé.....	441,507	Nov. 25	3042	783	53	1214
Hammocks. Manufacture of.....	J. B. Heitz.....	442,116	Dec. 9	771	208	53	1420
Hams, &c. Fastening device for.....	C. Maisel.....	440,815	Nov. 18	1897	488	53	989
Hand. Artificial.....	S. Lucas.....	429,243	June 3	204	50, 51	51	1511
Hand-brace.....	J. M. Baldwin.....	419,102	Jan. 7	678	178	50	143
Hand-hook.....	J. Healy.....	435,420	Sept. 2	61	20	52	1387
Hand-motor.....	N. T. Tarbox.....	435,001	Aug. 26	2432	643	52	1256
Hand-sprinkler.....	J. R. Elliott.....	429,609	June 10	769	185	51	1630
Hand-rest for penmen.....	G. F. Ellis.....	431,258	July 1	339	84	52	69
Handle: See Anger-handle. Extension-handle. Box-handle. Jug-handle. Can-handle. Kitchen-utensil handle. Car-brake handle. Knob-handle. Casket-handle. Lock-handle. Coffee or tea pot han- Mower-handle. dle. Pendent handle. Coffin-handle. Saw-handle. Cooking-utensil han- Scythe-handle. dle. Skipping-rope handle. Culinary-vessel han- Tea or coffee pot handle. dle. Tool-handle. Cutlery-handle. Vehicle-handle. Cycle-handle. Velocipede-handle. Dipper-handle.							
Handle.....	E. P. Nobbs.....	421,751	Feb. 18	1935	508	50	948
Handle.....	N. R. Streeter.....	425,352	Apr. 8	1398	{ 372 373 }	{ 51 51 }	281
Handle for vessels, &c. Non-conductive and orna- mental.....	W. P. Gould.....	433,284	July 29	3502	904	52	709
Hanger: See Barrel-hanger. Insulating-hanger. Brake-beam hanger. Lamp-hanger. Broom-hanger. Meat-hanger. Cable-hanger. Mirror-hanger. Car-door hanger. Mirror or picture hanger. Clock-hanger. Paper-bag hanger. Clothes-line hanger. Picture-hanger. Coat-hanger. Picture-frame hanger. Door-hanger. Picture-wire hanger. Eaves-trough hang- Pipe-hanger. er. Shaft-hanger. Electric-light hanger. Shafting-hanger. Gate-hanger. Tobacco-hanger. Hat-hanger. Trolley-wire hanger.							
Hanger for coats or other articles.....	J. L. and D. H. Coles.....	424,275	Mar. 25	2850	762	50	1702
Harmonica.....	J. Oefinger and B. F. Butler.....	443,607	Dec. 30	3232	831	53	1926
Harmonica.....	J. F. Stratton.....	423,642	Mar. 13	1934	509	50	1519
Harmonica.....	R. W. Weissenborn.....	435,163	Aug. 26	2669	705	52	1301
Harmonica-holder.....	G. A. Morgenthaler.....	439,415	Oct. 28	2716	725	53	535
Harness.....	C. C. Bigelow and F. T. Davis.....	429,496	June 3	602	148	51	1587
Harness.....	E. K. Blaikie.....	434,421	Aug. 19	1499	391	52	1067
Harness.....	E. Clark.....	421,123	Feb. 11	1042	.....	50	771
Harness.....	R. J. Clark.....	429,084	May 27	3126	806	51	1457
Harness.....	L. C. Erwin.....	434,259	Aug. 12	1240	321	52	1008
Harness.....	G. H. Gildersleeve.....	435,059	Aug. 26	2519	665	52	1273
Harness.....	T. Lovett and E. H. Purcell.....	437,159	Sept. 23	2865	744	52	1943
Harness.....	C. W. McDorman.....	443,106	Dec. 23	2402	612	53	1756
Harness.....	J. R. Phelps.....	438,360	Oct. 14	1055	287	53	208
Harness.....	S. M. Rhone.....	429,545	June 3	672	164	51	1600
Harness.....	T. Rosekrans.....	424,225	Mar. 25	2790	744	50	1690
Harness.....	J. C. Simpson.....	430,303	June 17	1872	460	51	1853
Harness.....	A. J. Smith.....	427,630	May 13	909	228	51	1000
Harness attachment.....	F. M. Hall.....	419,044	Jan. 7	594	152	50	125
Harness attachment.....	F. C. Kimball.....	441,493	Nov. 25	3025	780	53	1211
Harness attachment.....	C. J. Ries.....	419,075	Jan. 7	644	167	50	136
Harness. Blanket.....	J. Grim.....	426,722	Apr. 29	3493	914	51	715
Harness-blind with connected loop.....	A. J. Beck.....	433,436	Aug. 5	6	2	52	758
Harness. Breast-chain for.....	S. R. Coltebaugh.....	421,817	Feb. 18	2019	534	50	964
Harness-clip.....	A. Winter.....	430,556	June 17	2245	551	51	1924
Harness-detaching device.....	G. Fisher.....	436,226	Sept. 9	1312	342	52	1631
Harness for oxen or other cattle.....	O. R. Gottwald.....	432,400	July 15	2119	544	52	424

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Harness-girth	F. A. Fisher	435,537	Sept. 2	239	66	52	1421
Harness-hook	D. McDonough and F. H. Green	430,217	June 17	1704	424	51	1820
Harness-loop	A. W. Bennett	436,556	Sept. 16	1844	485	52	1740
Harness-machine	W. James	443,678	Dec. 30	3349	862	53	1947
Harness-machine	W. James	443,679	Dec. 30	3351	862	53	1948
Harness. Multiple metal loop for	E. L. Howe	419,951	Jan. 21	1956	515	50	409
Harness-pad	W. A. Bates	420,222	Jan. 28	2393	637	50	500
Harness-pad	W. A. Bates	424,532	Apr. 1	145	41	51	31
Harness-pad	W. K. Edgington	443,836	Dec. 30	3591	923	53	1994
Harness-pad	R. H. and J. Morrow	424,893	Apr. 1	714	190	51	138
Harness-pad	H. L. Naramore	423,797	Mar. 18	2161	571	50	1562
Harness-pad	E. Oelkuck	441,253	Nov. 25	2641	6-6	53	1138
Harness-pad	H. B. Piatt	426,318	Apr. 22	2862	754	51	584
Harness-pad fastening	F. C. Kimball	426,594	Apr. 29	3290	863	51	677
Harness-rosette	G. H. Ford	428,901	May 27	2841	722	51	1402
Harness-rosette	D. M. Ireland and C. R. Bradley	425,228	Apr. 8	1223	325	51	248
Harness-rosette	L. D. Jones	423,325	Mar. 11	1467	384	50	1422
Harness-rosette	M. Sansonoy	438,950	Oct. 21	1976	527	53	388
Harness-support	J. J. O'Neill	433,998	Aug. 12	826	217	52	926
Harness-tool	H. Egbers	437,888	Oct. 7	324	96	53	64
Harness-trimming	T. F. Durning	440,306	Nov. 11	1050	270	53	821
Harness-trimming	D. J. Regan	438,182	Oct. 14	782	213	53	157
Harness-trimmings. Coating	W. H. Steele	442,149	Dec. 9	826	221	53	1431
Harp	G. B. Durkee	437,917	Oct. 7	366	105	53	71
					106		
Harp	G. B. Durkee	437,918	Oct. 7	369	106	53	71
					107		
Harp	G. B. Durkee	437,919	Oct. 7	371	107	53	72
Harp and hanger	T. Hipwell	428,607	May 27	2394	609	51	1316
Harrow	N. L. Beck	426,704	Apr. 29	3460	906	51	708
Harrow	W. M. Brinkerhoff, L. W. Stevens, L. D. Swart, A. W. Stevens, and A. M. Nye	428,329	May 20	1981	498	51	1216
					499		
Harrow	J. D. Cleek	441,938	Dec. 2	479	127	53	1358
					128		
Harrow	C. B. Cook	433,518	Aug. 5	111	32	52	778
Harrow	T. R. Crane	438,405	Oct. 14	1123	303	53	220
					304		
Harrow	M. Daley	434,383	Aug. 12	1419	373	52	1045
Harrow	W. R. Davie	428,895	May 27	2835	721	51	1401
Harrow	D. Easton	432,821	July 22	2788	713	52	562
Harrow	S. T. Eskew	440,551	Nov. 11	1453	374	53	896
Harrow	D. O. Everest	426,666	Apr. 29	3395	891	51	697
Harrow	H. H. Frazier	427,412	May 6	586	146	51	928
					147		
Harrow	A. R. Gebbie	432,997	July 29	3071	7-8	52	622
Harrow	J. T. Grant	441,154	Nov. 25	2456	637	53	1107
Harrow	M. M. Green	438,920	Oct. 21	1929	514	53	379
Harrow	J. T. Greenwood	432,185	July 15	1801	463	52	366
Harrow	J. H. Hanson	428,392	May 20	2088	524	51	1239
Harrow	R. W. Hardie	422,406	Mar. 4	61	16	50	1149
Harrow	A. G. Hill	431,351	July 1	482	119	52	98
					120		
Harrow	H. H. Hollister and T. H. Hull	434,711	Aug. 19	1971	512	52	1159
Harrow	D. W. Inman	421,572	Feb. 18	1688	437	50	899
Harrow	E. R. Jewell	433,204	July 29	3390	876	52	684
Harrow	C. La Dow	433,573	Aug. 5	196	52	52	794
Harrow	C. La Dow	441,367	Nov. 25	2817	727	53	1170
Harrow	P. E. Little	423,523	Mar. 18	1752	461	50	1486
					462		
Harrow	H. L. Mack	421,739	Feb. 18	1918	504	50	945
Harrow	H. L. Mack	440,047	Nov. 4	639	170	53	733
Harrow	D. C. Markham	428,310	May 20	1951	489	51	1211
					490		
Harrow	W. S. McCord	427,353	May 6	494	126	51	909
Harrow	M. C. Moore	425,447	Apr. 15	1553	416	51	319
Harrow	S. Morris	442,131	Dec. 9	795	214	53	1425
Harrow	W. D. Napier	454,290	Aug. 12	1286	334	52	1017
Harrow	O. K. Oppen	419,158	Jan. 7	764	202	50	159
Harrow	S. Ritty	423,815	Mar. 18	2182	577	50	1566
Harrow	C. S. Ruef	439,691	Nov. 4	97	26	53	627
Harrow	J. Runkle	443,115	Dec. 23	2416	617	53	1759
Harrow	J. B. Shores	425,148	Apr. 8	1104	293	51	222
Harrow	D. B. Smith	423,705	Mar. 18	2031	536	50	1537
Harrow	W. T. Sterling	427,276	May 6	385	100	51	886
					101		
Harrow	O. Tower	434,962	Aug. 26	2377	630	52	1246
Harrow	E. J. Travis	440,854	Nov. 18	1966	506	53	1002
Harrow	W. V. Walker	426,695	Apr. 29	3446	903	51	706
Harrow	J. W. Whiles	443,840	Dec. 30	3604	927	53	1997
Harrow	H. Wiard and J. L. Judd	420,848	Feb. 4	615	158	50	680
Harrow and cultivator	J. A. Metzger	426,837	Apr. 29	3667	954	51	749
Harrow and cultivator	N. C. Orrick	419,214	Jan. 14	854	224	50	183
Harrow and cultivator. Combined	A. C. Brown	419,820	Jan. 21	1743	462	50	366
Harrow and cultivator. Combined	B. Ferguson and J. B. McKellor	438,880	Oct. 21	1874	497	53	368
Harrow and cultivator. Combined	F. G. Umbach	440,450	Nov. 11	1289	334	53	865
Harrow and cultivator. Double-side	M. B. Gooing	428,045	May 13	1548	392	51	1123
Harrow and cultivator. Spring-tooth	P. H. Bridenbaugh and L. A. Oellig	428,500	June 3	608	149	51	1588
Harrow and cutter. Combined	T. L. Flanagan	442,031	Dec. 2	632	171	53	1386
Harrow and seed-planter	L. B. Phelps	434,614	Aug. 19	1860	487	52	1140
Harrow-cleaner	H. P. Deuser and W. J. Snider	423,032	Mar. 11	1016	266	50	1337
Harrow. Combination	H. J. Ginn	420,682	Feb. 4	359	95	50	634
Harrow. Disk	E. C. Boyer	420,403	Jan. 28	2656	704	50	549
Harrow. Disk	E. C. Boyer	441,054	Nov. 18	2279	591	53	1063

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Harrow. Disk	A. J. Glass	427,854	May 13	1253	{ 316 317 }	51	1066
Harrow. Disk	A. J. Glass	429,437	June 3	508	131	51	1569
Harrow. Disk	S. J. Glass	427,855	May 13	1255	317	51	1067
Harrow. Disk	H. S. Howard	442,050	Dec. 2	663	{ 179 180 726 727 }	53	1393
Harrow. Disk	C. La Dow	437,124	Sept. 23	2785	{ 726 727 }	52	1930
Harrow. Disk	P. E. Little	431,370	July 1	516	128	52	104
Harrow. Disk	T. Maxon	420,817	Feb. 4	566	145	50	672
Harrow. Disk	T. Maxon	435,840	Sept. 2	719	193	52	1514
Harrow. Disk	E. Pridmore	433,654	Aug. 5	318	82	52	817
Harrow. Disk	S. Ritchie	443,793	Dec. 30	3529	905	53	1952
Harrow-disks, &c. Sharpener for	G. H. Markillie	436,530	Sept. 16	1786	471	52	1730
Harrow frame. Spring-tooth	F. J. Henry and F. A. Taylor	434,110	Aug. 12	1005	261	52	963
Harrow. Gang-plow	W. A. Zumwalt	433,608	Aug. 5	249	66	52	805
Harrow. Listing-	J. A. Boyer and G. E. Bentley	427,731	May 13	1060	266	51	1030
Harrow, pulverizer, and leveler. Combined	C. W. Chase	426,242	Apr. 22	2760	723	51	562
Harrow. Revolving	G. C. Billups	440,836	Nov. 18	1935	497	53	996
Harrow. Revolving	J. Shephard	432,286	July 15	1957	501	52	394
Harrow. Rotary	H. H. Monroe	440,178	Nov. 11	836	216	53	782
Harrow. Rotary	H. H. Monroe	441,851	Dec. 2	352	93	53	1333
Harrow. Spring-tooth	F. E. Church	423,218	Mar. 11	1298	338	50	1391
Harrow. Spring-tooth	S. N. Hench and W. A. Dromgold	419,990	Jan. 21	2015	531	50	421
Harrow. Spring-tooth	C. La Dow	431,594	July 8	866	215	52	181
Harrow. Spring-tooth	D. C. Markham	442,067	Dec. 2	695	{ 186 187 }	53	1398
Harrow. Spring-tooth	F. J. North and A. F. Molitor	435,706	Sept. 2	512	135	52	1474
Harrow. Spring-tooth	S. Ritty	419,971	Jan. 21	1981	521	50	414
Harrow. Spring-tooth	M. J. Todd	436,445	Sept. 16	1668	438	52	1708
Harrow. Spring-tooth	M. J. Todd	438,123	Oct. 7	690	187	53	133
Harrow-teeth. Holder for spring.	A. C. Hendricks	438,107	Oct. 7	673	183	53	130
Harrow-tooth fastener	W. V. Walker	421,769	Feb. 18	1984	522	50	957
Harrow-tooth holder. Reversible	D. C. Troxel	428,185	May 20	1747	442	51	1171
Harrow-tooth holder. Spring-	P. A. Spicer	434,407	Aug. 12	1466	382	52	1054
Harrow-track. Adjustable	J. and A. F. Moser	426,195	Apr. 22	2695	707	51	548
Harrows. Adjustable drag for	H. H. Revis	430,972	June 24	2930	719	51	2063
Harrows. Riding attachment for	G. M. Wernitz	435,619	Sept. 2	381	102	52	1447
Harrows. Spring-tooth for	P. R. Wells	431,241	July 1	320	79	52	65
Harvester.	J. Armstrong	436,392	Sept. 16	1586	{ 418 419 }	52	1693
Harvester.	E. D. Bangs	443,740	Dec. 30	3446	884	53	1966
Harvester.	D. W. Bovee	420,329	Jan. 28	2549	675	50	529
Harvester.	D. W. Bovee	420,376	Jan. 28	2616	694	50	541
Harvester.	G. G. Hunt	428,275	May 20	1892	476	51	1200
Harvester.	B. A. Kennedy	434,021	Aug. 12	854	225	52	931
Harvester.	S. D. Locke	422,601	Mar. 4	346	86, 87	50	1203
Harvester.	C. Madson	421,740	Feb. 18	1919	504	50	946
Harvester.	C. Miller	436,798	Sept. 23	2250	{ 592 593 594 }	52	1826
Harvester.	H. E. Pridmore	438,277	Oct. 14	934	252	53	183
Harvester.	H. E. Pridmore and W. R. Baker	442,543	Dec. 9	1423	364	53	1547
Harvester.	H. A. J. Rieckert	429,959	June 10	1285	{ 318 319 320 321 582 583 584 }	51	1730
Harvester.	A. O. Slentz	441,038	Nov. 18	2249	{ 582 583 584 }	53	1057
Harvester.	W. T. Vail	433,969	Aug. 12	793	207	52	920
Harvester.	E. G. Watrous	425,529	Apr. 15	1671	446	51	342
Harvester.	T. C. Wilkin	434,494	Aug. 19	1607	420	52	1090
Harvester and binder.	J. F. Seiberling	429,652	June 10	833	203	51	1645
Harvester and husker. Corn	L. G. Youngs and R. Richardson	438,972	Oct. 21	2009	{ 536 537 }	53	395
Harvester-apron	C. M. Fleek and K. Knudson	435,623	Sept. 2	386	104	52	1447
Harvester-binder	F. D. and J. S. Mercer	425,139	Apr. 8	1084	287	51	218
Harvester-binders. Driving mechanism for	J. C. McLachlan	438,421	Oct. 14	1144	309	53	325
Harvester. Broom-corn	H. Poole	434,070	Aug. 12	931	245	52	948
Harvester cleaner device. Cotton	G. N. Todd	423,542	Mar. 18	1782	468	50	1490
Harvester. Clover	J. H. Ettinger	435,809	Sept. 2	666	175	52	1503
Harvester. Corn	J. Armstrong	436,885	Sept. 23	2439	637	52	1862
Harvester. Corn	J. E. Burrus and L. D. Hall	438,758	Oct. 21	1671	{ 448 449 }	53	331
Harvester. Corn	W. W. Burson	436,823	Sept. 23	2293	{ 604 605 }	52	1835
Harvester. Corn	W. W. Burson	442,307	Dec. 9	1055	277	53	1475
Harvester. Corn	F. R. Clugage	438,142	Oct. 14	723	{ 198 199 }	53	146
Harvester. Corn	A. A. Faust	420,679	Feb. 4	355	93, 94	50	633
Harvester. Corn	W. Fuhlhage, Jr.	429,211	June 3	161	39	51	1502
Harvester. Corn	T. A. Galt and G. S. Tracy	432,184	July 15	1798	{ 462 463 }	52	365
Harvester. Corn	J. R. and R. N. Gebby	425,315	Apr. 8	1354	361	51	272
Harvester. Corn	J. B. Gibbs and H. Boozer	431,576	July 8	838	209	52	175
Harvester. Corn	A. N. Hadley	432,750	July 22	2672	{ 684 685 }	52	540
Harvester. Corn	F. Hazen	420,939	Feb. 11	773	{ 200 201 }	50	719
Harvester. Corn	S. W. Hope	423,766	Mar. 18	2111	557	50	1552
Harvester. Corn	D. R. Howard	434,273	Aug. 12	1262	{ 327 328 }	52	1012
Harvester. Corn	H. Ingersoll	423,770	Mar. 18	2116	{ 558 559 }	50	1553

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Harvester. Corn.....	H. L. Jones.....	429,311	June 3	317	75	51	1531
Harvester. Corn.....	P. J. Lawler and J. F. Barry.....	425,515	Apr. 15	1647	440	51	338
Harvester. Corn.....	D. T. Phillips.....	421,756	Feb. 18	1940	510 511	50	949
Harvester. Corn.....	C. H. Salzman.....	441,809	Dec. 2	282	76 77 78	53	1319
Harvester. Corn.....	G. H. Spaulding.....	426,475	Apr. 20	3113	818 819	51	642
Harvester. Corn.....	G. H. Spaulding.....	439,203	Oct. 28	2366	636 637 638	53	469
Harvester. Corn.....	J. A. Stone.....	442,922	Dec. 16	2083	535 536 537	53	1685
Harvester. Corn.....	J. W. Terman.....	432,650	July 22	2500	642 643	52	507
Harvester. Corn.....	G. F. S. Zimmerman.....	427,531	May 6	762	189	51	963
Harvester. Cotton.....	G. Beckman.....	427,218	May 6	295	76	51	869
Harvester. Cotton.....	G. Beckman.....	436,770	Sept. 23	2191	577 578	52	1814
Harvester. Cotton.....	P. J. Loonie.....	430,429	June 17	2057	507	51	1869
Harvester. Cotton.....	J. H. Masters.....	432,420	July 15	2142	551	52	429
Harvester. Cotton.....	G. N. Todd.....	423,541	Mar. 18	1781	468	50	1490
Harvester. Cotton.....	G. N. Todd.....	423,885	Mar. 18	2289	604 605	50	1587
Harvester. Cotton.....	G. N. Todd.....	441,717	Dec. 2	137	36, 37	53	1289
Harvester. Cotton.....	A. A. Wood.....	430,100	June 10	1527	379	51	1776
Harvester-cutter.....	E. H. Smith.....	426,966	Apr. 29	3832	1001	51	782
Harvester-cutter-bar.....	R. C. Davis.....	430,627	June 24	2372	579	51	1957
Harvester-cutter-bar.....	L. Miller.....	420,628	Feb. 4	288	76	50	620
Harvester-cutter. Corn.....	J. Wade.....	424,522	Apr. 1	121	35	51	27
Harvester-dropper.....	A. H. Ravenstein.....	435,320	Aug. 26	2913	773	52	1346
Harvester-elevator.....	C. D. Towne.....	423,290	Mar. 11	1420	368	50	1412
Harvester-frame.....	W. R. Baker and H. E. Pridmore.....	442,504	Dec. 9	1368	350 351	53	1537
Harvester. Grain.....	J. A. Graham.....	422,479	May 20	2205	557	51	1260
Harvester. Grain.....	R. H. Sheldon, Jr.....	427,443	May 6	636	159	51	937
Harvester. Grain.....	H. C. Stone.....	441,714	Dec. 2	135	35	53	1288
Harvester. Grain-binding.....	J. Keller.....	441,168	Nov. 25	2479	641 642	53	1111
Harvester. Grain-binding.....	L. Miller. (Reissue).....	11,064	Mar. 4	811	207 208	50	1291
Harvester. Grain-binding.....	L. Miller. (Reissue).....	11,065	Mar. 4	815	210 211	50	1291
Harvester. Grain-binding.....	L. Miller.....	434,642	Aug. 19	1852	484 485	52	1138
Harvester. Grain-binding.....	W. F. Olin.....	434,521	Aug. 19	1645	431	52	1097
Harvester. Grain-binding.....	A. O. Slentz.....	441,039	Nov. 18	2254	584	53	1058
Harvester grain-platform.....	L. Miller.....	434,641	Aug. 19	1849	483 484	52	1138
Harvester. Pea.....	J. H. Clement.....	439,344	Oct. 28	2612	696	53	515
Harvester-platform.....	T. E. Lewis.....	428,683	May 27	2524	641	51	1339
Harvester. Potato.....	A. T. Dowden.....	434,980	Aug. 26	2399	635	52	1251
Harvester. Potato.....	J. L. Woolley.....	425,922	Apr. 15	2254	597	51	453
Harvester-reel.....	J. E. Hudson.....	432,048	July 15	1592	407	52	325
Harvester-reel attachment.....	L. Peterson.....	422,152	Feb. 25	2516	665	50	1065
Harvester reel. Corn.....	I. McCollister and B. F. Rennard.....	435,238	Aug. 26	2768	731	52	1321
Harvester-reel driving and adjusting mechanism.....	L. Miller and A. E. Ellinwood.....	420,627	Feb. 4	286	76	50	619
Harvester-reel support.....	J. A. Graham.....	431,970	July 8	1464	370 371	52	295
Harvester. Self-binding.....	F. W. Colby.....	439,292	Oct. 28	2523	676 677 678 738 739	53	498
Harvester. Self-binding.....	J. J. Dewey.....	422,335	Feb. 25	2805	740 741 742	50	1119
Harvester. Self-binding.....	C. H. Salzman.....	441,110	Nov. 18	2376	616 617	53	1082
Harvester sheaf-carrier.....	W. R. Baker.....	420,429	Feb. 4	2	1	50	565
Harvester-wheel.....	S. D. Locke.....	420,947	Feb. 11	782	203	50	721
Harvester-wheel.....	J. Van Wordragen.....	443,126	Dec. 23	2431	620 621	53	1761
Harvesters. Binding attachment for.....	J. G. Gilmer.....	441,297	Nov. 25	2716	704 705	53	1152
Harvesters. Feeder for self-binding.....	T. R. Wilds.....	434,854	Aug. 19	2162	567	52	1198
Harvesters. Gavel-carrier for grain.....	W. G. Whiting.....	439,710	Nov. 4	123	33, 34	53	632
Harvesters. Grain-adjuster for self-binding.....	H. E. Pridmore.....	435,522	Sept. 2	210	5	52	1415
Harvesters. Grain-carrier for self-binders for.....	P. S. Wynne.....	443,031	Dec. 16	2252	578	53	1720
Harvesters. Manufacture of picker-stems for cotton.....	G. N. Todd.....	439,794	Nov. 4	247	63	53	657
Harvesters. Platform-flag for.....	H. E. Pridmore.....	431,283	July 1	379	95	52	77
Harvesters. Platform-flag for.....	H. E. Pridmore.....	432,766	July 22	2708	692	52	546
Harvesters. Raising and lowering device for.....	A. and E. E. Starbuck.....	437,461	Sept. 30	3355	878	52	2045
Harvesters. Sickle-bar for.....	W. H. Palmer.....	443,791	Dec. 30	3526	904	53	1982
Harvesters. Steering attachment for.....	R. B. Walmer.....	436,198	Sept. 9	1277	333	52	1623
Harvesters. Straw-dump attachment for combined.....	A. McDonald.....	443,648	Dec. 30	3300	851	53	1938
Harvesting and binding machine.....	J. Miller.....	418,898	Jan. 7	389	95, 96	50	81
Harvesting and binding machine.....	J. Miller.....	429,045	May 27	3065	790 791	51	1445
Harvesting-knife.....	T. and T. J. Downs.....	426,783	Apr. 29	3583	945	51	733
Harvesting-machine.....	J. C. Harding.....	437,113	Sept. 23	2761	732	52	1926

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Harvesting-machine	H. P. Henry	429,724	June 10	934	{ 229 230 }	51	1602
Harvesting machine. Corn	W. H. Chase	432,725	July 22	2628	672	52	532
Harvesting machine. Corn	J. R. Conklin	423,469	Mar. 18	1672	{ 441 442 }	50	1470
Harvesting machine. Fodder	J. P. Hart	425,609	Apr. 15	1791	{ 480 481 }	51	366
Harvesting machine. Potato	J. Zimmermann	428,794	May 27	2684	681	51	1370
Harvesting-machine register	J. W. Baumgardner	442,709	Dec. 16	1698	436	53	1611
Hasp. Car or barn door	R. W. Seemann	432,841	July 22	2809	720	52	567
Hasp-lock	G. W. Mackenzie	438,554	Oct. 14	1332	361	53	263
Hasp-lock	W. H. Price	438,823	Oct. 21	1778	476	53	351
Hasp-lock. Combination	W. J. Mundt	437,034	Sept. 23	2650	693	52	1903
Hat	D. C. Mowry	432,805	July 22	2769	{ 708 709 }	52	558
Hat	C. Wüstemann	437,807	Oct. 7	209	64	53	42
Hat and bonnet stand	S. E. L. Wilson	421,879	Feb. 18	2121	556	50	982
Hat and coat hook	J. W. Campbell	419,414	Jan. 14	1160	308	50	245
Hat and coat rack	C. T. Gardner	432,484	July 15	2248	581	52	452
Hat and garment hook	A. E. Hall	429,346	June 3	373	88	51	1542
Hat-band	T. B. Cross	424,465	Apr. 1	35	10	51	16
Hat-band	W. Lawrence	433,988	Aug. 12	816	213	52	924
Hat-block	G. F. Larkin	436,833	Sept. 23	2314	609	52	1838
Hat-block chuck	C. H. Reid	421,513	Feb. 18	1597	412	50	883
Hat-bodies. Apparatus for dipping	H. M. Chittenden	436,771	Sept. 23	2194	{ 573 579 }	52	1814
Hat-bodies. Device for blocking	G. F. Larkin	435,145	Aug. 26	2643	706	52	1296
Hat-bodies. Machine for pinning out	A. T. Clason	427,554	May 13	798	{ 200 201 }	51	980
Hat-bodies. Machine for starting	W. P. Mahoney	431,272	July 1	364	90	52	74
Hat-bow	G. E. Brush	421,380	Feb. 18	1409	365	50	847
Hat-brim-curling machine	J. Fitz G., J. G., and M. O. Reh fuss	434,438	Aug. 19	1525	398	52	1073
Hat-brim-shaping apparatus	L. H. Hoyt	431,228	July 1	298	74	52	60
Hat-brims. Apparatus for heating and softening	H. H. and A. Turner and J. Jenkins	428,539	May 20	2278	579	51	1275
Hat-brims. Machine for shaping	L. H. Hoyt	430,523	June 17	2200	541	51	1916
Hat-brims. Mechanism for ironing	J. B. Howe	419,255	Jan. 14	913	242	50	195
Hat-dyeing apparatus	M. Delohery	438,609	Oct. 21	1422	384	53	286
Hat-fastener	J. W. Pilkington	421,758	Feb. 18	1943	511	50	950
Hat-fastener	P. N. Tryon	437,878	Oct. 7	312	93	53	61
Hat-fitting lathe	C. H. Reid	421,514	Feb. 18	1598	{ 412 413 }	50	883
Hat-fitting device	E. P. McDonald	424,336	Mar. 25	2970	791	50	1724
Hat-forming and pressing machine	T. J. Pearson	427,186	May 6	246	64	51	860
Hat-forming machines. Dipping apparatus for	S. C. Palmer	425,901	Apr. 15	2224	590	51	448
Hat-hanger	A. J. Allen	420,028	Jan. 28	2077	549	50	441
Hat-hanger	G. H. Lumbe	435,312	Aug. 26	2900	768	52	1343
Hat-hanger	J. Massey	422,137	Feb. 25	2489	658	50	1060
Hat-ironing machine	C. H. Reid	420,961	Feb. 11	806	209	50	725
Hat or bonnet box. Millinery	A. C. Mack	443,397	Dec. 23	2897	745	53	1852
Hat or bonnet fastener	L. Rosenfeld	437,045	Sept. 23	2663	696	52	1906
Hat or bonnet fastener	L. Rosenfeld	437,046	Sept. 23	2664	696	52	1906
Hat-pin. Lady's	L. Barnes	436,328	Sept. 16	1470	383	52	1671
Hat-pouncing machine	S. A. Main	436,061	Sept. 9	1055	274	52	1584
Hat-pouncing machine	W. W. Stevens	420,612	Feb. 4	260	70	50	615
Hat-pouncing machine	J. T. Waring	439,314	Oct. 23	2572	686	53	507
Hat pressing and finishing machine	C. Easton	426,784	Apr. 29	3584	{ 935 936 }	51	733
Hat-pressing device	C. M. Osgood	421,190	Feb. 11	1142	292	50	789
Hat rest and holder	C. H. Richards	436,021	Sept. 9	987	259	52	1571
Hat-stiffening machine	F. J. Murphy and A. M. Rundle	426,135	Apr. 22	2603	{ 684 685 }	51	530
Hat-stretcher	R. W. Tanner	442,211	Dec. 9	914	242	53	1448
Hat-stretcher. Metallic	G. H. Conde	424,094	Mar. 25	2613	696	50	1655
Hat-support	D. M. Fuller	426,721	Apr. 29	3492	914	51	715
Hat-sweat	P. I. Field	429,341	June 3	367	87	51	1540
Hat-sweat	O. and A. Hübner	433,985	Aug. 12	814	212	52	923
Hat-sweats. Attaching reed-lining to	J. S. Hosmer	427,995	May 13	1472	374	51	1109
Hat-tag	J. H. Ricketts	437,132	Sept. 23	2799	729	52	1932
Hat-tray	L. S. Bartlett	431,503	July 1	728	{ 181 182 }	52	145
Hat-tray	A. F. Cammann	437,286	Sept. 30	3065	602	52	1989
Hat-ventilator	A. L. Eliel	432,728	July 22	2635	674	52	533
Hat-wires. Machine for bending	J. Nutt	439,890	Nov. 4	393	{ 102 103 }	53	684
Hats. Crease-retaining device for	S. E. Foreman	419,653	Jan. 21	1500	400	50	320
Hats. Machine for attaching sweats and bands to	G. E. Brush	424,458	Apr. 1	16	6, 7	51	6
Hats. Machine for beating up nap on	C. A. Mallory	420,814	Feb. 4	560	144	50	671
Hats. Machine for rounding and planing the curled edges of	C. H. Reid	427,793	May 13	1171	293	51	1051
Hats. Ornamenting	G. Yule	430,457	June 17	2102	518	51	1897
Hats. Receptacle or holder in	A. J. Parker	441,805	Dec. 2	274	74	53	1318
Hatch-door. Elevator	W. Stevens	420,744	Feb. 4	437	116	50	650
Hatch-operating mechanism. Automatic	J. Stoneham	424,033	Mar. 25	2527	672	50	1639
Hatch-roller	S. F. Palmer, Jr	436,046	Sept. 9	1037	270	52	1581
Hatchet	S. Rogers	420,104	Jan. 28	2199	582	50	466
Hatchet. Box-opening	O. Watson	431,199	July 1	249	63	52	52
Hatchet for shingling	B. C. Pettingell	440,962	Nov. 18	2140	534	53	1035
Hatchway-door	H. I. Coe and J. J. McBride	419,503	Jan. 14	1278	{ 340 341 }	50	268
Hatchway-door mechanism	W. Bardsley and W. K. Crofford	442,279	Dec. 9	1013	{ 267 268 }	53	1467
Hatchway doors. Device for operating elevator	H. I. Coe and J. J. McBride	419,317	Jan. 14	1008	{ 266 267 }	50	213
Hatchway doors. Mechanism for operating	D. B. Clem	421,388	Feb. 18	1421	368	50	849

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hatchway. Elevator.....	Z. Goodell.....	429,519	June 3	627	154	51	1592
Hatchway. Elevator.....	H. Hermann.....	425,227	Apr. 8	1223	325	51	248
Hatchway for elevators.....	W. Bardsley and W. K. Crofford.....	442,280	Dec. 9	1016	268	53	1467
Hatchway gate. Elevator.....	D. O. Mathews and I. Pruett.....	429,932	June 10	1247	309	51	1722
Hatchway gates. Device for operating elevator.....	F. O. Kittredge.....	427,770	May 13	1136	285	51	1045
Hatchway gates. Device for operating elevator.....	C. P. Stanford.....	431,676	July 8	1011	251 } 252	52	207
Hatchway-guard.....	E. M. Dye.....	442,310	Dec. 9	1061	278	53	1476
Hatchway-operating mechanism.....	R. E. Stewart.....	421,448	Feb. 18	1497	388	50	864
Haversack.....	W. F. Arnold.....	427,493	May 6	790	176	51	950
Hay and straw burner.....	M. Hamilton.....	438,075	Oct. 7	627	171	53	130
Hay. Apparatus for handling.....	T. Potter.....	439,326	Oct. 28	2586	690	53	510
Hay. Building for storing and feeding.....	S. Saucerman.....	440,369	Nov. 11	1138	293	53	838
Hay-carrier.....	P. A. Myers.....	419,279	Jan. 14	945	249	50	200
Hay-carrier.....	G. Nichols, Jr.....	442,635	Dec. 16	1572	406	53	1587
Hay-carrier elevating-pulley.....	W. Loudon.....	434,544	Aug. 19	1682	439	52	1105
Hay-carrier track.....	L. Y. Myers.....	440,602	Nov. 11	1543	397	53	913
Hay-carrier. Elevated.....	T. Milar and H. Pritchard.....	429,934	June 10	1249	309	51	1723
Hay elevator and carrier.....	J. C. Culbertson.....	420,533	Feb. 4	151	37	50	593
Hay-elevator track.....	J. E. Porter.....	423,274	Mar. 11	1397	364	50	1408
Hay-fork.....	J. D. Carr.....	440,011	Nov. 4	586	155	53	723
Hay-fork.....	M. W. Dickey.....	435,289	Aug. 26	2850	754	52	1336
Hay-frame.....	M. F. Divine.....	435,736	Sept. 2	548	145	52	1481
Hay-gatherers. Pole for.....	J. G. Archer.....	437,471	Sept. 30	3367	881	52	2049
Hay-knife.....	W. H. Carter.....	422,724	Mar. 4	526	134	50	1237
Hay-loader.....	W. H. Haley.....	440,105	Nov. 4	714	190	53	748
Hay-loader.....	A. J. and W. J. Hughes.....	433,865	Aug. 5	634	164 } 165	52	881
Hay-loader.....	J. W. Hunter and T. N. Lakin.....	431,585	July 8	856	213	52	178
Hay-loader.....	A. Lasack.....	428,844	May 27	2757	701	51	1385
Hay loader and stacker.....	M. C. Gates.....	431,113	July 1	121	31	52	26
Hay-loaders to vehicles. Device for attaching.....	W. A. Barber.....	426,703	Apr. 29	3457	906	51	708
Hay-press.....	W. H. Adams.....	424,161	Mar. 25	2707	720	50	1673
Hay-press.....	O. F. Dubois.....	437,146	Sept. 23	2846	739	52	1939
Hay-press.....	A. J. Hill.....	420,685	Feb. 4	363	96	50	635
Hay-press.....	T. T. Mayes.....	418,735	Jan. 7	115	27	50	25
Hay-press.....	S. H. and C. L. Miller.....	433,481	Aug. 5	67	20	52	770
Hay-press.....	C. O. Newton.....	437,404	Sept. 30	3252	848	52	2024
Hay-press.....	J. E. Sanders.....	436,725	Sept. 16	2102	553	52	1790
Hay-press.....	J. F. Smith.....	437,524	Sept. 30	3448	901	52	2064
Hay-press.....	J. H. Williams.....	433,755	Aug. 5	468	121	52	847
Hay-rack.....	E. N. Avery.....	430,611	June 24	2347	574	51	1952
Hay-rack.....	J. L. Wilkerson.....	431,302	July 1	405	102	52	83
Hay-rake.....	H. L. Banta.....	421,891	Feb. 25	2143	562 } 563	50	996
Hay-rake.....	W. M. Briukerhoff.....	442,794	Dec. 16	1855	479	53	1641
Hay-rake.....	S. B. Gilliland.....	423,146	Mar. 11	1201	313	50	1371
Hay-rake.....	M. R. Jenkins.....	433,316	Oct. 14	989	267	53	195
Hay-rake.....	W. R. Mann.....	425,618	Apr. 15	1812	484 } 485	51	370
Hay-rake.....	E. Tash.....	438,565	Oct. 14	1349	366	53	266
Hay rake and shocker.....	W. S. Wikle.....	425,721	Apr. 15	1968	524 } 523	51	400
Hay-rake. Gang.....	E. Todd.....	422,167	Feb. 25	2536	670	50	1069
Hay-rake. Horse.....	H. A. Alden and J. E. Kirk.....	436,165	Sept. 9	1221	318 } 319	52	1612
Hay-rake. Horse.....	W. Clemens.....	419,828	Jan. 21	1758	465	50	369
Hay-rake. Horse.....	A. H. Colly.....	432,509	July 22	2285	591 } 592	52	465
Hay-rake. Horse.....	B. W. Harmer.....	441,552	Nov. 25	3111	799	53	1228
Hay-rake. Horse.....	J. L. and J. Smith.....	430,151	June 17	1602	399	51	1801
Hay rake, loader, and tedder.....	A. W. Heany.....	439,948	Nov. 4	486	127	53	703
Hay-rake. Side-delivery horse.....	H. McPherson.....	431,171	July 1	208	52	52	43
Hay rake, tedder, and loader. Combined.....	T. A. Galt.....	424,415	Mar. 25	3117	827 } 828	50	1753
Hay-ricker.....	D. F. Oliver.....	436,741	Sept. 16	2134	562	52	1796
Hay-sling.....	A. Gype.....	442,619	Dec. 16	1553	401	53	1582
Hay-sling.....	J. Unterbrink.....	422,668	Mar. 4	457	116	50	1224
Hay-stacker.....	J. H. Moore.....	428,850	May 27	2768	703	51	1387
Hay-stacker.....	C. W. Post.....	424,128	Mar. 25	2661	709	50	1665
Hay-stacker.....	O. F. Smith.....	424,030	Mar. 25	2523	671	50	1638
Hay-stacker.....	L. and T. Soseman.....	438,500	Oct. 14	1248	338	53	246
Hay-stacking machine.....	S. A. Blake.....	433,067	July 29	3179	818	52	643
Hay-stacking machine.....	D. H. Talbot.....	419,025	Jan. 7	571	144	50	121
Hay-tedder and hay-rake. Combined.....	S. L. Denney.....	420,228	Jan. 28	2401	639 } 640	50	502
Hay-tedder fork.....	G. W. Rowell.....	436,152	Sept. 9	1201	314	52	1609
Hay tedder, rake, and loader.....	R. W. Renard.....	440,504	Nov. 11	1381	357 } 358	53	883
Head and back rest.....	C. Gurney.....	427,311	May 6	432	112	51	897
Head-dress.....	V. Janus.....	436,038	Sept. 9	1022	266	52	1578
Head-light. Electrical.....	J. Thorne and E. B. Burr.....	436,677	Sept. 16	2038	532 } 533	52	1777
Head-light. Locomotive.....	W. J. Burke.....	431,872	July 8	1326	332 } 333	52	267
Head-rest.....	J. B. Anderson and J. H. Hope.....	418,935	Jan. 7	451	110	50	94
Head-rest.....	W. A. Dobson and J. M. St. John.....	430,731	June 24	2552	625	57	1992
Head-rest.....	L. P. Knoll.....	419,961	Jan. 21	1969	517	56	412
Head-rest. Adjustable.....	C. S. Rogers.....	426,069	Apr. 22	2500	660	51	509
Head-rest and cane. Combined.....	T. S. Minniss.....	418,806	Jan. 7	223	54	50	48
Head-rest and cane. Combined.....	T. S. Minniss.....	432,759	July 22	2697	689	52	545
Head-rest and walking-cane. Combined.....	T. S. Minniss.....	433,016	July 29	3099	795	52	627
Head-rest. Tourist's.....	H. A. Bond.....	429,207	June 3	155	37	51	1501
Header attachment.....	T. J. Brown.....	429,257	June 3	218	54	51	1514

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Header-brake	C. N. Hinchliff and H. E. Hall.....	429,917	June 10	1223	303	51	1718
Heading, forging, and upsetting machine	W. L. Clouse	430,834	June 24	2720	666 667	51	2024
Headshade or hat. Folding	R. Ray	441,380	Nov. 25	2843	733 734	53	1176
Hearing. Device for assisting the	R. M. Mathes	426,508	Apr. 29	3160	831	51	652
Hearth-furnace for metallurgical operations	B. C. Lanth	434,715	Aug. 19	1974	513 514	52	1160
Heat-alarm	A. and A. Iske	434,872	Aug. 19	2199	576	52	1205
Heat-concentrator	P. M. Nixon	439,251	Oct. 28	2457	658	53	486
Heat-exchanger for water and steam	J. and G. Weir	433,190	July 29	3370	811	52	681
Heat for raising water. Apparatus for utilizing at- mospheric or solar	C. Tellier	433,055	July 29	3162	813 814	52	640
Heat-indicator and alarm. Electric distance	F. W. Wiesebrock	437,069	Sept. 23	2693	704	52	1912
Heat. Method of and means for applying the expan- sive power of	J. R. Fraser	432,182	July 15	1793	461	52	364
Heat-preserving apparatus	A. A. Frey	441,835	Dec. 2	325	86	53	1327
Heat-regulating system. Electric	F. M. Sparrow	433,375	July 29	3623	935	52	732
Heat-regulator	N. Curtis	441,648	Dec. 2	29	9	53	1268
Heat-screen	M. Thurston	432,340	July 15	2031	522	52	407
Heater:							
See Barrel-heater. Liquid-heater.							
Bath-heater. Sad-iron-heater.							
Car-heater. Seed-meal heater.							
Curling-iron heater. Soldering-iron heater.							
Dental heater. Steam-heater.							
Electric heater. Steam and hot-air heater.							
Electrical heater. Tank-heater.							
Feed-water heater. Tire-heater.							
Fire-place heater. Vault-heater.							
Gas-heater. Vehicle-heater.							
Hot-air and steam Ventilating-heater.							
heater. Water-heater.							
Hot-air ventilating Watering-tank heater.							
heater. Wheat-heater.							
Hot-water heater.							
Hydrocarbon-liquid heater.							
Heater	C. L. Haight	428,336	May 20	1991	501	51	1219
Heater	J. S. Harkins	425,222	Apr. 8	1215	322 323	51	246
Heater	W. H. Landers and F. Kernan, Jr.	442,901	Dec. 16	2055	528	53	1680
Heater	M. L. W. Martinot	438,932	Oct. 21	1944	518	53	382
Heater	W. H. Randall	428,137	May 20	1666	427 428	51	1160
Heater	K. Schmitt	442,141	Dec. 9	808	218	53	1428
Heater	E. F. Trent	433,705	Aug. 5	389	99	52	831
Heater	E. S. Wilber	438,336	Oct. 14	1016	276	53	200
Heater	E. B. Woolston	429,672	June 10	862	209	51	1648
Heater and ventilator. Combined	W. R. Macdonald	441,574	Nov. 25	3146	809	53	1234
Heater for coopeage purposes	L. M. Reed	426,325	Apr. 22	2871	756	51	586
Heater or stove	Z. Baker	442,348	Dec. 9	1123	293	53	1487
Heating air with gas. Apparatus for	H. Q. Hawley	437,777	Oct. 7	160	50, 51	53	33
Heating and cooking apparatus	J. E. Wilbur	419,485	Jan. 14	1254	333	50	264
Heating and cooking apparatus. Spirit	C. Buch and W. Brose	439,772	Nov. 4	213	55, 56	53	650
Heating and cooking apparatus. Steam	E. H. Warner	431,130	July 1	142	37	52	30
Heating and cooking device. Electric	H. R. Butterfield	424,403	Mar. 25	3100	823	50	1750
Heating and filtering apparatus	W. W. Sutcliffe and J. D. Sullivan	431,923	July 8	1387	352	52	279
Heating and filtering apparatus	W. W. Sutcliffe and J. D. Sullivan	431,924	July 8	1390	352 353	52	280
Heating and lighting device	W. Rennyson	426,215	Apr. 22	2725	713 714	51	554
Heating and ventilating apparatus	J. A. Baxter	430,726	June 24	2543	622	51	1990
Heating and ventilating apparatus	T. Dunmore	421,562	Feb. 18	1673	433	50	897
Heating and ventilating apparatus	C. B. Harris	436,353	Sept. 16	1513	394 395	52	1679
Heating apparatus	R. Bettsford	419,817	Jan. 21	1741	461	50	366
Heating apparatus	H. D. Justi	424,210	Mar. 25	2771	739	50	1686
Heating apparatus	J. Lewis	442,191	Dec. 9	884	236	53	1443
Heating apparatus	C. E. Mark	434,936	Aug. 26	2341	618	52	1239
Heating apparatus	L. A. Simpson	425,463	Apr. 15	1578	422	51	324
Heating apparatus. Air	J. A. Kirkpatrick	430,657	June 24	2429	591 592	51	1968
Heating apparatus. Automatic gas-regulator for water	I. M. Seamans	422,841	Mar. 4	703	181	50	1272
Heating apparatus. Electric	C. E. Carpenter	429,559	June 3	689	168	51	1604
Heating apparatus. Electric	C. E. Carpenter	429,560	June 3	692	169	51	1605
Heating apparatus. Electric	M. W. Dewey	423,223	Mar. 11	1306	340	50	1392
Heating apparatus for buildings	J. Shackleton	419,366	Jan. 14	1084	286	50	229
Heating apparatus for omnibuses, carriages, &c.	F. V. Crouch	426,926	Apr. 29	3778	987	51	771
Heating apparatus for water-tanks. Oil-burning	A. H. Calkins	419,826	Jan. 21	1755	464	50	368
Heating apparatus. Gas	S. B. Havens	443,829	Dec. 30	3593	923	53	1905
Heating apparatus. Steam	G. A. Barnard	429,182	June 3	113	26, 27	51	1493
Heating apparatus. Steam	E. Laemerhirt	430,529	June 17	2209	543 544	51	1918
Heating apparatus. Water	W. S. Johnson	434,111	Aug. 12	1005	261 262	52	963
Heating apparatus. Water	W. Maltby and J. D. Wallace	437,495	Sept. 30	3401	891	52	2056
Heating baking-compartments or cooking-vessels, &c. Apparatus for	D. Grove	443,516	Dec. 30	3083	794 795	53	1897
Heating buildings. Apparatus for	J. F. Packer and W. H. Gaede	419,969	Jan. 21	1977	519 520	50	414
Heating buildings. Apparatus for	J. F. Packer and W. H. Gaede	419,994	Jan. 21	2018	533 534	50	421

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Heating buildings. Device for	J. E. Stuart	427,634	May 13	913	{ 229 230	{ 51	1001
Heating by electricity	W. L. Burton	432,932	July 22	2943	754	52	592
Heating by gas or liquid fuel. Apparatus for	L. W. Leeds	426,596	Apr. 29	3392	864	51	677
Heating-coil stand	D. A. Brislin	425,856	Apr. 15	2168	577	51	438
Heating device	S. R. Jerome	431,588	July 8	860	214	52	179
Heating. Electric	C. E. Carpenter	429,562	June 3	695	169	51	1601
Heating-furnace	L. Anderson	440,237	Nov. 11	933	240	53	802
Heating-furnace	H. S. Houghton	438,887	Oct. 21	1887	500	53	371
Heating-furnace	J. Lawyer	419,049	Jan. 7	599	{ 154 155	{ 50	126
Heating-furnace	R. A. May	442,291	Dec. 9	1028	271	53	1470
Heating-furnace	R. A. May	442,292	Dec. 9	1029	271	53	1470
Heating-furnace	W. H. Riddell	431,151	July 1	173	44, 45	52	37
Heating in furnaces	E. B. Cornell	434,380	Aug. 12	1415	372	52	1044
Heating purposes. Device or apparatus for	G. L. Shorey	440,203	Nov. 11	874	225	53	790
Heating system	J. F. McElroy	425,384	Apr. 8	1451	{ 388 389	{ 51	290
Heating system	J. F. McElroy	439,888	Nov. 4	389	101	53	683
Heating water in baths. Apparatus for	J. Reilly	433,490	Aug. 5	75	92	52	771
Heddle-machine	B. Sauer	426,473	Apr. 29	3109	{ 815 816 817	{ 51	642
Heddle-machine	F. Ulrich	430,223	June 17	1712	{ 426 427	{ 51	1822
Heddles. Apparatus for making mails for	E. Absous	426,898	Apr. 29	3744	977	51	765
Hedge-trimmer	A. M. Fox	442,035	Dec. 2	643	173	53	1388
Hedge-trimmer	J. E. Lowell	424,803	Apr. 1	574	152	51	112
Hedge-trimmer and lawn-mower combined	O. C. Carr	421,241	Feb. 11	1209	312	50	802
Heel	B. F. Wilson	436,553	Sept. 16	1841	485	52	1739
Heel and sole edge blacking machine	C. F. Leighton	439,018	Oct. 21	2077	556	53	409
Heel-beading machine	C. F. Leighton and W. E. Bailey	433,796	Aug. 5	535	{ 138 139	{ 52	861
Heel-breasting machine	W. Gordon	434,333	Aug. 12	1345	{ 350 351	{ 52	1030
Heel-breasting machine	S. Ross, Jr.	437,665	Sept. 30	3643	951	52	2103
Heel-building machine	J. E. Brown	427,498	May 6	707	{ 177 178	{ 51	952
Heel-burnishing machine	C. J. Addy	432,471	July 15	2226	{ 575 576	{ 52	447
Heel-burnishing machine	C. J. Addy	443,420	Dec. 23	2925	753	53	1857
Heel-burnishing machine	G. W. Ceperley	441,398	Nov. 25	2871	741	53	1181
Heel-burnishing machine	A. B. Fowler, G. E. Warren, and W. C. Evans	438,997	Oct. 21	2047	548	53	403
Heel-burnishing machine	L. K. Strang	421,988	Feb. 25	2268	597	50	1019
Heel-burnishing tool	J. H. Busell	441,823	Dec. 2	309	83	53	1324
Heel-gouging machine	S. H. Howland	433,468	Aug. 5	47	15	52	766
Heel-machine	T. W. Dowrie	443,162	Dec. 23	2500	640	53	1773
Heel-making machine	A. Andres	440,342	Nov. 11	1101	{ 282 283	{ 53	830
Heel-making machine	W. J. Fahnley	443,908	Dec. 30	3693	945	53	2014
Heel-nail	H. R. Packard	424,430	Mar. 25	3138	833	50	1758
Heel-nailing machine	W. J. Fahnley	424,044	May 13	1544	{ 390 391	{ 51	1122
Heel-nailing machine	W. S. Jones	441,420	Nov. 25	2907	{ 749 750	{ 53	1189
Heel-plate	F. H. Richards	427,524	May 6	749	186	51	960
Heel-shaping machine	S. Brenand	436,208	Sept. 9	1291	{ 336 337	{ 52	1627
Heel-stiffener machine	L. Coté	435,481	Sept. 2	148	42, 43	52	1404
Heel-stiffener machine	L. P. Pell	423,271	Mar. 11	1386	362	50	1406
Heel-stiffener machine	A. F. Stowe	432,647	July 22	2494	{ 641 642	{ 52	506
Heel-trimmer	C. H. Helms	425,321	Apr. 8	1361	363	51	273
Heel-trimming machine	C. W. B. Fuller and J. W. Plummer	431,343	July 1	467	{ 115 116	{ 52	95
Heel-trimming machine	C. W. Glidden and A. D. Elliott	439,060	Oct. 21	2140	{ 574 575	{ 53	421
Heel-trimming machine	J. W. Plummer	419,880	Jan. 21	1856	488	50	349
Heel-trimming machine	S. Pope	433,213	July 29	3400	879	52	647
Heliocromy. Composite	F. E. Ives	432,530	July 22	2321	600	52	473
Hemp-brake	E. A. Hartshorn	420,575	Feb. 4	207	53, 54	50	605
Hemp-brake	J. J. Hawkins	427,764	May 13	1127	283	51	1043
Hemp-cleaner	J. J. Hawkins	427,763	May 13	1126	282	51	1043
Hide or skin stretching machine	G. E. Danforth	423,030	Mar. 11	1013	266	50	1336
Hides into strips. Apparatus for cutting	H. T. Rohrmoser	435,381	Aug. 26	3021	799	52	1366
Hides. Treating	J. Schmitt	434,645	Aug. 19	1861	.....	52	1140
High and low water alarm	J. M. Williams	420,649	Feb. 4	321	83	50	627
High and low water alarm boilers	A. C. Griggs	425,570	Apr. 15	1726	463	51	353
High and low water alarm for steam-boilers	J. MacFarlane	431,271	July 1	362	90	52	74
High-resistance compound	W. G. Bremer	443,497	Dec. 30	3061	.....	53	1893
High-resistance compound	W. G. Bremer	443,565	Dec. 30	3163	.....	55	1912
High-resistance-shunt compound	W. G. Bremer	435,030	Aug. 26	2475	.....	52	1264
High-speed engine	J. F. Slat	442,708	Dec. 16	1696	435	53	1611
High-water alarm	I. H. Simpson	441,982	Dec. 2	548	147	53	1370
Highways. Construction of	C. E. Keach	443,320	Dec. 23	2782	714	53	1829
Hinge	H. L. Biddle	443,495	Dec. 30	3059	787	53	1892
Hinge	R. Boone	436,691	Sept. 16	2056	537	52	1781
Hinge	C. W. Dunbar	419,507	Jan. 14	1284	342	50	269
Hinge	A. H. Hastings	423,247	Mar. 11	1338	348	50	1399
Hinge	C. C. Hess	420,997	Feb. 11	860	222	50	736
Hinge	C. E. La Fleur	429,812	June 10	1068	262	51	1687
Hinge	M. A. Morris	428,402	May 20	2103	527	51	1242
Hinge	E. G. Phillips	424,900	Apr. 1	722	193	51	139

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Hinge.	K. Radler.	442,547	Dec. 9	1435	368	53	1549
Hinge.	M. Slane.	429,391	June 3	446	105	51	1556
Hinge.	G. A. Stillman.	423,287	Mar. 11	1417	368	50	1412
Hinge.	H. J. Welteroth.	430,596	June 17	2311	568	51	1937
Hinge and door-check. Combined spring.	J. W. Morris.	424,613	Apr. 1	272	71	51	55
Hinge and door-check. Combined spring.	J. W. Morris.	424,614	Apr. 1	274	72	51	55
Hinge. Blind.	A. Davis.	434,323	Aug. 12	1332	347	52	1027
Hinge. Blind.	L. Porter.	442,689	Dec. 16	1655	425	53	1693
Hinge. Box.	J. J. Harmer.	442,434	Dec. 9	1251	323	53	1513
Hinge. Coach.	L. Ruel.	424,504	Apr. 1	99	28	51	92
Hinge for flasks, &c.	A. Schiefer.	440,724	Nov. 18	1738	446	53	961
Hinge for folding seats.	J. M. Sauder.	420,246	Jan. 28	2432	647	50	507
Hinge for rmls and protractors. Lock.	E. Cameron.	422,374	Mar. 4	18	6	50	1140
Hinge for school-seats.	O. S. Garretson.	425,098	Apr. 8	1019	{ 272 273 }	51	206
Hinge for stove or other doors.	C. C. Hoover.	442,376	Dec. 9	1161	302	53	1495
Hinge for window-sashes.	G. D. Crocker.	420,439	Feb. 4	17	4	50	568
Hinge. Friction.	J. Grant.	430,847	June 24	2745	672	51	2029
Hinge. Friction.	W. H. Hall.	429,684	June 10	876	213	51	1650
Hinge. Friction.	E. Thorp.	425,714	Apr. 15	1960	521	51	399
Hinge. Gate.	C. F. Darnell.	430,272	June 17	1826	448	51	1843
Hinge. Gate.	J. Macy.	440,320	Nov. 11	1068	274	53	824
Hinge. Gate.	L. R. Powers.	430,543	June 17	2230	547	51	1921
Hinge gate. Suspension.	W. T. Grant.	435,646	Sept. 2	421	112	52	1454
Hinge. Lock.	M. A. Cutter.	429,845	June 10	1117	{ 275 276 }	51	1697
Hinge. Lock.	L. Porter.	421,511	Feb. 18	1595	411	50	882
Hinge. Lounge.	W. Seng.	436,546	Sept. 16	1832	482	52	1737
Hinge mechanism for doors of safes or vaults.	E. J. Gross.	423,149	Mar. 11	1206	314	50	1372
Hinge-mortising machine.	J. A. Mackenzie.	437,657	Sept. 30	3633	949	52	2101
Hinge, roller, and hanger. Combined gate.	B. Heath.	420,790	Feb. 4	506	132	50	662
Hinge. Spring.	H. C. Hart.	419,943	Jan. 21	1942	511	50	407
Hinge. Spring.	H. C. Hart.	431,349	July 1	478	118	52	97
Hinge. Spring.	F. W. Hoefler.	443,078	Dec. 16	2333	596	53	1735
Hinge. Spring.	H. W. Libbey.	426,597	Apr. 29	3293	864	51	678
Hinge. Spring.	N. Linsley.	422,952	Mar. 11	902	237	50	1316
Hinge. Spring.	C. Morrow.	434,877	Aug. 19	2205	577	52	1207
Hinge. Spring.	M. Redlinger.	438,641	Oct. 21	1467	336	53	294
Hinge. Spring.	M. Redlinger.	443,057	Dec. 16	2286	586	53	1727
Hinge. Spring.	H. A. J. Rieckert.	443,380	Dec. 23	2871	{ 738 739 }	53	1847
Hinge. Spring.	O. Seely.	438,115	Oct. 7	682	186	53	132
Hinge. Spring.	G. R. Taxis.	428,974	May 27	2951	757	51	1424
Hinge. Spring.	G. R. Taxis.	434,212	Aug. 12	1161	302	52	993
Hinge. Spring.	C. Zattau.	421,342	Feb. 11	1351	349	50	828
Hinge. Stop.	L. F. Griswold.	431,459	July 1	656	164	52	132
Hinge. Swinging and sliding gate.	R. Bulmer.	430,618	June 24	2358	577	51	1954
Hinge. Window-sash.	G. D. Crocker.	432,119	July 15	1699	436	52	346
Hinges. Making.	G. P. Whittlesey.	442,656	Dec. 16	1597	413	53	1592
Hinged seat.	E. F. Barrows.	434,753	Aug. 19	2023	528	52	1170
Hip-strap attachment.	W. Rottger.	433,602	Aug. 5	241	62	52	803
Hitching-anchor.	W. W. McKay.	425,385	Apr. 8	1452	389	51	291
Hitching device.	J. P. Knisley.	430,962	June 24	2918	716	51	2061
Hitching device.	C. Lasman, Jr.	441,175	Nov. 25	2491	644	53	1113
Hitching device.	A. H. Wilson.	439,285	Oct. 28	2515	674	53	496
Hitching device. Stock.	A. L. Hinchman.	443,964	Dec. 30	3791	{ 966 967 }	53	2032
Hitching-post.	E. A. Parish.	429,123	June 3	27	6	51	1477
Hitching-post.	E. S. Reed.	427,012	Apr. 29	3903	1018	51	795
Hitching-strap.	F. P. Kemp.	441,848	Dec. 2	350	92	52	1332
Hitching-strap attachment.	H. D. Pratt, Jr.	420,958	Nov. 11	802	208	50	725
Hitching-strap for double teams.	E. B. Budd and W. R. Sands.	440,910	Feb. 18	2053	531	53	1018
Hitching-strap holder.	A. Nelling.	425,144	Apr. 8	1099	292	51	221
Hobby-horse.	H. C. Alexander.	430,459	June 17	2103	519	51	1897
Hobby-horse.	M. Bohlig.	439,627	Nov. 4	12	3	53	609
Hod.	A. G. and G. D. Brandt.	433,321	July 29	3556	917	52	719
Hoe and cotton-chopper. Disk.	J. B. Hurd and H. H. McLane.	419,586	Jan. 14	1386	{ 371 372 }	50	292
Hoe and cultivator. Horse.	J. N. Parker.	422,620	Mar. 4	337	96.97	50	1210
Hoe and seed-dropper. Combined.	R. C. and W. C. Claiborne.	419,928	Jan. 21	1919	506	50	403
Hoe. Ditching.	F. H. Adsit.	424,244	Mar. 25	2814	752	50	1695
Hoe. Garden.	C. Koch and C. Biel.	422,783	Mar. 4	604	155	50	1252
Hoe or rake.	W. Voltz.	421,117	Feb. 11	1031	24	50	768
Hoe. Revolving horse.	A. G. Emery.	421,128	Feb. 11	1047	{ 268 269 }	50	772
Hoe. Wheel.	S. Fuller.	426,639	Apr. 29	3360	881	51	690
Hoeing-machine.	J. B. Hurd.	430,209	June 17	1677	417	51	1815
Hog-boisting machine.	D. C. Mahoney.	441,311	Nov. 25	2742	709	53	1156
Hog-singling apparatus.	J. Cunningham.	430,769	June 24	2619	642	51	2005
Hog-trough.	H. A. Rose.	443,228	Dec. 23	2630	675	53	1800
Hog's snout and severing the tendon thereon. Device for holding a.	H. H. Silsby.	422,041	Feb. 25	2343	619	50	1033
Hoghead-making machine.	R. E. King.	441,011	Nov. 18	2206	570	53	1049
Hoist.	F. A. Robitaille.	425,699	Apr. 15	1938	515	51	394
Hoist. Gravity.	W. J. C. Doyle.	430,073	June 10	1481	368	51	1767
Hoisting and conveying apparatus.	F. L. Chamberlin.	419,583	Jan. 14	1382	370	50	291
Hoisting and conveying apparatus.	F. L. Chamberlin.	432,977	July 29	3037	780	52	615
Hoisting and conveying apparatus.	E. Day.	419,004	Jan. 7	537	134	50	113
Hoisting and conveying device.	O. W. O'Dell.	428,349	May 20	2008	505	51	1223
Hoisting and conveying machine.	E. Nicholson.	433,805	Aug. 5	549	142	52	864
Hoisting and conveying machines. Automatic dumping-bucket for.	A. E. Brown.	427,830	May 13	1218	{ 307 308 }	51	1060
Hoisting and conveying machines. Tub or bucket for.	A. E. Brown.	426,763	Apr. 29	3553	927	51	727
Hoisting and conveying machinery. Cable.	T. S. Miller.	434,550	Aug. 19	1693	443	52	1107

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hoisting and loading apparatus.....	J. R. Dalton.....	436,732	Sept. 16	2112	556	52	1792
Hoisting and loading apparatus.....	D. L. Van Eman.....	432,680	July 22	2559	655 656	52	519
Hoisting and transporting mechanism.....	W. P. Jordau.....	434,278	Aug. 12	1263	329	52	1013
Hoisting apparatus.....	J. Boyd.....	441,742	Dec. 2	176	47	53	1297
Hoisting apparatus.....	W. O. Conway.....	434,701	Aug. 19	1959	509	52	1157
Hoisting apparatus.....	C. W. Hunt.....	429,450	June 3	525	126	51	1573
Hoisting apparatus.....	C. W. Hunt.....	442,286	Dec. 9	1023	270	53	1469
Hoisting apparatus.....	J. McMyler.....	428,691	May 27	2532	643	51	1341
Hoisting apparatus.....	G. W. Rawson.....	436,190	Sept. 9	1262	329	52	1620
Hoisting apparatus.....	M. O. Royce and J. Connolly.....	434,001	Aug. 12	829	218	52	927
Hoisting apparatus.....	J. B. Sweetland.....	433,752	Aug. 5	465	120	52	846
Hoisting apparatus.....	G. H. Warren.....	430,241	June 17	1741	434 435	51	1828
Hoisting apparatus. Trolley for.....	R. Lavery.....	435,502	Sept. 2	185	51	52	1411
Hoisting-block.....	J. T. Hambay.....	419,652	Jan. 21	1806	478	50	378
Hoisting-bucket.....	P. H. Hageney.....	442,432	Dec. 9	1249	323	53	1513
Hoisting-bucket.....	C. Pay.....	424,371	Apr. 1	208	57	51	43
Hoisting device.....	W. P. Campbell.....	437,088	Sept. 23	2723	712	52	1918
Hoisting-engine.....	O. Flohr.....	436,828	Sept. 23	2303	606 607	52	1836
Hoisting-gear.....	G. Fletcher.....	429,308	June 3	314	74	51	1530
Hoisting-machine.....	J. Boyd.....	437,810	Oct. 7	212	65	53	43
Hoisting-machine.....	J. Boyd.....	443,719	Dec. 30	3412	876	53	1958
Hoisting-machine.....	E. Dainty.....	420,677	Feb. 4	350	92, 93	50	632
Hoisting-machine.....	J. E. Hensley.....	433,002	July 29	3078	789	52	623
Hoisting-machine.....	A. T. Kelliher.....	428,108	May 20	1645	417	51	1153
Hoisting-machine.....	E. McLane.....	435,239	Aug. 26	2769	731	52	1321
Hoisting-machine.....	W. Roth.....	438,187	Oct. 14	786	214	53	158
Hoisting-machine.....	H. B. Tefft.....	428,430	May 20	2135	537	51	1247
Hoisting-machine brake.....	A. Larsen.....	439,529	Oct. 28	2887	768	53	567
Hoisting-machine grip.....	L. E. Mansfield.....	413,481	Aug. 5	61	18	52	768
Hoisting machinery.....	R. C. Smith.....	425,261	Apr. 8	1268	339	51	256
Hoisting mechanism.....	C. W. Hunter.....	435,839	Sept. 2	709	190	52	1512
Hoisting mechanism.....	J. H. Montgomery.....	434,903	Aug. 19	2269	595	52	1219
Hoisting mechanism.....	T. A. Weston.....	442,469	Dec. 9	1302	337	53	1523
Hoisting mechanism. Portable.....	W. F. Murray.....	442,449	Dec. 9	1273	329 330	53	1518
Hoisting or lifting apparatus.....	J. Taylor.....	442,466	Dec. 9	1298	336	53	1523
Holdback.....	C. A. Dammann.....	440,347	Nov. 11	1107	284	53	831
Holdback.....	I. H. J. Ellsworth.....	437,294	Sept. 30	3074	905	52	1990
Holdback.....	G. T. Wilson.....	433,429	July 29	3700	955	52	748
Holdback-strap.....	W. Anderson.....	438,747	Oct. 21	1657	444	53	328
Holdback. Vehicle.....	L. G. Allen.....	439,368	Oct. 28	2653	706	53	522
Holdback. Vehicle.....	B. E. Beers.....	431,546	July 8	796	199	52	166
Holdback. Vehicle.....	C. W. Colony.....	419,140	Jan. 7	727	191	50	152
Holdback. Vehicle.....	S. Giles.....	429,756	June 10	984	241	51	1672
Holdback. Vehicle.....	W. G. Lansing.....	420,161	Jan. 28	2288	606	50	482
Holdback. Vehicle.....	J. H. Ormsby.....	427,894	May 13	1327	334	51	1060
Holder:							
See Advertising-card holder.	Cork-holder.						
Bag-holder.	Cover-holder.						
Bag and twine holder.	Cow-tail holder.						
er.	Cuff-holder.						
Ballot-holder.	Cup-holder.						
Bedclothes-holder.	Curtain-holder.						
Blacking-box holder.	Dental-tool holder.						
Blanket-holder.	Dish-holder.						
Bolt-holder.	Drapery-holder.						
Book-holder.	Egg-holder.						
Boring-tool holder.	Electric-light holder.						
Bottle-holder.	Electric-light-shade holder.						
Bouquet-holder.	holder.						
Broom-holder.	Eyeglass-holder.						
Brush-holder.	Fence-post holder.						
Bucket-rope holder.	File-holder.						
Burnishing-tool holder.	Fishing-rod holder.						
holder.	Flower or plant holder.						
Button-holder.	Fly-paper holder.						
Button-fastener holder.	Foretop-holder.						
Can-holder.	Gas-holder.						
Candle-holder.	Gas and liquid holder.						
Canopy-holder.	Globe or shade holder.						
Caramel-holder.	Grain-binder cord-holder.						
Carboy-holder.	Grain-binder twine-holder.						
Casket-holder.	er.						
Caustic-holder.	Grindstone tool-holder.						
Checkrein-holder.	Hammock-holder.						
Christmas-tree candle-holder.	Harmonica-holder.						
Chuck or tool-holder.	Harrow-tooth holder.						
Cigar-holder.	Hitching-strap holder						
Cigar or cigarette holder.	Horse-holder.						
Cigarette-holder.	Horse-tail holder.						
Clapboard-holder.	Ink-well holder.						
Clothes-line holder.	Jar-holder.						
Coffee-mill holder.	Knitting-machine web-holder.						
Coin-holder.	holder.						
Commutator-brush holder.	Lace or embroidery holder.						
Copy-holder.	er.						
	Lamp-holder.						
	Lamp-globe holder.						
	Lantern-holder.						
	Lead or crayon holder.						
	Lemonade-holder.						

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Holder—Continued.							
See Light-holder.	Sash-holder.						
Line-holder.	Sash or blind holder.						
Manuscript-holder.	Saw-bit holder.						
Match-box holder.	Scarf-holder.						
Miner's-lamp holder.	Scissors-holder.						
Mop-holder.	Screen-holder.						
Music-holder.	Sewing-machine attach-						
Music-leaf holder.	ment-holder.						
Mustache-holder.	Sewing-machine spool-						
Napkin-holder.	holder.						
Negative-holder.	Sewing-machine thread-						
Nipple-holder.	holder.						
Opera-glass holder.	Shade-holder.						
Order-holder.	Shaft-holder.						
Pail-cover holder.	Shoe-holder.						
Paper-holder.	Shoe-tie holder.						
Paper-bag holder.	Signal-holder.						
Paper-roll holder.	Sleeve-holder.						
Parcel or bundle	Speculum-holder.						
holder.	Splasher-holder.						
Parcel strap-holder.	Sponge-holder.						
Pen-holder.	Spool-holder.						
Pen and pencil hold-	Spring-holder.						
er.	Stake holder.						
Pen or pencil holder.	Stamp-holder.						
Pencil-holder.	Stereotype-plate holder.						
Perfume-holder.	Stub-holder.						
Phone-receiver hold-	Surgical-needle holder.						
er.	Tablet or hook holder.						
Photo-plate holder.	Tag-holder.						
Photographic-plate	Telephone-receiver						
holder.	holder.						
Photographic-nega-	Thill holder.						
tive-film holder.	Thread-holder.						
Pillow-sham holder.	Ticket-holder.						
Plate-holder.	Tidy-holder.						
Plate, cup, and sau-	Tile-holder.						
cer holder.	Tool-holder.						
Potato-chip holder.	Towel-holder.						
Poultry-holder.	Trace holder.						
Railway-rail holder.	Twine-holder.						
Railway-signal hold-	Twine or cord holder.						
er.	Type-holder.						
Reel-holder.	Umbrella-holder.						
Rein-holder.	Umbrella or cane holder.						
Roll-holder.	Wash-board holder.						
Rope-holder.	Washstand-splasher						
Sack-holder.	holder.						
Sales slip or sheet	Watch-movement holder.						
holder.	Whetstone-holder.						
Sample-holder.	Work-holder.						
Holder and bracket. Combined	E. M. Wright	434,413	Aug. 12	1484	387	52	1057
Holder or clasp	S. A. Cohen	425,983	Apr. 22	2381	630	51	486
Hollow-landled articles. Manufacture of	W. W. Lee	437,211	Sept. 30	2946	770	52	1966
Hollow mill	M. Weiss	418,903	Jan. 7	399	98	50	83
Hollow ware. Machine for trimming the edges of	J. T. Duff	419,755	Jan. 21	1648	437	50	347
Hominy-flakes or corn-flakes. Manufacturing	J. A. Currie	427,159	May 6	215	55	51	853
Hominy-mill	J. Warrington	427,644	May 13	925	232	51	1003
Hominy-mill	J. Warrington	431,631	July 8	918	231	52	190
Honey-extractor	A. R. Seaman	434,729	Aug. 19	1989	518	52	1163
Hood	M. Frey	427,263	May 6	369	96	51	883
Hoodwink	A. B. Grubb	425,782	Apr. 15	2052	547	51	417
Hoof-expander	E. Arnold	422,488	Mar. 4	181	50	50	1171
Hoof-expander	G. T. Chapman	431,022	June 24	3010	738	51	2079
Hoof-expander	M. Harris	419,667	Jan. 21	1530	407	50	324
Hoof-expander	S. W. Mackey	426,831	Apr. 29	3657	952	51	747
Hoof-protector	L. E. Mellen	439,537	Oct. 28	2896	770	53	569
Hoof-protector and side-expander	G. T. Chapman	421,672	Feb. 18	1833	479	50	928
Hook							
See Bench-hook.	Hat and coat hook.						
Cant-hook.	Hat and garment hook.						
Chain-hook.	Lacing-hook.						
Check-hook.	Ladder-hook.						
Checkrein-hook.	Lap-hook.						
Clothes-hook.	Log-hook.						
Coat and hat hook.	Meat, hammock, or other						
Corn-hook.	hook.						
Electric-line hook.	Picture-hook.						
Fish-hook.	Rope or twine hook.						
Fishing-hook.	Safety-hook.						
Garment-support-	Saw-hook.						
ing hook.	Singletree-hook.						
Grab-hook.	Snap-hook.						
Grappling-hook.	Trace-hook.						
Hame-hook.	Trip-hook.						
Hand-hook.	Wardrobe-hook.						
Harness-hook.	Whiffletree-hook.						
Hook	G. Bradshaw	439,997	Nov. 4	566	149	53	718
Hook	L. M. Devore	419,141	Jan. 7	728	191	50	152
Hook	R. M. Johnson	426,451	Apr. 29	3079	808	51	636

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Hook	J. L. Murphy	420,207	Jan. 28	2369	629	50	496
Hook	J. E. Murray	431,753	July 8	1138	294	52	232
Hook	O. M. Pond	419,353	Jan. 14	1069	292	50	226
Hook	J. H. Templin	432,288	July 15	1961	501	52	395
Hook and eye	E. H. Brown	420,766	Feb. 4	469	124	50	655
Hook and eye	H. W. Libbey	437,214	Sept. 30	2949	771	52	1966
Hook and eye	G. O. Schneller	440,373	Nov. 11	1143	295	53	839
Hook or catch	H. W. Jordan	436,242	Sept. 9	1338	350	52	1636
Hook or shackle	R. M. Ruck	427,482	May 6	684	171	51	947
Hoop:							
<i>See</i> Barrel-hoop.	Spirally-crimped hoop.						
Mast-hoop.	Toy hoop.						
Metal hoop.	Truss-hoop.						
Hoop-coupling	L. R. Fulda	441,869	Dec. 2	381	100	53	1340
Hoop-driving machine	S. L. Wiegand	437,409	Sept. 30	3265	852 853 854	52	2026
Hoop for coopers' ware	L. L. Frost	440,999	Nov. 18	2192	566	53	1046
Hoop-lock	J. H. Mitchell	421,104	Feb. 11	1015	260	50	765
Hoop-machine	J. B. Dougherty	420,902	Feb. 4	709	183	50	697
Hoop-machine	J. B. Dougherty	420,903	Feb. 4	711	183 184	50	698
Hoop-retaining attachment	L. L. Frost	420,680	Feb. 4	358	94	50	633
Hoop-shaving machine	W. P. Curtiss	429,376	June 3	423	100	51	1552
Hoop-skirt	E. C. Laub	435,649	Sept. 2	425	113	52	1455
Hoop-machine. Barrel	F. Glankler	420,683	Feb. 4	360	95	50	654
Hoop-machine. Barrel	F. Glankler	439,142	Oct. 28	2273	610	53	451
Hoop-pails and tubs. Machine for	R. S. Stratton	420,474	Feb. 4	76	18	50	578
Hop-drier	W. L. Leechman	418,730	Jan. 7	108	25, 26	50	23
Hop-picker	R. W. Peterson and S. B. Clark	428,603	Apr. 29	3300	866	51	679
Hops. Apparatus for extracting	J. Irlbacher	424,101	May 20	1633	414	51	1150
Hopper. Overflow slop	E. W. Williams	428,986	May 27	2966	761	51	1427
Horn. Portable fog	J. Millbourn	435,363	Aug. 26	2935	792 791	52	1360
Horse-arrester	A. Zalud	432,922	July 22	2924	750	52	589
Horse-bit	H. Ball	443,158	Dec. 23	2496	638	53	1772
Horse-blanket fastener	W. R. Magraw	441,249	Nov. 25	2636	683	53	1137
Horse-boot	C. L. Busch	423,854	Mar. 18	2242	592	50	1578
Horse-boot	C. J. Dyer and J. Rieck	424,767	Apr. 1	515	139	51	101
Horse-boot	R. T. Ferguson	431,111	July 1	120	31	52	26
Horse-boot	L. S. Lee	433,478	Aug. 5	58	18	52	767
Horse-boot	T. B. Mason	419,338	Jan. 14	1045	276	50	221
Horse-boot	A. McKay	420,208	Jan. 28	2369	629	50	496
Horse-boot	W. H. Osmer	421,964	Feb. 25	2238	569	50	1014
Horse-boot	L. M. Philo	424,573	Apr. 1	210	58	51	43
Horse-boot	M. V. Yerkes	434,619	Aug. 19	1803	470	52	1129
Horse-breaking apparatus	J. R. Brought	422,497	Mar. 4	193	52, 53	50	1173
Horse checking and unchecking device	J. Darling	424,181	Mar. 25	2733	729	50	1678
Horse-checking apparatus	A. Ross	425,633	Apr. 15	1839	492	51	375
Horse-checking device	W. P. Smith	419,082	Jan. 7	651	170 171	50	137
Horse-cleaner	M. Renshaw	439,561	Oct. 28	2933	780	53	576
Horse-clipping machine	E. A. Cochran	426,920	Apr. 29	3770	984	51	770
Horse-controlling device	C. Turney	433,555	Aug. 5	170	45	52	789
Horse-cover	J. Dessauer	426,780	Apr. 29	3577	994	51	732
Horse-covering	A. Gejer	438,105	Oct. 7	671	182	53	129
Horse-detacher	J. H. Akers	440,455	Nov. 11	1295	335	53	867
Horse-detacher	H. Berg	441,125	Nov. 25	2414	625	53	1098
Horse-detacher	J. D. Chamlee	436,400	Sept. 16	1596	422	52	1695
Horse-detacher	H. H. Harper	423,760	Mar. 18	2104	555	50	1551
Horse-detacher	G. W. Harrison	429,904	June 10	1207	299	51	1714
Horse-detacher	J. O. Holtzman	433,344	July 29	3583	924	52	724
Horse-detacher	J. McConnell and M. B. Sherman	433,873	Aug. 5	646	167	52	883
Horse-detacher	J. E. McCray	423,623	Mar. 18	1900	501	50	1512
Horse-detacher	J. H. Nichols	436,185	Sept. 9	1252	327	52	1619
Horse-detacher	G. W. Sikes	432,911	July 22	2909	746	52	586
Horse-detacher	J. R. Smith	432,574	July 22	2384	615	52	485
Horse-detacher	J. Stoneham	426,876	Apr. 29	3717	971	51	759
Horse-detacher	L. Swenson	421,148	Feb. 11	1076	276	50	778
Horse-detacher	F. C. Vickers	420,523	Feb. 4	134	33	50	590
Horse-detaching device	I. A. L. Lysgård	439,355	Oct. 28	2627	700 701	53	518
Horse-foot pad. Detachable	F. M. Dreibellis	431,717	July 8	1086	271	52	221
Horse-hitcher	H. J. Baxter	439,463	Oct. 28	2794	745	53	549
Horse-holder	J. J. McCann	428,931	May 27	2884	738	51	1411
Horse-nail-finishing machine	A. Holmquist	430,736	June 24	2559	626 627 101	51	1993
Horse-power apparatus	O. Johnson and N. A. Holtman	429,382	June 3	432	102	51	1553
Horse-power cooling apparatus	A. B. Bradley	429,996	June 10	1346	334	51	1742
Horse-power for hay-presses	D. S. Waugh	421,035	Feb. 11	915	236	50	746
Horse-power sweep attachment	W. S. Lamb and W. P. Emmert	428,615	May 27	2403	611	51	1313
Horse-powers or speed-regulators. Brake for	L. and A. Y. Gray	434,266	Aug. 12	1252	324	52	1010
Horse-rake	S. A. Blake	433,068	July 29	3130	818	52	643
Horse-rake	P. Blaker	432,112	July 15	1685	433	52	344
Horse-rake	L. W. O'Brian	430,035	June 10	1414	351 352	51	1755
Horse-rake. Wheel	L. W. O'Brian	430,483	June 17	2136	525	51	1904
Horse-shield	N. E. Springsteen	440,887	Nov. 18	2013	517	53	1011
Horse-spreading device	L. G. Hagne and W. P. Bolles	428,485	May 20	2211	559	51	1261
Horse-spreading device	L. G. Hagne and W. P. Bolles	443,562	Dec. 23	2846	732	53	1842
Horse-stopping device	C. A. Amelang	431,509	July 1	420	104	52	86
Horse-tail holder	W. F. Bidwell	424,453	Apr. 1	10	4	51	4
Horse-tail holder	R. G. Sayle	432,085	July 15	1643	421	52	336

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Horse-tail tie	C. D. Haldeman	429,569	June 3	707	172	51	1608
Horse-whipping device	F. D. Mercer	431,847	July 8	1289	323	52	261
Horses. Check for	J. E. Plew	4 5,948	Sept. 9	886	232 233	52	1551
Horses. Device for checking and unchecking	D. C. Knowles	438,550	Oct 14	1322	359	53	261
Horses' hoofs. Tool for trimming	A. M. Roberts	427,115	May 6	145	38	51	846
Horses. Ice and snow shoe for	C. W. Bolton	431,868	July 8	1322	331	52	266
Horses. Lip-protector for	F. N. Fancher	420,721	Feb. 4	407	109	50	644
Horses. Pad for the backs of	C. Mudford	426,042	Apr. 22	2463	651	51	502
Horses' tails. Clasp for knotting	L. Murphy and J. A. Kennedy, Jr.	419,536	Jan. 14	1323	353	50	278
Horseshoe	W. Bryden	421,349	Feb. 11	1361	353	50	830
Horseshoe	G. T. Chapman	428,802	May 27	2693	684	51	1372
Horseshoe	G. T. Chapman	431,021	June 24	3010	738	51	2079
Horseshoe	G. T. Chapman	434,821	Aug. 19	2120	555	52	1190
Horseshoe	C. F. Cochran	430,069	June 10	1475	366	51	1766
Horseshoe	J. Curtin	427,976	May 13	1448	366	51	1103
Horseshoe	G. C. Edmunds	424,546	Apr. 1	170	47	51	36
Horseshoe	J. E. Elkerton	428,594	May 27	2376	604	51	1313
Horseshoe	O. C. Elliott	431,805	July 8	1221	305 306	52	247
Horseshoe	T. F. Evans	420,151	Jan. 28	2272	602	50	479
Horseshoe	A. N. Green	437,152	Sept. 23	2852	741	52	1940
Horseshoe	D. S. Jaffray	423,162	Mar. 11	1225	319	50	1376
Horseshoe	L. B. Linn	429,460	June 3	539	130	51	1576
Horseshoe	E. and P. Malouey	428,117	May 20	1655	420	51	1155
Horseshoe	J. Murphy	427,183	May 6	242	63	51	859
Horseshoe	G. W. Rice	436,803	Sept. 23	2261	596	52	1823
Horseshoe	W. F. Rice	428,229	May 20	1825	458	51	1187
Horseshoe	J. Russell	428,231	May 20	1826	458	51	1188
Horseshoe	C. H. B. Schatz	438,952	Oct. 21	1978	528	53	388
Horseshoe	W. Somerville, Sr	435,104	Aug. 26	2584	6-2	52	1285
Horseshoe-blanks. Roll for preparing	Z. V. Purdy	434,838	Aug. 19	2142	561	52	1194
Horseshoe-calk. Detachable	J. C. Higgins	439,008	Oct. 21	2061	552	53	406
Horseshoe-fastening	E. T. Covell	441,940	Dec. 2	481	128	53	1359
Horseshoe guard-plates. Tool for applying and re- moving	G. T. Chapman	440,099	Nov. 4	707	188	53	747
Horseshoe-machine	C. L. Haight	426,564	Apr. 29	3242	850 851	51	667
Horseshoe-machine	Z. V. Purdy	434,837	Aug. 19	2139	660 661	52	1194
Horseshoe-nails and nail-blanks. Manufacture of	D. E. Kempster	427,030	Apr. 29	3933	1025 1026	51	802
Horseshoe-nails. Die for use in making	D. E. Kempster	429,036	May 27	3048	786 787	51	1443
Horseshoe-nails. Machine for forging	C. E. Moore	422,634	July 22	2474	636	52	502
Horseshoe-nails. Machine for forging	C. E. Moore	442,987	Dec. 16	2181	561 562	53	1706
Horseshoe-nails. Machine for making	J. Swalwell	429,975	June 10	1319	326 327	51	1736
Horseshoe. Nailless	S. Pruden	434,401	Aug. 12	1455	379	52	1052
Horseshoe-sharpener, drill, and saw-gummer. Com- bined	F. L. Adams	422,045	Feb. 25	2352	621	50	1035
Horseshoes. Device for attaching	D. L. Mayow and J. M. Castle	440,048	Nov. 4	640	170	53	733
Horseshoes. Machine for finishing cast	C. J. Le Roy	424,890	Apr. 1	708	187 188	51	137
Horseshoes. Machine for forming blank bars for	J. D. Billings	422,564	Mar. 4	287	73.74	50	1191
Horseshoes. Machine for forming clips on	J. D. Billings	443,893	Dec. 30	3669	945	53	2010
Horseshoes. Machine for welding calks to	C. E. Schroeder	440,372	Nov. 11	1141	294	53	832
Horseshoe's implement	W. H. Woodman	440,454	Nov. 11	1294	335	53	866
Horseshoe's nippers and hoof-trimmer	P. Perry	441,968	Dec. 2	522	140	53	1366
Horseshoeing-jack	F. Allen	443,346	Dec. 23	2832	725	53	1537
Hose	F. G. Botsford	438,836	Oct. 21	1804	451	53	355
Hose	R. Wright	425,283	Apr. 8	1311	350	51	264
Hose. Apparatus for making seamless rubber-lined	E. N. Foote	440,703	Nov. 18	1708	438	53	955
Hose attachment	F. L. Decarie and P. Lord	435,734	Sept. 2	546	145	52	1480
Hose band-clamp	H. B. Sherman	427,709	May 13	1032	259	51	1025
Hose bands. Device for securing	C. L. Halstead	436,706	Sept. 16	2077	546	52	1785
Hose-bridge	A. H. Hatchard	420,065	Jan. 28	2135	565	50	452
Hose-bridge for railway-tracks	T. H. Donohue and M. Gore	439,868	Nov. 4	358	92	53	677
Hose-carriage	G. M. Kim	429,764	June 10	995	244	51	1674
Hose-clamp	O. Thum	429,979	June 10	1324	328	51	1737
Hose-clamp	D. F. Toomey	427,132	May 6	169	44	51	845
Hose, &c. Compound fabric for	B. L. Stowe	427,929	May 13	1377	348 349	51	1089
Hose-connection	J. G. Hallas	440,844	Nov. 18	1948	500	53	999
Hose-coupling	R. L. Ambrose	421,647	Feb. 18	1800	470	50	922
Hose-coupling	V. Belisle	423,853	Mar. 18	2240	592	50	1577
Hose-coupling	C. B. Bosworth	418,906	Jan. 7	402	99	50	84
Hose-coupling	M. Connor	435,800	Sept. 2	651	172	52	1500
Hose-coupling	J. E. Davis	419,988	Jan. 21	2012	531	50	420
Hose-coupling	C. Eckhard	427,305	May 6	425	110	51	895
Hose-coupling	R. Franken	425,773	Apr. 15	2039	543	51	415
Hose-coupling	A. T. Gilbert	437,890	Oct. 7	328	96	53	64
Hose-coupling	M. D. Jones	431,167	July 1	203	50	52	42
Hose-coupling	B. F. Levett	437,213	Sept. 30	2948	770	52	1966
Hose-coupling	L. J. Rice	426,515	Apr. 29	3169	832	51	653
Hose-coupling	J. H. Sewall	421,110	Feb. 11	1021	261	50	766
Hose-coupling	F. E. Sharon	439,902	Nov. 4	416	108	53	689
Hose-coupling	I. D. Weaver	421,036	Feb. 11	917	236 237	50	746
Hose-coupling	E. T. Winkler	430,721	June 24	2535	620	51	1989
Hose-coupling. Air-brake	A. W. Jackson	434,873	Aug. 19	2201	576	52	1206
Hose-coupling band	W. Yerdon	428,660	May 27	2474	629	51	1330
Hose coupling. Brake	E. A. Leland	420,810	Feb. 4	555	142	50	670

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Hose coupling. Brake.....	E. A. Leland	426,824	Apr. 29	3647	951	51	745
Hose coupling. Brake.....	E. A. Leland	434,282	Aug. 12	1275	331	52	1015
Hose-couplings. Machine for applying	J. A. Angwin.....	423,106	Mar. 11	1138	295	50	1359
Hose-machine.....	R. Cowen.....	422,185	Feb. 25	2559	677 678 679	50	1073
Hose-machine.....	R. Cowen and G. C. Beckwith.....	419,987	Jan. 21	2006	528 529 530	50	419
Hose-machine.....	B. Hershey.....	440,033	Nov. 4	615	163 164 165	53	728
Hose. Manufacturing seamless tube rubber.....	E. N. Foote.....	441,754	Dec. 2	199	52	53	1302
Hose-nozzle.....	D. H. Rice.....	426,514	Apr. 29	3168	832	51	653
Hose or pipe coupling.....	J. H. Sewall.....	437,518	Sept. 30	3440	899	52	2062
Hose or tubing.....	H. D. Cheever.....	420,863	Feb. 4	643	166	50	686
Hose. Pliers for attaching couplings to.....	C. W. Kimball.....	441,671	Dec. 2	63	17	53	1274
Hose-reel.....	R. S. Chapman.....	440,838	Nov. 18	1941	498	53	997
Hose-reel.....	S. F. Reynolds.....	424,501	Apr. 1	96	27	51	92
Hose-reel.....	R. D. Wirt.....	432,467	July 15	2219	573	52	446
Hose-reel attachment.....	J. H. Luther.....	427,334	May 6	468	120	51	904
Hose-reel attachment.....	J. H. Luther.....	442,447	Dec. 9	1271	328 329	53	1517
Hose-straps. Making.....	C. W. Kimball.....	421,004	Feb. 11	876	226	50	739
Hose support. Fire.....	J. A. Olfner.....	443,460	Dec. 23	2994	769	53	1871
Hose support. Fire.....	C. R. Robinson.....	425,256	Apr. 8	1262	337	51	255
Hose to couplings. Tool for fastening.....	C. E. Hudson.....	420,272	Jan. 28	2473	657	50	515
Hose-washing machine.....	G. Villeneuve.....	425,642	Apr. 15	1852	494	51	377
Hose-winding machine.....	J. A. Coultaus.....	419,320	Jan. 14	1012	268 269	50	214
Hose-wrench.....	J. S. Smades.....	421,443	Feb. 18	1490	386	50	863
Hot-air and steam heater.....	W. J. Burnett.....	429,882	June 10	1179	292	51	1708
Hot-air engine.....	J. J. McTighe.....	429,281	June 3	248	61 62 63	51	1519
Hot-air engine.....	J. J. McTighe.....	429,282	June 3	256	63	51	1520
Hot-air engine.....	S. Vivian.....	437,320	Sept. 30	3112	615	52	1997
Hot-air engines. Operating.....	J. J. McTighe.....	429,223	June 3	261	63	51	1521
Hot-air furnace.....	H. Cowles.....	422,921	Mar. 11	852	222	50	1307
Hot-air furnace.....	J. Evans.....	436,075	Sept. 9	1082	220	52	1589
Hot-air furnace.....	H. N. Hemingway.....	443,849	Dec. 30	3612	929 930	53	1999
Hot-air furnace.....	J. H. Nevins.....	427,006	Apr. 29	3893	1016	51	793
Hot-air furnace.....	F. L. Sheppard.....	433,749	Aug. 5	462	119	52	845
Hot-air furnace.....	W. W. Sweetland.....	424,035	Mar. 25	2528	673 674	50	1639
Hot-air furnace.....	G. F. Wilson.....	438,667	Oct. 21	1504	406 407	53	301
Hot-air pipe.....	E. A. Eversman and D. Wagner.....	425,601	Apr. 15	1780	477	51	363
Hot-air register.....	F. Burmeister.....	435,391	Sept. 2	17	4	52	1378
Hot-air register.....	L. Schauk.....	429,968	June 10	1309	324	51	1734
Hot-air register and ventilator.....	J. Geddes.....	436,522	Sept. 16	1776	468	52	1729
Hot-air-register evaporator.....	A. F. Hilyer.....	438,159	Oct. 14	750	205	53	151
Hot-air registers. Water-evaporator attachment for.....	A. F. Hilyer.....	435,095	Aug. 26	2572	679	52	1283
Hot-air ventilating heater.....	C. B. Loveless.....	432,188	July 15	1804	404	52	366
Hot-water apparatus. Circulating.....	J. F. McElroy.....	422,312	Feb. 25	2767	729	50	1111
Hot-water boiler.....	U. Beaupré.....	442,566	Dec. 9	1467	376	53	1557
Hot-water boiler.....	R. F. Brown.....	424,174	Mar. 25	2723	726	50	1676
Hot-water boiler.....	D. L. Dwinnell.....	431,453	July 1	647	162	52	131
Hot-water boiler.....	D. L. Dwinnell.....	442,701	Dec. 16	1682	431	53	1608
Hot-water boiler.....	D. L. Dwinnell.....	443,432	Dec. 23	2945	758	53	1861
Hot-water boiler.....	M. Nicholson.....	443,329	Dec. 23	2793	717 718	53	1831
Hot-water draft-tube.....	C. D. Hunking.....	438,813	Oct. 21	1762	472	53	349
Hot-water heater.....	E. M. Arnold.....	430,415	June 17	2037	502	51	1885
Hot-water heater.....	J. J. Graves.....	423,759	Mar. 18	2103	555	50	1550
Hot-water heater.....	G. W. and A. W. Walker.....	442,651	Dec. 16	1591	411 412	53	1590
Hotel-indicator.....	C. S. Peters.....	431,725	July 8	1098	273	52	224
House: See Cold-storage house. Smoke-house. Dwelling-house. Smoke and dry house. Frame house. Storm-house. Play-house. Tobacco-curing house. Portable house.							
House.....	J. I. Comly.....	443,203	Dec. 23	2589	665 666	53	1793
House interiors. Finishing.....	M. Ohmer.....	432,553	July 22	2357	608	52	480
Houses. Construction of tenement.....	W. A. Smith and F. H. Peckwell.....	432,774	July 22	2717	695	52	548
Hub.....	M. E. Thomas.....	441,715	Dec. 2	136	35	53	1288
Hub and axle.....	F. B. Clements.....	425,754	Apr. 15	2015	537	51	410
Hub. Anti-friction.....	C. J. Applequist.....	421,539	Feb. 18	1641	424	50	890
Hub-attaching device.....	M. T. Foster.....	431,187	July 1	230	58	52	48
Hub-attaching device.....	W. H. Wright and E. O. Simpson.....	421,341	Feb. 11	1350	349	50	828
Hub-band.....	T. J. Reid.....	429,479	June 3	577	141	51	1583
Hub-band.....	M. Rheinecker and F. Ferkel.....	428,784	May 27	2672	677	51	1367
Hub-band.....	E. Storn.....	425,008	Apr. 8	897	237	51	182
Hub-bands. Machine for applying rings to.....	T. J. Reid.....	434,568	Aug. 19	1718	449	52	1112
Hub-boring machine.....	W. E. Kane and F. T. Weidaw.....	422,358	Feb. 25	2847	751	50	1126
Hub-boring machine. Metallic.....	G. H. Everson.....	430,339	Jan. 28	2563	681	50	532
Hub-clamp and wrench combined.....	J. Sullivan.....	430,814	Jan. 24	2639	661	51	2020
Hub. Metallic wheel.....	A. L. H. Messmer.....	428,312	May 20	1953	490	51	1211
Hub. Vehicle.....	J. A. Lee and W. H. Barrows.....	436,246	Sept. 9	1346	351	52	1638
Hub. Vehicle.....	J. R. McAlister.....	423,265	Mar. 11	1370	356	50	1403

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Hub. Vehicle.....	P. McMenamin.....	421,051	Feb. 11	941	243	50	751
Hub. Vehicle.....	E. T. Wade.....	423,360	Mar. 11	1508	396	50	1430
Hub. Vehicle.....	H. B. Williams.....	433,112	July 29	3256	838	52	657
Hub. Wheel.....	T. M. Hall.....	438,921	Oct. 21	1930	514	53	379
Hub. Wheel.....	H. Huddleston.....	426,816	Apr. 29	3632	947	51	742
Hub. Wheel.....	J. McMahon.....	439,035	Oct. 21	2100	562	53	413
Hub-wrench.....	M. Beach.....	431,641	July 8	947	237	52	196
Hubs. Cap and lining for point-bands of.....	J. Maris.....	433,250	July 29	3455	892	52	699
Hubs. End band for.....	J. Maris.....	437,496	Sept. 30	3402	891	52	2056
Hubs. Point-band for.....	W. H. Bowe.....	437,748	Oct. 7	110	34	53	24
Huller:							
See Coffee-huller. Oat-huller.							
Cotton-huller. Rice-huller.							
Grain-huller. Seed-huller.							
Hulling-machine.....	H. B. Stevens.....	425,111	Apr. 8	1034	276	51	209
Hurdle. Metallic.....	C. F. Millar.....	437,444	Sept. 30	3331	869	52	2040
Husking-bench and fodder-binder. Combined.....	P. J. Miller.....	429,936	June 10	1251	310	51	1723
Husking-pin.....	H. H. Perkins.....	429,475	June 3	568	139	51	1521
Husking pin or peg.....	H. H. Perkins.....	436,378	Sept. 16	1564	411	52	1690
Hydrant.....	P. N. Bardo and T. Ford.....	430,262	June 17	1775	441	51	1834
Hydrant.....	G. L. Doehe.....	437,831	Oct. 7	244	75	53	48
Hydrant.....	J. C. Kupferle and E. Herman.....	442,059	Dec. 2	683	184	53	1396
Hydrant.....	J. F. Lingemann.....	426,457	Apr. 29	3087	810	51	638
Hydrant.....	A. H. Mellert.....	430,081	June 10	1496	371	51	1770
Hydrant.....	J. H. Weitmyer.....	434,218	Aug. 12	1170	304	52	994
Hydrant.....	P. White.....	428,707	May 27	2560	648	51	1345
Hydrant and street-washer.....	C. G. Ette.....	440,552	Nov. 11	1454	375	53	896
Hydrant. Fire.....	W. T. Y. Schenck.....	430,301	June 17	1868	459	51	1852
Hydrant. Fire.....	F. C. Viney and J. M. Dalton.....	428,578	May 20	2342	593	51	1287
Hydraulic apparatus.....	E. T. Robb.....	433,822	Aug. 5	575	150 151	52	869
Hydraulic compress.....	A. L. Blackman.....	431,738	July 8	1119	278 279	52	228
Hydraulic-cylinder lubricator.....	J. H. Brookmire.....	424,456	Apr. 1	15	5	51	5
Hydraulic-cylinder lubricator.....	J. H. Brookmire.....	426,762	Apr. 29	3552	926	51	727
Hydraulic-cylinder lubricator.....	C. M. Dreyer.....	424,186	Mar. 25	2742	731	50	1680
Hydraulic elevator.....	S. W. Blanchard.....	435,202	Apr. 8	1187	315	51	240
Hydraulic elevator.....	R. C. Smith.....	420,548	Feb. 4	167	42	50	596
Hydraulic elevator.....	R. C. Smith.....	420,549	Feb. 4	169	42	50	597
Hydraulic-elevator plunger.....	D. P. Allen.....	437,880	Oct. 7	313	93	53	61
Hydraulic engine.....	G. W. Barrett.....	438,600	Oct. 21	1399	379	53	282
Hydraulic gate. Pivoted.....	J. P. Frizell.....	434,366	Aug. 12	1424	373	52	1046
Hydraulic gate. Reciprocating.....	J. P. Frizell.....	435,298	Aug. 26	2384	764	52	1339
Hydraulic motor.....	J. W. Blakenmore.....	429,600	June 10	755	182	51	1627
Hydraulic motor.....	H. P. Christiansen.....	428,829	May 27	2740	695	51	1341
Hydraulic motor.....	W. H. Davis.....	442,424	Dec. 9	1237	320	53	1511
Hydraulic motor.....	J. Kennedy.....	423,563	Mar. 18	1809	477	50	1495
Hydraulic motor.....	W. B. McPherson and W. Cahoon.....	421,605	Feb. 18	1740	455 456	50	910
Hydraulic motor.....	H. Roeske.....	424,223	Mar. 25	2788	744	50	1690
Hydraulic-motor stop.....	I. H. Venn.....	431,087	July 1	84	21	52	19
Hydraulic power-regulating apparatus.....	R. H. Thorpe.....	429,664	June 10	850	206	51	1645
Hydraulic press.....	E. W. Naylor.....	437,933	Oct. 7	397	113	53	76
Hydraulic press.....	S. J. Webb.....	429,666	June 10	853	207	51	1646
Hydraulic press.....	S. J. Webb.....	429,667	June 10	855	207	51	1646
Hydraulic shaping-press.....	A. E. Hobson and G. W. Hull.....	429,349	June 3	377	89	51	1543
Hydrazin.....	T. Curtius.....	422,334	Feb. 25	2805		50	1119
Hydrocarbon and other oils for burning. Preparing.....	J. H. Macy.....	443,225	Dec. 23	2625	674 675	53	1200
Hydrocarbon-burner.....	J. Adams.....	427,819	May 13	1207	304	51	1058
Hydrocarbon-burner.....	J. Adams.....	427,820	May 13	1208	304	51	1058
Hydrocarbon-burner.....	J. Adams.....	427,946	May 13	1406	355	51	1095
Hydrocarbon-burner.....	D. C. Andrews and J. F. Seery.....	419,304	Jan. 14	982	262	50	209
Hydrocarbon-burner.....	R. B. Avery and R. F. Smith.....	428,587	May 27	2366	601	51	1311
Hydrocarbon-burner.....	C. F. Bonback and O. Hoppe.....	421,543	Feb. 18	1649	427	50	892
Hydrocarbon-burner.....	H. C. Brill.....	429,414	June 3	474	112	51	1561
Hydrocarbon-burner.....	J. H. Bullard.....	419,409	Jan. 14	1152	306	50	242
Hydrocarbon-burner.....	L. Chandler.....	426,168	Apr. 22	2651	697	51	540
Hydrocarbon-burner.....	C. M. Collins.....	426,713	Apr. 29	3484	911	51	713
Hydrocarbon-burner.....	H. N. Davis.....	442,959	Dec. 16	2139	550	53	1697
Hydrocarbon-burner.....	R. T. Davies.....	443,316	Dec. 23	2777	712	53	1827
Hydrocarbon-burner.....	A. J. English.....	443,509	Dec. 30	3077	793	53	1896
Hydrocarbon-burner.....	E. W. Fellowes.....	425,872	Apr. 15	2187	581 582	51	442
Hydrocarbon-burner.....	J. Feorst.....	426,371	Apr. 22	2940	773	51	600
Hydrocarbon-burner.....	C. M. Gearing.....	441,062	Nov. 18	2294	595	53	1066
Hydrocarbon-burner.....	B. N. Hawes.....	443,763	Dec. 30	3484	893	53	1973
Hydrocarbon-burner.....	W. W. Lake, E. T. Jacobs, and G. S. Smith.....	435,755	Sept. 2	578	154	52	1486
Hydrocarbon-burner.....	C. H. Land.....	423,432	Mar. 18	1621	426	50	1460
Hydrocarbon-burner.....	F. B. Meyers.....	433,871	Aug. 5	642	167	52	882
Hydrocarbon-burner.....	W. S. More and J. G. Rogers.....	427,595	May 13	861	216	51	991
Hydrocarbon-burner.....	A. Noteman.....	427,893	May 13	1326	334	51	1080
Hydrocarbon-burner.....	W. Powell.....	431,479	July 1	686	172	52	138
Hydrocarbon-burner.....	S. C. Reilly.....	432,080	July 15	1639	420	52	335
Hydrocarbon-burner.....	E. A. Rider.....	436,437	Sept. 16	1653	435	52	1705
Hydrocarbon-burner.....	E. Rogers.....	434,810	Aug. 19	2104	551	52	1187
Hydrocarbon-burner.....	S. Turner.....	419,738	Jan. 21	1617	431	50	341
Hydrocarbon-burner.....	J. Wilson and A. Mason.....	421,642	Feb. 18	1793	469	50	920
Hydrocarbon-burner.....	J. Wilson and A. Mason.....	423,011	Mar. 11	936	260	50	1331
Hydrocarbon-burner.....	J. Wilson and A. Mason.....	438,513	Oct. 14	1269	343	53	250
Hydrocarbon-burner.....	J. Wilson and A. Mason.....	438,514	Oct. 14	1270	344	53	250
Hydrocarbon-burner.....	J. Wilson and A. Mason.....	438,515	Oct. 14	1271	344	53	250
Hydrocarbon-burner.....	J. Wilson and A. Mason.....	438,874	Oct. 21	1265	495	53	366

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Hydrocarbon-burner for heaters	O. Ewert and J. A. Mebling	424,105	Mar. 25	2632	701	50	1659
Hydrocarbon-burning apparatus	J. H. Bullard	435,269	Aug. 26	2827	748	52	1331
Hydrocarbon-burning apparatus	J. H. Bullard	435,270	Aug. 26	2828	748	52	1331
Hydrocarbon-engine	G. B. Brayton	432,260	July 15	1907	489	52	385
Hydrocarbon-engines. Means for facilitating the starting and regulating the working of	W. D. and S. Priestman	430,038	June 10	1421	353	51	1756
Hydrocarbon fuel. Apparatus for burning	J. H. Bullard	419,410	Jan. 14	1154	307	50	213
Hydrocarbon-furnace	M. R. Flagg	492,927	Mar. 11	861	225	50	1308
Hydrocarbon-furnace	N. Rogers and J. A. Wharry	427,367	May 6	509	130	51	912
Hydrocarbon generator and burner	A. L. Holland	430,854	June 24	2753	674	51	2030
Hydrocarbon-liquid heater	W. R. Addicks	443,214	Dec. 23	2607	671	53	1796
Hydrocarbon-motor	E. Butler	423,214	Mar. 11	1293	337	50	1390
Hydrocarbon motor-engine. Liquid	H. Lindley and T. Browett	440,485	Nov. 11	1346	347	53	877
Hydrocarbon-oil. Apparatus for burning	J. H. Bullard	419,411	Jan. 14	1155	307	50	243
Hydrocarbon-oil. Apparatus for burning	J. S. Hull	436,918	Sept. 23	2496	653	52	1872
Hydrocarbon-oil. Apparatus for burning	S. T. J. Bray	441,467	Nov. 25	2990	769	53	1203
Hydrocarbon-oil burner	R. P. Ambler	442,163	Dec. 9	843	226	53	1425
Hydrocarbon-oil burner	J. T. Black	437,013	Sept. 23	2618	684	52	1896
Hydrocarbon-oil burner	C. E. Burbank	440,942	Nov. 18	2107	547	53	1003
Hydrocarbon oils. Apparatus for burning	E. Rogers	428,353	May 20	2017	507	51	1225
Hydrocarbon oils. Refining	J. Gardner and J. F. Harris	442,802	Dec. 16	1866	482	53	1644
Hydrocarbons for impregnating purposes. Working high-boiling	E. T. Greenfield and J. Nagel	441,870	Dec. 2	382		53	1340
Hydrogen peroxide. Making	W. Erwin	440,792	Nov. 18	1858	479	53	982
Hydrometer	A. Eichhorn	442,962	Dec. 16	2143	551	53	1698
Hydropneumatic elevator	C. R. Otis	418,875	Jan. 7	344	83, 84	50	72
Hydroquinone. Obtaining permanent	K. Scholz	427,620	May 13	894		51	997
Hydrostatic presses. Apparatus for actuating	J. H. Vaile	424,040	Mar. 25	2537	676	50	1641
Hygienic chair	A. F. Caldwell	421,045	Feb. 11	933	241	50	749
Hypnotic. Preparing a	S. Radlauer	422,251	Feb. 25	2673		50	1094
I-beams or channel-bars. Machine for cutting	J. Koehler	438,252	Oct. 14	866	240	53	175
Ice. Apparatus for the manufacture of	J. W. Brook	423,306	Mar. 11	1438	374	50	1416
Ice-black mold	J. W. Brook	423,305	Mar. 11	1437	374	50	1416
Ice-boxes. Door or window for	D. Althen	426,700	Apr. 29	3453	905	51	707
Ice-breaking machine	T. Mills	432,758	July 22	2695	688	52	544
Ice cakes. Apparatus for planing	J. Kavanagh	428,565	May 20	2320	589	51	1282
Ice-cream freezer	J. C. Beard	442,659	Dec. 16	1602	414	53	1593
Ice-cream freezer	J. A. Burns	431,645	July 8	954	239	52	198
Ice-cream freezer	F. W. Cochrane	436,337	Sept. 16	1482	387	52	1673
Ice-cream freezer	E. L. Drake	438,103	Oct. 7	669	181	53	129
Ice-cream freezer	J. G. Falls	436,309	Sept. 9	1432	373	52	1656
Ice-cream freezer	C. H. A. Gerding	431,345	July 1	473	117	52	96
Ice-cream freezer	J. W. Hart and L. Gillihan	442,316	Dec. 9	1070	280	53	1477
Ice-cream freezer	J. G. Mooney	434,940	Aug. 26	2347	621	52	1240
Ice-cream freezer	A. L. Platt	427,901	May 13	1337	337	51	1082
Ice-cream freezer	E. H. Shaw	428,148	May 20	1698	431	51	1162
Ice-cream freezer	L. Stevenson	423,092	Mar. 11	1113	291	50	1354
Ice-cream freezer	W. H. Temson	435,333	Aug. 26	2932	779	52	1349
Ice-cream freezer	F. C. Wilsey	442,742	Dec. 16	1776	459	53	1624
Ice-cream packer	F. F. Stranahan	420,473	Feb. 4	75	17	50	578
Ice-creper	C. Cooper	425,093	Apr. 8	1013	271	51	204
Ice-creper	H. L. Page	430,537	June 17	2220	545	51	1919
Ice-creper	C. Voorhis and W. E. Starr	418,830	Jan. 7	263	64	50	56
Ice-cutting implement	O. F. Jarvis	428,563	May 20	2315	588	51	1281
Ice-cutting machine	E. Bradley and D. Gallagher	433,713	Aug. 5	400	103	52	833
Ice-cutting machine	L. Thurston and G. Stanton	421,209	Feb. 11	1168	299	50	794
Ice-cutting machine	D. Williamson	423,652	Mar. 18	1957	515	50	1523
Ice-elevator and snow-remover	J. S. Field	424,706	Apr. 1	415	109	51	82
Ice for storing. Apparatus for planing cakes of	J. N. Briggs. (Reissue)	11,060	Feb. 18	2131	558	50	984
Ice for storing. Cutter for corrugating	G. A. Birch	436,492	Sept. 16	1736	458	52	1722
Ice-harvesting machine	J. A. Mengel	432,421	July 15	2144	551	52	429
Ice harvesting or cutting machine	J. M. and S. B. Moody	433,953	Aug. 12	764	198	52	915
Ice-house. Refrigerating	F. Semmers	419,131	Jan. 7	717	189	50	150
Ice, ice-cream, &c. Machine for making	L. D. Railsback	443,984	Dec. 30	3830	976	53	2039
Ice-machine	W. D. Alford, G. O. Rinman, and F. V. De Coppel	434,904	Aug. 26	2295	605	52	1231
Ice-machine	J. C. Kitton	424,005	Mar. 25	2487	662	50	1631
Ice-machine	J. Kurtz	421,175	Feb. 11	1115	286	50	785
Ice-machine and method of operating same	W. T. Hildrup, Jr., and T. H. Butler	427,765	May 13	1129	283	51	1043
Ice, &c. Machine for making	C. Bradford	422,565	Mar. 4	299	74	50	1191
Ice-machines. Freezing-box for	H. Rea, Jr., and J. L. Clark	439,559	Oct. 25	2930	779	53	576
Ice. Making	G. F. Meyer	435,566	Sept. 2	299	80	52	1431
Ice or refrigerating machine	F. W. Wolf	424,746	Apr. 1	480	131	51	94
Ice or refrigerating machine	F. W. Wolf	424,747	Apr. 1	481	131	51	95
Ice-pick	C. Bew	419,911	Jan. 21	1896	498	50	398
Ice-pick	A. B. Schofield	441,333	Nov. 25	2770	716	53	1162
Ice-plane	J. C. Faughender	430,009	June 10	1372	340	51	1747
Ice-planer	W. F. Vernier	437,465	Sept. 30	3361	279	52	2047
Ice-planer cutter	J. N. Briggs	422,566	Mar. 4	290	74	50	1191
Ice-plow	C. Van Heesen	424,362	Mar. 25	3058	811	50	1742
Ice-plow	H. Pray	419,354	Jan. 14	1069	282	50	226

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Ice-plow and flanger for railway-tracks	E. Leslie	419,335	Jan. 14	1038	275	50	219
Ice-roads. Machine for making	G. T. Glover	426,006	Apr. 22	2417	640	51	493
Ice-sawing machine	A. L. Stauffer	438,651	Oct. 21	1480	{ 400 401 }	53	297
Ice-shaving machine	S. T. Jull	435,359	Aug. 26	2980	790	52	1358
Ice-tongs	J. Brinkerhoff	438,128	Oct. 7	701	190	53	135
Ice-tongs	C. B. McDonough, Sr.	426,464	Apr. 29	3098	812	51	640
Ice-tool	O. P. Jaques	425,325	Apr. 8	1366	364	51	274
Ice. Trough for the manufacture of	J. W. Brook	419,918	Jan. 21	1906	{ 501 502 }	50	400
Illuminating apparatus	R. Wallwork and A. C. Wells	425,154	Apr. 8	1111	295	51	223
Illuminating apparatus	R. Wallwork and A. C. Wells	440,520	Nov. 11	1402	{ 362 363 }	53	887
Illuminating buildings with coal-oil. Apparatus for	A. S. Cody	425,302	Apr. 8	1339	{ 357 358 }	51	269
Implement. Combination	A. A. Low	419,268	Jan. 14	930	246	50	198
Incandescent burner	C. B. Harris	437,114	Sept. 23	2763	722	52	1926
Inclines, &c. Safety device for	W. Peach	432,213	July 15	1845	474	52	373
Inclinometer	W. Martin	423,484	Mar. 18	1694	447	50	1475
Incrustation. Appliance for preventing	W. H. Porter	425,903	Apr. 15	2227	591	51	449
Incrustation in boilers. Compound for preventing	W. Blackburn	439,756	Nov. 4	186		53	644
Incrustation-preventer. Electric	W. B. Bull	430,462	June 17	2106	519	51	1897
Incrustation-preventive	J. W. Mitchell	428,015	May 13	1504		51	1115
Incrustation-preventive	E. C. Noland	419,470	Jan. 14	1239		50	261
Incubator	G. H. Bishop	435,387	Sept. 2	9	3	52	1376
Incubator	B. W. S. Clark	424,599	Apr. 1	249	66	51	51
Incubator	F. J. Palmer	442,294	Dec. 9	1031	272	53	1470
Incubator	E. W. Wickey	436,467	Sept. 16	1700	447	52	1714
Incubators. Thermostat for	F. Saumenig	433,910	Aug. 5	694	180	52	892
Index	C. M. Cott	426,114	Apr. 22	2573	677	51	524
Index	N. B. Shyer	429,970	June 10	1312	{ 324 325 }	51	1735
Index	A. J. Wells	433,223	July 29	3415	881	52	690
Index-center	F. J. Miller	420,278	Jan. 23	2483	659	50	516
Indicating and telephone system. Combined electric	H. J. Haight	442,883	Dec. 16	2021	519	53	1673
Indicating apparatus. Electrical	G. A. Holt	418,871	Jan. 7	332	81	50	70
Indicating mechanism. Coin-operated	W. R. Smith	440,728	Nov. 18	1745	448	53	962
Indicating races. Apparatus for	G. H. Chappell	432,694	July 22	2587	{ 662 663 }	52	523
Indicating the ages of persons. Device for	G. C. Tewksbury	435,718	Sept. 2	528	{ 139 140 }	52	1477
Indicator:							
See Boiler-indicator.	Liquid-level indicator.						
Boiler water-indicator.	Low-water indicator.						
Boiler water-indicator.	Mail-indicator.						
Cash-indicator.	Measure-indicator.						
Current-indicator.	Musical-key indicator.						
Current-direction indicator.	Office-indicator.						
Deal-indicator.	Order-indicator.						
Door-indicator.	Poison-indicator.						
Electric indicator.	Power-indicator.						
Electric-current indicator.	Pressure-indicator.						
Electrical indicator.	Speed-indicator.						
Elevator-indicator.	Station-indicator.						
Engine-indicator.	Station and street indicator.						
Fire-indicator.	Steam-engine indicator.						
Gun-charge indicator.	Street or station indicator.						
Heat-indicator.	Time-indicator.						
Hotel-indicator.	Vote-indicator.						
Letter-box indicator.	Water-closet indicator.						
Letter-box indicator.	Water-level indicator.						
Letter-box indicator.	Wind-vane indicator.						
Indicator	W. R. Bouis	426,103	Apr. 22	2560	673	51	521
Indicator	C. E. Brunthaver	443,314	Dec. 23	2774	711	53	1827
Indicator	G. W. Chase	437,480	Sept. 30	3381	885	52	2052
Indicator-lock	J. C. Barr	426,097	Apr. 22	2547	670	51	518
Indicator-lock	J. C. Barr	428,710	May 27	2564	{ 649 650 }	51	1346
Indicator-lock	J. C. Barr	428,711	May 27	2567	650	51	1346
Indicator-lock	W. H. King	419,607	Jan. 14	1423	{ 381 382 }	50	299
Indicator or directory	J. F. Deeves and R. U. J. Gauthreaux	434,325	Aug. 12	1334	347	52	1027
Indigo solution	A. Ashworth	437,638	Sept. 30	3607		52	2096
Induction-coil	A. M. Frankenberg	426,563	Apr. 29	3240	850	51	667
Induction-coil casing	E. Thomson	428,648	May 27	2451	625	51	1326
Induction-coil or transformer	C. E. Kammeier	432,050	July 15	1596	408	52	325
Induction-motor	C. J. Van Depoele	433,834	Aug. 5	591	{ 153 154 }	52	872
Inductorium	A. H. Hoyt	422,885	Mar. 4	786	201	50	1286
Infusions. Apparatus for making	J. Childs	423,127	Mar. 11	1169	{ 304 305 }	50	1365
Ingot and wire made therefrom. Compound	L. L. Burdon	422,713	Mar. 4	512	131	50	1234
Ingot-manipulator	J. Hemphill and J. Fawell	424,650	Apr. 1	328	85, 86	51	64
Ingot-pusher	S. T. Wellman	418,999	Jan. 7	531	133	50	112
Ingot. Seamless plated	J. L. P. Spooner	419,085	Jan. 7	655	{ 171 172 }	50	138
Ingots and seamless wire. Manufacture of hollow plated-metal	H. T. Smith	432,496	July 15	2261	585	52	454
Ingots. Device for handling	T. Brady	440,219	Nov. 11	900	{ 232 233 }	53	795
Ingots. Electrolytic apparatus for forming copper	M. G. Farnier	426,789	Apr. 29	3592	937	51	734
Ingots for plated wire. Making	J. L. P. Spooner	419,084	Jan. 7	653	171	50	138

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Ingot for seamless plated wire. Making	L. L. Burdon	419,508	Jan. 14	1412	378	50	296
Ingot in sectional molds. Forming steel.	J. B. D. Boulton	440,097	Nov. 4	701	187	53	745
Ingot. Making compound	L. L. Burdon	432,690	July 22	2579	661	52	522
Ingot. Manufacture of cast-steel	R. B. H. Leighton	434,347	Aug. 12	1364	356	52	1034
Ingot. Manufacture of compound	L. L. Burdon	432,691	July 22	2582	661	52	522
Ingot. Mold for making compound metal	J. L. P. Spooner	418,767	Jan. 7	166	40	50	37
Inhaler	J. D. Averell	432,782	July 22	2728	697	52	550
Inhaler	H. M. Brittain	440,132	Nov. 11	763	200	53	767
Inhaler	A. Dow and R. N. Warren	438,102	Oct. 7	667	181	53	129
Inhaler	C. J. Ellsworth and A. C. Alexander	425,765	Apr. 15	2031	540	51	413
Inhaler	A. S. Johnston	422,420	Mar. 4	85	22	50	1153
Inhaler	J. S. Kinnear	433,597	Aug. 5	235	61	52	802
Inhaler	C. W. Krohne and H. F. Sesemann	440,713	Nov. 18	1725	442	53	958
Inhaler	R. Macdonald	427,179	May 6	238	62	51	858
Inhaler	G. L. McQuigg	418,813	Jan. 7	231	56	50	50
Inhaler	G. W. Nütz	433,418	July 29	3680	951	52	745
Inhaler	A. H. Ramey and F. D. Rollins	429,321	June 3	335	79	51	1535
Inhaler	R. N. Warren and A. Dow	439,707	Nov. 4	118	32	53	631
Inhaler	F. W. Wiesebrock	437,070	Sept. 23	2698	704	52	1913
Inhaler and respirator	H. F. Williams	432,780	July 22	2725	697	52	550
Inhaler and respirator	J. O. Woods	427,247	May 6	348	89	51	878
Inhaler and spirometer. Combined	W. A. Shepard	433,153	July 29	3317	857	52	670
Inhaler. Steam	M. Schön	421,527	Feb. 18	1624	419	50	887
Inhaling apparatus	R. Macdonald	427,178	May 6	237	61	51	858
Inhaling instrument	M. W. Hobbs	422,411	Mar. 4	65	18	50	1150
Injector	D. Best	436,932	Sept. 23	2514	658	52	1875
Injector	A. S. Eberman	440,624	Nov. 18	1576	406	53	929
Injector	H. Holden and R. G. Brooke	419,047	Jan. 7	597	153	50	126
Injector	H. Holden and R. G. Brooke	419,124	Jan. 7	706	186	50	148
Injector	L. E. Hogue	430,023	June 10	1393	347	51	1751
Injector	P. P. Hogue	436,601	Sept. 16	1910	502	52	1752
Injector	W. B. Mack	439,356	Oct. 28	2628	701	53	518
Injector	W. McShane	431,613	July 8	890	222	52	186
Injector	H. B. Murdock	440,134	Nov. 11	846	218	53	785
Injector	F. R. Williams	430,308	June 17	1878	462	51	1854
Injector. Automatic visible-feed	R. Goodbody	423,758	Mar. 18	2101	555	50	1550
Injector. Boiler	J. D. Lynde	440,488	Nov. 11	1357	350	53	879
Injector burner. Hydrocarbon	C. Cole	423,131	Mar. 11	1175	306	50	1366
Injector. Steam	H. B. Murdock	440,183	Nov. 11	845	217	53	784
Ink	W. G. Fuerth	437,588	Sept. 30	3541	52	2082	
Ink-distributor. Self	S. D. Henry	420,940	Feb. 11	775	201	50	720
Ink for printing, lithographing, &c	O. G. Holt	424,556	Apr. 1	187	51	38	
Ink-impressions. Composition for fixing	D. C. Simpson	429,463	Dec. 9	1294	53	1522	
Ink-pad	E. Reynolds	424,657	Apr. 1	339	88	51	66
Ink. Printing	J. McCloskey and C. F. Farwell	422,430	Mar. 4	98	50	1155	
Ink. Printing or stamping	C. M. Higgins	437,780	Oct. 7	164	53	34	
Ink. Printing or stamping	C. M. Higgins	437,781	Oct. 7	166	53	34	
Ink. Producing indehible aniline	J. Schiffmann	428,146	May 20	1696	51	1162	
Ink-well	J. B. Antes	430,911	June 24	2841	697	51	2047
Ink-well bracket	W. Lunley	427,883	May 13	1311	331	51	1077
Ink-well cover	A. R. Sprague	442,403	Dec. 9	1207	312	53	1504
Ink-well covers. Device for closing and opening	J. H. Hayden	439,148	Oct. 28	2278	612	53	453
Ink-well for desks	W. M. Brown	434,015	Aug. 12	845	222	52	929
Ink-well holder	W. M. Brown	441,639	Dec. 2	17	5	53	1265
Ink well or stand	C. Reinisch	424,079	Mar. 25	2592	691	50	1651
Inking appliance	W. G. Fuerth	440,824	Nov. 13	1915	492	53	992
Inking pad	E. J. Brooks	438,571	Oct. 14	1356	367	53	268
Inking pad	J. B. Langton	424,424	Mar. 25	3129	831	50	1756
Inking pad and holder	J. E. Bohac	428,242	May 20	1840	461	51	1191
Inkstand	J. B. Archibald	440,254	Nov. 11	957	245	53	807
Inkstand	C. G. Backus	429,553	June 3	685	168	51	1604
Inkstand	J. D. Brooder and A. B. Thomas	431,247	July 1	326	80	52	66
Inkstand	W. W. Campbell	435,277	Aug. 26	2836	750	52	1333
Inkstand	W. W. Campbell	435,278	Aug. 26	2838	751	52	1331
Inkstand	J. R. Dromey	421,126	Feb. 11	1645	268	50	771
Inkstand	G. A. Fifield	427,063	May 6	48	14	51	819
Inkstand	F. V. Fletcher	435,035	Aug. 26	2482	656	52	1265
Inkstand	A. E. Gorse	425,780	Apr. 15	2049	546	51	417
Inkstand	J. Larkin	434,346	Aug. 12	1362	356	52	1033
Inkstand	J. Larkin	435,937	Sept. 9	870	228	52	1549
Inkstand	E. S. Raff	430,194	June 17	1655	412	51	1811
Inkstand	M. Schreiber	418,988	Jan. 7	518	129	50	109
Inkstand	E. W. Taylor	443,244	Dec. 23	2653	681	53	1805
Inkstand	S. L. Trogon	430,711	June 24	2523	618	51	1986
Inkstand and pen-rack. Combined	G. W. Lindsay	434,349	Aug. 12	1367	357	52	1034
Inkstand attachment	B. M. Everson	443,937	Dec. 30	3745	958	53	2024
Inkstand-cover	F. W. Cooley	438,573	Oct. 14	1358	368	53	268
Inkstand. Fountain	F. Guinter	428,753	May 27	2629	666	51	1359
Inkstand. Fountain	J. Heberling	425,672	Apr. 15	1896	506	51	386
Inkstand. Fountain	J. Heberling	425,673	Apr. 15	1899	507	51	387
Inkstand. Fountain	J. Heberling	425,674	Apr. 15	1902	507	51	387
Inkstand or bottle	W. Rodiger	438,898	Oct. 21	1900	505	53	373
Inkstand, pistol-case, and burglar-alarm. Combined	M. Siersdorfer	425,347	Apr. 8	1392	371	51	279
Inkstand, stamp-drawer, &c. Combined rotary	J. F. Garrow	427,854	Oct. 7	276	82	53	54
Inkstand-stopple	J. D. Brooder and A. B. Thomas	432,015	July 15	1537	391	52	315
Inkstands. Adjustable pen-rest for	H. C. Thomson	430,446	June 17	2078	513	51	1893
Inkstands. Adjustable pen-rest for	H. C. Thomson. (Reissue)	11,112	Sept. 23	2889	752	52	1948
Inkstands. Ink-well attachment for	D. B. McAlice	425,689	Apr. 15	1924	512	51	392
Insect-excluder for bedsteads	R. McDries	421,604	Feb. 18	1739	455	50	910
Insect-exterminator	T. Gray	429,345	June 3	372	88	51	1542

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Insect-powder	G. Calov	442,245	Dec. 9	959		53	1458
Insect-powder distributor	C. H. Leggett	421,942	Feb. 25	2213	{ 580 581	{ 50	1008
Insect-powder duster	J. W. Mudd	419,343	Jan. 14	1052	278	50	223
Insect-powder duster	J. M. Robinson	439,563	Oct. 28	2935	780	53	577
Insect-trap	J. Smith	426,967	Apr. 29	3233	1002	51	782
Insect-trap	J. T. Tate	442,650	Dec. 16	1590	411	53	1590
Insect-trap for furniture	P. J. and W. Bauehmüller	427,143	May 6	187	49	51	848
Insecticide	F. R. Farwell and F. P. Rhines	436,848	Sept. 23	2339		52	1844
Insecticide	N. Giles, Jr., and L. E. and W. E. Brown.	438,593	Oct. 14	1386		53	274
Insecticide	F. Jones	441,306	Nov. 25	2738		53	1156
Insecticide	W. Mann	435,509	Sept. 2	194		52	1412
Insecticide	C. C. Parsons	431,528	July 1	765		52	152
Insecticide and making the same	J. M. A. Miller and P. McMaster	430,393	June 17	2012		51	1880
Insecticide-fuel	R. Bessel	421,809	Feb. 18	2009		50	962
Insecticide solution	C. Schneider	421,196	Feb. 11	1151		50	791
Insole	F. Haag	424,195	Mar. 25	2752	734	50	1682
Insole	F. B. Robinson and W. J. Morgan	429,480	June 3	578	141	51	1583
Inspection of rooms from a distant point. Device for the	G. C. Farr	421,687	Feb. 18	1849	{ 483 484	{ 50	932
Inspirator	L. Chapman	428,592	May 27	2374	603	51	1312
Instep-supporter	J. Hibbitt	425,133	Apr. 8	1076	285	51	217
Insulator	J. M. Harding	419,942	Jan. 21	1942	511	50	407
Insulating brake	M. Wheless	441,215	Nov. 25	2567	664	53	1127
Insulating conducting-wire with lead. Machine for covering	L. W. Tracy	434,007	Aug. 12	836	220	52	928
Insulating conducting-wire with lead. Machine for covering	L. W. Tracy	434,008	Aug. 12	837	220	52	928
Insulated joint	E. F. Gennert	426,121	Apr. 22	2581	679	51	525
Insulated nippers	F. M. Casey	419,111	Jan. 7	690	182	50	145
Insulated wire	C. F. Splittdorf	437,632	Sept. 30	3598	941	52	2094
Insulating appliance for electric batteries	S. C. C. Currie	438,592	Oct. 14	1300	352	53	257
Insulating broken wire. Device for automatically	M. Kerstein	438,814	Oct. 21	1764	472	53	349
Insulating casing	J. A. Seely	420,171	Jan. 28	2304	609	50	485
Insulating composition	F. E. Blaisdell	440,391	Nov. 11	1188		53	847
Insulating composition	T. D. Bottomo	439,796	Nov. 4	250		53	657
Insulating composition	A. E. Menuez	438,698	Oct. 21	1563		53	311
Insulating compound	A. A. Knudson	425,615	Apr. 15	1803	483	51	368
Insulating compound	J. F. Munsie	426,202	Apr. 22	2706		51	550
Insulating compound	I. Rabinowicz	433,215	July 29	3403		52	687
Insulating compound	J. B. Williams	420,648	Feb. 4	319		50	626
Insulating compound. Heat	N. C. Fowler	427,167	May 6	224		51	855
Insulating-covering for pincher-handles	G. F. Virtue	442,155	Dec. 9	834	223	53	1433
Insulating-coverings on electrical conductors. Machine for weaving	C. T. Stetson	425,056	Apr. 8	959	{ 256 257	{ 51	194
Insulating device. Gas-pipe	E. W. Rice, Jr.	420,391	Jan. 28	2641	701	50	546
Insulating electrical conductors	T. A. Edison	438,309	Oct. 14	979	265	53	193
Insulating hanger for overhead supply-conductors	F. B. Rae	426,064	Apr. 22	2494	658	51	508
Insulating-joint	E. F. Gennert	430,846	June 24	2744	672	51	2029
Insulating-joint	S. H. Short	438,495	Oct. 14	1243	337	53	245
Insulating-layer for electric coils. Compound	E. Thomson	422,550	Mar. 4	271	69	50	1188
Insulating-lining	J. F. Munsie	426,201	Apr. 22	2705	709	51	550
Insulating material	J. W. Easton	436,733	Sept. 16	2113		52	1793
Insulating material	J. Fottrell	433,893	Aug. 5	676		52	889
Insulating pipe-joint	G. M. Lane	419,962	Jan. 21	1970	518	50	412
Insulating-tubing for electric conducting-wires. Manufacturing	H. B. Cobb	440,395	Nov. 11	1195		53	849
Insulation. Electrical	T. S. Reed	424,575	Apr. 1	215	58	51	44
Insulator	J. F. Buzby	427,296	May 6	413	107	51	892
Insulator	J. W. Davy	421,819	Feb. 18	2020	535	50	964
Insulator	W. L. R. Emmet	443,174	Dec. 23	2520	645	53	1777
Insulator	J. C. Firth	436,225	Sept. 9	1312		52	1631
Insulator	T. F. Gaynor	437,685	Oct. 7	15	5	53	5
Insulator	W. P. Kookogey	425,513	Apr. 15	1646	439	51	338
Insulator	F. Miro	438,934	Oct. 21	1948	519	53	383
Insulator	C. O. Muehlberg	434,992	Aug. 26	2417	639	52	1254
Insulator	J. F. Munsie	426,198	Apr. 22	2700	708	51	549
Insulator	J. F. Munsie	426,203	Apr. 22	2707	{ 709 710	{ 51	550
Insulator	S. Oakman	430,296	June 17	1861	457	51	1850
Insulator	W. H. Seamon	430,696	June 24	2495	609	51	1981
Insulator	G. E. Stanley	422,651	Mar. 4	432	108	50	1218
Insulator-bracket	H. E. Chubbuck	436,120	Sept. 9	1153	301	52	1601
Insulator. Electric	E. Andrews	428,545	May 20	2286	581	51	1276
Insulator. Electric	F. Bain	443,187	Dec. 23	2557	657	53	1786
Insulator. Electric	J. K. Dunbar	434,144	Aug. 12	1057	273	52	972
Insulator. Electric	S. Oakman	434,879	Aug. 19	2208	578	52	1207
Insulator. Electric	G. B. Watson	428,979	May 27	2958	759	51	1425
Insulator for electric conductors	W. Kessler	440,042	Nov. 4	633	168	53	732
Insulator for electric railways	W. D. MacQuesten	429,315	June 3	325	77	51	1532
Insulator for electric-railway wires	H. P. Brown	428,071	May 20	1584	482	51	1140
Insulator for electric wires	I. P. Cornog	419,642	Jan. 21	1479	396	50	316
Insulator for heating-pipes	G. W. Conderman	441,644	Dec. 2	24	7	53	1267
Insulator for overhead electric conductors. Section	E. Thomson	434,961	Aug. 26	2376	629	52	1246
Insulator. Trolley-line	W. M. Ramsey	443,005	Dec. 16	2208	568	53	1712
Insulators. Screw-press for	J. Pease	419,875	Jan. 21	1848	486	50	387
Interchangeable die	H. B. Anable	424,636	Apr. 1	308	78, 79	51	61
Interlocking apparatus	G. Koenig and S. H. Stupakoff	436,360	Sept. 16	1529	401	52	1682
Invalid-chair	N. Petry	438,945	Oct. 21	1969	525	53	387
Invalids. Apparatus for lifting and moving	A. Harley	428,602	May 27	2385	606	51	1315
Invalids. Apparatus for moving	S. P. H. Hale	430,642	June 24	2401	{ 584 585	{ 51	1962
Iodoform. Substitute for	J. Messinger and G. Vortmann	436,250	Sept. 9	1352		52	1639

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Iron:							
See Carriage wear-iron.	Sad-iron.						
Chair-iron.	Shirt-iron.						
Chair or seat iron.	Smoothing-iron.						
Channel-iron.	Soldering-iron.						
Cribbing-iron.	Vehicle-iron.						
Curling-iron.	Wagon-bed iron.						
Flat-iron.							
Iron and steel. Apparatus for the manufacture of.	C. Adams.	431,863	July 8	1311	{ 325 329 }	52	265
Iron and steel. Manufacturing.	J. Reese.	429,638	June 10	807		51	1637
Iron. Apparatus for decarbonizing and purifying.	R. F. Ludlow.	420,078	Jan. 28	2151	569	50	456
Iron. Apparatus for loading pie.	J. L. Boyer.	423,548	Mar. 18	1788	470	50	1491
Iron. Eliminating graphitic carbon from cast.	J. B. Renshaw.	438,715	Oct. 21	1529		53	316
Iron in cupola-furnaces. Remelting.	H. J. Graf.	437,109	Sept. 23	2755	720	52	1924
Iron into steel. Compound for converting wrought.	W. J. Miles, Jr.	435,940	Sept. 9	873		52	1549
Iron into steel. Composition for converting malleable cast.	W. J. Miles, Jr.	428,687	May 27	2529		51	1340
Iron. Manufacturing.	W. P. Hopkins.	438,436	Oct. 14	1161	314	53	228
Iron or steel. Manufacturing.	A. J. Severance.	429,744	June 10	963		51	1668
Iron ore. Reducing.	C. Adams.	431,864	July 8	1314	{ 329 330 }	52	265
Iron ore. Reducing.	C. J. Eames.	432,383	July 15	2093		52	419
Iron ores. Reducing.	H. W. Lash and J. Johnson.	441,102	Nov. 18	2363		53	1079
Ironer. Neckband.	C. O. White.	436,466	Sept. 16	1699	447	52	1714
Ironing and polishing machine.	C. O. White.	419,164	Jan. 7	771	204	50	160
Ironing-board.	G. W. Gardner.	420,297	Jan. 28	2509	665	50	521
Ironing-board.	W. A. E. Henrici.	426,014	Apr. 22	2423	641	51	495
Ironing-board.	C. W. Richardson and C. F. Galloway.	436,436	Sept. 16	1652	434	52	1705
Ironing-board.	J. Shepherd and E. M. Davis.	438,194	Oct. 14	797	217	53	160
Ironing-board.	S. J. Talbot.	440,972	Nov. 18	2156	558	53	1038
Ironing-board.	D. B. Washburn.	439,452	Oct. 28	2775	739	53	545
Ironing-board and bosom-stretcher. Combined.	D. A. Phelps.	425,048	Apr. 8	952	254	51	192
Ironing-board and support.	A. M. Bennett.	427,542	May 13	783	195	51	976
Ironing, finishing, and drying machine.	H. C. Charles.	443,131	Dec. 23	2438	623	53	1762
Ironing-machine.	D. H. Campbell.	420,405	Jan. 28	2657	{ 704 705 }	50	550
Ironing-machine.	J. J. Daley.	419,504	Jan. 14	1279	341	50	268
Ironing-machine.	J. J. Daley.	420,774	Feb. 4	484	{ 126 127 }	50	657
Ironing-machine.	J. J. Daley.	427,463	May 6	662	166	51	943
Ironing-machine.	G. N. Downs.	433,646	Aug. 5	301	79, 80	52	815
Ironing-machine.	R. H. Dusenbury.	427,469	May 6	669	168	51	944
Ironing-machine.	A. T. Hagen.	424,976	Apr. 8	843	224	51	172
Ironing-machine.	W. A. E. Henrici.	428,605	May 27	2390	608	51	1315
Ironing-machine.	W. A. E. Henrici.	436,016	Sept. 9	979	{ 256 257 }	52	1569
Ironing-machine.	R. S. Nelson and A. Kreuter.	441,373	Nov. 25	2830	730	53	1173
Ironing-machine.	G. C. Roberts.	433,658	Aug. 5	323	83	52	819
Ironing-machine.	G. C. Roberts.	436,192	Sept. 9	1265	330	52	1621
Ironing-machine.	C. L. Smith.	418,765	Jan. 7	164	39, 40	50	36
Ironing-machine.	C. F. Stone.	437,804	Oct. 7	203	63	53	41
Ironing-machine.	L. H. Watson.	439,453	Oct. 28	2776	{ 739 740 }	53	545
Ironing-machine.	L. H. Watson.	439,454	Oct. 28	2778	{ 740 741 }	53	546
Ironing-machine.	T. S. Wiles.	440,292	Nov. 11	1025	{ 263 264 265 }	53	817
Ironing machine. Shirt.	C. O. White.	429,076	May 27	3115	{ 802 803 }	51	1454
Ironing-stand.	W. R. Lasater.	436,584	Sept. 16	1891	497	52	1748
Ironing-stand.	W. Walters.	438,039	Oct. 7	569	155	53	106
Ironing-support.	J. C. Brown.	430,509	June 17	2178	535	51	1912
Ironing-table.	G. E. Benton.	442,507	Dec. 9	1372	351	53	1538
Ironing-table.	W. Emerson.	433,936	Aug. 12	741	193	52	911
Ironing-table.	T. J. Firth.	430,574	June 17	2274	559	51	1920
Ironing-table.	N. M. Graham.	422,344	Feb. 25	2826	745	50	1122
Ironing-table.	E. W. Nothstine.	431,191	July 1	234	59	52	49
Ironing-table.	J. D. Pace.	441,966	Dec. 2	520	139	53	1365
Ironing-table.	F. Rock.	431,530	July 1	768	191	52	153
Ironing-table.	M. Roos.	419,797	Jan. 21	1712	454	50	360
Ironing-table.	J. Shull.	428,533	May 20	2272	{ 576 577 }	51	1273
Ironing-table.	A. A. Wagon.	433,663	Oct. 21	1499	405	53	300
Ironing-table. Adjustable folding.	J. W. Bowen.	433,742	Aug. 5	400	103	52	833
Ironing-table and clothes-rack. Combined.	H. J. Poff.	422,093	Feb. 25	2423	640	50	1047
Irrigating apparatus.	E. C. Chapman.	426,169	Apr. 22	2653	697	51	540
Irrigator.	J. J. Botter.	429,994	June 10	1343	333	51	1741
Irrigator.	F. W. Ohlinger.	434,834	Aug. 19	2135	559	52	1193
Irrigator and fertilizer. Subsoil.	J. H. L. Tuck.	434,814	Aug. 19	2109	552	52	1188
Irritants. Apparatus for applying.	W. L. Tucker.	426,609	Apr. 29	3310	868	51	681
Jack:							
See Boot-jack.	Lifting-jack.						
Burnishing-jack.	Nailing-machine jack.						
Carriage jack.	Pegging-jack.						
Clapboard-support- ing jack.	Pegging and sewing jack.						
Cross-head jack.	Saddle-jack.						
Floor-jack.	Slugging-machine jack.						
Horseshoeing jack.	Thill-jack.						
Lasting-jack.	Wagon-jack.						
Jack for extracting pistons.	Window-jack.						
Jack-wrench for oiling vehicle-wheels.	J. W. Rusk.	440,609	Nov. 11	1555	400	53	915
	F. M. Henshaw.	432,779	Mar. 4	599	154	50	1251

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Jacket	J. A. Orr	424,344	Mar. 25	2988	795	50	1727
Jacketed can	S. Walter	432,346	July 15	2038	525	52	408
Jail-bucket	D. McDonald	437,614	Sept. 30	3574	934	52	2089
Jar:							
<i>See</i> Butter-jar.	Milk-preserving jar.						
Display-jar.	Sirup-jar.						
Fruit-jar.	Slop-jar.						
Milk-jar.							
Jar	K. E. Gunkle	422,934	Mar. 11	871	227	50	1310
Jar closure. Fruit	F. Holderman	420,511	Feb. 4	120	30	50	587
Jar-cover fastening	F. and E. Monier	424,720	Apr. 1	435	115	51	86
Jar holder. Adjustable fruit	G. W. Webster	438,043	Oct. 7	573	156	53	109
Jar holder and filler	I. F. Field	425,315	Apr. 8	1351	361	51	271
Jar holder. Fruit	C. E. Crandall	439,931	Nov. 4	456	119	53	697
Jar-lid fastener	C. P. Maiser	420,949	Feb. 11	784	204	50	721
Jar-lifter	Z. Motten	436,086	Sept. 9	1097	244	52	1591
Jar-sealing device	J. W. Fuller	433,937	Aug. 12	742	193	52	912
Jar-wrench	H. S. Hawes	430,257	June 17	1851	454	51	1848
Jars, &c. Cleaner for fruit	S. W. Erwin	434,982	Aug. 26	2402	636	52	1251
Jars. Seal-stopper for milk-preserving	P. K. Ward	441,993	Dec. 2	565	152	53	1374
Jaw-tool. Parallel	J. L. and D. H. Coles	424,274	Mar. 25	2849	702	50	1702
Jaw-trap	G. A. Bachmann	426,579	Apr. 29	3267	857	51	672
Jaw-trap	T. Donlon	419,188	Jan. 14	818	216	50	176
Jaw-trap	G. Holler	430,231	June 17	1726	429	51	1825
Jaw-trap	P. H. Sowash	434,842	Aug. 19	2150	563	52	1196
Jaw-trap	C. B. Trumble	418,772	Jan. 7	172	42	50	38
Jaw-trap	J. Watkins	421,639	Feb. 18	1790	468	50	920
Jet apparatus. Automatic	L. Schutte	434,997	Aug. 26	2423	641	52	1255
Jetty	G. Y. Wisner	419,237	Jan. 14	899	234	50	190
Jetty. Movable	G. Marsh	431,524	July 1	757	189	52	151
Jewel-box	H. T. Hermann	413,094	Dec. 23	2376	606	53	1751
Jeweler's blow-pipe	R. J. Taylor	437,317	Sept. 30	3107	814	52	1996
Jeweler's case	C. F. D. Springfels	427,631	May 13	909	229	51	1000
Jewelers' stock	G. E. A. Knight	437,862	Oct. 7	287	86	53	56
Jeweler's stock-plate	J. D. Planchamp	426,059	Apr. 22	2423	656	51	506
Jeweler's use. Making ingots for	H. T. Smith	427,924	May 13	1373	347	51	1088
Jewelers' use. Tool for	E. N. Parker	434,946	Aug. 26	2356	623	52	1242
Jewelry	D. F. Adams	421,022	Feb. 11	895	231	50	742
Jewelry	J. Bouner	443,425	Dec. 23	2935	755	53	1859
Jewelry	H. Lehr	441,496	Nov. 25	3030	781	53	1211
Jewelry	W. Leidig	435,068	Aug. 26	2533	669	52	1276
Jewelry	H. T. Regnell	433,033	July 29	3132	804	52	634
Jewelry	E. W. Schill	434,405	Aug. 12	1464	381	52	1054
Jewelry	R. Senner	434,302	Aug. 12	1302	339	52	1021
Jewelry	F. X. Zirkilton	424,749	Apr. 1	484	132	51	95
Jewelry. Compound for cleaning	F. Graffe, Jr	425,668	Apr. 15	1891	.....	51	385
Jewelry. Hinge-joint for	D. F. Adams	424,529	Apr. 1	139	40	51	29
Jewelry. Interchangeable die for the manufacture of	H. B. Veit	443,383	Dec. 23	2877	740	53	1848
Jewelry. Manufacture of	E. A. Billault	440,258	Nov. 11	960	.....	53	807
Jewelry. Manufacture of curved tubes for	J. R. Mathewson	435,939	Sept. 9	872	229	52	1549
Jewelry. Ornament for	W. Blassing	420,502	Feb. 4	115	28	50	586
Jewelry-pendant	G. W. Wasburn	436,729	Sept. 16	2106	555	52	1792
Jewelry. Rosette for	H. E. Goff	419,251	Jan. 14	910	241	50	194
Jewelry. Safety-catch for	H. Sessler	421,981	Feb. 25	2260	594	50	1018
Jib-bank	D. Crowell	423,859	Mar. 18	2248	594	50	1579
Jig-tank	R. Stults	434,403	Aug. 12	1468	382	52	1055
Jigging-machines. Motive power for	J. Nicholas	432,892	July 22	2884	739	52	582
Jigging-sieve. Hydraulic	O. Bilbarz	427,249	May 6	349	89, 90	51	879
Joint:							
<i>See</i> Adjustable joint.	Insulating-joint.						
Ankle-joint.	Insulating pipe-joint.						
Ball-and-socket joint.	Lock-joint.						
Box-edge joint.	Metal joint.						
Bridge-rail joint.	Metal-plate joint.						
Carriage-joint.	Mortise-joint.						
Coupling-joint.	Pipe-joint.						
Cylinder coupling-joint.	Pipe-splice joint.						
Dovetail joint.	Puzzle-joint.						
Dust-proof joint.	Rail-joint.						
Electric-conductor joint.	Railway-joint.						
Fence-joint.	Railway-rail joint.						
Filtering-joint.	Rotary joint.						
Furniture-joint.	Spectacle-frame joint.						
Gaff-joint.	Steam-joint.						
Insulated joint.	Tubing-joint.						
Universal-joint.	Universal joint.						
Vehicle-top joint.	Vehicle-top joint.						
Joint conpling. Universal	F. Scheff	420,284	Jan. 28	2492	661	50	518
Joint-fastening device	G. T. Neill	436,048	Apr. 22	2471	653	51	504
Joint for cornices, gutters, balustrades, &c	H. Symonds	435,906	Sept. 2	826	219	52	1535
Joint of mast composed of pipes or tubes	H. C. Stifel	420,023	Jan. 21	2063	{ 543 544 }	50	429
Jointed post and manufacture of the same	W. A. McCallum	443,053	Dec. 16	2281	585	53	1726
Journal. Anti-friction	B. Beapre	422,903	Mar. 11	824	214	50	1301
Journal. Anti-friction	T. N. Subers	438,902	Oct. 21	1905	506	53	374
Journal. Anti-friction bearing-roller	B. Beapre	427,539	May 13	778	194	51	975
Journal-bearing	M. A. Andrews	429,554	June 3	684	167	51	1603
Journal-bearing	S. A. Bemis	425,973	Apr. 22	2366	627	51	484
Journal-bearing	S. A. Bemis	431,642	July 8	849	237	52	197
Journal-bearing	W. W. Holland	419,445	Jan. 14	1201	318	50	253
Journal-bearing	W. E. Kinsey and F. C. Smith	421,289	Feb. 11	1273	329	50	814
Journal-bearing	F. H. Smiley	435,592	Sept. 2	324	90	52	1437
Journal-bearing	P. Sweeney	421,783	Feb. 18	1976	520	50	955

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Journal-bearing.....	P. Sweeney.....	433,378	July 29	3627	935	52	732
Journal-bearing.....	J. J. Wood.....	421,089	Feb. 11	994	{ 254 255 }	50	761
Journal-bearing. Anti-friction.....	W. E. Elliott.....	420,047	Jan. 23	2102	555	50	446
Journal-bearing. Anti-friction.....	W. E. Elliott.....	438,576	Oct. 14	1361	369	53	269
Journal-bearing. Anti-friction.....	R. W. Moffett.....	435,074	Aug. 26	2543	671	52	1277
Journal. Bolster-beam.....	E. W. MacKenzie-Hughes.....	421,937	Feb. 25	2206	578	50	1007
Journal-box.....	E. W. Cooke.....	442,357	Dec. 9	1137	296	53	1490
Journal-box.....	A. D. Cox.....	432,156	July 15	1761	452	52	358
Journal-box.....	T. Gare.....	425,569	Apr. 15	1725	462	51	353
Journal-box.....	B. F. James.....	433,525	Aug. 5	121	35	52	780
Journal-box.....	H. Marsbal.....	442,631	Dec. 16	1566	405	53	1585
Journal-box.....	C. H. Morgan.....	437,364	Sept. 30	3198	833	52	2012
Journal-box.....	E. L. Post.....	418,960	Jan. 7	485	120	50	102
Journal-box.....	W. S. Sharpneck.....	442,831	Dec. 16	1923	494	53	1655
Journal-box.....	E. Verry.....	423,461	Mar. 18	1662	439	50	1468
Journal-box. Anti-friction.....	W. S. Sharpneck.....	441,027	Nov. 18	2231	577	53	1053
Journal-box. Anti-friction.....	T. Tripp.....	439,224	Oct. 23	2513	674	53	496
Journal-box keys. Manufacture of.....	C. T. Schoen.....	426,604	Apr. 29	3303	667	51	680
Journal-box lid.....	N. H. Davis.....	431,254	July 1	334	83	52	68
Journal-box protector.....	H. S. Pugsley.....	421,610	Feb. 18	1747	458	50	912
Journal-box. Roller.....	E. W. Cooke.....	442,352	Dec. 9	1130	294	53	1488
Journal-boxes. Device for forming green-sand cores for railway.....	W. B. Sterrit.....	422,261	Feb. 25	2686	709	50	1097
Journal-boxes. Lining.....	R. Beddall.....	422,873	Mar. 4	757	193	50	1281
Journal-boxes. Machine for constructing.....	J. H. Haskins.....	422,580	Mar. 4	330	83	50	1199
Journal-brass.....	W. McCombie.....	433,301	July 29	3527	910	52	713
Journal-cap.....	W. A. Shank.....	442,766	Dec. 16	1838	475	53	1639
Journal, journal box, and bearing. Anti-friction.....	J. F. Morell.....	428,400	May 20	2098	527	51	1241
Journal-lubricating device.....	J. B. Glover, Jr.....	434,983	Aug. 26	2403	636	52	1251
Journals and boxes. Means for cooling.....	A. J. Robertson.....	434,995	Aug. 26	2421	640	52	1254
Jug handle and stopper. Combined.....	S. L. Bray.....	418,940	Jan. 7	457	112	50	96
Jug-lid.....	G. Sutton.....	424,034	Mar. 25	2527	673	50	1639
Jute bagging. Making.....	A. and B. Gratz.....	432,401	July 15	2120	.....	52	424
Keg and barrel washing machine.....	J. J. Danks.....	434,430	Aug. 19	1513	395	52	1070
Keg hooping and heading machine.....	T. A. Cook.....	428,831	May 27	2742	667	51	1381
Keg. Metallic.....	A. O. and M. A. Stiveson.....	421,833	Mar. 18	2208	583	50	1571
Keg. Nail.....	H. E. Spilman.....	428,865	May 27	2790	709	51	1392
Kegs containing liquids. Device for forcing air into.....	B. Kinn.....	431,592	July 8	864	215	52	180
Kettle.....	F. W. Judd.....	441,421	Nov. 25	2909	750	53	1190
Kettle.....	A. C. Nunn.....	432,067	July 15	1615	414	52	330
Kettle attachment.....	L. W. Buxton.....	432,017	July 15	1540	392	52	316
Kettle-drainer.....	G. G. Matthews.....	434,452	Aug. 19	1547	403	52	1077
Kettle-support.....	J. Thousas.....	429,977	June 10	1323	327	51	1737
Kettle-supporter.....	J. M. Rohm.....	425,701	Apr. 15	1941	516	51	395
Kettles, &c. Support for.....	V. C. Driesbach.....	437,486	Sept. 30	3389	888	52	2053
Key:							
See Clock-key. Telegraph-key.							
Cotter-key. Telephone-key.							
Loop-key. Time-piece key.							
Reversing-key. Watch-key.							
Shafting-key.							
Key.....	H. C. Fischer.....	424,412	Mar. 25	3114	826	50	1753
Key-board.....	A. Newell.....	423,076	Mar. 11	1091	{ 284 285 }	50	1350
Key-board instruments. Mechanism for playing.....	F. Rähse.....	443,003	Dec. 16	2206	{ 567 568 }	53	1711
Key-board player. Mechanical.....	E. Capitaine.....	429,419	June 3	481	114	51	1563
Key-board player. Mechanical.....	G. P. Le Dan.....	419,690	Jan. 21	1558	{ 416 417 418 }	50	330
Key-board self-playing attachment.....	J. D. Case and C. W. Evans.....	430,065	June 10	1469	{ 364 365 }	51	1764
Key-board. Transposing.....	S. Lindberg.....	431,369	July 1	514	128	52	103
Key-board. Transposing.....	A. Marcey.....	426,031	Apr. 22	2451	647	51	499
Key-board. Transposing.....	C. M. Richards.....	420,359	Jan. 28	2593	689	50	537
Key-boards. Applying celluloid to.....	A. Newell.....	423,075	Mar. 11	1088	{ 283 284 }	50	1350
Key-boards. Making.....	W. C. Zeidler and A. Newell.....	423,104	Mar. 11	1135	{ 294 295 }	50	1358
Key-fastener.....	T. B. Armstead.....	423,107	Mar. 11	1140	295	50	1359
Key-fastener.....	E. Frary.....	420,932	Feb. 11	764	198	50	717
Key-fastener.....	W. W. Hitchcock.....	426,016	Apr. 22	2431	642	51	496
Key-fastener.....	G. H. Huttenlocher.....	429,239	June 3	200	49	51	1510
Key-fastener.....	T. D. Yates.....	430,501	June 17	2168	533	51	1911
Key-hole escutcheon.....	J. E. Fish.....	419,324	Jan. 14	1021	270	50	216
Key-hole guard.....	G. A. Cavalli.....	430,563	June 17	2254	553	51	1926
Key-hole guard.....	F. Eiche.....	438,534	Oct. 14	1302	352	53	257
Key-hole guard.....	J. H. Johnson.....	433,291	July 29	3511	906	52	710
Key-hole guard.....	O. Stoddard.....	423,349	Mar. 11	1496	392	50	1428
Key instruments. Apparatus for playing.....	P. Ehrlich.....	428,244	May 20	1841	{ 462 463 }	51	1191
Key-seat-cutting machines. Mandrel for.....	A. M. Little.....	430,133	June 17	1577	392	51	1796
Key-making machine.....	C. Felton.....	433,280	July 29	3496	902	52	707
Keys or wedges. Machine for notching.....	P. Moncharmont.....	420,729	Feb. 4	420	{ 111 112 }	50	647
Kiln:							
See Brick-kiln. Limekiln.							
Brick and pottery kiln. Lumber-drying kiln.							
Brick and tile kiln. Malt-kiln.							
Cement-kiln. Pottery-kiln.							
China-firing kiln. Tile-kiln.							
Drying-kiln. Tile or brick kiln.							
Kiln.....	J. H. Johnson.....	419,334	Jan. 14	1036	274	50	219

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Kindergarten-table	A. W. Potter	421,512	Feb. 18	1596	412	50	882
King-bolt for vehicles	L. F. Case, Jr.	429,753	June 10	978	240	51	1671
King-bolt supporter	A. R. Muterspaugh ..	422,821	Mar. 4	663	169	50	1264
Kitchen-cabinet	S. Bowhall	429,602	June 10	761	183	51	1629
Kitchen-cabinet	J. M. Carver	423,025	Mar. 11	1005	264	50	1335
Kitchen-cabinet	J. M. Curtice	435,579	Sept. 2	306	85	52	1434
Kitchen-cabinet	W. H. Hiteshew	431,974	July 8	1471	372	52	297
Kitchen-cabinet	B. H. James	436,481	Sept. 16	1726	455	52	1719
Kitchen-cabinet	C. C. Post	422,833	Mar. 4	690	176	50	1269
Kitchen. Field	K. Hahn	443,206	Dec. 23	2594	666 667 668	53	1794
Kitchen. Portable	L. Malen	434,548	Aug. 19	1691	442 443	52	1107
Kitchen-safe. Sectional	J. A. Campbell	419,920	Jan. 21	1909	502	50	400
Kitchen-utensil handle	F. W. Judd	429,453	June 3	529	127	51	1574
Kitchen utensils. Cover for	J. W. and J. E. Murray ..	426,844	Apr. 29	3674	957	51	750
Knapsack and shoulder-strap bag. Combined	J. T. Dwyer	432,607	July 22	2426	625	52	493
Kneading machine. Dough	B. H. Melendy	423,619	Mar. 18	1889	498	50	1510
Kneading or mixing device. Dough	F. C. Davis	437,099	Sept. 23	2743	717	52	1922
Knife:							
See Chopping-knife. Paper-trimming knife.							
Cutter-head knife. Pocket-knife.							
Drawing-knife. Potato-peeling knife.							
Fruit-knife. Rotary cutting-knife.							
Fruit-picker's knife. Saddler's-knife.							
Gage-knife. Shoe-knife.							
Harvesting-knife. Skinning knife.							
Hay-knife. Surgical knife.							
Meat-knife. Table-knife.							
Knife	W. P. Bailey	437,081	Sept. 23	2715	709	52	1916
Knife	W. V. Barclay	437,325	Sept. 30	3122	816	52	1998
Knife	J. Johnston	433,793	Aug. 5	530	137	52	860
Knife	J. Mason	437,762	Oct. 7	139	44	53	29
Knife	N. P. Nielsen	443,534	Dec. 30	3110	801	53	1902
Knife	C. and W. Rush	428,817	May 27	2724	691	51	1377
Knife	A. Schlief	432,770	July 22	2712	694	52	547
Knife	R. S. Thain	422,547	Mar. 4	265	67	50	1186
Knife and burglar-alarm. Combined	W. H. Sutton	425,010	Apr. 8	899	237	51	182
Knife and eraser. Combined	C. F. W. Koehler	435,543	Sept. 2	249	69	52	1423
Knife and scissors sharpener	C. A. Gilman	431,887	July 8	1345	339	52	271
Knife-cleaner	J. Thompson	418,964	Jan. 7	488	122	50	103
Knife cleaning and polishing machine	T. A. Evans	440,948	Nov. 18	2117	550	53	1031
Knife-cylinder ends. Holder for	J. Braum	420,715	Feb. 4	399	106	50	643
Knife-cylinders. Holder for brace-rings of	J. Braum	420,714	Feb. 4	398	105 106	50	642
Knife for cutting and scoring pasteboard	E. Saltzkorn and L. Nicolai ..	442,738	Dec. 16	1771	458	53	1624
Knife for meat-cutters and similar machines	C. T. Leopold	431,230	July 1	303	75	52	61
Knife-polisher	J. Vermeulen	434,365	Aug. 12	1394	366	52	1040
Knife-sharpener	J. S. Blood	435,553	Sept. 2	267	74	52	1427
Knife-sharpener	G. Geer	439,799	Nov. 4	253	64	53	657
Knife-sharpener	J. Vermeulen	434,366	Aug. 12	1396	366	52	1040
Knives. Forming table	E. Grah	418,710	Jan. 7	86	20	50	1
Knit fabric	C. Heinold	430,803	June 24	2671	655	51	2016
Knit fabric	H. Pulster	426,322	Apr. 22	2867	755	51	565
Knit fabric. Drawers of	R. W. Scott	422,641	Mar. 4	417	104	50	1216
Knit fabric. Pointed	W. Osborne	420,695	Feb. 4	374	99	50	638
Knit fabric. Shirt of	R. W. Scott	422,640	Mar. 4	416	104	50	1216
Knit fabrics. Manufacturing widened tubular	W. Esty	419,191	Jan. 14	822	217	50	176
Knit garment. Combination	A. R. Burpee	421,236	Feb. 11	1199	308 309	50	800
Knitted cap	J. Stohr	442,921	Dec. 16	2082	535	53	1685
Knitted fabrics. Machine for cutting	N. H. Bruce	441,532	Nov. 25	3081	792	53	1222
Knitting-frames. Covering-point for	J. A. Barfoot	431,135	July 1	147	39	52	31
Knitting-machine	E. Franck	419,513	Jan. 14	1290	544 545	50	270
Knitting-machine	J. P. Harriman	428,304	May 20	1941	488	51	1209
Knitting-machine	H. S. Long	424,011	Mar. 25	2500	664	50	1633
Knitting-machine	J. H. Reed	435,449	Sept. 2	105	30	52	1395
Knitting-machine	L. E. Salisbry and A. Wrightson ..	434,205	Aug. 12	1153	299 300	52	991
Knitting-machine	J. Schmitt	421,526	Feb. 18	1620	417 418	50	887
Knitting-machine	A. Townsend	431,417	July 1	585	147 148	52	118
Knitting-machine burr	J. S. Crane	441,612	Nov. 25	3207	826	53	1248
Knitting-machine burr-wheel	P. S. Kinsey	424,314	Mar. 25	2929	780 781 318	50	1717
Knitting machine. Circular	J. R. Bridges	440,415	Nov. 11	1229	319 320 321	53	855
Knitting machine. Circular	H. Brinton and B. M. Deuney ..	426,760	Apr. 29	3549	926	51	726
Knitting machine. Circular	A. C. Bugbee	439,050	Oct. 21	2120	569	53	417
Knitting machine. Circular	S. F. Burdett and J. Bradley ..	442,168	Dec. 9	849	228	53	1436
Knitting machine. Circular	C. F. Carr	430,268	June 17	1821	447	51	1842
Knitting machine. Circular	C. F. Carr	435,394	Sept. 2	19	5, 6	52	1378
Knitting machine. Circular	W. H. Carr	431,801	July 8	1216	303 304	52	246
Knitting machine. Circular	G. Davidson and R. A. Dixon ..	427,465	May 6	663	167	51	943
Knitting machine. Circular	A. T. L. Davis	438,346	Oct. 14	1032	281 282	53	204
Knitting machine. Circular	F. L. Dow	421,915	Feb. 25	2176	571	50	1002
Knitting machine. Circular	J. C. Egly	420,190	Jan. 28	2339	618	50	490

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Knitting machine. Circular.....	J. E. Gearhart.....	424,877	Apr. 1	688	{ 181 182 413 414 415 416	51	133
Knitting machine. Circular.....	A. T. Gifford and C. H. French.....	438,685	Oct. 21	1529	{ 417 418 419 420 421	53	306
Knitting machine. Circular.....	J. F. Gordon.....	438,686	Oct. 21	1543	{ 416 417 418 419	53	307
Knitting machine. Circular.....	J. B. Hipwell.....	438,885	Oct. 21	1881	{ 499 500 501 502	53	370
Knitting machine. Circular.....	B. Holt and A. Wrightson.....	424,787	Apr. 1	552	{ 147 148 149 150	51	108
Knitting machine. Circular.....	W. D. Huse and C. F. Carr.....	419,151	Jan. 7	749	{ 198 199 200 201	50	156
Knitting machine. Circular.....	W. D. Huse and C. F. Carr.....	422,593	Mar. 4	335	{ 83 84 85 86	50	1200
Knitting machine. Circular.....	J. S. Kern.....	432,051	July 15	1597	{ 408 409 410 411	52	326
Knitting machine. Circular.....	E. E. Kilbourn.....	432,946	July 22	2966	{ 761 762 763 764 765	52	596
Knitting machine. Circular.....	E. Lippitt and R. Hansdoerfer.....	429,856	June 10	1129	{ 279 280 281 282	51	1699
Knitting machine. Circular.....	E. Lippitt and W. Pope.....	425,617	Apr. 15	1807	{ 484 485 486 487	51	369
Knitting machine. Circular.....	H. S. Long.....	435,378	Aug. 26	3010	{ 797 798 799 800	52	1364
Knitting machine. Circular.....	G. Martin and J. F. Gee.....	428,052	May 13	1558	{ 394 395 396 397	51	1125
Knitting machine. Circular.....	D. P. Mills.....	433,132	July 29	3286	{ 846 847 848 849	52	663
Knitting machine. Circular.....	F. A. Nye.....	440,869	Nov. 18	1983	{ 511 512 513 514	53	1006
Knitting machine. Circular.....	W. H. Pepper.....	424,497	Apr. 1	89	{ 25 26 27 28	51	20
Knitting machine. Circular.....	J. W. Pike.....	423,080	Mar. 11	1098	{ 286 287 288 289	50	1351
Knitting machine. Circular.....	M. Rhome and H. F. Herkner.....	430,300	June 17	1864	{ 459 460 461 462	51	1851
Knitting machine. Circular.....	R. W. Scott and L. N. D. Williams.....	419,565	Jan. 14	1358	{ 363 364 365 366	50	286
Knitting machine. Circular.....	A. Sedmihradsky.....	434,523	Aug. 19	1655	{ 534 535 536 537	52	1100
Knitting machine. Circular.....	E. E. Sibley.....	430,593	June 17	2306	{ 467 468 469 470	51	1936
Knitting machine. Circular.....	C. Winterbottom.....	420,505	Feb. 4	111	{ 27 28 29 30	50	525
Knitting machine. Circular-rib.....	P. W. Cochrane.....	420,772	Feb. 4	481	{ 126 127 128 129	50	657
Knitting machine. Circular-rib.....	R. W. Scott and L. N. D. Williams.....	421,147	Feb. 11	1073	{ 276 277 278 279	50	777
Knitting machine. Circular spring-needle.....	D. F. Sullivan.....	431,292	July 1	391	{ 98 99 100 101	52	80
Knitting machine. Collarette.....	J. Bradley.....	424,167	Dec. 9	847	{ 227 228 229 230	53	1436
Knitting-machine filling-burr.....	J. S. Crane.....	421,248	Feb. 11	1217	{ 315 316 317 318	50	804
Knitting-machine latch-needle.....	O. Treat.....	427,134	May 6	171	{ 45 46 47 48	51	845
Knitting-machine looping attachment.....	R. A. Gage.....	431,047	July 1	30	{ 7 8 9 10	52	8
Knitting-machine looping attachment. Circular.....	R. A. Gage.....	431,046	July 1	29	{ 7 8 9 10	52	8
Knitting-machine needle-cylinder.....	J. C. Egly.....	422,751	Mar. 4	563	{ 143 144 145 146	50	1243
Knitting-machine needles with latches. Machine for providing.....	J. J. Jenkins.....	432,802	July 22	2762	{ 707 708 709 710	52	557
Knitting-machine needles with latches. Machine for providing.....	J. J. Jenkins.....	432,943	July 22	2958	{ 758 759 760 761	52	595
Knitting-machine splicing attachment.....	E. Newton and J. Palmer.....	431,913	July 8	1374	{ 348 349 350 351	52	277
Knitting-machine stop mechanism.....	J. W. Cassidy and E. M. Smith.....	430,512	June 17	2181	{ 536 537 538 539	51	1913
Knitting-machine stop mechanism.....	J. Stewart.....	432,450	July 15	2187	{ 563 564 565 566	52	438
Knitting-machine stop-motion.....	R. B. Goodyear.....	431,969	July 8	1461	{ 370 371 372 373	52	294
Knitting-machine stopping mechanism.....	J. T. Ashworth.....	427,534	May 13	771	{ 192 193 194 195	51	974
Knitting-machine stopping mechanism.....	H. S. Townsend and G. A. Schneckel.....	436,010	Sept. 9	970	{ 254 255 256 257	52	1568
Knitting machine. Straight.....	J. Bennor.....	440,389	Nov. 11	1174	{ 303 304 305 306	53	845
Knitting machine. Straight.....	D. Hurley.....	435,181	Aug. 26	2697	{ 712 713 714 715	52	1306
Knitting-machine. Straight-fashioning.....	J. F. Sleeper and J. P. Miller.....	440,903	Nov. 18	2040	{ 526 527 528 529	53	1017
Knitting-machine take-up mechanism.....	T. H. Worrall.....	441,814	Dec. 2	296	{ 80 81 82 83	53	1321
Knitting-machine thread-guide.....	J. Power.....	436,996	Sept. 23	2594	{ 678 679 680 681	52	1891
Knitting machine. Warp.....	C. H. Landenberger.....	423,780	Mar. 18	2132	{ 563 564 565 566	50	1556
Knitting machine. Warp.....	C. H. Smith.....	422,646	Mar. 4	422	{ 105 106 107 108	50	1217
Knitting-machine web-holder.....	G. F. Gilbert.....	435,174	Aug. 26	2686	{ 709 710 711 712	52	1304
Knitting-machine yarn-guide.....	H. Brinton and B. M. Denney.....	426,761	Apr. 29	3550	{ 926 927 928 929	51	727
Knitting-machines. Automatic take-up for.....	H. Meier.....	433,251	July 29	3456	{ 892 893 894 895	52	699
Knitting-machines. Circle guide or indicator for.....	W. H. Draper.....	420,167	Feb. 11	1106	{ 284 285 286 287	50	784
Knitting-machines. Device for feeding thread to.....	J. R. Bridges.....	441,416	Nov. 11	1241	{ 321 322 323 324	53	856
Knitting-machines. Electric stop-motion for.....	J. P. Haslam.....	424,295	Mar. 25	2890	{ 772 773 774 775	50	1710
Knitting-machines. Falling bar for straight.....	E. Tiffany.....	430,201	June 17	1664	{ 414 415 416 417	51	1812
Knitting-machines. Feeding attachment for circular.....	C. J. Apploton.....	425,362	Apr. 8	1413	{ 377 378 379 380	51	284
Knitting-machines. Intermittent-feed mechanism for.....	S. L. Otis.....	429,319	June 3	330	{ 78 79 80 81	51	1333
Knitting-machines. Mechanism for controlling the operation of.....	W. H. Stewart.....	424,231	Mar. 25	2798	{ 746 747 748 749	50	1692
Knitting-machines. Needle-cylinder and needle for circular.....	H. W. Harley and W. Diebel.....	423,244	Mar. 11	1335	{ 347 348 349 350	50	1398
Knitting-machines. Splicing-thread attachment for.....	O. L. Merrow and A. E. Sanborn.....	434,156	Aug. 12	1081	{ 278 279 280 281	52	977
Knitting-machines. Splicing-thread-feed mechanism for.....	W. H. Pepper and A. T. L. Davis.....	440,606	Nov. 11	1547	{ 398 399 400 401	53	914
Knitting-machines. Splicing-thread gripper and slackener for.....	W. H. Pepper and A. T. L. Davis.....	443,462	Dec. 23	2996	{ 770 771 772 773	53	1871
Knitting-machines. Spring-supported needle for.....	R. W. Scott.....	433,747	Aug. 5	459	{ 118 119 120 121	52	844
Knitting-machines. Take-up mechanism for circular.....	J. W. Pike.....	423,079	Mar. 11	1096	{ 285 286 287 288	50	1351

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Knitting-machines. Work-transferring mechanism for	W. H. Appleton	439,571	Oct. 28	2945	{ 782 783	{ 53	579
Knitting-machines. Work-transferring mechanism for	W. H. Appleton	439,585	Oct. 28	2967	788	53	583
Knitting machines. Yielding cam-stop for straight...	H. M. Lecture	436,982	Sept. 23	2576	673	52	1888
Knitting narrowed tubular fabrics	C. H. Young	430,981	June 24	2944	{ 732 733 734	{ 51	2065
Knitting seines, gill-nets, &c. Mesh-plate for	N. D. Sollers	442,787	Dec. 16	1839	{ 475 476	{ 53	1639
Knitting stockings	E. C. Covell and E. S. Cram	443,900	Dec. 30	3679	947	53	2012
Knitting stockings	F. Wilcomb	422,869	Mar. 4	749	191	50	1280
Knob	G. B. Adams	434,650	Aug. 19	1871	489	52	1141
Knob	W. Livingstone	428,924	May 27	2878	736	51	1410
Knob	W. A. Turner	433,108	July 29	3250	836	52	656
Knob. Alarm	E. C. Garlick	442,803	Dec. 16	1868	482	53	1644
Knob attachment	W. R. Briggs	425,743	Apr. 15	2000	533	51	406
Knob attachment	J. B. Finch	419,431	Jan. 14	1180	314	50	248
Knob attachment	I. J. Gray	427,073	May 6	76	19	51	826
Knob attachment	C. Preston	443,260	Dec. 23	2677	686	53	1809
Knob attachment	H. V. Smith	419,894	Jan. 21	1874	493	50	392
Knob attachment. Door	S. H. Berrey	422,493	Mar. 4	186	51	50	1172
Knob. Door	C. O. Case	421,670	Feb. 18	1830	478	50	928
Knob. Door	J. E. Gaitley	443,223	Dec. 23	2620	674	53	1799
Knob. Door	W. F. Greene	434,543	Aug. 19	1681	439	52	1104
Knob. Door	J. A. Gustavson	433,464	Aug. 5	42	14	52	765
Knob handle. Lock	H. Anderson	428,442	May 20	2151	541	51	1251
Knob. Sheet-metal	C. C. Andrews	423,203	Mar. 11	1278	333	50	1387
Knob. Sheet-metal	C. Glover	436,523	Sept. 16	1777	469	52	1729
Knob. Sheet-metal	W. A. Turner	432,583	July 22	2395	617	52	487
Knobs. Attaching	H. A. Matthews	441,883	Dec. 2	397	105	53	1343
Knobs to sockets. Means for attaching door	E. B. Owen	428,285	May 20	1912	481	51	1204
Knobs to their shanks. Attaching	S. P. Cooley	439,120	Oct. 28	2236	601	53	446
Knobs. Washer-connection for door	H. F. Sampson	435,250	Aug. 26	2794	741	52	1325
Knockdown box	C. F. Bosworth	426,231	Apr. 22	2746	719	51	559
Knockdown table	G. J. Keller	423,259	Mar. 11	1360	355	50	1402
Label-case and attachment for bottles and jars. Druggist's	O. E. Given	435,928	Sept. 9	858	232	52	1547
Label case or cabinet. Druggist's	C. B. Dean	421,251	Feb. 11	1220	316	50	804
Labeling apparatus. Hand	H. R. Pay	428,246	May 20	1845	463	51	1191
Labeling bottles, &c. Machine for	S. Cooper	439,270	Oct. 28	2485	{ 666 667	{ 53	491
Labeling-machine	S. L. Salomon	435,615	Sept. 2	374	101	52	1445
Labeling machine. Can	J. M. Van Meter	441,341	Nov. 25	2781	719	53	1164
Laboratory burner, specially useful with gasoline-gas	J. F. Barker	423,896	Mar. 25	2309	609	50	1598
Lace-drier	L. E. Lane, Jr.	436,178	Sept. 9	1244	324	52	1617
Lace fastener. Shoe	E. J. Mayfield	428,758	May 27	2634	667	51	1360
Lace fastening. Shoe	M. J. Ward	428,434	May 20	2140	538	51	1249
Lace machine. Twist	H. Redgate	435,321	Aug. 26	2913	773	52	1346
Lace or embroidery holder	W. C. Quigley	436,638	Sept. 16	1966	516	52	1763
Lacer. Shoe	A. C. James	422,131	Feb. 25	2424	656	50	1059
Lacing	F. S. McKenney	437,836	Oct. 7	251	77	53	50
Lacing-eye	F. S. McKenney	437,228	Sept. 30	2968	776	52	1970
Lacing-eye	F. S. McKenney	438,936	Oct. 21	1952	520	53	384
Lacing-hook	W. C. Bray	433,162	July 29	3327	861	52	672
Lacing-hook	L. J. E. Gourdé	442,221	Dec. 9	930	246	53	1452
Lacing-hook	F. S. McKenney	438,420	Oct. 14	1143	309	53	225
Lacing-hook	H. T. Sperry	436,958	Sept. 23	2544	666	52	1882
Lacing-hook	J. L. Thomson and J. J. Unbehend.	434,895	Aug. 19	2248	590	52	1215
Lacing-hook and making the same	F. R. Welton	419,982	Jan. 21	2000	526	50	418
Lacing hooks with pyroxyline material. Die for covering shoe	T. B. Benwell	427,958	May 13	1424	359	51	1098
Lacing-stud	I. F. Peck	438,113	Oct. 7	680	185	53	131
Lacing-stud	G. Troxler, Jr.	442,277	Dec. 9	1007	266	53	1466
Lacing stud and making the same. Shoe	W. H. Smidt	434,959	Aug. 26	2374	629	52	1246
Lacing-studs. Making	J. L. Thomson and J. J. Unbehend.	435,907	Sept. 2	827	209	52	1535
Lactose or milk-sugar. Making	A. A. Bennett and C. S. Boynton	439,717	Nov. 4	134	.....	53	634
Ladder	W. Dilts	432,263	July 15	1917	491	52	386
Ladder	R. Hammill	426,180	Apr. 22	2668	701	51	543
Ladder	J. T. O'Brien	437,936	Oct. 7	400	113	53	77
Ladder	E. Raber	434,462	Aug. 19	1559	405	52	1079
Ladder and fire-escape. Extension	L. D. Knowles	427,771	May 13	1137	{ 285 286	{ 51	1045
Ladder and truck. Extension fire	H. C. Schmidt	437,625	Sept. 30	3588	{ 938 939	{ 52	2092
Ladder-balcony	A. S. Cuff	437,333	Sept. 30	3129	818	52	2000
Ladder, cot, ironing-board, and chair. Combined step	S. D. Fry	432,869	July 22	2853	730	52	576
Ladder. Extension	R. S. Adley	428,995	May 27	2976	764	51	1429
Ladder. Extension	J. J. Flynn	437,395	Sept. 30	3241	845	52	2021
Ladder. Extension	J. B. Harvey	441,872	Dec. 2	384	100	53	1340
Ladder. Extension	V. Holmgvist	427,992	May 13	1468	372	51	1108
Ladder. Extension	V. Holmgvist	431,353	July 1	187	121	52	99
Ladder. Extension	C. G. and L. Tiedel	431,014	June 24	2995	736	51	2076
Ladder. Extension	J. P. Smale	443,800	Dec. 30	3538	908	53	1984
Ladder. Extension roof	J. L. Crafts	434,176	Aug. 12	1108	287	52	983
Ladder. Extension step	A. L. Myers	440,185	Nov. 11	848	218	53	785
Ladder. Extension step	J. L. Wolf	426,747	Apr. 29	3530	922	51	723
Ladder. Fire	J. B. Gathright	440,026	Nov. 4	604	160	53	726
Ladder. Fireman's	J. H. Stupp	439,361	Oct. 28	2636	704	53	520
Ladder. Folding	J. A. Dalumi	437,174	Sept. 30	2897	754	52	1956
Ladder. Folding adjustable	P. F. M. Burrows	419,821	Jan. 21	1744	{ 462 463	{ 50	366
Ladder. Folding step	N. Engquist	420,720	Feb. 4	406	108	50	644
Ladder. Folding step	N. Goldberg	438,883	Oct. 21	1879	499	53	369
Ladder. Folding step	L. Kopf	434,792	Aug. 19	2077	543	52	1181

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Ladder hook. Extension.....	C. N. Richardson.....	430,885	June 24	2802	686	51	2040
Ladder-irons. Machine for forming.....	J. S. Stevenson.....	435,864	Sept. 2	743	199 } 200	52	1519
Ladder. Step.....	W. J. Coolahan and W. G. Fleeman.....	428,460	May 20	2176	548	51	1255
Ladder. Step.....	M. F. Coomes.....	442,360	Dec. 9	1140	297	53	1491
Ladder. Step.....	A. Dornitzer.....	421,914	Feb. 25	2175	571	50	1002
Ladder. Step.....	E. Harter.....	424,782	Apr. 1	546	146	51	107
Ladder. Step.....	J. W. Hester.....	438,157	Oct. 14	747	204 } 205	53	150
Ladder. Step.....	C. L. Smith.....	423,962	Mar. 25	2425	643	50	1620
Ladder. Step.....	C. L. Smith.....	443,299	Dec. 23	2742	704	53	1821
Ladder. Step.....	D. E. Deal.....	421,843	Feb. 18	2064	544	50	971
Ladder. Step.....	C. S. Wing.....	436,459	Oct. 14	1200	325	53	236
Ladder, table, and platform. Combination step.....	J. E. Alden.....	419,906	Jan. 21	1888	496	50	396
Ladders. Hydraulic device for elevating.....	C. Winter.....	423,851	Mar. 18	2239	591	50	1577
Ladders or fire-escapes. Step for ships.....	D. H. Rivers.....	441,585	Nov. 25	3165	816	53	1238
Ladders. Trolley-support for step.....	L. Coburn.....	426,983	Apr. 29	3855	1008	51	766
Ladle and mold for lead hammers. Combined.....	C. H. Field, Jr.....	428,558	May 20	2307	586	51	1280
Ladle-car.....	J. A. Burns.....	439,637	Nov. 4	25	7	53	611
Ladle. Converter.....	S. C. Collin.....	429,337	June 3	359	85	51	1539
Ladles. Device for conveying and elevating.....	W. A. Mitchell.....	419,698	Jan. 21	1570	420	50	332
Lambrequin-pin.....	J. Day.....	418,693	Jan. 7	45	11	50	10
Lamp.....	R. T. Barton.....	428,367	May 20	2036	513	51	1229
Lamp.....	W. Benner.....	439,995	Nov. 4	561	148 } 149	53	717
Lamp.....	J. E. Bobner.....	418,782	Jan. 7	187	45	50	41
Lamp.....	W. F. Duncan and G. A. Fullerton.....	425,498	Apr. 15	1625	433	51	334
Lamp.....	T. Gordon.....	429,440	June 3	512	122	51	1571
Lamp.....	T. Gordon.....	429,441	June 3	513	123	51	1571
Lamp.....	L. Henkle.....	435,377	Aug. 26	3009	797	52	1364
Lamp.....	T. Hipwell.....	439,593	Oct. 28	2981	791	53	586
Lamp.....	W. M. Hoerle.....	432,489	July 15	2254	583	52	453
Lamp.....	J. A. Miller.....	430,870	June 24	2782	682	51	2036
Lamp.....	J. F. Place.....	422,537	Mar. 4	247	64	50	1183
Lamp.....	G. Rose.....	427,912	May 13	1352	341	51	1085
Lamp.....	A. Taplin.....	432,339	July 15	2030	522	52	406
Lamp.....	A. C. West.....	422,864	Mar. 4	744	190	50	1279
Lamp.....	W. W. Willits.....	427,491	May 6	697	175	51	950
Lamp.....	G. W. Woodward.....	429,181	June 3	112	26	51	1493
Lamp.....	A. F. Zimmerling.....	442,299	Dec. 9	1042	274	53	1472
Lamp adapter. Electric.....	J. Stewart.....	420,705	Feb. 4	385	103	50	640
Lamp adapter. Electric.....	J. Stewart.....	420,706	Feb. 4	3	103	50	640
Lamp adapter. Electric.....	J. Stewart.....	421,630	Feb. 18	1780	465	50	918
Lamp. Alternating-current arc.....	G. Westinghouse, Jr.....	428,435	May 20	2141	538	51	1249
Lamp and alarm-clock. Combined.....	W. Gaertner.....	436,456	Sept. 16	1685	444	52	1711
Lamp and burner. Street.....	J. S. Wood.....	435,551	Sept. 2	265	74	52	1426
Lamp. Arc.....	A. U. Alcock and H. Galopin.....	430,260	June 17	1772	440 } 441	51	1834
Lamp. Arc.....	R. H. Beach.....	424,752	Apr. 1	487	133	51	96
Lamp. Arc.....	R. H. Beach.....	437,767	Oct. 7	147	46	53	31
Lamp. Arc.....	C. P. Breese.....	428,066	May 20	1578	400	51	1138
Lamp. Arc.....	T. A. Edison.....	438,303	Oct. 14	972	263	53	191
Lamp. Arc.....	O. A. Enholm.....	441,543	Nov. 25	3100	796	53	1226
Lamp. Arc.....	J. Kent.....	439,011	Oct. 21	2065	553	53	407
Lamp. Arc.....	P. Lange.....	428,008	May 13	1492	379	51	1113
Lamp. Arc.....	A. H. Lucas.....	432,949	July 22	2984	766	52	598
Lamp. Arc.....	J. A. Mosber.....	437,502	Sept. 30	3115	894	52	2053
Lamp. Arc.....	S. E. Nutting.....	440,604	Nov. 11	1544	393	53	914
Lamp. Arc.....	H. Pieper, Fils.....	423,807	Mar. 18	2172	574 } 575	50	1564
Lamp. Arc.....	G. C. Pyle.....	422,446	Mar. 4	122	33	50	1160
Lamp. Arc.....	C. A. Tucker.....	436,465	Sept. 16	1695	446	52	1714
Lamp. Arc.....	A. W. Whitcomb.....	443,557	Dec. 30	3154	811	53	1910
Lamp. Arc.....	J. J. Wood.....	430,722	June 24	2536	620 } 621	51	1989
Lamp. Argand.....	L. J. Atwood.....	436,063	Sept. 9	1105	286	52	1593
Lamp. Argand.....	F. Rhind.....	443,868	Dec. 30	3636	936	53	2004
Lamp. Argand.....	C. S. Upton.....	427,207	May 6	280	72	51	866
Lamp attachment. Arc.....	A. P. Seymour.....	427,195	May 6	261	68	51	862
Lamp attachment. Electric-arc.....	J. A. Manning.....	443,944	Dec. 30	3756	960	53	2025
Lamp attachment. Safety.....	J. H. Simpson.....	433,911	Aug. 5	696	180	52	892
Lamp-base.....	T. A. Edison.....	438,310	Oct. 14	981	265	53	193
Lamp-black machine.....	T. Dietrich.....	431,881	July 8	1339	337	52	270
Lamp-bracket.....	P. R. Reine.....	438,768	Oct. 21	1685	432	53	334
Lamp-bulbs. Means for attaching and detaching electric.....	S. J. Jacobs.....	431,721	July 8	1092	272	52	225
Lamp-burner.....	L. J. Atwood and F. W. Tobey.....	419,747	Jan. 21	1634	435	50	344
Lamp-burner.....	J. F. Fox.....	437,684	Oct. 7	13	5	53	5
Lamp-burner.....	F. Déimel.....	419,601	Jan. 14	1416	379	50	297
Lamp-burner.....	W. C. Homan.....	442,524	Dec. 9	1398	357	53	1542
Lamp-burner.....	W. B. Somers.....	441,987	Dec. 2	556	149	53	1372
Lamp-burner.....	E. F. Trent.....	420,584	Feb. 4	220	57	50	607
Lamp-burner.....	T. Wall.....	440,078	Nov. 4	675	179	53	740
Lamp-burner.....	L. Zander.....	424,666	Apr. 1	356	94	51	69
Lamp-burner attachment.....	E. S. Crockett.....	428,463	May 20	2181	549	51	1255
Lamp burner. Street-car.....	T. Wall.....	440,079	Nov. 4	676	180	53	740
Lamp-burners. Device for securing chimneys to.....	J. Meadway.....	436,069	Sept. 9	1071	277	52	1587
Lamp. Car.....	J. Kirby, Jr.....	435,361	Aug. 26	2982	791	52	1359
Lamp. Carbureting.....	W. S. Horry and A. Kitson.....	430,778	June 24	2638	647	51	2009
Lamp. Carbureting street.....	T. W. Young.....	423,367	Mar. 11	1522	400	50	1433
Lamp. Central-draft.....	J. E. Bohner.....	439,718	Nov. 4	136	36	53	634
Lamp. Central-draft.....	R. L. Brewer.....	428,882	May 27	2814	716	51	1397
Lamp. Central-draft.....	C. A. Everts.....	430,380	June 17	1991	491	51	1876
Lamp. Central-draft.....	C. A. Everts.....	432,264	July 15	1919	491	52	387

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Lamp. Central-draft	W. M. Hoerle	432,311	July 15	1998	510	52	401
Lamp. Central-draft	J. Jauch	421,171	Feb. 11	1110	285	50	784
Lamp. Central-draft	J. Jauch	427,870	May 13	1221	324	51	1072
Lamp. Central-draft	J. Jauch	431,359	July 1	436	123	52	101
Lamp. Central-draft	H. J. Williams	425,281	Apr. 8	1308	350	51	253
Lamp-chimney	F. Démel	419,600	Jan. 14	1414	378	50	297
Lamp-chimney cleaner	J. H. Steen	433,552	Aug. 5	166	45	52	789
Lamp-chimneys, &c. Device for ornamenting the tops of	J. McMurtry	440,494	Nov. 11	1369	353	53	881
Lamp-chimneys, &c. Tool for finishing	C. Hamm	437,154	Sept. 23	2855	742	52	1941
Lamp-collar. Hinged	A. D. C. Vest	423,359	Mar. 11	1507	395	50	1430
Lamp cut-out. Electric	W. G. Bremer	435,029	Aug. 26	2473	655	52	1264
Lamp cut-out. Electric	W. F. Smith	435,049	Aug. 26	2505	662	52	1270
Lamp. Electric	S. B. Cobb	419,829	Jan. 21	1760	465	50	369
Lamp. Electric	W. D. Graves	435,967	Sept. 9	911	240	52	1556
Lamp. Electric	A. Swan	439,363	Oct. 28	2640	704	53	520
Lamp. Electric-arc	A. Apps	438,134	Oct. 14	711	194	53	144
Lamp. Electric-arc	W. E. Cady	434,175	Aug. 12	1106	286 287	52	983
Lamp. Electric-arc	C. Coerper	429,787	June 10	1027	251	51	1679
Lamp. Electric-arc	T. P. C. Crampton	442,018	Dec. 2	608	164	53	1382
Lamp. Electric-arc	J. E. Giles	442,617	Dec. 16	1549	401	53	1582
Lamp. Electric-arc	C. W. Hazeltine	437,901	Oct. 7	345	100	53	67
Lamp. Electric-arc	W. B. Henderson	442,580	Dec. 9	1486	382	53	1561
Lamp. Electric-arc	E. and F. W. Heymann	443,632	Dec. 30	3275	843 844	53	1933
Lamp. Electric-arc	E. and F. W. Heymann	443,633	Dec. 30	3276	844 845	53	1933
Lamp. Electric-arc	C. F. Keller	429,573	June 3	710	173	51	1609
Lamp. Electric-arc	S. P. Parnly	433,906	Aug. 5	691	179	52	892
Lamp. Electric-arc	E. Rothlisberger	435,248	Aug. 26	2791	740	52	1325
Lamp. Electric-arc	E. C. Russell	418,987	Jan. 7	517	129	50	109
Lamp. Electric-arc	E. C. Russell	432,284	July 15	1953	499 500	52	394
Lamp. Electric-arc	R. Scheffbauer	420,314	Jan. 28	2528	670	50	525
Lamp. Electric-arc	C. E. Scribner	418,757	Jan. 7	141	34, 35	50	31
Lamp. Electric-arc	C. E. Scribner	418,758	Jan. 7	143	35	50	31
Lamp. Electric-arc	C. E. Scribner	420,109	Jan. 28	2204	583	50	467
Lamp. Electric-arc	H. C. Shubert	439,904	Nov. 4	418	108	53	689
Lamp. Electric-arc	E. Thomson	430,357	June 17	1960	482	51	1869
Lamp. Electric-arc	E. Thomson and E. W. Rice	440,662	Nov. 18	1632	421 422	53	941
Lamp. Electric-arc	E. Thomson and E. W. Rice	440,663	Nov. 18	1636	422	53	941
Lamp. Electric-arc	A. Wagniere	436,814	Sept. 23	2280	601	52	1832
Lamp. Electric incandescent	J. S. Potter, D. J. Cartwright, and B. B. Keyes	436,316	Sept. 9	1444	376	52	1658
Lamp-extinguisher	J. M. Amiss	431,423	July 1	598	150	52	121
Lamp extension device. Incandescent	S. O. and M. A. Newton	438,779	Oct. 21	1699	456	53	337
Lamp-extinguisher	H. D. Hinks	437,782	Oct. 7	168	52	53	34
Lamp-extinguisher	F. Rhind	440,748	Nov. 18	1782	459	53	968
Lamp-extinguishing mechanism	H. D. Hinks	442,760	Dec. 16	1799	460	53	1630
Lamp-extinguishing mechanism	J. Hinks	442,761	Dec. 16	1800	467	53	1630
Lamp filament. Incandescent	T. A. Edison	430,933	June 24	2869	705	51	2053
Lamp-filler	H. C. Beman	424,259	Mar. 25	2830	757	50	1698
Lamp fixture. Electric	S. Bergmann	431,320	July 1	432	107	52	89
Lamp fixture. Incandescent	F. Lewis	441,877	Dec. 2	390	102	53	1341
Lamp-fixtures. Extension device for	L. F. Griswold	420,875	Feb. 4	661	172	50	689
Lamp flange. Coach	O. W. Swift	437,947	Oct. 7	416	117	53	79
Lamp. Flash	H. Campbell	435,884	Sept. 2	787	209	52	1527
Lamp for burning heavy hydrocarbon oils	F. M. Sims	441,446	Nov. 25	2950	760	53	1197
Lamp for burning hydrocarbons	F. G. Barthel	442,281	Dec. 9	1018	268	53	1468
Lamp for magic lanterns	J. B. Colt	430,115	June 17	1554	387	51	1791
Lamp. Gas	J. Stott	443,876	Dec. 30	3643	938	53	2005
Lamp. Gas	C. Westphal	419,741	Jan. 21	1622	432	50	342
Lamp. Generative gas	W. Stern and J. Mücke	421,325	Feb. 11	1331	344	50	824
Lamp globe. Electric	W. H. Wilson	428,989	May 27	2969	762	51	1427
Lamp globe. Gas or oil	G. Froh	424,776	Apr. 1	534	143	51	105
Lamp-globe holder	E. Atkins	439,090	Oct. 28	2197	589	53	439
Lamp globes. Exhaust apparatus for incandescent	H. J. Jaeger	422,219	Feb. 25	2616	692 693	50	1084
Lamp-hanger	T. Hipwell	443,521	Dec. 30	3090	797	53	1899
Lamp hanger and switch. Automatic electric	O. B. White	434,038	Aug. 12	877	231	52	937
Lamp hanger. Incandescent	P. J. Chassagne	434,917	Aug. 26	2317	612	52	1234
Lamp. Hanging	J. I. Johnson	424,712	Apr. 1	426	113	51	84
Lamp. Hanging	A. H. Jones	424,714	Apr. 1	428	113	51	84
Lamp. Hanging	J. C. Miller	421,184	Feb. 11	1132	289	50	788
Lamp. Hanging	A. Patiz	420,211	Jan. 28	2374	630	50	497
Lamp-hanging device. Electric	W. H. Layng	421,864	Feb. 18	2104	552	50	978
Lamp head. Coach	O. W. Swift	437,948	Oct. 7	417	117	53	79
Lamp-holder	W. Jefferson	438,162	Oct. 14	754	206	53	151
Lamp holder and switch	C. H. Herrick	435,931	Sept. 9	861	226	52	1347
Lamp holder. Electric-arc	J. Pawlowski	428,942	May 27	2901	743	51	1414
Lamp holder. Incandescent	I. E. Storey	418,855	Jan. 7	308	50	64	
Lamp holder. Incandescent electric	P. H. Klein, Jr.	426,189	Apr. 22	2686	705	51	546
Lamp holder. Incandescent electric	A. Schirner	433,371	July 29	3618	933	52	731
Lamp hood and support. Electric	E. P. Warner	426,155	Apr. 22	2633	691	51	536
Lamp hood. Electric	D. A. Culman, Jr.	419,186	Jan. 14	816	215	50	175
Lamp hood. Indandescent	J. Heath	430,645	June 24	2407	586	51	1963
Lamp. Hydrogen	F. Aurnhammer	432,590	July 22	2402	619	52	489
Lamp. Incandescent	T. A. Edison	425,761	Apr. 15	2026	539	51	412
Lamp. Incandescent	G. R. Lean	431,776	July 8	1173	292	52	238
Lamp. Incandescent	F. C. Rockwell	430,437	June 17	2067	510	51	1891
Lamp. Incandescent	F. C. Rockwell	430,485	June 17	2139	526	51	1905
Lamp. Incandescent electric	A. Bornholdt	441,128	Nov. 25	2417	626	53	1099

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lamp. Incandescent electric.....	J. W. Packard.....	426,055	Apr. 22	2479	655	51	505
Lamp. Incandescent electric.....	A. L. Reinmann.....	434,159	Aug. 12	1086	279	52	978
Lamp. Incandescent gas.....	J. N. Pew.....	422,536	Mar. 4	246	64	50	1183
Lamp key-socket or switch. Incandescent-electric.....	A. B. Holmes and G. F. Gale.....	427,514	May 6	732	183	51	957
Lamp-lighting device.....	L. A. Roberts and T. H. Watts.....	429,642	June 10	817	197	51	1639
Lamp. Miner's.....	G. Hayes.....	439,656	Nov. 4	48	13	53	616
Lamp. Miner's.....	P. J. Miller.....	435,120	Aug. 26	2609	690	52	1289
Lamp. Miner's.....	J. Ratz.....	438,490	Oct. 14	1235	335	53	244
Lamp. Miner's.....	H. J. Richards.....	427,013	Apr. 29	3905	1018	51	795
Lamp. Miner's safety.....	W. J. McDowell.....	430,671	June 24	2457	599	51	1973
Lamp. Oil.....	G. C. Berry and T. M. Fell.....	441,052	Nov. 18	2277	590	53	1063
Lamp. Oil.....	T. and A. E. Penn.....	431,616	July 8	895	{ 223 224 }	52	186
Lamp or lantern. Carriage.....	F. A. Johnson.....	427,028	Apr. 29	3930	1024	51	801
Lamp or lighting device. Pocket.....	E. B. Koopman and W. W. McKenney (Reissue.)	11,130	Dec. 9	1517	390	53	1566
Lamp or oil burner.....	C. E. Bell.....	441,465	Nov. 25	2987	769	53	1203
Lamp. Overhead oil.....	J. H. Ross and E. E. Atkins.....	422,836	Mar. 4	695	{ 177 178 }	50	1270
Lamp. Overhead oil.....	J. H. Ross and E. E. Atkins.....	422,837	Mar. 4	697	178	50	1271
Lamp. Pocket.....	S. W. Evans, Jr., E. L. Glenn, and W. H. Gaskill.....	432,304	July 15	1988	508	52	399
Lamp. Pocket.....	J. H. Farrel.....	439,578	Oct. 28	2958	785	53	581
Lamp. Pocket.....	H. Knight.....	430,584	June 17	2269	563	51	1933
Lamp. Pocket.....	E. B. Koopman and W. W. McKenney.....	440,265	Nov. 11	976	249	53	810
Lamp. Portable electric.....	A. H. Bauer.....	423,207	Mar. 11	1283	334	50	1388
Lamp. Portable electric.....	D. G. Fitz Gerald and A. H. Hough.....	442,969	Dec. 16	2151	554	53	1700
Lamp. Portable electric.....	J. H. Irwin.....	429,172	June 3	99	24	51	1491
Lamp post. Electric.....	W. Carroll.....	426,660	Apr. 29	3388	889	51	696
Lamp. Regenerative.....	E. C. Hathaway.....	420,538	Feb. 4	157	39	50	594
Lamp. Regenerative gas.....	W. C. Bucklin.....	422,567	Mar. 4	291	74, 75	50	1192
Lamp. Regenerative gas.....	F. W. Clark.....	430,468	June 17	2121	521	51	1901
Lamp. Regenerative gas.....	L. A. Cooper.....	442,613	Dec. 16	1546	399	53	1581
Lamp. Regenerative gas.....	E. Fullford.....	433,341	July 29	3578	923	52	723
Lamp. Regenerative gas.....	T. Gordon and W. R. Swift.....	422,588	Mar. 4	327	82	50	1198
Lamp. Regenerative gas.....	B. Zeitschel.....	430,723	June 24	2540	621	51	1989
Lamp. Safety.....	R. Kopetschi.....	422,608	Mar. 4	644	164	50	1260
Lamp. Safety.....	J. Thorne.....	437,061	Sept. 23	2681	{ 700 701 }	52	1910
Lamp safety apparatus. Oil.....	J. Stark.....	436,879	Sept. 23	2429	633	52	1860
Lamp-shade.....	J. P. Boesen.....	425,735	Apr. 15	1990	530	51	404
Lamp-shade.....	C. F. Monroe.....	433,017	July 29	3100	795	52	627
Lamp-shade.....	J. T. Simpson.....	443,169	Dec. 23	2513	643	53	1775
Lamp-shade. Extensible.....	W. S. Berg.....	427,661	May 13	948	{ 238 239 }	51	1008
Lamp-shade holder.....	J. Jauch.....	425,600	Apr. 15	2075	554	51	422
Lamp-shade support.....	G. W. Baldwin.....	441,632	Dec. 2	5	2	53	1263
Lamp-shade support.....	O. F. Wegener.....	438,455	Oct. 14	1196	324	53	235
Lamp socket and key. Incandescent.....	W. F. Smith.....	435,047	Aug. 26	2501	661	52	1269
Lamp socket. Electric.....	J. T. Dempster.....	443,746	Dec. 30	3453	886	53	1967
Lamp socket. Electric.....	C. A. Lieb.....	443,530	Dec. 30	3104	799	53	1901
Lamp socket. Electric.....	J. O. Phillips.....	439,304	Oct. 28	2556	683	53	505
Lamp socket. Incandescent.....	S. Bergmann.....	443,562	Dec. 30	3161	812	53	1911
Lamp socket. Incandescent.....	J. J. Bradley.....	425,741	Apr. 15	1998	532	51	406
Lamp socket. Incandescent.....	G. W. Hunt and A. E. Rich.....	442,287	Dec. 9	1024	270	53	1469
Lamp socket. Incandescent.....	W. P. Kookogey.....	421,586	Feb. 18	1710	445	50	904
Lamp socket. Incandescent.....	P. Lange.....	434,153	Aug. 12	1073	275	52	976
Lamp socket. Incandescent.....	C. H. Lawton.....	419,617	Jan. 14	1436	385	50	301
Lamp socket. Incandescent.....	H. Lemp.....	420,077	Jan. 28	2149	569	50	455
Lamp socket. Incandescent.....	F. C. Rockwell.....	422,634	Mar. 4	407	101	50	1214
Lamp socket. Incandescent.....	F. C. Rockwell.....	435,024	Aug. 26	2466	653	52	1263
Lamp socket. Incandescent.....	T. G. Roebuck.....	433,698	Aug. 5	379	97	52	830
Lamp socket. Incandescent.....	A. Swan.....	439,364	Oct. 28	2642	705	53	520
Lamp socket. Incandescent.....	A. Swan.....	439,365	Oct. 28	2644	705	53	521
Lamp socket. Incandescent.....	E. Thomson and G. H. Alton.....	428,652	May 27	2460	{ 626 627 }	51	1327
Lamp socket. Incandescent.....	M. J. Wightman.....	420,370	Jan. 28	2609	694	50	540
Lamp socket. Incandescent.....	W. F. Wollin and E. H. Werline.....	422,360	Feb. 25	2851	752	50	1128
Lamp socket. Incandescent.....	J. J. Wood.....	431,681	July 8	1024	256	52	209
Lamp socket. Incandescent-electric.....	J. W. Collier.....	438,431	Oct. 14	1155	312	53	227
Lamp socket. Incandescent-electric.....	J. W. Collier.....	441,059	Nov. 18	2291	594	53	1066
Lamp socket. Incandescent-electric.....	A. Swan.....	439,366	Oct. 28	2647	705	53	521
Lamp socket. Incandescent-electric.....	A. Swan.....	439,367	Oct. 28	2651	705	53	522
Lamp socket switch. Incandescent.....	W. C. Bryant.....	435,578	Sept. 2	305	84	52	1434
Lamp socket with regulating attachment. Electric.....	W. F. Wollin and E. H. Werline.....	439,047	Oct. 21	2116	568	53	416
Lamp-standard.....	E. L. Bryant.....	441,393	Nov. 25	2863	739	53	1180
Lamp-standard.....	W. C. Homan.....	424,711	Apr. 1	425	112	51	84
Lamp-standard. Adjustable.....	O. Luetke.....	439,411	Oct. 28	2712	723	53	534
Lamp-support.....	J. A. Miller.....	439,671	Nov. 4	69	18, 19	53	621
Lamp-support.....	W. Schlingmann.....	426,549	Apr. 29	3221	844	51	663
Lamp-support. Band.....	C. E. Smith.....	443,212	Dec. 23	2604	670	53	1796
Lamp-support. Electric.....	J. Chase.....	430,622	June 24	2361	578	51	1955
Lamp-support. Extension.....	C. Maschmeyer.....	430,392	June 17	2010	496	51	1880
Lamp-support. Extension.....	C. Maschmeyer.....	432,278	July 15	1942	497	52	391
Lamp-support. Hanging.....	F. F. Ward.....	419,575	Jan. 14	1373	368	50	289
Lamp-supporting device.....	F. Wilkening.....	419,576	Jan. 14	1374	368	50	289
Lamp suspension device. Incandescent.....	H. W. Hayden and C. S. Dikeman.....	422,591	Mar. 4	332	83	50	1200
Lamp. Wall.....	J. M. Satterfield.....	420,250	Jan. 28	2440	649	50	509
Lamp-wick-adjusting device.....	H. D'Arcus.....	438,101	Oct. 7	666	181	53	129
Lamp-wick raiser.....	W. M. Hoerle.....	435,357	Aug. 26	2979	790	52	1358
Lamps. Air-heating attachment for.....	J. J. Johnston.....	433,474	Aug. 5	54	17	52	767
Lamps and hoods. Holder for electric.....	G. L. Batchelder.....	442,472	Dec. 9	1308	338	53	1524
Lamps and lanterns. Burner-fastening for.....	F. Dietz.....	442,172	Dec. 9	856	229	53	1438

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Lamps and lanterns. Burner-fastening for tubular.	C. Lapierre	440,896	Nov. 18	2026	522	53	1015
Lamps. Apparatus for feeding oil to	V. di Marzo	429,353	June 3	383	90	51	1544
Lamps. Apparatus for supplying oil to	J. B. Fenby	425,666	Apr. 15	1888	504	51	385
Lamps. Appliance for use with incandescent gas.	A. Heald	423,317	Mar. 11	1454	380	50	1420
Lamps. Ceiling-block connector for incandescent	L. W. Dillon	431,038	July 1	15	4	52	5
Lamps. Ceiling-block for incandescent electric.	A. T. Tregurtha	433,915	Aug. 5	701	182	52	893
Lamps. Construction of	J. P. Barringer and T. H. Johnston	420,139	Jan. 28	2254	597	50	476
Lamps. Cut-out for electric arc	C. E. Scribner	423,638	Mar. 18	1930	508	50	1518
Lamps. Cut-out for incandescent	E. Thomson	421,207	Feb. 11	1165	299	50	793
Lamps. Cut-out for incandescent electric	T. A. Edison	425,762	Apr. 15	2027	540	51	412
Lamps. Device for elevating and lowering electric.	J. B. Morris and G. Voll	428,401	May 20	2100	527	51	1241
Lamps. Electro-magnetic cut-out for electric.	E. Thomson and E. W. Rice, Jr	430,326	June 17	1911	468 469	51	1860
Lamps, &c. Extension-fixture for	L. F. Griswold. (Reissue)	11,067	Mar. 18	2302	607	50	1589
Lamps. Fount-holder for central-draft	J. C. Miller	430,871	June 24	2783	682	51	2036
Lamps. Globe for regenerative gas-	B. L. Dennison	423,416	Mar. 18	1596	419	50	1455
Lamps. Handle for brakemen's	W. H. Brady	442,852	Dec. 16	1961	504	53	1662
Lamps. Hanging device for electric arc	J. A. Lounsbury	442,127	Dec. 9	786	212	53	1424
Lamps. Manufacture of filaments for incandescent.	V. M. Hobby	435,660	Sept. 2	443	118	52	1459
Lamps. Manufacture of incandescent	T. A. Edison	430,932	June 24	2869		51	2053
Lamps. Manufacture of incandescent	W. L. Voelker	430,156	June 17	1608	400	51	1802
Lamps. Manufacture of incandescent electric	A. Bornholdt	441,127	Nov. 25	2416	625	53	1099
Lamps. Manufacture of incandescent electric	R. N. Dyer	429,608	June 10	768	185	51	1630
Lamps. Manufacture of incandescent electric	T. A. Edison	438,298	Oct. 14	967	262	53	190
Lamps. Manufacture of incandescent electric	T. A. Edison	438,307	Oct. 11	976	264	53	192
Lamps. Pulley attachment for electric	T. H. Brady	437,883	Oct. 7	319	94	53	63
Lamps. Pulley attachment for electric	T. H. Brady	442,415	Dec. 9	1225	316	53	1508
Lamps. Repairing incandescent electric	C. Panthouier	439,178	Oct. 28	2325	623	53	461
Lamps. Shade-holder for incandescent.	S. Bergmann	443,563	Dec. 30	3162	812	53	1912
Lamps, &c. Spring device for hanging.	U. H. S. de Boer	439,100	Oct. 28	2203	592	53	441
Lamps. Socket for incandescent electric	H. E. Swift	436,387	Sept. 16	1575	414	52	1692
Lamps. Supplying oil to	J. B. Fenby	425,667	Apr. 15	1890	505	51	385
Lamps. Suspension device for	E. L. Bryant	441,394	Nov. 25	2864	740	53	1180
Lamps. Suspension-hanger for electric.	E. P. Morris	428,929	May 27	2884	738	51	1411
Lamps to gas-fixtures. Device for attaching incandescent electric	N. Marshall	442,270	Dec. 9	998	263	53	1465
Lamps. Wick-lift for	H. L. Clark	441,642	Dec. 2	21	7	53	1266
Lamps. Wick-raiser for central-draft	F. Rhind	440,608	Nov. 11	1553	399	53	915
Lamps. Wick-raising device for Argand	F. W. Tobey	430,258	June 17	1769	440	51	1833
Lamps. Wick-raising mechanism for	G. W. Woodward	440,683	Nov. 18	1665	430	53	947
Lamps. Wind-casing for regenerative gas	T. Gordon	421,698	Feb. 18	1808	489	50	936
Lamps. Windlass for raising and lowering	S. Morse	432,545	July 22	2342	605	52	477
Land-picker.	C. Chauff	419,415	Jan. 14	1160	308	50	245
Land-roller	S. Hazen	423,248	Mar. 11	1339	348	50	1399
Land-roller	J. Horey and C. Marsh	426,018	Apr. 22	2433	643	51	496
Land-roller	D. Kint	437,606	Sept. 30	3563	930	52	2087
Land-roller	J. G. Mallory	435,441	Sept. 2	93	26	52	1393
Land-roller	M. Schumacher	419,892	Jan. 21	1869	491	50	392
Land roller and ditcher. Combined	P. Verliff	428,187	May 20	1748	443	51	1172
Land roller and pulverizer	J. W. Eardly	427,161	May 6	217	55	51	854
Lantern	F. P. Benjamin	420,713	Feb. 4	397	105	50	642
Lantern	A. H. Crawford	435,134	Aug. 26	2626	695	52	1293
Lantern	F. Dietz	441,358	Nov. 25	2804	724	53	1168
Lantern	S. B. Field	437,587	Sept. 30	3540	924	52	2082
Lantern	E. E. Glidden	424,289	Mar. 25	2882	769	50	1708
Lantern	C. T. Ham	433,564	Aug. 5	181	48, 49	52	791
Lantern	L. Henkle	433,652	Aug. 5	315	82	52	817
Lantern	G. P. Hobbs	428,047	May 13	1550	392	51	1124
Lantern	G. P. Hobbs	442,437	Dec. 9	1256	324	53	1514
Lantern	J. A. Miller	439,672	Nov. 4	70	19	53	621
Lantern	A. W. Paull	433,362	July 29	3608	930	52	729
Lantern	A. W. Paull	433,363	July 29	3609	931	52	729
Lantern	A. W. Paull	433,364	July 29	3610	939	52	729
Lantern	W. J. Quinn	427,440	May 6	631	158	51	937
Lantern	J. B. Stetson	438,869	Oct. 21	1859	493	53	365
Lantern	A. C. Stout	434,646	Aug. 19	1862	487	52	1140
Lantern	C. Rabenstein and J. Reincking	430,193	June 17	1654	412	51	1811
Lantern	W. C. Winfield	430,719	June 24	2532	620	51	1988
Lantern	W. C. Winfield and J. F. McNutt	433,313	July 29	3542	915	52	716
Lantern. Bicycle.	P. Levison	436,528	Sept. 16	1783	470	52	1730
Lantern. Combined platform and signal	M. Morton	426,041	Apr. 22	2462	650	51	501
Lantern. Dark.	C. H. Denison	431,563	July 8	821	205	52	171
Lantern for electric-arc lights	G. W. Gwynn	427,986	May 13	1460	370	51	1106
Lantern for railway-gates. Signal	W. P. Elliott	438,228	Oct. 14	851	230 231	53	169
Lantern-holder	E. G. Annable	438,792	Oct. 21	1717	460	53	340
Lantern-holder	R. and J. Barlass	439,620	Nov. 4	4	1	53	607
Lantern. Magic	J. B. Colt	430,114	June 17	1553	386	51	1791
Lantern or lamp	J. E. Perry	430,680	June 24	2471	603	51	1975
Lantern. Signal	W. R. Musser	441,323	Nov. 25	2756	712 713	53	1159
Lantern. Signal	C. D. Oatman	425,244	Apr. 8	1243	331	51	251
Lantern. Signal	E. S. Piper	428,946	May 27	2905	744	51	1415
Lantern. Signal	G. W. Smith	440,206	Nov. 11	880	226 227	53	791
Lantern. Signal	G. J. A. Zimmer	441,348	Nov. 25	2790	721	53	1166
Lantern. Signaling	J. W. Hayward	441,555	Nov. 25	3116	800	53	1229
Lantern. Street	W. P. Butler	435,795	Sept. 2	645	170	52	1499
Lantern support. Vehicle.	A. Hering	443,207	Dec. 23	2597	668	53	1794
Lantern. Tubular	A. L. Baron	433,267	July 29	3478	898	52	703
Lantern. Tubular	L. F. Betts. (Reissue)	11,127	Nov. 25	3239	835	53	1253
Lantern. Tubular	C. T. Hau	436,416	Sept. 16	1621	427	52	1699
Lantern. Tubular	C. J. Higgins	424,983	Apr. 8	853	226	51	174
Lantern. Tubular	C. J. Higgins	433,243	July 29	3442	889	52	696

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Lantern. Tubular	W. C. Winfield	441,529	Nov. 25	3075	790	53	1921
Lanterns. Signal attachment for	G. C. Westervelt	435,082	Aug. 26	2552	673	52	1279
Lanterns. Wick-raiser for	L. A. Roberts	442,205	Dec. 9	906	241	53	1446
Lap-hook	L. A. McDonald	435,151	Aug. 26	2651	701	52	1298
Lasso for horses. Automatic	M. Foreman	425,771	Apr. 15	2037	542	51	414
Last	C. Behrens	429,992	June 10	1341	332	51	1740
Last	E. Newberry and J. W. Sharp	431,614	July 8	892	222	52	186
Last	L. Quigg	434,678	Aug. 19	1916	499	52	1149
Last	J. D. Spiller	429,782	June 10	1022	250	51	1678
Last	J. S. Turner	421,992	Feb. 25	2272	598	50	1020
Last	D. F. Willis	432,684	July 22	2564	657	52	520
Last	M. L. Wright	438,671	Oct. 21	1511	408	53	302
Lasting and tacking machine	H. W. Dean and J. Mundell	418,698	Jan. 7	69	16	50	16
Lasting-jack	O. Martin	430,233	June 17	1727	430	51	1825
Lasting-jack	C. T. Stetson	436,727	Sept. 16	2104	554	52	1791
Lasting-jack	J. H. Wood and E. D. Woods	440,526	Nov. 11	1413	365	53	889
Lasting-jack support	F. Wood	423,584	Mar. 18	1837	483	50	1500
Lasting-machine	S. Braggins	437,884	Oct. 7	320	94	53	63
Lasting-machine	S. Braggins	443,351	Dec. 23	2828	727	53	1838
Lasting-machine	E. S. Combs	436,772	Sept. 23	2196	579	52	1815
Lasting-machine	E. S. Combs	443,429	Dec. 23	2939	756	53	1860
Lasting-machine	E. S. Combs and H. M. Goodhue	436,773	Sept. 23	2197	579	52	1815
Lasting-machine	G. W. Copeland and J. E. Crisp	422,734	Mar. 4	537	137	50	1239
Lasting-machine	P. Cunningham	424,861	Apr. 1	662	138	51	128
Lasting-machine	H. W. Dean	418,694	Jan. 7	46	12	50	10
Lasting-machine	H. W. Dean	418,699	Jan. 7	72	13	50	16
Lasting-machine	S. B. Ellithorp	435,888	Sept. 2	790	210	52	1527
Lasting-machine	J. Emery	436,700	Sept. 16	2065	211	52	1782
Lasting-machine	I. N. Forbes	436,849	Sept. 23	2340	542	52	1782
Lasting-machine	I. N. Forbes	436,850	Sept. 23	2363	543	52	1844
Lasting-machine	I. N. Forbes	436,851	Sept. 23	2367	544	52	1847
Lasting-machine	I. N. Forbes	436,852	Sept. 23	2371	544	52	1849
Lasting-machine	I. N. Forbes	436,853	Sept. 23	2382	544	52	1851
Lasting-machine	C. S. Gooding and S. W. Ladd	423,922	Mar. 25	2256	544	50	1607
Lasting-machine	C. E. Goss	438,919	Oct. 21	1926	544	53	378
Lasting-machine	E. F. Grandy	420,268	Jan. 28	2468	544	50	514
Lasting-machine	M. L. Hansen	422,774	Mar. 4	590	544	50	1250
Lasting-machine head	G. W. Copeland, J. E. Crisp, and E. F. Grandy	439,051	Oct. 21	2122	544	53	417
Lasting-tack	T. O'Boiger	430,034	June 10	1414	351	51	1755
Latch	J. W. Ashbaugh	443,489	Dec. 30	3053	785	53	1891
Latch	H. C. Beardsley	438,675	Oct. 21	1515	409	53	303
Latch	C. A. Cook	435,683	Sept. 2	479	126	52	1467
Latch	C. Felton	431,843	July 8	1283	322	52	259
Latch	A. H. Gleason	437,590	Sept. 30	3543	925	52	2083
Latch	J. Hope, Jr.	431,845	July 8	1286	323	52	260
Latch	N. Johnson	426,938	Apr. 29	3793	991	51	774
Latch	R. H. Knubts	439,016	Oct. 21	2074	555	53	409
Latch	W. S. Merritt	423,938	Mar. 25	2382	634	50	1611
Latch	W. R. Monroe	431,752	July 8	1136	284	52	231
Latch	J. V. H. Nott	428,348	May 20	2008	505	51	1223
Latch	A. O'Keefe	429,150	June 3	64	17	51	1484
Latch	A. A. Page	429,948	June 10	1264	313	51	1725
Latch	F. N. Perkins	433,146	July 29	3305	854	52	668
Latch	C. Rettie	420,963	Feb. 11	810	210	50	726
Latch	C. Rettie	436,435	Sept. 16	1651	434	52	1704
Latch	E. Richardson, U. S. Shearer, and J. L. Meils	424,902	Apr. 1	723	193	51	140
Latch	H. E. Russell, Jr.	436,381	Sept. 16	1567	412	52	1690
Latch	L. Scofield	423,493	Mar. 18	1710	451	50	1478
Latch	T. S. Shouler	442,739	Dec. 16	1772	458	53	1624
Latch	E. Sondecke	434,732	Aug. 19	1995	520	52	1165
Latch	W. H. Stinson	426,080	Apr. 22	2519	664	51	512
Latch	C. W. Trotter	420,365	Jan. 28	2604	692	50	539
Latch	E. S. Wheeler	420,586	Feb. 4	224	58	50	608
Latch. Alarm	M. A. Dibble	428,381	May 20	2065	520	51	1235
Latch and lock. Combined	J. M. and S. B. Moody	434,563	Aug. 19	1710	447	52	1111

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Latch and lock combined	D. E. Grant	436,780	Sept. 23	2205	581	52	1817
Latch and lock combined	H. O. Hooper	420,600	Feb. 4	245	562	50	612
Latch and lock combined	F. Keil	442,982	Dec. 16	2173	559	53	1704
Latch and lock combined	T. Martin	426,834	Apr. 29	3662	953	51	748
Latch and lock combined	W. Samoniel	438,862	Oct. 21	1849	491	53	363
Latch and lock combined	C. Sandford	429,322	June 3	336	79	51	1535
Latch-case. Sheet-metal.	C. M. Burgess	421,905	Feb. 25	2162	567	50	999
Latch coupling. Spring.	E. E. De Kalb	422,012	Feb. 25	2305	609	50	1026
Latch. Door.	G. D. Merrill	419,966	Jan. 21	1974	519	50	413
Latch. Door.	D. S. Swarbrig	427,808	May 13	1192	299	51	1055
Latch for car-doors	A. B. Chaffin and O. A. Cone	429,502	June 3	610	149	51	1588
Latch for elevator-doors. Safety.	J. Johnston	425,802	Apr. 15	2078	555	51	422
Latch for elevator-gates	F. A. Thomas	423,459	Mar. 18	1659	438	50	1468
Latch. Gate.	E. Brunhoff and C. Lehmann	426,765	Apr. 29	3556	927	51	728
Latch. Gate.	T. C. Chapman	420,142	Jan. 28	2261	598	50	477
Latch. Gate.	W. W. Clements	429,505	June 3	613	150	51	1589
Latch. Gate.	G. Colden	440,396	Nov. 11	1195	308	53	849
Latch. Gate.	D. J. Domer	436,405	Sept. 16	1603	423	52	1696
Latch. Gate.	A. C. Hendricks	440,919	Nov. 18	2070	535	53	1022
Latch. Gate.	J. A. Lindberg	438,481	Oct. 14	1225	333	53	241
Latch. Gate.	H. W. Meinhardt.	434,191	Aug. 12	1126	292	52	986
Latch. Gate.	J. Ramsey	421,015	Feb. 11	887	229	50	741
Latch. Gate.	G. Rohrbach	433,492	Aug. 5	77	23	52	772
Latch. Gate.	G. T. Songer	442,646	Dec. 16	1566	410	53	1589
Latch. Gate.	A. Van Wie	440,092	Nov. 4	696	185	53	744
Latch. Gravity.	N. G. Sörensen	419,374	Jan. 14	1094	289	50	231
Latch-hub	H. G. Voight	421,994	Feb. 25	2275	599	50	1021
Latch-keeper. Sheet-metal	C. M. Burgess	421,381	Feb. 18	1411	365	50	847
Latch. Locking.	E. Koenig	436,761	Sept. 16	2172	571	52	1803
Latch-opener	W. M. Leavens	430,779	June 24	2639	647	51	2010
Latch. Reversible	C. M. Burgess	435,555	Sept. 2	270	75	52	1427
Latch. Reversible	F. B. Case	433,325	July 29	3560	918	52	720
Latch. Reversible	J. R. Forster	428,771	May 27	2650	671	51	1363
Latch. Reversible	T. Lincoln	431,523	July 1	756	188	52	151
Lath. Wire	P. Miles	429,935	June 10	1250	310	51	1723
Lathing	T. B. Cockburn	419,416	Jan. 14	1161	308	50	245
Lathing	A. Weigle	438,456	Oct. 14	1196	324	53	235
Lathing and furring strip for buildings. Combined	E. M. Coffin	437,886	Oct. 7	322	95	53	63
Lathing. Die for making	G. H. Tucker	435,986	Sept. 9	939	247	52	1562
Lathing. Metallic.	G. Hayes	420,654	Feb. 4	326	84	50	627
Lathing. Metallic.	G. Hayes	420,656	Feb. 4	328	84	50	628
Lathing. Metallic.	G. Hayes	420,657	Feb. 4	328	85	50	628
Lathing. Metallic.	G. Hayes	420,658	Feb. 4	329	85	50	628
Lathing. Metallic.	G. Hayes	420,659	Feb. 4	330	85	50	628
Lathing. Metallic.	G. Hayes	420,660	Feb. 4	330	85	50	628
Lathing. Metallic.	G. Hayes	420,661	Feb. 4	331	86	50	628
Lathing. Metallic.	G. Hayes	427,988	May 13	1462	371	51	1106
Lathing. Metallic.	G. Hayes	427,989	May 13	1463	371	51	1107
Lathing. Metallic.	G. Kelly	439,728	Nov. 4	149	39	53	637
Lathing. Metallic.	C. Kinney	432,141	July 15	1739	446	52	354
Lathing. Metallic.	W. Orr	425,245	Apr. 8	1245	331	51	252
Lathing. Metallic.	L. L. Sagendorph	422,318	Feb. 25	2778	731	50	1113
Lathing. Metallic.	L. L. Sagendorph	438,327	Oct. 14	1006	273	53	198
Lathing. Metallic.	B. Scarles	420,738	Feb. 4	430	114	50	648
Lathing. Sheet-metal	G. Hayes	420,655	Feb. 4	327	84	50	627
Lathing. Staple bridging or furring for wire	E. Gilbert and P. Drendul	433,594	Aug. 5	676	175	52	889
Lathe	H. C. Albee	429,297	June 3	291	69, 70	51	1525
Lathe	W. F. Barnes	427,495	May 6	702	177	51	951
Lathe	G. H. Bennett	436,013	Sept. 9	976	256	52	1569
Lathe	G. A. Brodin	442,662	Dec. 16	1609	415	53	1595
Lathe	L. Brown, Sr	430,245	June 17	1751	436	51	1830
Lathe	F. H. Clement	429,603	June 10	762	184	51	1629
Lathe	J. Harley	436,175	Sept. 9	1238	322	52	1616
Lathe	W. Houghtaling	434,930	Aug. 26	2333	616	52	1237
Lathe	O. Kromer	422,809	Mar. 4	645	165	50	1261
Lathe	G. T. Reiss	430,088	June 10	1509	375	51	1773
Lathe	J. D. Silberzahn	443,335	Dec. 23	2803	720	53	1834
Lathe attachment	R. H. Hurlbut	427,869	May 13	1280	324	51	1072
Lathe attachment	A. Leck	439,531	Oct. 28	2889	769	53	568
Lathe attachment	E. Prietz	431,392	July 1	552	138	52	112
Lathe attachment	W. Swabel	437,945	Oct. 7	414	116	53	79
Lathe attachment. Screw-cutting	E. Schmitz and R. F. Paulsen	431,625	July 8	911	229	52	189
Lathe attachment. Turret.	C. L. Libby	434,775	Dec. 30	3499	897	53	1976
Lathe. Button-turning	D. B. Shantz	431,956	July 8	1441	365	52	290
Lathe-carriage	W. Barker	430,612	June 24	2348	575	51	1953
Lathe-carriage	P. G. Simpson	431,855	July 8	1302	326	52	263
Lathe-center grinder	E. E. Woodward	438,876	Oct. 21	1867	495	53	367
Lathe. Cob-pipe turning and boring	J. T. Bright	427,037	May 6	9	3	51	812
Lathe cutting-tool	H. J. Moreland	442,907	Dec. 16	2063	529	53	1631
Lathe-dog	F. L. Osgood	435,945	Sept. 9	881	231	52	1551
Lathe-feed mechanism	E. A. Müller	421,866	Feb. 18	2105	552	50	979
Lathe for turning buttons	D. B. Shantz	427,919	May 13	1364	343	51	1087
Lathe for turning buttons	D. B. Shantz	427,920	May 13	1367	345	51	1087
Lathe for turning eccentric or polygonal forms	W. H. Lenhart	437,339	Sept. 30	3139	821	52	2002
Lathe for turning handles	P. T. Lamkin	430,862	June 24	2768	678	51	2033

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Lathe for turning pinion-shafts	D. H. Church	432,791	July 22	2746	703	52	554
Lathe for turning spirals	M. Brochu	419,167	Jan. 7	777	205 206	50	161
Lathe for turning wood	G. H. Ober	433,023	July 29	3113	798 799	52	630
Lathe-mandrel. Expanding	L. H. Brightman	420,616	Feb. 4	269	71	50	617
Lathe. Metal-turning	P. Lobben	421,181	Feb. 11	1123	288	50	786
Lathe. Metal-working	W. J. Muncaster	437,866	Oct. 7	293	88	53	57
Lathe or planer tool	J. U. Reed	442,259	Dec. 9	981	258	53	1462
Lathe. Screw-cutting	E. F. Valiquet	432,585	July 22	2397	617	52	487
Lathe. Shaft-turning	H. H. Taylor	438,032	Oct. 7	561	153	53	106
Lathe. Spoke	P. Kettenring	429,924	June 10	1233	305 306	51	1720
Lathe-tool	W. Parteons	427,902	May 13	1339	338	51	1082
Lathe treadle. Foot	F. Thomas	422,465	Mar. 4	153	41	50	1165
Lathe. Tubular cutter	E. Zimmermann, A. Schmid, and G. Wunderle	420,982	Feb. 11	836	216 217	50	731
Lathe. Turning	C. W. McDaniel	419,155	Jan. 7	758	201	50	158
Lathe. Turret	C. S. Sherman	423,088	Mar. 11	1108	290	50	1353
Lathe. Turret-head	H. Drysdale	437,292	Sept. 30	3071	805	52	1990
Lathe. Vertical gang	J. H. Haskins	420,064	Jan. 28	2132	563 564	50	452
Lathes. Adjustable tool-holder for	J. H. Parker	426,311	Apr. 22	2852	751	51	582
Lathes or other machinery. Guard for	H. S. Hopper	433,994	Aug. 12	813	212	52	923
Lathes. Pipe and bolt threading attachment for	L. B. Curtis	439,122	Oct. 28	2240	602	53	446
Lathes. Shaper attachment for	S. M. Cook and J. E. Sherman	441,939	Dec. 2	480	128	53	1358
Lathes. Speed-changing mechanism for	L. E. Whiton	437,067	Sept. 23	2690	703	52	1911
Lathes. Speed-changing mechanism for	L. E. Whiton	437,068	Sept. 23	2692	703 704	52	1912
Lathes. Steady-rest for	J. L. Bogert	429,880	June 10	1176	292	51	1708
Lathes. Tool-carriage for	W. F. Barnes	427,494	May 6	701	176	51	950
Laundry-table	M. McClure	436,839	Sept. 23	2325	611 612	52	1840
Lawn-cleaner	C. Bailey	434,233	Aug. 12	1198	311	52	1000
Lawn-edge trimmer	H. H. Dille	427,406	May 6	574	143	51	925
Lawn-rake	R. S. Carr	443,567	Dec. 30	3166	813	53	1912
Lawn-rake and grass-carrier. Combined	C. O'Neill and J. Linstrom	432,168	July 15	1778	457	52	361
Lawn rake and sweeper	M. E. Pontions	425,695	Apr. 15	1933	514	51	393
Lawn-sprinkler	J. G. Baker and T. H. Asbury	436,592	Sept. 16	1900	499	52	1750
Lawn-sprinkler	R. Franken	443,394	Dec. 23	2891	743	53	1831
Lawn-sprinkler	D. A. Hoyt	437,118	Sept. 23	2769	723	52	1927
Lawn-sprinkler	D. A. Hoyt	440,159	Nov. 11	810	210	53	778
Lawn-sprinkler	A. A. Kent	423,778	Mar. 18	2129	562	50	1556
Lawn-sprinkler	T. Schoen	436,942	Sept. 23	2524	661	52	1878
Lawn-sprinkler	D. C. Wilgus	443,734	Dec. 30	3440	882	53	1964
Lawn-sprinkler. Portable centrifugal	R. Addison	437,322	Sept. 30	3117	815	52	997
Lawn-sweeper	F. La Batt	435,144	Aug. 26	2642	699	52	1296
Lawn-sweeper	O. D. Thompson	426,882	Apr. 29	3725	973	51	761
Lawns. Metallic edging for	W. Bicknell	436,821	Sept. 23	2290	604	52	1834
Lead and base bullion from slags, mattes, and speiss.	W. B. Devereux	427,058	May 6	35	11	51	817
Apparatus for separating							
Lead by electrolysis. Desilverizing	T. D. Bottome	442,661	Dec. 16	1608	.....	53	1595
Lead-joint runner	W. Vanderman	430,713	June 24	2526	618	51	1987
Lead. Making white	A. C. Bradley	434,623	Aug. 19	1809	473	52	1131
Lead. Making white	P. Bronner	431,505	July 1	730	.....	52	145
Lead. Making white	A. Orr	428,017	May 13	1506	.....	51	1116
Lead. Manufacture of white	G. Bischof	442,943	Dec. 16	2118	.....	53	1693
Lead. Manufacture of white	J. A. Boand	432,784	July 22	2731	699	52	551
Lead. Manufacturing red	M. Alsberg	431,026	July 1	1	.....	52	3
Lead or alloys thereof. Purifying	W. Shapleigh	438,117	Oct. 7	684	.....	53	132
Lead or crayon holder	O. Mussinan, Jr.	439,787	Nov. 4	236	60	53	654
Lead pigment	G. T. Lewis	437,700	Oct. 7	31	.....	53	9
Lead pigment. Manufacturing	G. T. Lewis	437,701	Oct. 7	31	.....	53	9
Lead-press	C. C. Tracy	439,986	Nov. 4	551	145	53	715
Lead-press die	C. C. Tracy	431,295	July 1	396	100	52	81
Lead. Treating sublimed	C. V. Petraeus	439,733	Nov. 4	156	.....	53	638
Leads, crayons, &c. Holder for	R. F. von Faber	440,222	Nov. 11	913	234	53	798
Leader-protector	L. J. Masbach	439,669	Nov. 4	67	18	53	620
Leaf-turner	C. P. Brown	431,327	July 1	441	109 110	52	90
Leaf-turner	M. Kyle	425,180	Apr. 8	1159	306	51	234
Leaf-turner	G. W. Leevey	425,810	Apr. 15	2090	559 560	51	425
Leaf-turner	W. F. Mitchell	434,718	Aug. 19	1977	515	52	1161
Leaf-turner	J. E. Pellow	439,550	Oct. 28	2917	776	53	573
Leaf-turner	E. Wilkoshesky and L. Van Orton	424,155	Mar. 25	2699	718	50	1672
Leak or flow detector. Electric	G. S. Nen	442,385	Dec. 9	1173	305	53	1497
Leather. Apparatus for stuffing and stretching	P. King	440,358	Nov. 11	1120	288	53	834
Leather-heading machine	C. W. Collyer	436,752	Sept. 16	2161	568	52	1801
Leather-cutting tool	H. Comstock	427,461	May 6	660	166	51	942
Leather-dressing	J. M. Jolly	441,010	Nov. 18	2206	.....	53	1049
Leather-dressing machine	T. P. Coombs	437,483	Sept. 30	3383	886	52	2052
Leather-dressing machine	F. J. Faulkner	443,433	Dec. 23	2946	758	53	1861
Leather-finishing machine	B. D. Chalkley	443,896	Dec. 30	3674	946	53	2010
Leather-finishing machine	G. W. Lennox	436,363	Sept. 16	1534	402	52	1683
Leather-glazing machine	G. V. Anderson	426,225	Apr. 22	2740	717	51	557
Leather-punching machine	S. H. Randall	439,603	Oct. 28	3004	797	53	591
Leather-rolling machine	J. A. Brownell	441,821	Dec. 2	306	82, 83	53	1323
Leather-scouring machine	F. Monk	427,101	May 6	116	31	51	834
Leather scraps. Machine for grinding	H. Leavitt	423,384	Mar. 11	1543	406	50	1437
Leather-skiver	J. Kirwan	438,002	Oct. 7	506	142	53	96
Leather-skiving machine	F. L. Kuhn	427,579	May 13	841	210	51	987
Leather-skiving machine	J. A. Safford	442,399	Dec. 9	1192	310	53	1501

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Leather-skiving machine	A. J. Tewksbury	439,208	Oct. 28	2384	{ 640	53	473
Leather-skiving machine	A. D. Worthen	423,977	Mar. 25	2445	{ 641		
Leather-softening machine	A. C. Andrews	430,165	June 17	1617	{ 403	51	1804
Leather-stretching machine	S. A. West and C. Sinning	423,846	Mar. 18	2226	{ 404		
Leather-stuffing wheel	A. J. Darragh	421,249	Feb. 11	1219	315	50	804
Leather-thong cutter	C. E. Ramms	432,641	July 22	2484	639	52	504
Leather-washer	T. Gingras	441,406	Nov. 25	2886	745	53	1185
Ledger	F. V. Wurster	436,554	Sept. 16	1841	485	52	1739
Ledger. Check	H. T. Leslie	428,009	May 13	1495	380	51	1114
Ledger. Petty	E. L. Reynolds	443,007	Dec. 16	2210	569	53	1712
Leg. Artificial	G. Beacock	433,226	July 29	3419	883	52	691
Leg. Artificial	H. C. Wintermute	433,638	Aug. 5	288	77	52	813
Leggin. Water-proof	J. E. Carls and J. E. Gibbs	421,906	Feb. 25	2163	567	50	999
Lemon cutter and squeezer	S. T. Jull	426,188	Apr. 22	2685	705	51	546
Lemon-juice extractor	J. P. Manny	441,882	Dec. 2	395	104	53	1342
Lemon-juice extractor	S. Prince	428,947	May 27	2906	745	51	1416
Lemon-squeezer	W. O. Dunlap	420,868	Feb. 4	649	168	50	687
Lemon-squeezer	W. O. Dunlap	434,327	Aug. 12	1337	348	52	1028
Lemon-squeezer	J. L. Easley	438,069	Oct. 7	616	167	53	118
Lemonade-holder and glass-washer combined. Portable	S. Wilkins	423,650	Mar. 18	1954	514	50	1522
Lens-grinding machine	R. B. H. Leighton	441,570	Nov. 25	3136	{ 806	53	1233
Lens. Refracting	W. Kochs and M. Wolz	421,585	Feb. 18	1710	{ 807		
Letter-box	E. M. Boynton	439,631	Nov. 4	19	5	53	610
Letter-box	T. C. Chappell and E. D. Moore. (Reissue.)	11,059	Feb. 11	1397	359	50	836
Letter-box	J. W. Cutler	430,626	June 24	2370	579	51	1957
Letter-box	S. A. Darrach	427,464	May 6	663	166	51	943
Letter-box	W. L. Godfrey	441,063	Nov. 18	2296	595	53	1067
Letter-box	R. M. Haan	422,401	Mar. 4	55	15	50	1148
Letter-box	W. W. Haskell	425,225	Apr. 8	1220	324	51	247
Letter-box	A. S. Johnston	429,922	June 10	1230	305	51	1719
Letter-box	E. F. Kinsey	442,983	Dec. 16	2174	559	53	1704
Letter-box	H. Perls	438,942	Oct. 21	1959	523	53	385
Letter-box	R. F. Regeester	441,898	Dec. 2	422	113	53	1347
Letter-box	J. G. Smith	430,114	Jan. 28	2212	586	50	469
Letter-box	H. V. Snead	428,968	May 27	2941	735	51	1422
Letter-box	W. O. Taylor	432,254	July 15	1895	487	52	383
Letter-box	J. Tegurtha	433,665	Aug. 5	333	85	52	821
Letter-box	R. G. Ward	423,007	Mar. 11	982	259	50	1330
Letter-box	S. L. Wiegand	429,986	June 10	1334	331	51	1739
Letter-box and gate-post. Combined	R. Groom, Jr.	438,476	Oct. 14	1218	330	53	240
Letter-box. Electric alarm	W. B. Detwiller	433,560	Aug. 5	175	47	52	790
Letter-box indicator	G. A. Colton	438,095	Oct. 7	655	178	53	127
Letter-box indicator	H. B. Griffiths	432,306	July 15	1990	508	52	399
Letter. Electric illuminated	J. A. McEntee	437,226	Sept. 30	2965	775	52	1969
Letter-opener	D. W. Sholes	425,586	Apr. 15	1755	470	51	359
Letter. Removable	C. J. Pfrangle	433,211	July 29	3398	878	52	686
Letter-sheet	H. N. H. Lugin	429,575	June 3	714	173	51	1609
Letter. Stamped	M. R. Dillin and C. S. Ford, Jr.	437,334	Sept. 30	3131	819	52	2000
Letters and canceling stamps thereon. Apparatus for handling	J. S. Fielding	423,472	Mar. 18	1677	443	50	1471
Letters, &c. Receptacle for gummed	H. Willson	424,526	Apr. 1	127	37	51	28
Lettering-machine. Book-finisher's	G. H. Reynolds	443,379	Dec. 23	2869	738	53	1847
Level. Farmer's	W. M. Washburn	426,696	Apr. 29	3447	903	51	706
Level for bit-braces. Spirit	J. McLaughlin	419,703	Jan. 21	1576	421	50	333
Level. Plumb	L. D. Blackwood and A. R. Bradley	438,518	Oct. 14	1274	345	53	251
Level. Plumb	R. Einstein	431,184	July 1	227	57	52	47
Level. Plumb	T. G. Hall	419,329	Jan. 14	1027	272	50	217
Level. Plumb	N. Jensen	433,570	Aug. 5	193	51	52	793
Level. Plumb	K. Miller	441,772	Dec. 2	228	59	53	1308
Level. Plumb	C. E. Nielsen	420,242	Jan. 28	2427	646	50	507
Level. Spirit	J. A. Byrne	423,669	Mar. 18	1980	522	50	1528
Level. Spirit	P. L. Fox	436,495	Sept. 16	1739	459	52	1722
Level. Spirit	H. Green	438,541	Oct. 14	1309	354	53	258
Level. Spirit	G. Laube	436,005	Sept. 9	966	253	52	1567
Level. Spirit	J. A. Trant	421,786	Feb. 18	1981	521	50	956
Level. Spirit	J. A. Trant	423,969	Mar. 25	2435	647	50	1621
Leveler. Land	J. N. Holland	425,793	Apr. 15	2064	551	51	420
Leveler. Meadow	P. M. Thompson	443,950	Dec. 30	3764	{ 961	53	2027
Leveling-instrument	J. Paoli	434,399	Aug. 12	1452	{ 962		
Leveling-instrument	C. G. Smith	438,954	Oct. 21	1980	528	53	329
Leveling-instrument	M. A. Stewart	440,445	Nov. 11	1281	332	53	864
Lever	J. Buckley	418,907	Jan. 7	404	99	50	84
Lever	H. C. Stone	435,529	Sept. 2	224	62	52	1418
Lever. Brake	I. Eaton	436,221	Sept. 9	1305	340	52	1630
Lever for moving locomotives or cars	W. H. Garlock	441,061	Nov. 18	2293	595	53	1066
Lever mechanism	A. L. G. Ganttard	430,282	June 17	1844	452	51	1847
Lever. Power	D. Corning and C. H. Sprague	433,978	Aug. 12	805	210	52	922
Lever. Reversing	F. M. Dwelley	427,560	May 13	810	203	51	982
Licorice-root, &c., to powder. Reducing	S. B. Rickerson	437,244	Sept. 30	2992	782	52	1975
Lid-lifter	D. H. Flehr	433,726	Aug. 5	419	107	52	837
Life at sea. Pillow or bolster for saving	D. Taylor	426,081	Apr. 22	2519	665	51	513
Life-buoy	G. H. Lidbeck	418,897	Jan. 7	387	94, 95	50	80
Life-buoy or preserver	J. Grant	440,088	Nov. 4	692	184	53	743
Life-lines. Pneumatic apparatus for throwing	J. D'Arcy-Irvine	433,674	Aug. 5	346	88	52	823
Life-preserver	J. Christensen	426,363	Apr. 22	2929	770	51	598
Life-preserver	S. Pemberton	426,543	Apr. 29	3213	842	51	661
Life-preserver	F. Powers	436,318	Sept. 9	1447	376	52	1658
Life-preserver	O. Quist	419,066	Jan. 7	630	164	50	133

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Life-preserver.....	F. G. C. Weir.....	431,830	July 8	1260	316	52	255
Life-raft.....	M. Edwards.....	428,833	May 27	2745	698	51	1382
Life-raft.....	D. Kahweiler.....	421,578	Feb. 13	1697	440	50	901
Life-saving apparatus.....	T. W. Jeffries.....	439,157	Oct. 28	2290	615	53	455
Life-saving apparatus.....	A. F. Rockwell.....	434,725	Aug. 19	1985	517	52	1162
Life-saving apparatus. Stationary.....	M. Waldner.....	441,082	Nov. 18	2333	604	53	1073
Life-saving belt.....	J. C. Wilcox.....	419,132	Jan. 7	718	189	50	151
Life-saving garment.....	J. H. Grady.....	429,269	June 3	232	58	51	1517
Lift or elevator.....	J. Nadler.....	440,111	Nov. 4	724	192	53	750
Lifter:							
<i>See</i> Ash-lifter.	Lid-lifter.						
Box-lifter.	Pie-lifter.						
Cable-lifter.	Plate-lifter.						
Carriage-top lifter.	Plate or pan lifter.						
Clothes-lifter.	Pot-lifter.						
Cuspidor-lifter.	Spittoon-lifter.						
Dress-lifter.	Transom-lifter.						
Egg-lifter.	Wagon-body lifter.						
Jar-lifter.							
Lifting and pulling machines. Coin-controlled test..	C. E. Lipe and J. Lighton.....	425,892	Apr. 15	2211	{ 587 588 }	51	446
Lifting-jack.....	J. W. Alfred.....	437,077	Sept. 23	2710	708	52	1915
Lifting-jack.....	M. Chumard.....	419,927	Jan. 21	1918	506	50	402
Lifting-jack.....	J. B. and A. Cleveland.....	421,552	Feb. 18	1662	431	50	894
Lifting-jack.....	E. Covert.....	432,230	July 15	1865	479	52	378
Lifting-jack.....	L. J. Crecelius.....	430,421	June 17	2046	505	51	1887
Lifting-jack.....	B. Duez.....	437,182	Sept. 30	2905	756	52	1958
Lifting-jack.....	C. P. Emerson.....	422,014	Feb. 25	2308	609	50	1027
Lifting-jack.....	I. N. Groves.....	432,732	July 22	2641	675	52	534
Lifting-jack.....	S. F. Hall.....	425,785	Apr. 15	2054	547	51	418
Lifting-jack.....	A. Harris.....	430,946	June 24	2590	711	51	2057
Lifting-jack.....	M. P. Holmes.....	434,712	Aug. 19	1972	512	52	1160
Lifting-jack.....	C. T. Laur.....	436,179	Sept. 9	1245	324	52	1617
Lifting-jack.....	F. B. Mallory.....	421,592	Feb. 18	1720	448	50	906
Lifting-jack.....	G. F. Quinn.....	422,539	Mar. 4	251	64	50	1184
Lifting-jack.....	S. B. Sigler.....	438,496	Oct. 14	1244	337	53	245
Lifting-jack.....	L. S. Stringham.....	437,350	Sept. 30	3160	827	52	2006
Lifting-jack.....	F. Tischer.....	439,735	Nov. 4	160	41	53	639
Lifting-jack.....	F. D. Wallace.....	428,027	May 13	1519	386	51	1118
Lifting-jack.....	H. Wilson.....	436,943	Sept. 23	2525	661	52	1878
Lifting-jack.....	C. S. Winey.....	425,358	Apr. 8	1407	375	51	283
Lifting-machine. Coin-controlled self-registering ..	L. Donne.....	423,035	Mar. 11	1028	268	50	1339
Lifting-machine. Coin-controlled test.....	J. Lighton.....	425,436	Apr. 15	1532	{ 411 412 }	51	316
Light:							
<i>See</i> Arc light.	Locomotive head-light.						
Electric street-light.	Photographic flash-light.						
Gas-light.	Signal-light.						
Head-light.							
Light-globes. Device for operating elevated.....	J. F. Barker.....	423,895	Mar. 25	2309	609	50	1597
Light-holder.....	J. O. Barrett.....	420,292	Jan. 28	2503	664	50	520
Light-houses. Construction of.....	J. Andrews and G. Lindenthal.....	438,976	Oct. 21	2016	538	53	397
Lights. Filament for incandescent.....	R. Langhans.....	420,881	Feb. 4	671	.....	50	691
Lighter. Pocket.....	A. J. Fredrikson.....	443,966	Dec. 30	3833	976	53	2040
Lighting and advertising system. Electric.....	A. Douglass.....	425,125	Apr. 8	1064	{ 282 283 }	51	215
Lighting and wick-raising attachment.....	C. D. Rundell.....	435,190	Aug. 26	2712	716	52	1309
Lighting. Conductor for house.....	W. H. Eckert and W. H. Gregory.....	442,575	Dec. 9	1481	{ 380 381 }	53	1559
Lighting device.....	J. F. Nelson.....	442,534	Dec. 9	1412	361	53	1545
Lighting-fixture.....	P. C. J. Lemaire.....	422,811	Mar. 4	649	166	50	1261
Lighting system. Arc and incandescent.....	J. E. Giles.....	438,619	Oct. 21	1438	387	53	290
Lightning-arrester.....	G. G. Bayne.....	430,984	Feb. 11	839	217	50	732
Lightning-arrester.....	L. Bell.....	437,540	May 13	779	194	51	975
Lightning-arrester.....	J. D. Bishop.....	425,061	Apr. 8	968	260	51	195
Lightning-arrester.....	G. D. Hoop.....	436,238	Sept. 9	1331	347	52	1634
Lightning-arrester.....	H. M. Kalbach.....	437,363	Sept. 30	3197	833	52	2012
Lightning-arrester.....	O. J. Lodge.....	429,727	June 10	938	231	51	1663
Lightning-arrester.....	O. P. Loomis.....	424,562	Apr. 1	183	53	51	40
Lightning-arrester.....	O. P. Loomis.....	424,563	Apr. 1	196	54	51	41
Lightning-arrester.....	G. S. Maxwell.....	423,788	Mar. 18	2148	567	50	1559
Lightning-arrester.....	C. A. Pfleger.....	420,096	Jan. 28	2182	575	50	462
Lightning-arrester.....	E. W. Rice, Jr.....	440,654	Nov. 18	1623	418	53	939
Lightning-arrester.....	A. D. Spear.....	426,338	Apr. 22	2888	760	51	590
Lightning-arrester.....	E. A. Sperry.....	418,824	Jan. 7	254	62	50	54
Lightning-arrester.....	A. C. White.....	438,788	Oct. 21	1710	459	53	339
Lightning-arrester.....	J. J. Wood.....	441,999	Dec. 2	575	{ 156 157 }	53	1376
Lightning-arrester.....	A. Wurts.....	434,167	Aug. 12	1095	283	52	980
Lightning-arrester.....	A. Wurts.....	434,170	Aug. 12	1098	{ 283 284 }	52	981
Lightning-arrester.....	A. Wurts.....	434,371	Aug. 12	1403	368	52	1041
Lightning-arrester.....	A. Wurts and O. H. Baldwin.....	433,430	July 29	3701	956	52	749
Lightning-arrester and cut-out. Combined.....	J. A. McManman.....	440,361	Nov. 11	1124	289	53	835
Lightning-arrester. Automatic.....	C. M. Griffin.....	427,984	May 13	1458	369	51	1105
Lightning. Protecting buildings from.....	N. D. C. Hodges.....	443,048	Dec. 16	2274	583	53	1724
Lightning-protector for oil-tanks.....	H. W. Spang.....	437,526	Sept. 30	3450	901	52	2065
Lightning-rod tower.....	I. M. Ferrell.....	433,459	Aug. 5	34	9	52	763
Limb. Artificial.....	A. Gault.....	428,839	May 27	2752	699	51	1384
Limb. Artificial.....	H. M. Kolbe.....	419,019	Jan. 7	563	141	50	119
Limb. Artificial.....	H. S. Swank.....	433,497	Aug. 5	82	24	52	773
Limekiln.....	W. Jones.....	437,494	Sept. 30	3400	890	52	2055
Limekiln.....	G. A. Mace.....	436,426	Sept. 16	1638	431	52	1702
Limekiln.....	C. A. Mercer.....	443,779	Dec. 30	3504	899	53	1977

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Limekiln.....	C. D. Page.....	443,865	Dec. 30	3631	935	53	2003
Line-check.....	T. H. Trice.....	440,667	Nov. 18	1644	424	53	943
Line-fastener.....	G. W. Bowers.....	438,398	Oct. 14	1105	300	53	217
Line-fastener.....	W. B. Clark.....	423,312	Mar. 11	1445	376	50	1418
Line-holder.....	P. J. Chassagne.....	430,922	June 24	2855	701	51	2050
Line-holder.....	W. R. Morse.....	424,075	Mar. 25	2587	690	50	1650
Line-holder.....	H. W. Taylor.....	422,997	Mar. 11	970	256	50	1328
Line-puller.....	C. N. Wilcox.....	434,691	Aug. 19	1942	504	52	1154
Line-tightener.....	J. and D. Park.....	424,022	Mar. 25	2513	669	50	1636
Linear measure. Electrical indicating apparatus for.....	J. Rapiéff.....	441,972	Dec. 2	527	{ 141 142 }	{ 53 53 }	{ 1367 1367 }
Lined boiler.....	A. Loring.....	440,318	Nov. 11	1066	274	53	824
Liniment.....	M. Doppelmayer.....	438,063	Oct. 7	608	.....	53	117
Liniment.....	D. A. Early and J. W. Johnston.....	425,499	Apr. 15	1626	.....	51	334
Liniment.....	J. Esquinaldo.....	429,720	June 10	931	.....	51	1662
Liniment.....	J. W. Jones.....	422,946	Mar. 11	893	.....	50	1314
Liniment.....	S. J. Lancaster.....	428,344	May 20	2003	.....	51	1222
Liniment.....	D. Meinen.....	442,667	Dec. 16	1618	.....	53	1596
Liniment.....	J. M. Smith.....	419,372	Jan. 14	1093	.....	50	231
Liniment.....	W. Snow and J. A. Johns.....	437,728	Oct. 7	80	.....	53	18
Liniment.....	W. C. Summers.....	435,984	Sept. 9	936	.....	52	1561
Liniment-pad.....	B. T. Jacobs.....	377,994	Oct. 7	494	140	53	94
Lining-machines. Web-cutting attachment for.....	A. W. Schlichte.....	420,283	Jan. 28	2491	661	50	518
Link. Detachable.....	N. Bosmanu.....	434,498	Aug. 19	1615	423	52	1092
Link-lifter.....	F. L. Johnson.....	422,021	Feb. 25	2316	611	50	1028
Linoleum. Manufacture of.....	H. W. Godfrey, C. F. Leake, and C. E. Lucas.....	425,875	Apr. 15	2190	583	51	443
Linotype-machine.....	O. Mergenthaler.....	438,354	Oct. 14	1046	285	53	206
Linotypes, type-matrices, &c. Machine for producing.....	O. Mergenthaler.....	436,532	Sept. 16	1802	474	52	1733
					475		
					476		
					477		
					478		
Linseed-meal. Machine for mixing and tempering ..	O. R. Nelson.....	442,081	Dec. 2	712	191	53	1402
					192		
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					194		
					195		
Lint and other similar fibers. Machine for preparing.....	G. W. Foster.....	425,874	Apr. 15	2190	582	51	442
Liquid-agitator.....	C. J. Hauck, Jr.....	427,473	May 6	675	169	51	945
Liquid cooler and purifier.....	D. C. Camp.....	426,914	Apr. 29	3762	983	51	769
Liquid-cooling vessel.....	T. J. Kerns.....	437,999	Oct. 7	502	141	53	95
Liquid-dispensing apparatus.....	J. C. Mayrhofer.....	430,079	June 10	1491	370	51	1769
Liquid-dispensing apparatus. Coin-controlled.....	R. H. Little.....	434,395	Aug. 12	1443	376	52	1050
Liquid-distributor.....	F. W. Kendall.....	422,799	Mar. 4	631	162	50	1258
Liquid-fuel burner.....	A. H. Calkins.....	419,822	Jan. 21	1746	463	50	367
Liquid-fuel burner.....	A. H. Calkins.....	419,823	Jan. 21	1748	463	50	367
Liquid-fuel burner.....	A. H. Calkins.....	419,824	Jan. 21	1751	463	50	368
Liquid-fuel burner.....	A. H. Calkins.....	419,825	Jan. 21	1753	464	50	368
Liquid-heater.....	C. Young.....	434,225	Aug. 12	1181	307	52	996
Liquid-heater. Steam.....	J. F. Bradford.....	418,939	Jan. 7	455	{ 111 112 }	{ 50 50 }	{ 85 85 }
Liquid-heating device.....	A. A. Clearwater.....	438,469	Oct. 14	1211	328	53	238
Liquid-holding vessel.....	S. R. Mace.....	428,013	May 13	1502	381	51	1115
Liquid-level indicator.....	T. P. Sullivan.....	421,061	Feb. 11	956	246	50	754
Liquid-meter. Rotary.....	J. J. Claret.....	426,919	Apr. 29	3768	948	51	770
Liquid-meter. Rotary double-piston.....	H. F. Gaskill.....	421,489	Feb. 18	1561	{ 403 404 }	{ 50 50 }	{ 876 876 }
Liquid-mixer.....	W. R. Kahlenberg.....	419,200	Jan. 14	833	219	50	179
Liquid-mixing apparatus.....	A. Jorgensen.....	439,010	Oct. 21	2063	552	53	406
Liquid-mixing machine.....	B. F. Phelps.....	420,356	Jan. 28	2588	667	50	536
Liquid-receptacles. Spreading-tip for.....	W. H. Underwood.....	421,362	Feb. 11	1378	356	50	833
Liquid-releaser. Automatic.....	K. F. Peterson.....	427,607	May 13	876	{ 220 221 }	{ 51 51 }	{ 994 994 }
Liquid-releaser. Automatic.....	K. F. Peterson.....	427,608	May 13	878	221	51	994
Liquid-separator.....	A. Parks, Jr.....	418,984	Jan. 7	514	128	50	108
Liquid-shake.....	J. Stubbs.....	424,438	Mar. 25	3158	838	50	1762
Liquid sprinkling and cooling apparatus.....	J. J. de Kinder.....	441,365	Nov. 25	2814	727	53	1170
Liquid waste and apparatus therefor. Treating heated.....	E. Nelson.....	440,410	Nov. 11	1215	314	53	853
Liquids. Apparatus for decolorizing, filtering, &c.....	B. Lavigne.....	429,459	June 3	537	129	51	1576
Liquids. Apparatus for regulating the flow of.....	F. J. Mitchell.....	441,681	Dec. 2	76	21	53	1277
Liquids. Apparatus for sprinkling and cooling.....	J. J. de Kinder.....	442,865	Dec. 16	1982	509	53	1666
Liquids. Apparatus for testing.....	T. Clement.....	424,643	Apr. 1	318	83	51	63
Liquids. Concentrating and evaporating.....	J. A. Morrell.....	441,371	Nov. 25	2826	729	53	1172
Liquids. Heating and cooling.....	J. Klein.....	430,961	June 24	2917	716	51	2061
Liquids. Machine for agitating.....	R. Smith and P. Dillon.....	423,285	Mar. 11	1413	367	50	1411
Liquids. Vessel for receiving.....	F. E. Goldsmith.....	430,425	June 17	2052	506	51	1888
Liquids. Testing.....	T. Clement.....	437,356	Sept. 30	3175	{ 829 830 }	{ 52 52 }	{ 2008 2008 }
Liquors. Apparatus for cooling and aerating wort for malt.....	C. D. Stanford.....	435,000	Aug. 26	2430	643	52	1256
Lister and drill. Combined.....	W. A. Loughry.....	422,603	Mar. 4	356	88	50	1204
Lithographic plates. Combined bed and stretcher for zinc.....	R. A. Kinkelo and G. H. Leinert.....	422,227	Feb. 25	2626	696	50	1086
Lithographic purposes. Backing for stones for.....	T. R. Johnston.....	433,349	July 29	3588	925	52	725
Lithographic stippling. Producing.....	C. H. Gordon.....	438,918	Oct. 21	1925	.....	53	378
Lithographing by means of sand-blast.....	J. L. Mills.....	434,157	Aug. 12	1083	279	52	978
Loading and unloading mechanism.....	N. E. Green.....	434,664	Aug. 19	1890	494	52	1145
Loading apparatus.....	C. F. Harman.....	421,568	Feb. 18	1620	435	50	898
Loading apparatus. Helical.....	A. Dauber.....	431,650	July 8	964	{ 240 241 }	{ 52 52 }	{ 199 199 }
Loading-elevator.....	T. McConnell.....	432,637	July 22	2450	638	52	503
Lobster-car.....	A. M. and M. S. Weston.....	428,983	May 27	2962	760	51	1426
Location and range finding instrument. Electrical.....	J. Rapiéff.....	441,973	Dec. 2	534	{ 142 143 }	{ 53 53 }	{ 1367 1367 }

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Lock:							
See Alarm-lock.	Mail-bag lock.						
Bag-lock.	Master-key lock.						
Bail-lock.	Master-key cylinder-lock.						
Red-slat lock.	Mortise-lock.						
Bedstead-slat lock.	Nut-lock.						
Bicycle-lock.	Oar-lock.						
Bicycle-brake lock.	Permutation-lock.						
Bottle-lock.	Pocket-book snap-lock.						
Car-lock.	Railway-switch lock.						
Car-seat lock.	Safe-lock.						
Case-lock.	Safe or vault lock.						
Combination-lock.	Saw-buck lock.						
Cylinder-lock.	Scuttle-lock.						
Door-lock.	Seal-lock.						
Electric lock.	Seat-lock.						
Electro-mechanical combination-lock.	Signal-lock.						
Elevator-lock.	Switch-lock.						
Fire-arm lock.	Telephone-lock.						
Floating lock.	Till-lock.						
Gage-lock.	Time-lock.						
Galley-lock.	Trap-lock.						
Gun-lock.	Trigger-lock.						
Hasp-lock.	Valve-lock.						
Hoop-lock.	Vehicle-seat lock.						
Indicator-lock.	Velocipede-lock.						
Magnetic lock.	Wagon-seat lock.						
Lock.....	E. F. Barrows.....	442,087	Dec. 2	719	193	53	1404
Lock.....	W. F. Beasley.....	439,624	Nov. 4	8	2	53	608
Lock.....	C. M. Burgess.....	438,677	Oct. 21	1517	409	53	303
Lock.....	O. R. Cooke.....	428,553	May 20	2301	584	51	1279
Lock.....	J. Corbett.....	424,859	Apr. 1	657	{ 173 174 }	51	127
Lock.....	E. F. Davis.....	422,740	Mar. 4	549	141	50	1241
Lock.....	J. Dowd.....	430,072	June 10	1480	367	51	1767
Lock.....	C. Felton.....	428,718	May 27	2577	653	51	1349
Lock.....	C. Felton.....	443,910	Dec. 30	3697	947	53	2015
Lock.....	F. W. Forke and A. B. Humm.....	438,803	Oct. 21	1732	{ 464 465 }	53	342
Lock.....	E. Hamburjer.....	443,479	Dec. 23	3030	779	53	1878
Lock.....	B. Heimsoeth.....	425,788	Apr. 15	2058	548	51	418
Lock.....	C. E. Hennies.....	427,865	May 13	1270	321	51	1070
Lock.....	H. O. Hooper.....	440,846	Nov. 18	1952	501	53	999
Lock.....	W. Hover.....	426,273	Apr. 22	2801	736	51	572
Lock.....	C. E. Jones.....	441,875	Dec. 2	388	101	53	1341
Lock.....	T. F. Keating.....	420,558	Feb. 4	186	48	50	601
Lock.....	J. Kirby, Jr.....	420,013	Jan. 21	2048	540	50	427
Lock.....	J. Kubler.....	441,674	Dec. 2	69	19	53	1275
Lock.....	H. L. Link.....	430,189	June 17	1651	411	51	1810
Lock.....	K. J. F. Lundquist.....	434,989	Aug. 26	2412	638	52	1253
Lock.....	W. A. Martin.....	443,945	Dec. 30	3756	960	53	2025
Lock.....	P. McMahon.....	429,361	June 3	396	94	51	1546
Lock.....	E. Y. Moore.....	443,780	Dec. 30	3505	899	53	1977
Lock.....	W. Nehring.....	440,187	Nov. 11	851	219	53	785
Lock.....	W. W. Pursel.....	431,620	July 8	902	226	52	187
Lock.....	W. W. and F. P. Pursel.....	440,280	Nov. 11	1008	259	53	814
Lock.....	J. Pusey.....	429,795	June 10	1036	254	51	1681
Lock.....	J. Satterstrom.....	425,461	Apr. 15	1575	{ 421 422 }	51	323
Lock.....	J. Schade.....	421,977	Feb. 25	2255	593	50	1017
Lock.....	J. Schade and F. B. Case.....	419,890	Jan. 21	1867	491	50	391
Lock.....	O. Schmidt and C. Loeffel.....	426,866	Apr. 29	3701	965	51	756
Lock.....	E. C. Smith.....	429,159	June 3	73	18, 19	51	1486
Lock.....	E. C. Smith. (Reissue).....	11,119	Nov. 11	1561	401	53	917
Lock.....	W. E. Sparks.....	443,264	Dec. 23	2682	687	53	1810
Lock.....	G. St. Meyer.....	420,285	Jan. 28	2494	662	50	518
Lock.....	F. G. Stark.....	426,079	Apr. 22	2517	664	51	512
Lock.....	S. P. Stein.....	440,068	Nov. 4	663	177	53	738
Lock.....	C. M. Stiner.....	435,569	Sept. 2	294	82	52	1432
Lock.....	J. Swihart.....	441,602	Nov. 25	3191	821	53	1244
Lock.....	F. Sykora.....	421,205	Feb. 11	1162	298	50	793
Lock.....	W. H. Taylor.....	420,127	Jan. 28	2231	{ 590 591 }	50	472
Lock.....	H. R. Towne.....	419,384	Jan. 14	1107	292	50	233
Lock.....	R. E. Van Zant.....	442,559	Dec. 9	1458	374	53	1555
Lock.....	W. L. Wilkins.....	419,903	Jan. 21	1885	495	50	395
Lock.....	C. D. Williams.....	419,091	Jan. 7	662	173	50	139
Lock.....	C. Wood.....	443,887	Dec. 30	3661	943	53	2008
Lock and alarm. Combination.	R. Baumann.....	438,049	Oct. 7	583	159	53	111
Lock and key	R. Tanczos.....	418,902	Jan. 7	398	98	50	83
Lock-bolt	H. E. Russell, Jr.....	434,470	Aug. 19	1568	407	52	1081
Lock-case	C. M. Burgess.....	425,748	Apr. 15	2007	535	51	408
Lock for satchels, trunks, &c	L. French.....	439,138	Oct. 28	2266	609	53	450
Lock-gate and dam	W. L. Scaife.....	419,287	Jan. 14	959	253	50	203
Lock-handle	N. G. Sørensen.....	437,007	Sept. 23	2611	682	52	1895
Lock-joint. Sheet-metal	L. L. Sagendorph.....	425,002	Apr. 8	884	233	51	179
Lock-nut	A. C. Vaughan.....	419,325	Jan. 14	1110	293	50	234
Lock or latch	N. G. Sørensen.....	425,707	Apr. 15	1949	{ 518 519 }	51	397
Lock or latch bolt.	C. M. Burgess.....	435,554	Sept. 2	268	75	52	1427
Lock or latch bolt.	H. G. Voight.....	434,491	Aug. 19	1603	419	52	1090
Lock-switch. Electrical	E. N. Dickerson, Jr.....	420,632	Feb. 4	281	74	50	619
Lock-trimming	J. L. Atkins.....	420,854	Feb. 4	626	161	50	681

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Lock-trimming	G. R. Johnson	427,423	May 6	602	150	51	931
Locks. Combination-finder for	M. Jackson	427,421	May 6	601	150	51	930
Locks. Method of and means for sealing	C. B. Hopkins	442,049	Dec. 2	661	178 } 53	1392	
Locket	G. E. Adams	420,757	Feb. 4	455	120	50	653
Locking attachment. Electric	H. J. Meyers	427,341	May 6	478	123	51	906
Locomotion and conveyance. System of	W. J. Munden	421,186	Feb. 11	1134	290	50	758
Locomotive	H. C. Goulding	422,075	Feb. 25	2392	632 } 50	1042	
Locomotive	J. E. Phillips	428,179	May 20	1739	440	51	1170
Locomotive and train brake	R. Weigel	425,356	Apr. 8	1404	374	51	282
Locomotive attachment	R. L. Stevens	422,653	Mar. 4	433	108	50	1219
Locomotive-bell-ringing apparatus	S. H. Heginbottom	440,264	Nov. 11	972	248	53	809
Locomotive-boiler	M. Atock	423,406	Mar. 18	1583	415 } 50	1453	
Locomotive-boiler	A. Beöthy	429,003	May 27	2988	767	51	1431
Locomotive-boilers. Protecting blast or exhaust pipes for	J. Y. Smith	423,283	Mar. 11	1410	367	50	1411
Locomotive-boilers. Water-purifier for	J. B. Barnes	435,168	Aug. 26	2677	707	52	1303
Locomotive-brake	L. P. Lawrence	433,413	July 29	3672	948 } 52	743	
Locomotive-brake	L. P. Lawrence	433,414	July 29	3674	949	52	744
Locomotive. Compound	R. C. Wright	438,969	Oct. 21	1999	535	53	393
Locomotive-driver brake	G. A. Boyden	437,171	Sept. 23	2883	750	52	1946
Locomotive-driver brake	H. H. Welsh	432,960	July 22	3001	771	52	602
Locomotive driving-wheel	H. A. Kingsland	436,711	Sept. 16	2084	548	52	1786
Locomotive. Dummy	H. A. Ramsay	441,583	Nov. 25	3163	815	53	1237
Locomotive. Electric	W. H. Darling	419,753	Jan. 21	1646	437	50	347
Locomotive. Electric	F. W. Dean	439,345	Oct. 28	2614	696 } 53	515	
Locomotive. Electric	E. Dummer	428,669	May 27	2488	633	51	1332
Locomotive. Electric	R. Eickemeyer	443,671	Dec. 30	3332	858	53	1944
Locomotive. Electric	W. H. Knight	432,142	July 15	1740	447	52	354
Locomotive. Electric	G. W. Mansfield	424,070	Mar. 25	2575	688 } 50	1648	
Locomotive. Electric	J. F. McLaughlin	424,810	Apr. 1	584	154 } 51	113	
Locomotive. Electric	J. F. McLaughlin	428,175	May 20	1732	439	51	1169
Locomotive. Electro-magnetic	R. N. Allen	429,107	June 3	1	1	51	1473
Locomotive-engine	J. Baird	438,220	Oct. 14	836	227	53	167
Locomotive-engine	M. W. Carroll	419,637	Jan. 21	1472	395	50	315
Locomotive-engine. Compound	R. H. Lapage	431,899	July 8	1359	344	52	274
Locomotive-engines and railway-rails. Device for drive-wheels of	A. P. Tallmadge	424,627	Apr. 1	293	76	51	58
Locomotive-exhaust-pipe	C. E. Huntley	420,643	Feb. 4	312	81	50	625
Locomotive-feeding-tank	J. F. Smith	420,973	Feb. 11	822	213	50	728
Locomotive-frame pedestal	J. Player	442,541	Dec. 9	1420	363	53	1546
Locomotive front plate	E. W. MacKenzie-Hughes	423,517	Mar. 18	1744	459 } 50	1484	
Locomotive head-light	H. C. Crowley	422,503	Mar. 4	202	55	50	1175
Locomotive-lamp bracket	E. W. MacKenzie-Hughes	431,603	July 8	878	218	52	163
Locomotive machinery	J. W. Shinn	432,090	July 15	1652	424	53	337
Locomotive. Multiplex electric	C. J. Van Depoele	432,345	July 15	2036	524	52	408
Locomotive or ear pilot	A. Komp	422,110	May 20	1647	413	51	1153
Locomotive or other compound engine. Compound	J. H. Pitkin and J. S. Lane	430,969	June 24	2926	718	51	2062
Locomotive sand-box	O. H. Thompson and J. E. Kind	435,372	Aug. 26	3001	795	52	1363
Locomotive sand-pipe	M. Daly	435,210	Aug. 26	2738	732	52	1314
Locomotive sand-pipe	D. A. Reagan	431,150	July 1	172	44	52	37
Locomotive smoke and steam discharge	E. S. Cram and G. S. Roberts	427,673	May 13	969	244	51	1012
Locomotive-smoke-box front plate	W. R. Stirling	440,929	Nov. 18	2088	539	53	1026
Locomotive spark-arrester	F. J. Drake	433,647	Aug. 5	309	80	52	816
Locomotive. Steam	S. E. S. Chaplean	437,376	Sept. 30	3217	839	52	2017
Locomotive-switch. Electric	F. B. Rae	430,686	June 24	2479	606	51	1977
Locomotive-tank	T. W. Ransom	431,397	July 1	559	140	52	113
Locomotive-tender	G. W. Haas	431,052	July 1	38	9	52	10
Locomotive. Tramway	R. S. Battles	421,894	Feb. 25	2146	563	50	996
Locomotive. Tramway	R. S. Battles	423,720	Mar. 18	2050	540 } 50	1540	
Locomotive. Water	G. H. Pond	441,327	Nov. 25	2762	714	53	1161
Locomotives and cars. Device for replacing derailed	H. Schreiner	443,200	Dec. 23	2585	665	53	1793
Locomotives and engines. Means for generating power and reutilizing the exhaust of	I. T. Dyer	431,225	July 1	295	73	52	60
Locomotives. Bell-ringer for	I. H. Spencer	436,271	Sept. 9	1377	359	52	1645
Locomotives. Driving mechanism for	J. M. McMaster	442,821	Dec. 16	1908	490	53	1652
Locomotives. Exhaust-nozzle for	J. J. De Lancey	442,767	Dec. 16	1812	469	53	1633
Locomotives. Exhaust-nozzle for	F. Mertsheimer	432,422	July 15	2146	552	52	430
Locomotives. Gearing and motor-supporting mechanism for electric	F. Mansfield	441,771	Dec. 2	226	58	53	1307
Locomotives. Guard-rail for	J. A. Woodmansee	424,697	Apr. 1	403	106	51	80
Locomotives. Stand-pipe for supplying water to	G. B. Jackson	426,124	Apr. 22	2585	680	51	526
Locomotives. Steam-brake mechanism for	H. D. Dunbar and W. L. Austin	443,272	Dec. 23	2693	691	53	1812
Locomotives. Variable exhaust for	D. Hanney	432,704	July 22	2603	665	52	527
Log boom	G. F. Sibley	437,521	Sept. 30	3444	906	52	2063
Log-canter	I. S. Wardell	424,385	Mar. 25	3062	813	50	1743
Log-carrier	T. N. Jordan	433,627	Aug. 5	274	73	52	810
Log-hauling device	O. Marcotte	431,169	July 1	206	51	52	43
Log-hook	G. McCurdy	435,511	Sept. 2	195	54	52	1412
Log-loader. Steam	F. O. Kilgore	420,942	Feb. 11	778	202	50	720
Log-loading machine	J. W. Kuntz and C. A. Eschenbrenner	429,926	June 10	1235	306	51	1720
Log-rolling apparatus	O. E. Johnson	420,387	Jan. 28	2634	609	50	544
Log-rolling machine	G. Mee	430,319	June 17	1378	465	51	1858
Log stop and loader	W. F. Hill	431,746	July 8	1129	281	52	230
Log-turner	H. O. Lange	440,043	Nov. 4	634	168	53	732
Logging-skid	W. J. Ackerman	441,047	Nov. 18	2265	587	53	1060

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Loom	G. A. and J. F. Greene	436,937	Sept. 23	2520	660	52	1877
Loom	T. Harrison	440,591	Nov. 11	1515	390 391	53	909
Loom	E. D. Hilton	425,379	Apr. 8	1443	386 387	51	289
Loom	{H. Hodgson, C. Bedford, and F. } Dracup.	432,046	July 15	1584	405 406	52	324
Loom	J. Jucker	422,224	Feb. 25	2622	694 695	50	1085
Loom	J. Kennedy	435,565	Sept. 2	286	80	52	1431
Loom	H. B. Morris	427,104	May 6	119	32, 33	51	835
Loom	H. B. Morris	427,105	May 6	124	33, 34	51	836
Loom	O. A. Sawyer and M. M. Lahue	440,833	Nov. 18	1930	495 496	53	995
Loom	S. T. and W. S. Thomas	435,549	Sept. 2	260	72, 73	52	1425
Loom	H. F. West and G. P. Wood	428,436	May 20	2142	539	51	1249
Loom drip-pan	L. Hollingworth	429,918	June 10	1224	303	51	1718
Loom-driving mechanism	H. Wyman	423,103	Mar. 11	1133	294	50	1378
Loom drop-box mechanism	M. Armitage and C. Topham	422,279	Feb. 25	2718	715 716	50	1102
Loom for cross-weaving	L. Haslam and C. Marshall	440,566	Nov. 11	1477	381 382	53	901
Loom for weaving carpets or rugs	G. F. Hutchins	437,894	Oct. 7	333	97, 98	53	65
Loom for weaving double pile fabrics	F. Pearson	440,113	Nov. 4	726	193	53	751
Loom for weaving pile fabrics	T. Harrison	440,592	Nov. 11	1520	392 393	53	909
Loom for weaving pile fabrics	T. Harrison	440,593	Nov. 11	1526	393 394 395	53	910
Loom for weaving pockets	J. T. Meats	428,253	May 20	1855	466	51	1193
Loom for weaving slat-and-wire fabrics	C. E. Parks and L. Mollart	433,024	July 29	3116	799 800	52	631
Loom for weaving velvets, &c	F. H. Wilke	441,084	Nov. 18	2335	605	53	1074
Loom for weaving with short wefts	J. H. Greenleaf	421,270	Feb. 11	1249	322 323	50	810
Loom for weaving with short wefts	J. H. Greenleaf	429,618	June 10	777	188	51	1632
Loom harness mechanism	M. Healy	432,042	July 15	1580	404	52	323
Loom harness mechanism	G. F. Hutchins	431,263	July 1	347	87	52	71
Loom-heddle-making machine	C. P. Ladd	434,065	Aug. 12	917	240 241 242 243	52	945
Loom heddle or harness	A. E. Thompson and W. Lund	419,382	Jan. 14	1104	292	50	233
Loom Jacquard mechanism	J. E. and W. J. Garlick	443,235	Dec. 23	2640	677 678	53	1803
Loom Jacquard mechanism	H. Hardwick	441,486	Nov. 25	3013	776 777	53	1208
Loom. Lappet	J. W. Cheney	440,943	Nov. 18	2108	547 548	53	1030
Loom let-off mechanism	G. Park	429,580	June 3	722	175	51	1611
Loom let-off mechanism	G. Park	431,707	July 8	1072	268	52	218
Loom let-off motion	G. Kerr	420,158	Jan. 28	2283	605	50	431
Loom let-off motion	L. C. Robinson	436,724	Sept. 16	2101	553	52	1790
Loom mechanism for producing intermediate selvages	W. Simpson	438,781	Oct. 21	1701	456 457	53	337
Loom. Needle	J. Graner	441,796	Dec. 2	262	70, 71	53	1315
Loom-pattern bar or lag	W. G. Thomson	436,274	Sept. 9	1381	360	52	1645
Loom pattern-chain	C. G. Petzold	427,010	Apr. 29	3898	1017	51	794
Loom-picker	C. H. Wagg	443,307	Dec. 23	2765	708	53	1825
Loom picker-motion	T. Hall and D. Young	432,527	July 22	2318	599	52	472
Loom picker-stick check	V. Dupre and J. E. Dupré	439,725	Nov. 4	146	38	53	636
Loom picking-motion. Power	S. Hamblin	421,703	Feb. 18	1876	491	50	937
Loom pile-warp-supplying mechanism	R. Foster	428,902	May 27	2842	722	51	1402
Loom positive shuttle-motion	S. C. and F. L. Burnham	418,863	Jan. 7	319	78	50	67
Loom. Self-threading shuttle	J. H. Nason	432,167	July 15	1777	457	52	361
Loom selvage-forming device	F. Lacey	436,018	Sept. 9	981	257 258	52	1570
Loom shedding and shuttle-box-operating mechanism	E. Wright	425,843	Apr. 15	2146	572 573	51	434
Loom shedding mechanism	{ L. A. Aumann, J. W. Cumnock, } { and G. W. Stafford.	437,472	Sept. 30	3369	681 682	52	2049
Loom shedding mechanism	R. B. Goodyear	431,346	July 1	474	117 118	52	96
Loom shedding mechanism	J. Haggenmacher	428,584	May 20	2356	598 599	51	1289
Loom shedding mechanism	R. L. Hattersley and J. Hill	434,061	Aug. 12	906	239	52	942
Loom shedding mechanism	R. L. Hattersley and J. Hill	437,195	Sept. 30	2924	761	52	1961
Loom shedding mechanism	R. L. Hattersley and J. Hill	437,196	Sept. 30	2925	761	52	1962
Loom shedding mechanism	E. Hollingworth	443,444	Dec. 23	2964	762 763	53	1865
Loom shedding mechanism	G. W. Stafford	439,204	Oct. 28	2376	638	53	471
Loom-shedding mechanism	G. W. Stafford and S. D. Barrett	420,118	Jan. 28	2217	587	50	460
Loom shedding mechanism	E. Weibel	432,460	July 15	2209	570	52	443
Loom shedding mechanism	E. Wright	441,626	Nov. 25	3230	833	53	1252
Loom-shuttle	A. Baldwin	418,670	Jan. 7	8	3	50	4
Loom-shuttle	A. D. Emery	441,295	Nov. 25	2712	703	53	1151
Loom-shuttle	A. Partridge	430,037	June 10	1420	352	51	1756
Loom-shuttle	T. Wood	422,481	Mar. 4	173	48	50	1169
Loom-shuttle attachment for preventing misweaving	H. Baumann	434,419	Aug. 19	1497	391	52	1067
Loom shuttle-box motion	R. B. Goodyear	419,435	Jan. 14	1185	315	50	249
Loom shuttle-box-operating mechanism	W. J. Lutton	440,487	Nov. 11	1354	350	53	878
Loom shuttle-changing mechanism	A. Sinclair	428,322	May 20	1970	494 495	51	1214

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr & C.	Vol.	Page.
Loom-shuttle checking and releasing mechanism.....	O. A. Sawyer and M. M. Lahue.....	430,694	June 24	2490	{ 608 609 }	{ 51 52 }	1980
Loom-shuttle-driving mechanism.....	C. A. Loud.....	437,215	Sept. 30	2949	771	52	1966
Loom shuttle-guard.....	T. J. Benson.....	432,357	July 15	2051	528	52	411
Loom shuttle-motion.....	R. Turner.....	423,096	Mar. 11	1121	292	50	1355
Loom-shuttle-operating mechanism.....	F. E. Fisher.....	433,996	Oct. 21	2046	547	53	403
Loom-shuttle-operating mechanism.....	L. Brand.....	419,818	Jan. 21	1741	461	50	366
Loom-shuttle-operating mechanism.....	J. A. Tucker.....	434,533	Aug. 19	1667	436	52	1102
Loom-shuttle tension device.....	A. Baldwin.....	438,599	Oct. 21	1398	379	53	282
Loom-shuttle threader.....	B. S. H. Harris and G. W. Taylor.....	435,603	Sept. 2	338	94	52	1440
Loom smash-protector mechanism.....	T. Thompson and F. Crook.....	428,292	May 20	1923	484	51	1206
Loom stop mechanism.....	H. Wyman.....	438,591	Oct. 14	1382	{ 374 375 }	{ 53 54 }	273
Loom stop-motion.....	J. J. Shanahan.....	439,606	Oct. 28	3010	798	53	592
Loom stop-motion.....	J. H. Thalmann.....	424,908	Apr. 1	732	195	51	141
Loom stop-motion.....	J. D. Westgate.....	430,452	June 17	2089	516	51	1895
Loom take-up mechanism.....	G. F. Hutchins.....	438,269	Oct. 14	920	249	53	181
Loom take-up mechanism.....	J. T. Meats.....	430,080	June 10	1495	{ 370 371 }	{ 51 52 }	1770
Loom take-up mechanism.....	J. Riddiough.....	427,270	May 6	378	98, 99	51	885
Loom take-up mechanism.....	P. C. Stadler.....	424,142	Mar. 25	2679	713	50	1668
Loom take-up mechanism.....	H. Wyman.....	422,044	Feb. 25	2350	{ 620 621 }	{ 50 51 }	1034
Loom-temple.....	D. Durkin.....	442,747	Dec. 16	1782	461	53	1626
Loom-temple.....	E. Hamilton.....	432,187	July 15	1803	464	52	366
Loom-temple.....	R. C. Irish.....	441,666	Dec. 2	56	15	53	1272
Loom-temple.....	O. Piper.....	422,248	Feb. 25	2669	{ 704 705 }	{ 50 51 }	1094
Loom-temple.....	J. E. Prest.....	428,132	May 20	1682	426	51	1159
Loom-temple.....	J. E. Prest.....	428,133	May 20	1682	426	51	1159
Loom. Terry.....	T. Holt.....	441,303	Nov. 25	2727	707	53	1154
Loom warp stop-motion.....	G. H. Winegar and H. O. Farrar.....	431,637	July 8	933	234	52	194
Loom weft-fork.....	A. H. Luscomb.....	421,948	Feb. 25	2220	{ 582 583 }	{ 50 51 }	1010
Loom weft-tension-regulating device.....	J. Widmer.....	425,014	Apr. 8	902	239	51	183
Looms. Adjustable tug-strap-holder for power.....	P. H. Lynch.....	419,336	Jan. 14	1043	276	50	220
Looms. Batten-operating mechanism for power.....	A. F. Dèvigne and J. P. Durand.....	443,161	Dec. 23	2500	639	53	1773
Looms. Buffer for picker-staffs of.....	J. Ingram.....	443,524	Dec. 30	3094	797	53	1899
Looms. Device for connecting picker-straps to the picker-sticks of.....	W. Hanse and T. Eder.....	438,152	Oct. 14	741	203	53	149
Looms. Drop-box-operating mechanism for.....	W. Shaw.....	436,547	Sept. 16	1833	483	52	1737
Looms. Electric stop-motion for.....	D. E. Coughlin.....	432,512	July 22	2291	593	52	466
Looms for weaving silk ribbon or fringe. Glass-bar bracket for.....	O. W. Schaum.....	440,370	Nov. 11	1139	294	53	838
Looms for weaving silk ribbon or fringe. Glass-bar bracket for.....	W. H. Schleicher.....	439,807	Nov. 4	262	66	53	659
Looms for weaving silk ribbon or fringe. Glass-bar bracket for.....	W. H. Schleicher.....	442,727	Dec. 16	1754	454	53	1621
Looms. Jacquard attachment for.....	G. W. Stafford and C. H. Poland.....	420,119	Jan. 28	2218	587	50	470
Looms. Mechanism for facilitating tying-in warp in.....	J. and J. Nightingale.....	431,989	July 8	1491	{ 376 377 }	{ 52 53 }	300
Looms. Shuttle-operating mechanism for narrow-ware.....	H. Wyman and A. A. Gordon.....	438,214	Oct. 14	830	225	53	166
Looms. Sweep and picker-stick attachment for.....	B. F. Stearns.....	436,160	Sept. 9	1213	316	52	1611
Looms. Tug strap and holder for.....	D. S. Knight.....	434,988	Aug. 26	2411	638	52	1253
Looms. Warp-tension-regulating device for.....	A. D. Emery.....	443,612	Dec. 30	3239	833	53	1927
Looms, &c. Warp-tension-regulating device for.....	B. F. Ford.....	425,873	Apr. 15	2188	582	51	442
Looms. Weft-tension-regulating device for.....	Z. Kelley.....	420,644	Feb. 4	313	81	50	625
Looms. Wire-operating device for pile-fabric.....	W. Kothe.....	426,284	Apr. 22	2815	{ 739 740 }	{ 51 52 }	574
Loop-forming machine.....	W. O. Miller.....	429,540	June 3	664	162	51	1598
Loop-key.....	C. E. Scribner.....	433,046	July 29	3150	810	52	637
Looped fabric.....	J. M. Merrow.....	422,142	Feb. 25	2496	660	50	1061
Lotion.....	F. Schmidt.....	434,727	Aug. 19	1988	.....	52	1163
Lounge.....	G. and G. Stock.....	423,641	Mar. 18	1933	509	50	1519
Lounge. Invalid.....	W. L. Dossett.....	421,392	Feb. 18	1426	369	50	850
Lounge-leg.....	W. Seng.....	421,980	Feb. 25	2259	594	50	1018
Lounge or sofa.....	J. Reich.....	429,956	June 10	1275	215	51	1727
Low-water alarm.....	W. R. Fox.....	435,742	Sept. 2	555	{ 147 148 }	{ 52 53 }	1482
Low-water alarm. Electric.....	J. Morehead.....	428,688	May 27	2529	642	51	1340
Low-water alarm for boilers.....	C. J. Cronin.....	423,857	Mar. 18	2247	593	50	1579
Low-water alarm for boilers.....	J. B. Funk and J. P. Zeiher.....	419,038	Jan. 7	584	149	50	124
Low-water alarm for steam-boilers.....	E. E. Kildoyle.....	422,803	Mar. 4	2638	163	50	1259
Low-water boiler-alarm.....	O. G. Guss.....	428,482	May 20	2209	558	51	1261
Low-water indicator.....	W. I. Page.....	423,879	Mar. 18	2283	603	50	1586
Lubricant.....	S. Hopkins, Jr.....	428,610	May 27	2397	.....	51	1316
Lubricant.....	R. Hutchison.....	432,313	July 15	2002	.....	52	401
Lubricant.....	J. Lewandowski.....	423,522	Mar. 18	1751	.....	50	1486
Lubricant.....	J. J. Stock.....	430,812	June 24	2697	.....	51	2020
Lubricant.....	F. F. Swain.....	424,233	Mar. 25	2801	748	50	1633
Lubricating apparatus.....	W. Heckert.....	425,878	Apr. 15	2195	583	51	443
Lubricating device.....	C. Andersson.....	423,202	Mar. 11	1277	332	50	1387
Lubricating device.....	H. W. Caldwell.....	421,382	Feb. 18	1411	365	50	847
Lubricating device.....	J. S. Whitney.....	443,265	Dec. 23	2683	688	53	1810
Lubricating-gland.....	J. N. Chamberlin.....	429,717	June 10	928	228	51	1651
Lubricator: See Automatic pressure lubricator. Axle-lubricator. Elevator-lubricator. Engine-lubricator. Grease lubricator.	Hydraulic-cylinder lu- bricator. Shaft-lubricator. Shafting-lubricator. Sight-feed lubricator.						
Lubricator.....	G. W. Brown.....	423,662	Mar. 18	1970	520	50	1526

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lubricator	G. W. Brown	426,764	Apr. 29	3555	927	51	727
Lubricator	A. C. Buzby	434,059	Aug. 12	902	238	52	942
Lubricator	G. B. Essex	425,936	Apr. 15	2292	606	51	460
Lubricator	J. M. Evans	429,431	June 3	502	120	51	1568
Lubricator	W. J. Paul	419,429	Jan. 14	1179	313	50	248
Lubricator	J. L. Grandison	441,407	Nov. 25	2887	745	53	1185
Lubricator	T. J. Hart	426,377	Apr. 22	2949	775	51	601
Lubricator	F. G. Hubbard	442,624	Dec. 16	1559	403	53	1554
Lubricator	E. Huber	427,575	May 13	835	209	51	986
Lubricator	E. Humphreys	423,057	Mar. 11	1063	275	50	1345
Lubricator	W. James	442,321	Dec. 9	1077	282	53	1479
Lubricator	W. James	442,322	Dec. 9	1078	283	53	1479
Lubricator	F. W. Krantz	433,008	July 29	3086	792	52	625
Lubricator	R. J. McCarty and C. A. Burton	431,910	July 8	1370	347	52	276
Lubricator	W. P. Miller	420,911	Feb. 4	728	187	50	701
Lubricator	L. J. Phelps	424,350	Mar. 25	2994	796	50	1729
Lubricator	C. C. Rueger	436,927	Sept. 23	2505	656	52	1874
Lubricator	F. N. Santenard	429,155	June 3	69	18	51	1455
Lubricator	W. J. Tynon	439,795	Nov. 4	248	63	53	657
Lubricator	G. Warrington	423,580	Mar. 18	1829	492	50	1498
Lubricator attachment	R. Ritter	436,438	Sept. 16	1655	435	52	1705
Lubricator-cup	B. S. Reynolds and W. A. Orr	422,038	Feb. 25	2335	617	50	1032
Lubricators, &c. Link-motion for	C. A. Schmitt	434,839	Aug. 19	2143	561	52	1195
Lumber. Apparatus for making compound	I. R. Joslin and C. M. Thompson	422,794	Mar. 4	623	159	50	1256
Lumber. Apparatus for making compound	I. R. Joslin and C. M. Thompson	422,795	Mar. 4	626	160	50	1257
Lumber-assorter	J. B. Mahaffey	436,984	Sept. 23	2578	674	52	1888
Lumber-drier	J. W. Adriance	423,301	Mar. 11	1431	372	50	1415
Lumber-drier	U. E. Brumbaugh	441,278	Nov. 25	2688	698	53	1146
Lumber-drier	J. M. Hooton	420,686	Feb. 4	364	96	50	635
Lumber-drier	W. McPherson	429,473	June 3	565	138	51	1581
Lumber-drier	H. J. Morton and R. B. Andrews	426,463	Apr. 29	3097	812	51	639
Lumber-drier	L. C. Van Duzer	440,451	Nov. 11	1290	334	53	806
Lumber-drier	C. R. Van Osdel	418,773	Jan. 7	173	42	50	38
Lumber-drying kiln	M. W. Ryan	441,196	Nov. 25	2521	651	53	1119
Lumber-kiln	A. T. Anderson	422,106	Feb. 25	2449	646	50	1651
Lumber-kiln	W. A. Fletcher	421,690	Feb. 18	1853	485	50	932
Lumber-lifting machine	J. B. Nadeau	420,516	Feb. 4	126	31	50	58
Lumber. Means for loading	J. B. Nadeau	420,517	Feb. 4	126	32	50	588
Lumber-piler	M. Downey, Jr.	435,738	Sept. 2	550	146	52	1481
Lumber-strip	A. Meigs	432,245	July 15	1885	485	52	381
Lumber-treating apparatus	T. H. Sampson	419,798	Jan. 21	1713	455	50	360
Lumber-trimmer. Automatic	C. E. Cleveland	436,402	Sept. 16	1597	422	52	1695
Lumber-way	M. M. Ford and H. N. Revelle	422,369	Mar. 4	38	12	50	1141
Lunch-box	W. L. Whiteway	443,183	Dec. 23	2533	648	53	1760
Machine-carriage	F. McDonough	432,549	July 22	2351	606	52	478
Machinery. Mechanism for driving	A. Kleinstiver	429,134	June 3	41	9	51	1480
Magnet. Actuated electro-	F. H. Brown	435,343	Aug. 26	2953	784	52	1354
Magnet. Choking electro-	L. Gutmann	424,606	Apr. 1	260	69	51	33
Magnet. Drill-hole	C. S. Porter	432,896	July 22	2889	740	52	563
Magnet. Electro-	G. D. Clarke	424,703	Apr. 1	412	108	51	81
Magnet. Electro-	R. Eickemeyer	422,512	Mar. 4	214	57	50	1177
Magnet. Electro-	F. J. Patten	427,606	May 13	875	220	51	994
Magnet. Electro-	F. M. Schmidt	438,780	Oct. 21	1700	456	53	337
Magnet for dynamos. Field-	E. Thomson and A. L. Rohrer	422,999	Mar. 11	972	256	50	1329
Magnet for dynamos. Field-	E. Wagemann	429,490	June 3	595	145	51	1585
Magnet. Therapeutic	T. H. Hicks	420,300	Jan. 28	2511	666	50	522
Magnet-winding machine	J. J. Wood	437,387	Sept. 30	3231	842	52	2019
Magnets. Making cores for electro-	S. C. C. Currie	421,067	Feb. 11	963	.....	50	755
Magnetic device. Alternating-current	E. Thomson	428,650	May 27	2454	626	51	1327
Magnetic lock	W. W. Fenner	428,247	May 20	1846	463	51	1191
Magnetic lock	J. Schneider	428,256	May 20	1864	468	51	1194
Magnetic particles. Separating	G. Conkling	423,907	Mar. 25	2335	615	50	1603
Magnetic-power equalizer	W. W. Alexander	430,606	June 24	2337	573	51	1951
Magnetic separator	G. Conkling	420,334	Jan. 28	2558	678	50	531
Magnetic separator	G. Conkling	422,732	Mar. 4	536	136	50	1238
Magnetic separator	T. A. Edison	430,275	June 17	1830	448	51	1843
Magnetic separator	T. A. Edison	430,280	June 17	1841	451	51	1846
Magnetic separator	G. S. Finney	432,823	July 22	2791	713	52	562
Magnetic separator	G. S. Finney	443,043	Dec. 16	2268	582	53	1723
Magnetic separator for grain	E. von Syo	440,070	Nov. 4	667	177	53	738
Magnetic tool	C. F. Carpenter	429,012	May 27	3008	772	51	1435
Magneto-generator	N. B. Ginochio	438,434	Oct. 14	1158	313	53	228
Magnifying-glass. Mirror	T. Simon	426,869	Apr. 29	3706	967	51	757
Mail-bag	L. Creps	431,335	July 1	452	112	52	93
Mail-bag	W. Leifer	435,362	Aug. 26	2984	791	52	1360
Mail-bag	C. P. Tatso	440,932	Nov. 18	2093	543	53	1027
Mail-bag	C. W. Terpening and C. Thomas	443,230	Dec. 23	2632	676	53	1801
Mail-bag	C. Van Inwegen	426,746	Apr. 29	3529	921	51	723
Mail-bag and fastener therefor	A. H. Enholm	428,387	May 20	2080	522	51	1237
Mail-bag catcher and deliverer	A. P. Hauss	431,461	July 1	659	165	52	113
Mail-bag catcher and deliverer	H. and C. Soggs	411,986	Dec. 2	553	149	53	1371
Mail-bag-catching fork	J. F. Mains	435,508	Sept. 2	193	53	52	1412
Mail-bag-cord fastener	J. Lighton and P. H. Brennan	434,875	Aug. 19	3203	577	52	1206
Mail-bag fastener	F. W. Hofele	424,419	Mar. 25	3124	829	50	1755
Mail-bag fastener	W. A. Horrall	435,895	Sept. 2	808	214	52	1531

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Mail-bag lock	J. F. Mains	432,756	July 22	2689	687	52	543
Mail-bag staple	F. W. Smith	427,923	May 13	1372	346	51	1088
Mail-bags to cars in motion. Device for delivering	J. F. Mains	435,507	Sept. 2	191	53	52	1412
Mail-box	H. Hill	435,306	Aug. 26	2894	766	52	1342
Mail-box	A. S. Wright	421,643	Feb. 18	1794	469	50	921
Mail-indicator and advertising-board	T. B. Peacock	440,961	Nov. 18	2139	554	53	1035
Mail-matter. Machine for marking	F. N. Ethridge	440,401	Nov. 11	1201	310	53	850
Mail-matter. Machine for marking	F. N. Ethridge	441,832	Dec. 2	321	86	53	1327
Mail-matter. Machine for stamp-canceling and post-marking	M. V. B. Ethridge	424,868	Apr. 1	677	178	51	130
Mail-pouch	W. M. Conner	438,680	Oct. 21	1520	410	53	304
Mail-pouch	B. Edgar	427,676	May 13	972	245 246	51	1013
Mail-pouch	W. H. Price	428,228	May 20	1823	457	51	1187
Mail-pouch catcher	J. A. Hatlestad	430,851	June 24	2749	673	51	2029
Mail-pouch fastener	T. A. Kennedy	424,420	Mar. 25	3125	830	50	1755
Mail-sack crane	J. F. Mains	443,290	Dec. 23	2725	699 700	53	1818
Mailing-box	C. Folsom	419,117	Jan. 7	697	184	50	147
Mailing-box fastening	T. J. Soden	442,758	Dec. 16	1793	465	53	1630
Mailing-cage for boxes	W. H. Page	439,177	Oct. 28	2323	623	53	461
Mailing-case	J. Q. Moxley	438,736	Oct. 21	1630	438	53	323
Mailing-case	G. E. Taylor	432,253	July 15	1893	487	52	383
Mailing-case for bottles	E. R. Phillips	428,410	May 20	2113	530	51	1243
Mains. Device for disjoining	J. W. Helps	422,211	Feb. 25	2605	689	50	1082
Mains. Disjoining	J. W. Helps	422,212	Feb. 25	2606	690	50	1082
Mainspring-winder	A. R. Vaughan	443,881	Dec. 30	3653	941	53	2007
Mallet	S. Rust	434,091	Aug. 12	967	253	52	956
Malt. Apparatus for manufacturing	C. Fey	429,124	June 3	28	7	51	1477
Malt-kiln	A. Rack	441,689	Dec. 2	107	28, 29	53	1283
Malt-kilns. Spreader and discharge for	S. Hirschler	432,706	July 22	2605	686	52	527
Malt. Preparation of	G. Reininghaus	419,707	Jan. 21	1582	422	50	334
Malt. Producing caramel	L. Ramseil	421,431	Feb. 18	1475		50	860
Malt-scouring machine	J. Goeddeke	432,998	July 29	3073	788	52	622
Malt-turning apparatus	J. A. Saladin	440,850	Nov. 18	1957	502 503 504	53	1000
Man-hole for sewers or cesspools	J. Wallace	423,501	Mar. 18	1720	453	50	1480
Man-hole for underground electric conduits	J. F. Munsie	426,206	Apr. 22	2711	710	51	551
Man-holes. Filling for	J. Flannery	420,192	Jan. 28	2341	619	50	491
Mandrel. Expanding	J. T. Evely	436,223	Sept. 9	1307	341	52	1630
Manganese and iron for brake-shoes. Composition of	W. W. Snow	435,050	Aug. 26	2507		52	1270
Manger	W. H. Shaw	429,969	June 10	1311	324	51	1734
Manger. Corner	G. Hutter	439,298	Oct. 28	2548	681	53	503
Mangle	R. N. Reid	419,795	Jan. 21	1708	453	50	359
Mangle	F. J. Rost	421,144	Feb. 11	1069	275	50	776
Mangle	R. Totzauer	438,206	Oct. 14	815	221	53	163
Mangles. Tape-feed for	G. C. Roberts	436,265	Sept. 9	1368	357	52	1643
Manifold	C. E. Mark	419,783	Jan. 21	1691	449	50	355
Manometer. Registering	A. Lusuardi and A. Falco	426,029	Apr. 22	2448	647	51	499
Mantel. Extensible	E. Dambach	420,775	Feb. 4	485	127	50	658
Mantel. Sheet-metal	J. Graves	418,788	Jan. 7	194	47	50	43
Mantel. Sheet-metal	J. Graves	419,659	Jan. 21	1517	402	50	322
Mantel. Sheet-metal	K. A. Graves	435,017	Aug. 26	2455	650	52	1260
Manure-spreader	D. B. Merrell	419,463	Jan. 14	1227	326	50	258
Manuscript-holder and place-indicator. Combined	A. L. Gilbert	422,342	Feb. 25	2823	745	50	1121
Map	E. Eggleston	421,684	Feb. 18	1846	482	50	931
Map-case	I. W. Henderson	434,507	Aug. 19	1628	427	52	1094
Map-case	I. W. Henderson	434,508	Aug. 19	1629	428	52	1095
Map-case	C. M. Terrell and H. M. Chittenden	432,914	July 22	2913	747	52	587
Map. Curtained	E. L. Kirtland	422,228	Feb. 25	2628	696	50	1066
Map or curtain hanging device	R. J. Watts	441,994	Dec. 2	566	152	53	1374
Marble-like or enamel-like objects. Producing	L. Preussner	424,352	Mar. 25	2996		50	1729
Marble. Polishing	J. C. Fowler and W. F. Ott	427,262	May 6	366	95, 96	51	882
Marbles. Coloring	A. L. Dyke	439,031	Oct. 21	2094		53	412
Marbles. Machine for manufacturing	A. L. Dyke	431,454	July 1	649	162 163	52	131
Marine engine	R. M. Beck	440,531	Nov. 11	1422	367	53	891
Marine engine	J. T. Case	430,067	June 10	1472	365	51	1765
Marine engine. Horizontal	F. M. Brown	423,120	Mar. 11	1153	300	50	1362
Marine plow. Steam-jet	A. Anderl	420,670	Feb. 4	342	90	50	630
Marine signal	F. E. Forster	440,741	Nov. 18	1761	453	53	966
Marker. Cattle	P. de Nagy	421,680	Feb. 18	1842	481	50	930
Marker for counters	J. M. Bostwick	437,967	Oct. 7	449	126	53	85
Marker. Land	P. M. Dice	422,191	Feb. 25	2575	681	50	1076
Marker. Land	O. B. and A. E. Rockwell	429,481	June 3	579	141	51	1583
Marking-instrument	B. Arnold	426,094	Apr. 22	2539	660	51	516
Marking-instrument	E. Madden	426,622	Apr. 29	3334	874	51	686
Marking machine. Tag	J. F. Burnham	425,749	Apr. 15	2008	535	51	408
Marking patterns for dress-waists. Apparatus for	E. A. Berry	433,711	Aug. 5	397	102	52	893
Marking patterns. Machine for	I. A. and B. Schaeffer	443,798	Dec. 30	3555	907	53	1983
Marking rails, &c. Apparatus for	T. James	422,594	Mar. 4	336	84	50	1200
Marking round objects. Machine for	H. S. Page	431,477	July 1	683	170 171	52	137
Marking textile fabrics	D. S. Oliphant	443,375	Dec. 23	2866		53	1846
Marline-pin	B. F. Todd	431,416	July 1	584	147	52	118
Marquetry	E. C. Clark and G. D. Briggs	424,958	Apr. 8	814	218	51	166
Mash-machine	A. W. Billings	431,246	July 1	324	80	52	66
Mash-tub	W. Medlin	431,372	July 1	521	130	52	105
Mashing-machine	C. Kaestner	421,577	Feb. 18	1694	439 440	50	901
Mashing-machine	J. Schafhaus	431,624	July 8	910	228 229	52	189
Mask	A. G. Eaves	434,435	Aug. 19	1521	397	52	1072

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Mask. Complexion.....	N. E. Jenkins.....	441,009	Nov. 18	2205	570	53	1049
Mask. Toilet.....	I. Cassidy.....	438,800	Oct. 21	1729	464	53	342
Masonry. Head or collar for supporting tubes in.....	E. N. Gates.....	422,881	Mar. 4	780	199	50	1285
Masonry. Tool for pointing.....	J. A. Blanchard.....	443,387	Dec. 23	2881	741	53	1849
Masonry-work gage.....	J. T. Lambdin.....	420,880	Feb. 4	670	174	50	691
Mason's guiding and gaging implement.....	J. I. Kelley.....	441,492	Nov. 25	3024	779 780	53	1210
Masquerade-suit.....	F. O. Horstmann.....	433,732	Aug. 5	430	110	52	839
Mast-hoop.....	H. T. Hutchings.....	419,448	Jan. 14	1205	319	50	253
Master-key cylinder-lock.....	H. B. Sargent.....	443,261	Dec. 23	2679	687	53	1809
Master-key lock.....	H. E. Russell, Jr.....	438,188	Oct. 14	788	214 215	53	158
Master-key lock.....	T. Taylor.....	420,174	Jan. 28	2314	612	50	486
Mat:							
See Door-mat. Wire floor-mat.							
Metallic mat. Wire foot-mat.							
Wire mat.							
Mat.....	H. Beisheim.....	443,472	Dec. 23	3014	774	53	1875
Mat.....	C. Clark.....	439,865	Nov. 4	352	91	53	676
Mat.....	W. C. Price.....	443,331	Dec. 23	2796	719	53	1833
Mat.....	W. A. White.....	441,785	Dec. 2	246	65	53	1312
Match.....	W. M. Nix.....	436,877	Sept. 23	2426	.....	52	1859
Match and mode of making.....	Y. Gonzalez-Gomez.....	426,007	Apr. 22	2419	.....	51	494
Match-box.....	J. Brown.....	436,209	Sept. 9	1292	337	52	1627
Match-box.....	A. E. Guy.....	425,608	Apr. 15	1790	480	51	365
Match-box.....	J. B. Morgan.....	428,623	May 27	2416	614	51	1320
Match-box and cigar-punch. Combined.....	E. Heinrich.....	443,042	Dec. 30	3755	960	53	2025
Match-box holder.....	E. C. Bachert.....	427,211	May 6	287	74	51	868
Match-boxes with matches. Apparatus for filling.....	N. M. Ström.....	440,930	Nov. 18	2089	540 541 542	53	1026
Match-boxing machine.....	D. Casey, J. Manton, and G. H. Mil- len.....	418,887	Jan. 7	365	87, 88 448 449	50	76
Match-machine.....	M. M. Zellers and J. W. Denmead.....	436,470	Sept. 16	1705	450 451 452	52	1716
Match-making machine.....	A. E. Ellinwood.....	443,623	Dec. 30	3255	836 837 838	53	1929
Match-making machine.....	A. E. Ellinwood.....	443,624	Dec. 30	3258	838 839	53	1930
Match-making machine.....	G. Grisel and F. Severio.....	430,604	June 17	2321	570 571	51	1939
Match. Quick.....	L. Bäärnheim and A. Fernander.....	442,164	Dec. 9	845	.....	53	1435
Match-safe.....	G. W. Baker.....	427,824	May 13	1211	305	51	1058
Match-safe.....	L. M. Perveil.....	437,792	Oct. 7	188	59	53	38
Match-safe. Combination.....	F. A. Huehn.....	419,952	Jan. 21	1956	515	50	409
Match-safe, pin-cushion, and trap. Combined.....	H. Brandt.....	439,467	Oct. 28	2799	746	53	549
Match-safe. Pocket.....	H. C. Stolle.....	439,701	Nov. 4	110	29	53	629
Match-splints. Machine for making.....	G. E. Norris.....	436,991	Sept. 23	2585	676 677	52	1890
Matches. Machine for wrapping block.....	G. Grisel.....	419,851	Jan. 21	1802	477	50	377
Matcher.....	E. Benjamin.....	431,796	July 8	1209	301	52	245
Matcher.....	E. Benjamin.....	436,331	Sept. 16	1473	384	52	1671
Matcher-head.....	F. S. Madison.....	439,079	Oct. 21	2173	564	53	428
Matching-machine attachment.....	C. P. Flanders.....	429,170	June 3	96	23	51	1490
Matrices. Forming.....	C. L. Redfield.....	429,864	June 10	1147	283	51	1702
Matrices. Forming.....	C. L. Redfield.....	429,867	June 10	1151	284	51	1703
Matrices. Making.....	J. W. Osborne.....	436,314	Sept. 9	1439	375	52	1657
Matrix-machine.....	C. L. Travis.....	427,717	May 13	1043	261 262	51	1027
Matrix-machines. Impression device for.....	C. L. Redfield.....	429,738	June 10	953	234	51	1666
Matrix-machines. Justifying-index for.....	C. L. Redfield.....	429,741	June 10	959	236	51	1667
Matrix-machines. Type-die for.....	C. L. Redfield.....	429,865	June 10	1148	284	51	1703
Matrix-making machine.....	F. M. F. Cazin.....	435,344	Aug. 26	2954	784	52	1354
Matrix-making machine.....	G. A. Goodson.....	436,703	Sept. 16	2072	545 546	52	1784
Matrix-making machine.....	M. Howard.....	441,564	Nov. 25	3128	803 804	53	1231
Matrix-making machine.....	A. J. Kletzker.....	432,627	July 22	2456	633 634	52	499
Matrix-making machine.....	C. L. Redfield.....	429,740	June 10	955	235 236	51	1667
Matrix-making machine.....	C. L. Redfield.....	441,118	Nov. 18	2389	619	53	1084
Matrix-making machines. Impression device for.....	C. L. Redfield.....	421,972	Feb. 25	2249	591	50	1016
Matrix-making machines. Impression device for.....	C. L. Redfield.....	429,737	June 10	951	234	51	1666
Matrix-making machines. Impression device for.....	C. L. Redfield.....	429,739	June 10	954	234	51	1666
Matrix-making machines. Impression device for.....	C. L. Redfield.....	429,742	June 10	960	236	51	1668
Matrix-making machines. Type-die holder for.....	C. L. Redfield.....	428,138	May 20	1688	428	51	1160
Matrix-making. Type-die for.....	C. L. Redfield.....	429,866	June 10	1149	284	51	1703
Matting-machine.....	A. T. Brown.....	440,909	Nov. 18	2050	530 531	53	1018
Matting-machine, easel, and table. Combined.....	J. E. and A. J. Rösch.....	421,973	Feb. 25	2250	591 592	50	1016
Matting and similar fabrics. Machine for trimming the edges of straw.....	I. Lindsley.....	431,498	July 1	721	180	52	144
Matting or similar fabric. Straw.....	I. Lindsley.....	425,090	Apr. 8	1009	270	51	203
Mattress.....	T. Müller.....	433,905	Aug. 5	688	178	52	891
Mattress.....	H. J. Webb.....	433,261	July 29	3469	896	52	701
Mattress.....	H. Westphal.....	428,791	May 27	2682	680	51	1370
Mattress-making machine.....	A. H. Frost and F. L. Bryant.....	443,673	Dec. 30	3339	859 860	53	1945
Mattress. Woven-wire.....	C. E. Hinkle and E. Ransom.....	419,950	Jan. 21	1955	514	50	409

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Mattresses. Machine for weaving wire.....	C. H. Hard, O. G. Franks, and A. E. Loomis.	439,873	Nov. 4	365	94, 95	53	679
Mattresses. Manufacturing feather.....	A. J. Cunningham.....	438,682	Oct. 21	1525	.....	53	305
Measure and tally. Grain.....	O. D. McDaniel.....	421,421	Feb. 18	1461	378	50	857
Measure. Automatic grain.....	J. H. Maggard.....	423,876	Mar. 18	2280	602	50	1585
Measure. Grain.....	M. A. Harmless.....	441,302	Nov. 25	2726	707	53	1154
Measure. Grain.....	L. B. Riley.....	434,467	Aug. 19	1564	407	52	10-0
Measure. Hatter's.....	H. L. Johnson.....	424,481	Apr. 1	58	17, 18	51	14
Measure indicator. Liquid.....	T. Hipwell.....	439,508	Oct. 28	2858	760	53	562
Measure. Printer's type.....	B. W. Gillis.....	431,692	July 8	1046	262	52	213
Measure. Recording liquid.....	W. M. Fowler.....	433,461	Aug. 5	37	10, 11	52	764
Measure. Rotary.....	W. C. Wells.....	437,065	Sept. 23	2687	702	52	1911
Measure. Scale.....	I. Birgé.....	434,911	Aug. 26	2308	610	52	1232
Measure. Shoe-maker's.....	A. S. Adler.....	428,875	May 27	2804	{ 712 713 }	51	1395
Measure. Speed.....	A. B. Calkins.....	435,012	Aug. 26	2448	648	52	1259
Measure. Speed.....	A. B. Calkins.....	435,013	Aug. 26	2450	649	52	1260
Measure. Spouted.....	G. E. Raymond.....	424,901	Apr. 1	723	193	51	140
Measure. Tailor's.....	J. Gothard.....	420,448	Feb. 4	34	7	50	570
Measure. Tailor's.....	D. Hawley.....	439,747	Nov. 4	173	45	53	642
Measure. Tailor's.....	F. P. Johum.....	419,452	Jan. 14	1211	321	50	255
Measure. Tailor's.....	M. E. Kellogg.....	435,182	Aug. 26	2700	713	52	1307
Measure. Tailor's.....	E. E. Lewis.....	441,675	Dec. 2	70	19	53	1275
Measure. Tailor's.....	H. F. Scully.....	435,714	Sept. 2	523	138	52	1476
Measure. Tailor's conforming.....	M. Bernheim.....	422,067	Feb. 25	2382	629	50	1040
Measure. Tape.....	T. M. Kenney.....	443,681	Dec. 30	3355	863	53	1948
Measures. Drain-cabinet for liquid.....	C. F. Mowll.....	418,738	Jan. 7	117	28	50	26
Measures. Drainer for liquid.....	H. Pannill.....	421,754	Feb. 18	1937	509	50	948
Measures. Register for grain.....	J. H. Lowery.....	441,678	Dec. 2	72	20	53	1276
Measurement of electricity in distribution systems.....	T. A. Edison.....	425,760	Apr. 15	2025	539	51	412
Measurements according to one system into another system. Instrument for transferring.....	H. Hagemann.....	426,010	Apr. 22	2424	640	51	494
Measuring alternating currents of electricity. Method of and apparatus for.....	W. Lowrie, C. J. Hall, and H. W. Kolle.	424,891	Apr. 1	709	{ 188 189 }	51	137
Measuring and carbureting air or gas. Apparatus for.....	F. H. Hambleton.....	429,271	June 3	233	59	51	1517
Measuring and drawing off liquids. Apparatus for.....	O. Möller.....	419,340	Jan. 14	1048	277	50	222
Measuring and registering electric currents. Apparatus for.....	C. A. Faure.....	443,636	Dec. 30	3280	846	53	1934
Measuring and registering electric energy.....	S. C. C. Currie.....	427,749	May 13	1104	276	51	1038
Measuring appliance. Shirt.....	J. F. Prizgint.....	438,178	Oct. 14	777	212	53	156
Measuring device. Distance.....	H. Emken.....	427,306	May 6	427	110	51	895
Measuring device. Grain.....	M. Cashin.....	437,093	Sept. 23	2733	714	52	1920
Measuring device. Grain.....	C. A. Wever.....	432,347	July 15	2039	525	52	408
Measuring device. Height.....	J. Y. Lewis.....	442,192	Dec. 9	885	236	53	1443
Measuring device. Lumber.....	T. Newnham.....	426,305	Apr. 22	2845	750	51	981
Measuring device. Yarn.....	L. W. Penney.....	430,679	June 24	2467	602	51	1975
Measuring electric currents.....	E. W. Rice, Jr.....	428,633	May 27	2427	618	51	1322
Measuring electric currents. Method of and apparatus for.....	S. C. C. Currie.....	442,423	Dec. 9	1235	319	53	1510
Measuring electrical currents. Device for.....	T. H. Hicks.....	426,499	Apr. 29	3151	828	51	650
Measuring gage.....	E. G. Angell and L. F. Picard.....	437,549	Sept. 30	3491	911	52	2073
Measuring-instrument. Electrical.....	M. M. Garver.....	426,992	Apr. 29	3874	{ 1012 1013 }	51	789
Measuring-instrument. Electrical.....	G. W. Walker.....	435,550	Sept. 2	264	74	52	1426
Measuring-instrument. Electrical.....	E. Weston.....	427,022	Apr. 29	3918	1022	51	798
Measuring-instrument. Electrical.....	E. Weston.....	433,637	Aug. 5	266	76	52	812
Measuring-instrument. Electrical.....	E. Weston.....	442,843	Dec. 16	1942	500	53	1658
Measuring-instruments. Dead-beat mechanism for electrical.....	E. Weston.....	440,289	Nov. 11	1020	262	53	816
Measuring-instruments. Index-controlling device for electrical.....	E. Weston.....	440,291	Nov. 11	1023	263	53	816
Measuring-instruments. Temperature-regulator for electrical.....	E. Weston.....	440,290	Nov. 11	1022	262	53	816
Measuring machine. Cloth.....	M. N. Jones.....	443,528	Dec. 30	3101	799	53	1901
Measuring machine. Distance.....	J. S. Blankman.....	435,201	Aug. 26	2725	{ 719 720 599 }	52	1312
Measuring machine. Leather.....	F. Bain.....	425,925	Apr. 15	2262	{ 600 601 }	51	455
Measuring mechanism. Coal.....	C. W. Hunt.....	428,916	May 27	2868	{ 733 734 }	51	1408
Measuring or weighing apparatus. Grain.....	W. Looney.....	431,948	July 8	1423	{ 361 362 }	52	287
Measuring sugar, &c. Vessel for.....	G. H. Hazelton.....	429,622	June 10	785	191	51	1633
Measuring the intensity of magnetic currents. Device for.....	R. Eickemeyer.....	434,558	Aug. 19	1703	446	52	1109
Measuring the strength of electric currents. Apparatus for.....	S. C. C. Currie.....	438,226	Oct. 14	848	230	53	169
Measuring-vessel.....	E. N. Bachelder and F. E. Lovejoy.....	432,353	July 15	2047	527	52	410
Measuring-vessel.....	J. O. Chamberlin.....	436,212	Sept. 9	1296	338	52	1628
Measuring-vessel.....	C. F. and F. L. Filson.....	432,995	July 29	3070	787	52	621
Measuring-vessel.....	J. V. Kiernan and T. F. Moore.....	441,960	Dec. 2	514	137	53	1364
Measuring-vessel.....	C. Robinson.....	429,201	June 3	145	35	51	1499
Measuring vessel. Liquid.....	H. P. and S. L. Barnhart.....	421,155	Feb. 11	1089	{ 279 280 }	50	780
Meat and other substances. Machine for cutting.....	H. Albrecht.....	435,383	Sept. 2	1	1	52	1375
Meat-block.....	W. W. Willson.....	441,527	Nov. 25	3071	789	53	1220
Meat-casings. Machine for reversing.....	E. Cherrière.....	427,046	May 6	20	7	51	814
Meat-chopper.....	W. W. Renkin.....	420,583	Feb. 4	219	57	50	607
Meat-cutter.....	J. W. Brown, Jr.....	424,758	Apr. 1	501	135	51	98
Meat-cutter.....	M. Hofbauer.....	441,663	Dec. 2	51	14	53	1271
Meat-cutter.....	M. Hofbauer.....	441,664	Dec. 2	53	14, 15	53	1272
Meat-cutter.....	R. V. Jones.....	430,316	June 17	1894	464	51	1857

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Meat-cutter	S. T. Jull	426,413	Apr. 22	3029	792	51	617
Meat-cutter	A. Shepard	422,644	Mar. 4	421	105	50	1217
Meat-cutter	O. D. Woodruff	443,589	Dec. 30	3204	824	53	1920
Meat-cutter	O. D. Woodruff	443,590	Dec. 30	3205	825	53	1920
Meat-cutter. Rocking	P. J. Ternes and R. Hohnbach, Jr.	433,056	July 29	3165	814	52	640
Meat-cutter. Rotary	R. C. Ellrich	419,190	Jan. 14	820	216	50	176
Meat-cutting machine	J. H. Eaton and G. B. Seaman	429,850	June 10	1123	277 278	51	1698
Meat-cutting machine	S. T. Jull	432,242	July 15	1882	484	52	381
Meat-cutting machine	J. Zimmerman and E. Barrath	431,638	July 8	937	235	52	195
Meat extracts. Obtaining	J. Van Ruynebeke	438,333	Oct. 14	1012	.....	53	200
Meat, hammock, or other hook	W. B. Charlton	423,730	Mar. 18	2066	544	50	1543
Meat-hanger. Automatic	J. Schaub	436,382	Sept. 16	1568	412	52	1690
Meat-knife	N. C. Oakley	420,090	Jan. 28	2170	572	50	460
Meat-mixer	J. Zimmerman	420,291	Jan. 28	2501	663	50	520
Meat-pounder	N. A. Tanner	442,151	Dec. 9	828	222	53	1432
Meat-rack	C. A. Gloekler	430,341	June 17	1936	474	51	1865
Meat-roaster	H. R. Williams	429,708	June 10	919	225	51	1659
Meat-roaster and baker	J. W. Carpenter	426,712	Apr. 29	3482	911	51	713
Meat-scraper	D. von Reibnitz	421,995	Feb. 25	2275	599	50	1021
Meat-smoker	C. B. Sims	434,052	Aug. 12	895	235	52	940
Meat-tenderer	C. Bischoff	434,238	Aug. 12	1204	313	52	1001
Meat-tenderer	S. C. Hunter	440,635	Nov. 15	1595	411	53	933
Meat-tenderer	W. P. Nichols	440,603	Nov. 11	1544	398	53	913
Meat-tenderer	E. J. Severance	437,517	Sept. 30	3439	899	52	2062
Meats. Adjustable supporting-frame for poultry or other	J. M. H. Frederick	436,654	Sept. 16	1998	523	52	1769
Meats. Curing	J. H. Greenstreet	439,144	Oct. 28	2275	.....	53	452
Meats. Envelope for cured	W. C. Marshall	436,287	Sept. 9	1401	365	52	1650
Mechanical motion	B. F. Stewart	423,578	Mar. 18	1826	481 482	50	1498
Mechanical motor	W. R. Hunter	434,447	Aug. 19	1539	401	52	1075
Mechanical motor	J. B. Skeyen	433,912	Aug. 5	697	181	52	893
Mechanical motor for use on land and water-ways	V. F. Schaffers	440,234	Nov. 11	929	238 239	53	801
Mechanical movement	W. R. Bell	427,496	May 6	704	177	51	951
Mechanical movement	J. H. Bowen	425,401	Apr. 15	1479	397	51	305
Mechanical movement	J. H. Bowen	425,738	Apr. 15	1994	531	51	405
Mechanical movement	W. E. Brock	427,038	May 6	10	3	51	813
Mechanical movement	J. F. Byers	438,799	Oct. 21	1728	463	53	342
Mechanical movement	H. F. Cook	431,442	July 1	633	158 159	52	128
Mechanical movement	E. B. Coxo	419,037	Jan. 7	583	148 149	50	123
Mechanical movement	E. B. Coxo and S. Salmon	419,035	Jan. 7	581	147 148	50	123
Mechanical movement	E. B. Coxo and S. Salmon	419,036	Jan. 7	582	148	50	123
Mechanical movement	C. C. Emmons	432,386	July 15	2099	539	52	420
Mechanical movement	J. P. H. Gastrell	428,476	May 20	2202	556	51	1259
Mechanical movement	J. P. H. Gastrell. (Reissue)	11,129	Dec. 2	725	194 195	53	1405
Mechanical movement	T. M. Gordon	434,442	Aug. 19	1530	399	52	1074
Mechanical movement	H. E. Harbaugh	423,604	Mar. 18	1863	491 492	50	1505
Mechanical movement	J. Hayton	435,826	Sept. 2	690	184	52	1508
Mechanical movement	J. Hellings	430,852	June 24	2750	673 674	51	2030
Mechanical movement	H. H. Huntley	433,568	Aug. 5	189	50	52	793
Mechanical movement	J. M. McNeal and W. F. Runnells	432,192	July 15	1813	466	52	368
Mechanical movement	R. Miehle	429,694	June 10	891	216 217	51	1654
Mechanical movement	J. Patterson	442,998	Dec. 16	2201	566	53	1710
Mechanical movement	C. K. Pickles	433,184	July 29	3360	869	52	678
Mechanical movement	C. R. Pollard	421,608	Feb. 18	1744	457	50	911
Mechanical movement	C. D. Sigsbee	441,112	Nov. 18	2381	617 618	53	1083
Mechanical movement	O. C. Smith	422,356	Feb. 25	2844	750	50	1126
Mechanical movement	A. W. Steiger	442,404	Dec. 9	1209	312	53	1504
Mechanical movement	J. Thomson	427,448	May 6	642	161	51	939
Mechanical movement	O. Tyberg	441,260	Nov. 25	2657	690	53	1141
Mechanical movement	J. E. Wagner	419,089	Jan. 7	660	173	50	139
Mechanical movement	J. A. Watson	426,343	Apr. 22	2895	762	51	592
Mechanical movement	W. C. Westaway and L. W. Beard	432,586	July 22	2398	617 618	52	488
Mechanical movement	E. Wright	425,844	Apr. 15	2150	573	51	435
Mechanical movement for converting motion	L. A. Brenner	425,534	Apr. 15	1678	448	51	344
Mechanical movement for converting motion	R. Miehle	429,695	June 10	892	217 218	51	1654
Mechanical power	J. H. Frey	441,868	Dec. 2	380	99	53	1339
Medical battery	F. P. and W. A. Hoeneman	429,447	June 3	522	125	51	1573
Medical powders. Device for injecting	W. H. Rowland	443,545	Dec. 30	3127	805	53	1905
(Medicine.) Ague remedy	J. W. Noland	435,046	Aug. 26	2500	.....	52	1269
(Medicine.) Antiseptic lotion	J. Alson	428,033	May 13	1529	.....	51	1120
Medicine-case. Alternating	W. Hawn	418,793	Jan. 7	202	50	50	44
(Medicine.) Catarrh remedy	W. Bradley	440,461	Nov. 11	1305	.....	53	869
(Medicine.) Cough remedy	C. Jensen	440,039	Nov. 4	630	.....	53	731
(Medicine.) Cough remedy	E. Smithe	438,955	Oct. 21	1982	.....	53	389
Medicine-dropper and eye-pipette	W. F. Ware	424,632	Apr. 1	299	77	51	60
(Medicine.) Remedy for asthma	C. Iselin and D. Callahan	437,599	Sept. 30	3557	.....	52	2085
(Medicine.) Remedy for diphtheria	L. M. Pierson	429,152	June 3	66	.....	51	1485
(Medicine.) Remedy for dyspepsia	P. L. Brault	432,366	July 15	2063	.....	52	413
(Medicine.) Remedy for dyspepsia	W. P. King	426,566	Apr. 29	3246	.....	51	668
(Medicine.) Remedy for liver complaint, &c	J. Taylor	419,802	Jan. 21	1718	50	361
(Medicine.) Remedy for toothache	E. J. Ljunggren	424,009	Mar. 25	2498	50	1633

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Medicine-spoon	C. Danielewsky	427,254	May 6	355	91	51	880
(Medicine.) Stomach-bitters	H. W. Farrell	440,998	Nov. 18	2191		53	1046
Medicine to animals. Device for administering	W. H. B. Doty	430,928	June 24	2862	703	51	2052
(Medicine.) Topical remedy	J. H. Blume and C. Loving	436,014	Sept. 9	977		52	1569
(Medicine.) Topical remedy	G. G. Wellington	428,982	May 27	2961		51	1426
Men of war or merchantmen. Light protection for	L. P. de la Barrière	425,363	Apr. 8	1415	377	51	284
Merchandise-package	H. P. Barber	438,367	Oct. 14	1063	289	53	209
Merchandise-package	G. Owens	422,967	Mar. 11	924	244	50	1320
Merchandise-seller. Automatic	W. G. Latimer	438,691	Oct. 21	1553	418	53	308
Merry-go-round, &c.	F. W. Allechin	418,843	Jan. 7	269	65, 66	50	57
Merry-go-round	E. S. Bentley	443,492	Dec. 30	3056	786	53	1891
Message-cabinet	F. Howcroft	442,439	Dec. 9	1257	325	53	1514
Message-recording instrument	J. C. Wilson	426,554	Apr. 29	3228	{ 846 847 }	51	664
Message-recording instrument	J. C. Wilson	426,555	Apr. 29	3231	847	51	665
Messages. Apparatus for preparing and translating secret	F. Anderson	431,792	July 8	1201	299	52	243
Metal and circuit detector	R. L. Watkins	438,041	Oct. 7	570	156	53	108
Metal and at the same time pointing and threading the adjacent ends thereof. Dividing rods of	C. D. Rogers	429,388	June 3	441	104	51	1555
Metal articles. Apparatus for making hollow	T. James	442,895	Dec. 16	2046	525	53	1678
Metal articles. Die for forming	J. R. Paddock	422,313	Feb. 25	2770	729	50	1112
Metal articles. Making irregular-shaped	G. F. Simonds	419,292	Jan. 14	968	{ 255 256 257 }	50	205
Metal bars. Machine for forming gibs or flanges on	J. C. Taliaferro	438,364	Oct. 14	1059	289	53	209
Metal beams. Machine for removing fins from	A. Pevall and F. P. Howe	442,914	Dec. 16	2073	{ 532 533 }	53	1683
Metal-bending machine	W. W. Green	420,935	Feb. 11	769	199	50	718
Metal boat	W. W. Keys	433,085	July 29	3212	{ 825 826 }	52	648
Metal-boring machine	A. Tatem	441,204	Nov. 25	2549	659	53	1123
Metal by electro-deposition. Apparatus for producing sheets of	M. G. Farmer	426,788	Apr. 29	3591	937	51	734
Metal can	P. H. Gates	425,502	Apr. 15	1629	434	51	334
Metal can, box, &c.	G. A. Waeber	435,618	Sept. 2	380	192	52	1446
Metal can, box, or other receptacle	G. A. Waeber. (Reissue)	11,076	May 13	1558	397	51	1128
Metal can or vessel	J. A. Frey	420,781	Feb. 4	493	129	50	660
Metal-coating furnace	H. B. Lynch	419,695	Jan. 21	1563	419	50	331
Metal cylinders. Machine for making	E. K. Coas	422,293	Feb. 25	2740	{ 722 723 }	50	1106
Metal. Device for forming pin-holes in cast	A. L. Kendall	431,982	July 8	1482	374	52	299
Metal-drill. Hand	A. L. Stanford	442,647	Dec. 16	1587	410	53	1589
Metal heating and melting furnace. Hydrocarbon	J. H. Bullard	419,406	Jan. 14	1147	305	50	242
Metal-heating furnace	J. W. Parmelee	430,538	June 17	2221	545	51	1919
Metal-heating furnace. Hydrocarbon	J. H. Bullard	419,407	Jan. 14	1149	305	50	242
Metal hollow ware. Ornamenting	F. H. Webster	430,816	June 24	2701	662	51	2021
Metal hoop	S. C. Cary	420,900	Feb. 4	706	182	50	697
Metal into irregular shapes. Machine for spinning	J. Browning	423,904	Mar. 25	2331	614	50	1602
Metal-joint fastenings for boxes. Machine for making	C. T. Remus	431,995	July 8	1497	{ 378 379 }	52	307
Metal joint. Tubular	L. M. Cottle	421,482	Feb. 18	1550	400	50	874
Metal. Machine for cutting and shaping heated	J. W. Wailles	435,955	Sept. 9	894	235	52	1553
Metal. Machine for forming and bending	I. S. McGiehan	419,156	Jan. 7	760	{ 201 202 }	50	158
Metal. Machine for turning and drilling	W. Wattie	425,556	Apr. 15	1708	457	51	350
Metal. Manufacturing carburized	H. W. Lash and J. Johnson	441,174	Nov. 25	2490		53	1113
Metal. Method of and apparatus for burning holes in	W. P. Kookey	434,133	Aug. 12	1044	270	52	970
Metal-planishing machine	E. A. Harvey	423,048	Mar. 11	1047	272	50	1342
Metal-plate joint	H. W. Dressler	428,807	May 27	2701	685	51	1373
Metal plates. Machine for flanging and nozzling	R. C. Nugent and S. H. Stupakoff	422,615	Mar. 4	375	93, 94	50	1203
Metal plates or sheets. Uniting	J. C. Bayles	441,276	Nov. 25	2684	697	53	1146
Metal. Plated	G. U. Meyer	431,848	July 8	1289	324	52	261
Metal post	O. B. Hall	433,001	July 29	3077	789	52	623
Metal post	T. J. Thorp	438,121	Oct. 7	688	187	53	133
Metal posts. Machine for forming tubular	T. J. Thorp	442,556	Dec. 9	1454	{ 372 373 }	53	1554
Metal. Producing sheets direct from molten	C. M. Pielsticker	437,509	Sept. 30	3424	{ 896 897 }	52	2060
Metal rods or shafts. Machine for drawing cold	T. J. Bray	435,992	Sept. 9	949	249	52	1564
Metal rods. Rolls for reducing and straightening	W. Allderice	427,288	May 6	403	105	51	890
Metal-sawing machine	L. M. Ham	428,773	May 27	2654	673	51	1364
Metal-sawing machine	J. Robison	423,278	Mar. 11	1401	365	50	1409
Metal-sawing machine	W. Steets	441,597	Nov. 25	3182	819	53	1241
Metal-shearing apparatus	S. T. Owens	426,677	Apr. 29	3414	896	51	700
Metal-shears	H. Aiken	438,339	Oct. 14	1020	{ 277 278 }	53	201
Metal sheet. Compound	R. Chappell	435,014	Aug. 26	2451	649	52	1260
Metal strips for mats. Machine for corrugating and punching	F. M. Leavitt	438,629	Oct. 21	1450	{ 391 392 }	53	291
Metal-swinging machine	J. Berry	435,351	Aug. 26	2968	{ 787 788 }	52	1356
Metal tube	G. W. Dithridge	431,203	July 1	259	65	52	53
Metal turning or planing tool	E. Bussell	429,883	June 10	1180	293	51	1709
Metal-upsetting machine	W. P. Bettendorf	432,360	July 15	2055	529	52	412
Metal wheel	W. D. Burgess and T. C. Munz	420,927	Feb. 11	755	195	50	715
Metal wheel	M. De Mars	425,993	Apr. 22	2398	635	51	490
Metal wheel	P. Gendrou	419,937	Jan. 21	1930	509	50	405
Metal wheel	C. B. Post	442,455	Dec. 9	1283	332	53	1519
Metal wheel	W. F. Young	426,631	Apr. 29	3548	877	51	688
Metal wheel and manufacturing the same	E. P. Lynch	439,412	Oct. 28	2713	724	53	534
Metal with another. Machine for regulating the coating of one	J. Monto	421,597	Feb. 18	1726	{ 450 451 }	50	907
Metal work. Forming hollow ornamental	H. D. Bronson	428,883	May 27	2815	716	51	1397

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Metal-working apparatus. Electric	H. Lemp and J. Tregoning	432,629	July 22	2467	634	52	501
Metal-working machine	L. Olsen and N. E. Burns	420,827	Feb. 4	582	150	50	675
Metal-working machine. Combined	W. G. Budlong	437,284	Sept. 30	3061	{ 801 802 }	52	1988
Metal-working machine. Combined	H. B. Sevey	429,324	June 3	339	80	51	1535
Metal-working machine. Compound	E. S. Babcock	434,231	Aug. 12	1194	311	52	999
Metals by electricity. Apparatus for working	M. W. Dewey	430,839	June 24	2731	669	51	2026
Metals by electricity. Forming or shaping	H. Lemp	432,630	July 22	2469	635	52	501
Metals by electricity. Heating	C. L. Coffin	435,284	Aug. 26	2843	752	52	1335
Metals by electricity. Melting or reducing	T. L. Willson	430,453	June 17	2091	516	51	1895
Metals by electricity. Method of and apparatus for working	G. D. Burton	438,525	Oct. 14	1287	{ 348 349 }	53	254
Metals by electricity. Process of and apparatus for forming and welding	E. Thomson	434,530	Aug. 19	1661	435	52	1101
Metals by electricity. Working	E. Thomson	432,651	July 22	2502	643	52	507
Metals. Flux or solution for coating	B. S. Richardson	434,296	Aug. 12	1293		52	1019
Metals from their ores. Apparatus for the extraction of	T. R. Jordan	438,479	Oct. 14	1222	{ 331 332 }	53	241
Metals from their ores. Separation of	M. Crawford	420,377	Jan. 28	2618	695	50	542
Metals. Melting, refining, and casting	E. A. Colby	428,552	May 20	2299	584	51	1278
Metals. Sectional-faced wheel for dressing	C. H. Benton	442,283	Dec. 9	1020	269	53	1468
Metals. Treating	H. K. Jones	427,768	May 13	1133	284	51	1044
Metals. Uniting	R. J. Tilford	424,379	Mar. 25	3047		50	1740
Metallic cross-tie	M. F. Bonzano	437,476	Sept. 30	3375	884	52	2050
Metallic cross-tie	M. F. Bonzano	441,926	Dec. 2	458	122	53	1354
Metallic finishing-plate	L. L. Sagendorph	433,217	July 29	3407	880	52	688
Metallic flask	H. J. Phelps	420,664	Feb. 4	335	87	50	629
Metallic glazing-bar	J. T. Pennycook	431,193	July 1	239	61	52	50
Metallic mat	W. C. Spelman	438,648	Oct. 21	1476	399	53	296
Metallic matting	J. Adair	424,445	Apr. 1	1	1	51	3
Metallic ornaments on roughened surfaces. Mounting	C. B. Heady	432,940	July 22	2954	757	52	595
Metallic plate-work. Raising and forming machine for	R. B. Swain	440,888	Nov. 18	2013	517	53	1012
Metallic plates. Apparatus for the manufacture of articles from	S. Fox	418,869	Jan. 7	330	80	50	69
Metallic post	F. Milliken	431,276	July 1	372	93	52	75
Metallic post	F. Milliken	438,082	Oct. 7	636	173	53	122
Metallic precipitates. Treatment of	E. K. Mitting	428,566	May 20	2321		51	1282
Metallic ring	H. E. Kelley	423,260	Mar. 11	1362	354	50	1402
Metallic surfaces. Finishing	D. Wheeler	437,468	Sept. 30	3364	880	52	2048
Metallic tube	C. L. Betts	425,975	Apr. 22	2368	628	51	484
Metallic tube	C. F. Erb	426,000	Apr. 22	2408	638	51	492
Metallic vessel	J. M. Sullivan	429,660	June 10	845	205	51	1644
Metallic vessels. Lead-lining	T. P. Burgess	421,161	Feb. 11	1099	282	50	782
Metallic wheel	H. W. Avery	429,408	June 3	467	111	51	1560
Metallic wheel	W. P. and J. W. Bettendorf	440,533	Nov. 11	1426	368	53	892
Metallic wheel	G. Hawes	433,621	Aug. 5	266	71	52	808
Metallic wheel	E. D. Wassell	429,253	June 3	212	53	51	1513
Metallurgical apparatus	W. H. Masser	427,701	May 13	1018	256	51	1022
Metallurgical furnace	F. L. Bardett	420,029	Jan. 28	2078	549	50	441
Metallurgical furnace	R. F. Nenninger	432,280	July 15	1945	{ 497 498 }	52	392
Metallurgical plant	H. Aiken	423,199	Mar. 11	1271	331	50	1386
Metallurgical indications. Means for the transmission of	H. J. Haight	442,881	Dec. 16	2012	{ 517 518 }	53	1672
Meter:							
See Ampère meter. Liquid-meter.							
Electric meter. Oscillating meter.							
Fluid-meter. Piston meter.							
Gas-meter. Volt or ampère meter.							
Grain-meter. Water-meter.							
Meter-record	I. S. Schrop	434,207	Aug. 12	1157	300	52	992
Micrometer-gage	J. W. Riglander	443,869	Dec. 30	3637	936	53	2004
Micrometer-gage	L. S. Starrett	433,311	July 29	3540	914	52	716
Micrometer-gage	S. H. Stupakoff	438,504	Oct. 14	1255	340	53	247
Micrometer surface-gage	C. W. Malmquist	438,851	Oct. 21	1831	487	53	360
Microscope. Coin-controlled	A. W. and A. H. Roovers	439,189	Oct. 28	2338	{ 629 630 }	53	464
Microscope. Coin-controlled	A. W. and A. H. Roovers	439,190	Oct. 28	2340	630	53	465
Microscopical examination of photographic pictures. Apparatus for facilitating the	H. Duncan	443,359	Dec. 23	2839	730	53	1841
Middlings-purifier	W. D. Gray	428,674	May 27	2497	635	51	1334
Middlings-purifier	C. E. Henshaw	432,488	July 15	2252	583	52	452
Middlings-purifier	R. L. Hottel	432,876	July 22	2861	{ 732 734 }	52	577
Middlings-purifier	D. G. Reitz	433,034	July 29	3133	805	52	634
Middlings-purifier	H. W. Stone, Jr. (Reissue)	11,132	Dec. 9	1520	391	53	1567
Middlings-purifier	G. Walter	442,212	Dec. 9	915	243	53	1448
Middlings-separator	T. Ponsar	420,957	Feb. 11	801	208	50	724
Middlings separator and double purifier	C. O. Wright	427,027	Apr. 29	3927	{ 1023 1024 }	51	800
Milk and butter cooler	N. H. C. Slaughter	421,199	Feb. 11	1155	296	50	792
Milk and cream testing machine	G. W. Towar, Jr.	431,128	July 1	140	36	52	30
Milk-can	A. W. H. Smith	420,253	Jan. 28	2444	649	50	509
Milk-can	W. C. Thornton	419,735	Jan. 21	1613	{ 430 431 }	50	340
Milk-cans, &c. Safe for	R. H. Ricker	439,605	Oct. 28	3009	798	53	592
Milk-cooler	W. W. Conder	430,336	June 17	1931	472	51	1864
Milk-cooler	G. D. Johnson	443,854	Dec. 30	3617	931	53	2000
Milk-cooler	C. H. Leonard	436,364	Sept. 16	1537	403	52	1684
Milk-cooler	G. R. Meloney	436,288	Sept. 9	1402	365	52	1650
Milk-cooler	P. S. Ryan	430,545	June 17	2231	547	51	1921
Milk-cooler	F. Stiles	429,972	June 10	1315	325	51	1735
Milk-cooler	W. Watson	425,920	Apr. 15	2251	597	51	453

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Milk-cooler	J. J. Willard	422,676	Mar. 4	466	119	50	1225
Milk-cooler	W. W. Wilson and H. J. Van Tuyl	436,469	Sept. 16	1704	448	52	1716
Milk. Device for aerating	A. O. Morgan and J. B. Gates	418,956	Jan. 7	478	119	50	100
Milk-jar	A. V. Whitman	421,461	Feb. 18	1515	393	50	867
Milk. Preparation of flour from curd of	W. Gerbel	421,830	Feb. 18	2039		50	967
Milk-preserving jar and sealed stopple for the same	F. K. Ward	437,952	Oct. 7	423	118 119	53	81
Milk-vat	D. W. Curtis	425,494	Apr. 15	1620	432	51	333
Milker. Cow	H. K. Stevens	421,985	Feb. 25	2266	596	50	1019
Milker. Pneumatic	J. T. Pomeroy	439,552	Oct. 28	2921	777	53	574
Mill:							
See Attrition-mill. Grinding and amalgamat-							
Bark-mill. ing mill.							
Boring-mill. Hollow mill.							
Boring and turning Hominy-mill.							
mill. Ore-mill.							
Cane-mill. Ore-crushing mill.							
Chili mill. Paint-mill.							
Cider-mill. Pug-mill.							
Clay-grinding mill. Pulverizing-mill.							
Coffee-mill. Quartz-mill.							
Crushing-mill. Rod-mill.							
Crushing and grind- Roller-mill.							
ing mill. Rolling-mill.							
Fanning-mill. Saw-mill.							
Feed-mill. Spice-mill.							
Fulling-mill. Windmill.							
Gig-mill. Wire-rod mill.							
Grinding-mill.							
Mill	F. O. Lindheimer	426,598	Apr. 29	3294	864 865	51	678
Mill appliance	H. Aiken	439,828	Nov. 4	295	74, 75	53	665
Mill appliance	H. Aiken	439,829	Nov. 4	297	75	53	666
Mill appliance	S. Porter	428,301	May 20	1938	487	51	1208
Mill appliance	G. F. McCleane and W. M. Faber, Jr.	426,046	Apr. 22	2468	652 653	51	503
Mill boot or pestle	N. B. Tilton	422,661	Mar. 4	447	112	50	1221
Mill-elevator alarm	F. Carter and M. McChesney	430,921	June 24	2854	700	51	2050
Mills. Safety device for	G. Rieseck	441,702	Dec. 2	114	31	53	1284
Milling-cutter	U. and H. E. Eberhardt	433,458	Aug. 5	33	9	52	763
Milling-cutter	C. C. Tyler	435,572	Sept. 2	298	83	52	1433
Milling-cutters. Machine for making	C. C. Tyler	435,573	Sept. 2	299	83	52	1433
Milling-cutters. Machine for making	C. C. Tyler	435,574	Sept. 2	300	83	52	1433
Milling-machine	A. T. Gifford	432,936	July 22	2947	755	52	593
Milling-machine	J. Hollingworth	432,529	July 22	2321	599	52	473
Milling-machine	A. Holmquist	442,681	Dec. 16	1640	422	53	1600
Milling-machine	F. Holz	432,621	July 22	2445	330 331 332	52	497
Milling-machine	M. C. Johnson	419,451	Jan. 14	1209	320 321 322	50	254
Milling-machine	C. H. Trask	422,663	Mar. 4	448	113 114	50	1222
Milling-tool	C. H. Trask	436,323	Sept. 9	1460	380	52	1661
Millstone	L. H. Letz	437,699	Oct. 7	30	10	53	9
Millstone-dress	G. M. Snodgrass	430,893	June 24	2815	691	51	2043
Millstone-dressing machine	J. J. Chapman	430,185	Jan. 28	2333	617	50	490
Millstone-pick	J. W. Truax	431,789	July 8	1191	298	52	241
Millstone-pick. Combination	W. Z. Bevis	430,003	Jan. 21	2036	537	50	424
Millstones. Device for dressing or cutting	J. A. Beamisderfer	432,592	July 22	2404	619	52	489
Millstones. System of grooves for	J. Schweitzer	439,900	Nov. 4	412	107	53	688
Mincing-machine	T. Williams, Jr.	440,215	Nov. 11	893	230	53	794
Mine-cages. Mechanism for loading and unloading	R. Dinsmore	438,612	Oct. 21	1424	385 386	53	286
Miner's candlestick	D. B. James	442,186	Dec. 9	878	234	53	1442
Miner's candlestick	L. H. Sholder	430,488	June 17	2145	527	51	1906
Miners' caps. Lamp-carrier for	C. H. Hobson	442,185	Dec. 9	878	234	53	1442
Miner's combination-box	L. C. Harrison and C. Keef	435,746	Sept. 2	563	150	52	1424
Miner's lamp	G. Anton	431,734	July 8	1113	276	52	226
Miner's-lamp holder	W. C. Rockwell	430,691	June 24	2487	607	51	1979
Miner's-lamp wick	F. M. Anton	431,733	July 8	1112	276	52	226
Mines. Apparatus for operating diamond drills in	H. G. Johnston	435,648	Sept. 2	423	113	52	1455
Mines. Draft-annunciator for	W. Bulluck	419,312	Jan. 14	1001	264 265	50	212
Mines. System of transportation by electricity in	E. A. Sperry	434,363	Aug. 12	1390	365	52	1039
Mines. Timber structure for	G. J. Goodhue	429,439	June 3	511	122	51	1570
Mining	J. W. Crites	439,812	Nov. 4	270	68	53	661
Mining-cars. Self-acting pin-pusher for	J. C. Pearce	435,653	Sept. 2	430	115	52	1456
Mining-machine	N. S. Amstutz	433,881	Aug. 5	658	170 171	52	885
Mining-machine	F. Bain	433,610	Aug. 5	251	67	52	805
Mining-machine	F. Bain	433,612	Aug. 5	254	68	52	806
Mining-machine	E. E. Carter. (Reissue)	11,058	Feb. 4	748	192 193	50	706
Mining-machine	E. Ingold	419,199	Jan. 14	830	219	50	178
Mining-machine	J. Kangley	435,426	Sept. 2	66	21, 22	52	1358
Mining-machine	F. M. Lechner	432,754	July 22	2683	686 687	52	542
Mining-machine	M. A. Michales	421,594	Feb. 18	1722	448 449	50	907
Mining-machine	S. B. Stine	443,585	Dec. 30	3199	823	53	1919
Mining-machine	S. B. Stine	443,586	Dec. 30	3201	823	53	1919
Mining-machine	J. M. Walter	431,239	July 1	317	78	52	64
Mining machine. Coal	J. L. Bourry	432,361	July 15	2056	529	52	412
Mining machine. Coal	M. Hardsoeg	426,618	Apr. 29	3328	873	51	685

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr g's	Vol.	Page.
Mining machine. Coal.....	W. Job	427,871	May 13	1282	{ 324 325 }	51	1072
Mining machine. Coal.....	F. M. Lechner	428,920	May 27	2874	735	51	1409
Mining machine. Coal.....	S. B. Stine and J. V. Smith	443,925	Dec. 30	3723	952	53	2020
Mining-machine cutter.....	E. E. Carter	450,989	June 24	2957	726	51	2069
Mining-machine for dredging and separating the precious metals. Submarine	J. A. Mathews and H. T. Scurry	436,161	Sept. 9	1247	{ 325 326 }	52	1618
Mining-machine pick.....	E. A. Sperry	428,787	May 27	2677	679	51	1368
Mining plant.....	J. C. Simpson	419,595	Jan. 14	1409	377	50	296
Mineral or metallic matters from the liquids in which they are suspended. Process of and apparatus for the separation of finely-divided	J. C. Newbery and C. T. J. Vautin	439,173	Oct. 28	2318	622	53	460
Mineral wool. Method of and apparatus for the pro- duction of	W. H. Kennedy	436,244	Sept. 9	1341	350	52	1637
Minnow-trap.....	J. S. Cochenour	427,049	May 6	23	8	51	815
Mirror.....	N. R. Streeter	441,600	Nov. 25	3188	821	53	1243
Mirror.....	P. Wiederer	433,707	Aug. 5	393	100	52	832
Mirror. Adjustable.....	F. M. Chapman	422,501	Mar. 4	200	54	50	1174
Mirror. Folding.....	P. Wiederer	433,708	Aug. 5	394	{ 100 101 }	52	832
Mirror-hanger for bureaus, &c.....	J. R. Anderson	434,632	Aug. 19	1834	479	52	1135
Mirror or picture hanger.....	C. C. Du Bois	438,066	Oct. 7	613	166	53	117
Mirror-support.....	R. P. Elliott	439,839	Nov. 4	313	79	53	609
Mirror-support.....	K. M. Greenwood	439,001	Oct. 21	2053	549	53	404
Mirror-support. Adjustable.....	R. P. Elliott	434,659	Aug. 19	1884	492	52	1144
Mirror-support or holder.....	D. C. Parker	419,549	Jan. 14	1339	358	50	2-1
Mirror supporting and adjusting device.....	R. P. Elliott	429,430	June 3	501	119	51	1568
Mirror supporting and adjusting device.....	D. Heald and C. H. French	419,521	Jan. 14	1301	347	50	273
Mirror supporting and adjusting device.....	W. P. Tarbell	434,733	Dec. 30	3438	932	53	1964
Mirror-supporting device.....	R. P. Elliott	426,7-5	Apr. 29	3585	886	51	733
Mirror. Toilet.....	J. Manheimer	421,101	Feb. 11	1012	259	50	764
Mirror. Window.....	J. E. Evans	425,500	Apr. 15	1026	433	51	334
Mirror. Window.....	A. J. Lotto	423,434	Mar. 18	1624	{ 426 427 }	50	1461
Mirrors. Silvering.....	A. B. Drautz	433,074	July 29	3190	.....	52	645
Mirrors with images. Providing metallic	C. Wegener	421,119	Feb. 11	1033	.....	50	769
Missiles. Apparatus for projecting combustible	G. H. Babcock	429,592	June 10	715	179	51	1625
Missiles. Projecting.....	G. H. Babcock	430,056	June 10	1451	360	51	1761
Miter-board.....	J. H. Rowland	425,051	Apr. 8	954	255	51	1393
Miter-box.....	J. E. Bundy	426,767	Apr. 29	3559	928	51	728
Miter-box.....	F. V. Carman	420,530	Feb. 4	147	36	50	592
Miter-box.....	E. G. T. Gabriel and J. C. Pohl	432,524	July 22	2315	598	52	472
Miter-box.....	E. G. Herbert and F. L. York	419,772	Jan. 21	1672	444	50	352
Miter-box.....	A. E. McMillan	434,134	Aug. 12	1045	270	52	970
Miter cutter.....	W. R. Fox	422,517	Mar. 4	221	58	50	1178
Miter-cutting machine.....	W. R. Fox	433,781	Aug. 5	512	133	52	856
Miter-cutting machine.....	W. R. Fox	435,219	Aug. 26	2746	725	52	1316
Miter-cutting machine.....	W. R. Fox. (Reissue)	11,062	Feb. 25	2853	753	50	1128
Mitering-machine.....	W. Murphy	422,608	Mar. 4	364	90	50	1206
Mitten.....	R. F. Levy	428,115	May 20	1653	419	51	1154
Mixer.....	H. Boemermann	420,262	Jan. 28	2458	652	50	512
Mixing and kneading machine.....	J. Bertels	423,020	Mar. 11	998	{ 262 263 }	50	1333
Mixing apparatus.....	G. W. Swan	421,883	Feb. 18	2126	557	50	983
Mixing-machine.....	C. W. Hottman	426,619	Apr. 29	3330	873	51	685
Mixing-machine.....	E. J. Powers	443,654	Dec. 30	3306	852	53	1939
Mixing-machine discharge-gate.....	M. Broughton	431,798	July 8	1212	302	52	245
Mixing or stirring vessel.....	J. J. Schilling	429,484	June 3	583	142	51	1584
Mixing-picker.....	A. S. Lyon	435,147	Aug. 26	2646	700	52	1297
Moistening device.....	M. Holst	422,078	Feb. 25	2400	634	50	1043
Moistening device.....	J. B. Sword	425,834	Apr. 15	2130	568	51	432
Moistening-roller.....	G. R. Jenking	435,606	Sept. 2	344	96	52	1441
Mold: See Anvil-mold. Dental mold. Brick-mold. Glass-mold. Brick-machine mold. Ice-block mold. Butter-mold. Paving-block or tile mold. Candy-mold. Ring-mold. Capsule-mold. Sash-weight mold. Casting-mold.							
Mold.....	J. M. Fenska	436,561	Sept. 16	1849	487	52	1741
Mold.....	E. W. Johnson	440,810	Nov. 18	1887	{ 485 486 }	53	988
Mold.....	T. H. Mooney	424,892	Apr. 1	712	189	51	137
Mold.....	J. L. P. Spooner	443,338	Dec. 23	2808	722	53	1835
Mold.....	J. L. P. Spooner	443,339	Dec. 23	2809	722	53	1835
Mold.....	J. L. P. Spooner	443,412	Dec. 23	2915	749	53	1855
Mold.....	F. C. Sturges	443,686	Dec. 30	3362	864	53	1949
Mold-board.....	J. C. Moses	427,346	May 6	485	124	51	907
Mold-drying apparatus.....	P. McArthur	434,833	Aug. 19	2133	559	52	1193
Mold for tubular articles.....	S. J. Adams	433,586	Aug. 5	217	58	52	799
Mold for tubular articles.....	S. J. Adams	433,590	Aug. 5	224	59	52	800
Mold-pin-greasing machine.....	J. Krehbiel	430,861	June 24	2765	{ 677 678 }	51	2033
Molds. Bottom board for sand.....	S. J. Adams	433,587	Aug. 5	219	58	52	799
Molds. Forming.....	F. C. Sturges	443,687	Dec. 30	3364	864	53	1950
Molds. Making.....	H. D. Buchman	434,104	Aug. 12	989	258	52	960
Molder's flask.....	W. N. Gartside	421,693	Feb. 18	1860	487	50	934
Molder's flask.....	W. A. James	443,704	Dec. 30	3391	871	53	1955
Molding apparatus.....	J. J. Franke	435,743	Sept. 2	557	{ 148 149 }	52	1483
Molding apparatus. Sand.....	F. Gandy	433,166	July 29	3333	863	52	673
Molding blocks or bricks. Machine for.....	W. B. Hayden	436,237	Sept. 9	1326	{ 346 347 }	52	1634

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Molding. Composition	J. M. Marston	435,845	Sept. 2	718	193	52	1514
Molding-flask	J. I. Kinsey	435,040	Aug. 26	2492	658	52	1267
Molding-flask	J. Oliver and C. Anderson	433,361	July 29	3606	930	52	729
Molding-machine	T. E. Caddy	428,590	May 27	2371	602	51	1312
Molding-machine	C. D. Clark	419,639	Jan. 21	1475	336	50	315
Molding-machine	W. F. Jones	442,054	Dec. 2	674	182	53	1394
Molding-machine	F. Kepp	432,243	July 15	1883	484	52	321
Molding-machine	E. Keenan, Jr.	442,123	Dec. 9	779	210	53	1422
Molding-machine	J. Kinzer	422,081	Feb. 25	2403	635	50	1044
Molding-machine	P. O'Connor	438,821	Oct. 21	1776	475	53	351
Molding-machine	F. H. Van Houten	435,336	Aug. 26	2939	781	52	1350
Molding-machine attachment	G. Poppert	439,894	Nov. 4	400	104	53	685
Molding-machine. Curved	J. White	433,191	July 29	3371	872	52	681
Molding-machine for hollow ware	J. C. Richardson	425,255	Apr. 8	1261	336	51	255
Molding-machine. Pulp	E. C. Westervelt	430,905	June 24	2832	695	51	2046
Molding-machine. Sand	T. Mistelski	430,666	June 24	2448	597	51	1971
Molding-machine. Sand	T. Scherf	439,430	Oct. 28	2745	732	53	540
Molding machinery	B. F. Rittenhouse	427,708	May 13	1031	253	51	1024
Molding-press	C. J. Le Roy	439,075	Oct. 21	2163	580	53	426
Moldings. Embossing and edge-shaping roller	B. C. J. Anderson	422,486	Mar. 4	178	49	50	1170
Moldings. Machine for decorating circular	J. Groble	430,576	June 17	2276	559	51	1929
Moldings. Machine for making sheet-metal	J. W. Yates	438,970	Oct. 21	2004	535	53	394
Moldings. Machine for polishing or smoothing	J. Fleischmann	423,748	Mar. 18	2089	552	50	1547
Molten material. Apparatus for centrifugally treating	O. B. Peck	433,139	July 29	3295	849	52	665
Molten material. Apparatus for centrifugally treating	O. B. Peck	433,140	July 29	3296	849	52	666
Molten material. Apparatus for centrifugally treating	O. B. Peck	433,142	July 29	3300	850	52	666
Molten material. Apparatus for centrifugally treating	O. B. Peck	433,144	July 29	3302	851	52	667
Molten material. Apparatus for centrifugally treating	O. B. Peck	433,145	July 29	3304	853	52	667
Molten material. Machine for centrifugally treating	O. B. Peck	433,141	July 29	3298	854	52	666
Money-changer	W. H. Staats	422,258	Feb. 25	2681	707	50	1096
Money-changing machine	J. N. Alsop	420,896	Feb. 4	701	180	50	696
Money-changing machine	J. N. Alsop	434,312	Aug. 12	1315	342	52	1023
Money-registering device	H. J. Anderson	419,620	Jan. 21	1446	388	50	310
Money-wrapper	C. Schmeiser	425,910	Apr. 15	2241	594	51	451
Monkey-wrench	H. B. Cary	427,672	May 13	968	243	51	1012
Monkey-wrench	W. W. Charlton	439,743	Nov. 4	168	44	53	641
Monkey-wrench	F. L. Smith	439,201	Oct. 28	2364	635	53	469
Monkey-wrench	R. W. Smith	431,236	July 1	314	77	52	63
Mop	S. W. C. Adams	424,750	Apr. 1	484	132	51	95
Mop	C. Bateman	429,835	June 10	1102	272	51	1694
Mop and wringer	E. C. Rolls	432,806	July 22	2769	709	52	558
Mop and wringer	C. L. Westbrook	419,387	Jan. 14	1112	293	50	234
Mop and wringer combined	C. A. Chisholm	437,143	Sept. 23	2842	738	52	1938
Mop and wringer combined	E. C. Rolls	428,696	May 27	2539	645	51	1342
Mop-head	J. M. Holmes	420,798	Feb. 4	526	137	50	665
Mop-head	W. J. McDonnell	429,048	May 27	3071	792	51	1446
Mop-holder	A. M. Pierce	420,466	Feb. 4	67	14	50	577
Mop-wringer	M. H. Borland	438,467	Oct. 14	1210	328	53	238
Mop-wringer	H. L. Ennes	440,550	Nov. 11	1453	374	53	896
Mop-wringer	T. J. Foley	435,088	Aug. 26	2562	675	52	1281
Mop-wringer	J. Frost	442,773	Dec. 16	1820	471	53	1635
Mop-wringer	R. H. Mullen	435,705	Sept. 2	510	135	52	1473
Mop-wringer	G. D. Mussey	436,423	Sept. 16	1640	431	52	1702
Mop-wringer	S. H. Schmuck	434,033	Aug. 12	869	229	52	935
Mop-wringer	F. J. Wood	427,817	May 13	1203	303	51	1057
Mop-wringer and squillgee. Combined	J. Ziv and N. Davis	431,100	July 1	104	26	52	23
Mop wringer and washer. Automatic	R. C. Andersen	422,487	Mar. 4	179	49	50	1170
Mop-wringing attachment for pails	W. F. Kendrick	434,344	Aug. 12	13	355	52	1033
Mop-wringing device	A. J. Landry	436,457	Sept. 16	1686	444	52	1712
Mop-wringing device	R. H. Mullen	435,976	Sept. 9	925	243	52	1559
Mordant	E. O. Fankhauser	437,295	Sept. 30	3075	604	52	1991
Mordant	C. Wachendorf	421,847	Feb. 12	2076	50	973	
Mortar. Composition of matter for	M. Turley G. W. Chamberlin, and P. M. Pomeroy	434,490	Aug. 19	1602	52	1090	
Mortar-mixer	J. H. Poorbaugh	436,020	Sept. 9	986	259	52	1571
Mortar-mixing apparatus	E. D. Johnston	440,478	Nov. 11	1332	344	53	874
Mortar-mixing machine	H. A. Garvey	438,805	Oct. 21	1735	465	53	343
Mortar-mixing machine	J. H. Parkhurst	440,651	Nov. 18	1619	417	53	938
Mortar-mounting	W. Anderson	422,003	Feb. 25	2293	605	50	1024
Mortise-joint. Blind	J. A. Smith	422,843	Mar. 4	705	181	50	1272
Mortise-lock	O. R. Cooke	427,157	May 6	211	54	51	853
Mortising-machine	J. H. Blake	424,849	Apr. 1	643	170	51	125
Mortising-machine	R. S. and R. L. Greenlee	418,978	Jan. 7	503	125	50	105
Mortising-machine	M. J. Piper	429,059	May 27	3087	796	51	1449
Mortising-machines. Stop mechanism for	B. F. Crow	421,859	Feb. 18	2097	550	50	977
Mosaic work. Producing	A. H. Hettich	418,840	Jan. 7	253	69	50	60
Mosquito-bar frame	J. H. Myers	433,253	July 29	3460	893	52	700
Mosquito-bar frame	P. M. Owen	443,108	Dec. 23	2404	613	53	1757

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Mosquito-bar frame	F. C. Schwend and J. B. Wilson.....	439,256	Oct. 28	2462	660	53	487
Mosquito-bar frame, Automatic	J. Sarrazin	435,191	Aug. 26	2713	717	52	1309
Mosquito-canopies. Folding frame or support for.....	A. H. Bailey	424,256	Mar. 25	2828	756	50	1697
Mosquito-canopy	A. Miller	429,355	June 3	385	91	51	1544
Mosquito-net frame	A. C. Lottman	442,486	Dec. 9	1334	344	53	1530
Mosquito-net frame and sham-pillow holder	W. Tension	442,498	Dec. 9	1356	348	53	1534
Moth-trap	W. C. Barnard	420,490	Feb. 4	92	22	50	581
Motion and overcoming dead-centers. Mechanism for reversing	P. B. Landgraf	428,681	May 27	2521	640	51	1339
Motion. Apparatus for the transmission of rotary	A. H. Hamon	427,987	May 13	1461	370	51	1106
Motion. Apparatus for transmitting	W. C. Boone	431,030	July 1	5	1, 2	52	3
Motion. Apparatus for transmitting	W. J. M. Dobson	431,039	July 1	16	4	52	5
Motion. Apparatus for transmitting and converting	E. Wright	427,492	May 6	698	{ 175 176 }	{ 51 51 }	950
Motion. Device for converting	J. W. James	423,322	Mar. 11	1465	383	50	1422
Motion. Device for converting	S. Sloan	458,647	Oct. 21	1475	398	53	296
Motion. Device for transmitting	J. W. Eisenhuth	420,678	Feb. 4	352	93	50	632
Motion. Device for transmitting	A. F. Hillstrom	425,543	Apr. 15	1690	451	51	346
Motion. Device for transmitting	C. A. Palmquist	437,717	Oct. 7	60	19	53	14
Motion. Device for transmitting	J. T. Pedersen	443,259	Dec. 23	2675	686	53	1809
Motion. Device for transmitting	J. N. Severance	422,163	Feb. 25	2529	{ 668 669 }	{ 50 50 }	1067
Motion. Device for transmitting	J. M. Williams	419,092	Jan. 7	664	173	50	139
Motion from windmills, &c. Mechanism for converting and transmitting	M. S. Smith and G. J. Kelly	424,510	Apr. 1	108	31	51	24
Motion. Machine for converting	B. Coburn	443,132	Dec. 23	2439	624	53	1762
Motion. Machinery for transmitting and arresting	W. Lewis	421,178	Feb. 11	1119	287	50	786
Motion. Mechanism for converting	W. T. Kellogg	443,284	Dec. 23	2714	696	53	1816
Motion. Mechanism for producing intermitting	F. H. Easby	436,755	Sept. 16	2165	569	52	1801
Motion. Mechanism for transforming reciprocating into rotary	J. P. H. Gastrell	428,477	May 20	2203	556	51	1259
Motion. Mechanism for transmitting	H. E. Smith	441,984	Dec. 2	550	148	53	1371
Motion. Mechanism for transmitting rotative	W. M. Smith and J. Caldwell	427,374	May 6	518	132	51	913
Motion. Multiple-movement device for transmitting and increasing	J. A. Zerbe	426,610	Apr. 29	3310	{ 868 869 }	{ 51 51 }	681
Motion-transmitter. Electric	M. W. Dewey	439,577	Oct. 28	2955	785	53	581
Motion-transmitting device	B. F. Sammons	440,851	Nov. 18	1961	505	53	1001
Motive agents. Apparatus for distributing	V. H. Tomlinson	423,192	Mar. 11	1263	329	50	1384
Motive power and apparatus therefor. Production of	C. Tellier	439,258	Oct. 28	2465	{ 660 661 }	{ 53 53 }	487
Motive power. Apparatus for obtaining	J. Bourne	442,793	Dec. 16	1852	{ 478 479 252 253 254 255 }	{ 53 53 }	1641
Motive power. Apparatus for producing	C. Tellier	431,677	July 8	1012	{ 253 254 255 }	{ 52 52 }	208
Motive power. Apparatus with feathering-blades for obtaining	H. Avet	441,461	Nov. 25	2982	768	53	1202
Motive power. Means and apparatus for utilizing waste heat for producing	C. Tellier	439,259	Oct. 28	2466	{ 661 662 }	{ 53 53 }	488
Motor:							
See Air-motor. Pressure-motor.							
Car-motor. Pump-motor.							
Centrifugal-machine motor. Railway-motor.							
Churn-motor. Rotary motor.							
Clipping-machine motor. Sewing-machine motor.							
Current-motor. Spring-motor.							
Electric motor. Steam-motor.							
Electro-magnetic motor. Thermic motor.							
Fluid-motor. Thermo-motor.							
Gas-motor. Thermo-dynamic motor.							
Gas and petroleum motor. Tidal motor.							
Hand-motor. Traction-motor.							
Hydraulic motor. Wave-motor.							
Hydrocarbon-motor. Wave and tide motor.							
Induction-motor. Wave-power motor.							
Mechanical motor. Wind-motor.							
Petroleum or similar motor.							
Motor	L. Beck	424,451	Apr. 1	8	4	51	4
Motor	C. E. Burrows and F. E. Jones	426,432	Apr. 29	3055	800	51	631
Motor	E. Butler	427,973	Oct. 7	459	{ 129 130 }	{ 53 53 }	87
Motor	G. H. Chappell	440,913	Nov. 18	2059	532	53	1020
Motor	H. D. Deschler	441,143	Nov. 25	2443	633	53	1104
Motor	J. B. Erwin	431,567	July 8	827	266	52	173
Motor	A. Friess and J. Walzer	425,097	Apr. 8	1018	272	51	205
Motor	F. L. Gilbert	429,379	June 3	428	101	51	1553
Motor	F. J. Laun	439,162	Oct. 28	2297	{ 616 617 618 }	{ 53 53 }	457
Motor	J. S. Lester	419,051	Jan. 7	608	157	50	128
Motor	J. H. Lorimer	421,736	Feb. 18	1914	503	50	945
Motor	J. F. Matthews and W. E. Dinsmore	425,894	Apr. 15	2217	589	51	447
Motor	J. A. Peer	441,696	Dec. 2	100	27	53	1282
Motor	R. G. Ping	420,888	Feb. 4	691	177	50	693
Motor	R. Solano	424,659	Apr. 1	341	89	51	66
Motor	J. F. Weddendorf	436,930	Sept. 23	2511	657	52	1875
Motor-engine worked by oil-vapor	N. A. Otto	433,806	Aug. 5	551	143	52	864
Motor-engine worked by oil-vapor	N. A. Otto	433,807	Aug. 5	554	{ 143 144 }	{ 52 52 }	864

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Motor-engine worked by the vapor of ether or other volatile liquids.	P. de Susini	443,877	Dec. 30	3645	939	53	2006
Motor-regulator.	D. Pepper, Jr.	441,807	Dec. 2	276	75	53	1318
Motors. Automatic switch for stationary	F. B. Rae	437,662	Sept. 30	3639	951	52	2102
Motors. Brake-operating mechanism for	J. Hahn	423,555	Mar. 18	1799	474	50	1493
Mouse-trap.	H. J. Barry	429,254	June 3	214	53	51	1513
Mouse-trap.	A. T. Sullivan	421,329	Feb. 11	1337	345	50	825
Mouse-trap. Field.	H. Rippke	426,857	Apr. 29	3691	962	51	754
Movement cure. Shaking-machine for.	C. H. Liedbeck	433,011	July 29	3090	793	52	626
Mower.	W. R. Baker	425,016	Apr. 8	906	239 240	51	183
Mower.	J. I. Eavenson	423,314	Mar. 11	1448	379	50	1418
Mower.	L. M. Jones and J. Wedlake.	442,811	Dec. 16	1885	486	53	1647
Mower.	J. Kaufmann	439,278	Oct. 28	2502	670	53	494
Mower.	H. Lindstrom	427,238	May 6	332	85, 86	51	876
Mower.	P. and L. P. Lorenz	436,947	Sept. 23	2530	662 663	52	1879
Mower.	J. Macphail	423,435	Mar. 18	1625	427	50	1461
Mower.	J. I. Murray	423,942	Mar. 25	2386	635	50	1612
Mower.	O. U. Perrin	439,253	Oct. 28	2459	659	53	486
Mower.	J. A. and A. A. Peterkin	436,878	Sept. 23	2427	632 633	52	1859
Mower.	H. E. Pridmore	441,896	Dec. 2	417	111 112	53	1346
Mower and hay-tedder. Combined	D. F. Saurer	423,491	Mar. 18	1705	449 450	50	1477
Mower and hay-tedder. Combined	D. F. Saurer	438,492	Oct. 14	1238	336	53	244
Mower attachment. Center-cut.	G. W. Sturm	427,278	May 6	389	101	51	887
Mower attachment. Lawn.	Z. E. Boule	438,340	Oct. 14	1023	278	53	201
Mower attachment. Lawn.	R. R. Grimes	432,307	July 15	1992	509	52	400
Mower attachment. Lawn.	C. D. Powers, Jr.	433,029	July 29	3123	802	52	632
Mower attachment. Lawn.	I. Wagner	422,473	Mar. 4	163	44	50	1167
Mower handle. Lawn.	T. Johnston	443,855	Dec. 30	3618	931 932	53	2000
Mower. Lawn.	N. A. Batcheller	437,808	Oct. 7	210	64	53	42
Mower. Lawn.	N. A. Batcheller	437,809	Oct. 7	211	65	53	42
Mower. Lawn.	H. D. Blakemore	433,317	July 29	3549	916	52	718
Mower. Lawn.	N. S. and E. R. Bowdish.	433,318	July 29	3551	916	52	718
Mower. Lawn.	C. H. Braithwaite	435,389	Sept. 2	12	4	52	1377
Mower. Lawn.	T. Coldwell	426,984	Apr. 29	3857	1008	51	786
Mower. Lawn.	M. C. Henley	438,156	Oct. 14	745	204	53	150
Mower. Lawn.	C. E. Holmes	425,794	Apr. 15	2065	551	51	420
Mower. Lawn.	F. M. Hunt	434,787	Aug. 19	2072	542	52	1180
Mower. Lawn.	D. P. McKinney	439,172	Oct. 28	2317	622	53	460
Mower. Lawn.	L. Meyer	425,687	Apr. 15	1921	511	51	391
Mower. Lawn.	H. G. and G. C. Miller.	439,806	Nov. 4	261	66	53	659
Mower. Lawn.	J. L. Mills	436,738	Sept. 16	2122	558	52	1794
Mower. Lawn.	C. H. Paxson	425,954	Apr. 15	2324	616 617	51	467
Mower. Lawn.	A. Porter	441,970	Dec. 2	525	140 141	53	1366
Mower. Lawn.	A. L. Slager and G. E. Linn	432,092	July 15	1653	425	52	337
Mower. Lawn.	P. Thielen	439,026	Oct. 21	2086	558 559	53	411
Mower or harvester cutter.	H. Froueufeld and J. M. Price	430,472	June 17	2126	522	51	1902
Mower or harvester cutting apparatus.	C. W. Crannell	428,077	May 20	1594	405	51	1141
Mowers and reapers. Endless cutter for	J. O. Brown	431,799	July 8	1214	302 303	52	246
Mowers and reapers. Guard-finger for cutter-bars of	J. O. Brown	420,768	Feb. 4	472	125	50	656
Mowers. Combined grass receiver and dumper for lawn.	J. P. Blondeau	428,371	May 20	2042	514	51	1230
Mowers. Cutting attachment for lawn.	C. G. Bockus	431,836	July 8	1269	319	52	257
Mowers. Grass-catching attachment for lawn.	W. C. McQuillen	432,065	July 15	1612	413	52	330
Mowers. Grass-gathering tray for lawn.	L. Sutton	440,518	Nov. 11	1400	362	53	886
Mowers. Grass-receiver for lawn.	D. Johnson	429,629	June 10	797	294	51	1636
Mowers. Grass-receptacle for lawn.	C. Buchmüller	428,074	May 20	1588	403	51	1141
Mowers. Grass-receptacle for lawn.	F. F. Kelley	421,370	Feb. 11	1389	358	50	834
Mowing and reaping machine.	W. H. Laguire	431,522	July 1	754	188	52	151
Mowing and reaping machine.	P. Pierce	438,424	Oct. 14	1147	310	53	225
Mowing and reaping machines. Pitman-holder for	G. H. Bartlett	427,536	May 13	775	192 193	51	974
Mowing-machine.	D. O. Abel	425,968	Apr. 22	2359	625	51	483
Mowing-machine.	B. Branson	436,912	Sept. 23	2484	649 650	52	1870
Mowing-machine.	J. J. Courtney	442,573	Dec. 9	1477	379 380	53	1559
Mowing-machine.	R. H. Dixon	436,825	Sept. 23	2290	605	52	1836
Mowing-machine.	L. Gray and E. Estep	427,857	May 13	1258	318	51	1068
Mowing-machine.	J. W. James	441,069	Nov. 18	2310	598	53	1069
Mowing-machine.	S. V. Kennedy	437,696	Oct. 7	25	8	53	8
Mowing-machine.	D. C. Markham	423,936	Mar. 25	2380	633	50	1611
Mowing-machine.	J. A. Peer	428,018	May 13	1507	382	51	1116
Mowing-machine.	J. Phillips	421,430	Feb. 18	1474	383	50	859
Mowing-machine.	J. Pine	420,098	Jan. 28	2183	575 576 577	50	462
Mowing-machine.	G. M. Sanford	422,162	Feb. 25	2528	668	50	1067
Mowing-machine.	A. Stevens	430,791	June 24	2653	651	51	2012
Mowing-machine cutter.	G. A. Hall	426,801	Apr. 29	3611	942	51	738
Mowing-machine finger-bar.	A. B. Smith	441,337	Nov. 25	2776	718	53	1163
Mowing-machine frame.	G. H. Bartlett	427,537	May 13	776	193	51	974
Mowing-machine frame.	R. H. Dixon	426,248	Apr. 22	2768	725	51	564
Mowing-machine grinding attachment.	C. Beyer	432,660	July 22	2526	648	52	511
Mowing-machines. Grinding attachment for.	C. A. Kellogg	419,527	Jan. 14	1308	350	50	274

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Mowing-machines. Tilting device for.....	G. H. Bartlett.....	441,463	Nov. 25	2085	768	53	1203
Mowing or reaping machines. Sharpener for knives of endless cutter.....	J. O. Brown.....	420,769	Feb. 4	473	125	50	656
Mucilage-moistener.....	J. Dawson.....	432,605	July 22	2423	625	52	493
Mucilage or paste distributor.....	M. J. Palson.....	427,897	May 13	1333	336	51	1081
Muffle-furnace.....	J. B. Archer.....	430,414	June 17	2036	502	51	1885
Muffler.....	G. W. Shipman.....	425,637	Apr. 15	1844	493	51	376
Muffler. Steam.....	H. Guelis.....	419,940	Jan. 21	1938	510	50	406
Muffler. Steam.....	E. S. Hildebrandt.....	422,213	Feb. 25	2608	690	50	1062
Multiple-circuit closer.....	H. J. Haight.....	442,882	Dec. 16	2016	518 519	53	1672
Multiple-cylinder engine.....	C. L. Snyder.....	423,393	Mar. 11	1564	411 412	50	1441
Multiple slip.....	L. H. Rogers.....	419,359	Jan. 14	1076	284	50	227
Multiple-switch-board.....	M. G. Kellogg.....	424,310	Mar. 25	2918	779	50	1714
Multiple-switch-board.....	C. E. Scribner.....	427,917	May 13	1361	343	51	1086
Multiple-switch-board apparatus.....	J. J. Carty.....	427,155	May 6	207	53	51	852
Multiple-switch-board. Divided.....	J. J. Carty.....	427,154	May 6	205	53	51	851
Multiple-switch-board system.....	C. E. Scribner.....	442,143	Dec. 9	810	218 219	53	1428
Multiple-switch-board system.....	C. E. Scribner.....	442,145	Dec. 9	818	219 220	53	1430
Multiple-switch-board system.....	E. P. Warner.....	433,636	Aug. 5	283	76	52	811
Multiple-switch-board system. Single-cord.....	C. E. Scribner.....	428,698	May 27	2543	645 646	51	1343
Multiple-switch-board system. Three-wire.....	E. P. Warner.....	428,189	May 20	1751	443	51	1172
Multiple-switch-board test-circuit.....	C. E. Scribner.....	427,120	May 6	149	39, 40	51	841
Multiple-switch-board test-circuit.....	C. E. Scribner.....	427,623	May 13	898	226	51	998
Multiple-switch-board test-circuit.....	C. E. Scribner.....	427,624	May 13	900	226	51	998
Multiple-switch-board test-circuit.....	C. E. Scribner.....	433,047	July 29	3151	810	52	638
Multiple-switch-board test system.....	C. E. Scribner.....	427,621	May 13	895	225	51	997
Multiple-switch-board testing apparatus.....	C. E. Scribner.....	427,121	May 6	151	40	51	842
Multiple switch-boards. Transfer-connecting apparatus for.....	E. M. Barton.....	431,962	July 8	1449	367	52	292
Music-album and leaf-turner.....	W. H. J. Devine.....	420,229	Jan. 28	2404	640	50	503
Music-boxes. Feed mechanism for.....	E. Malke.....	427,097	May 6	110	29, 30	51	833
Music-boxes, &c. Regulator for motors for.....	L. Campiche.....	442,609	Dec. 16	1537	397	53	1579
Music-chart.....	J. J. Baguyle.....	442,303	Dec. 9	1048	275	53	1474
Music-belder.....	T. R. Budd.....	432,859	July 22	2834	726	52	572
Music-belder.....	J. F. Miller.....	423,789	Mar. 18	2150	567	50	1560
Music-leaf holder.....	F. C. Watson.....	439,987	Nov. 4	553	146	53	716
Music-leaf turner.....	T. Allsop and E. Nice.....	426,899	Apr. 29	3745	978	51	765
Music-leaf turner.....	F. F. Asmus.....	429,711	June 10	922	226	51	1660
Music-leaf turner.....	L. L. Bridge.....	442,009	Dec. 2	594	161	53	1379
Music-leaf turner.....	G. B. Crews.....	442,596	Dec. 9	1511	388 389	53	1566
Music-leaf turner.....	T. H. De Loss and J. M. Mears.....	432,120	July 15	1701	437	52	346
Music-leaf turner.....	T. M. and T. J. Eynon.....	442,367	Dec. 9	1149	299 300	53	1492
Music-leaf turner.....	P. Jung.....	425,178	Apr. 8	1157	305	51	224
Music-leaf turner.....	S. Leiry.....	439,759	Nov. 4	194	50, 51	53	646
Music-leaf turner.....	J. Maret.....	443,626	Dec. 30	3262	840	53	1931
Music-leaf turner.....	D. Schuyler.....	430,302	June 17	1869	459 460	51	1852
Music-leaf turner.....	C. L. Service.....	426,146	Apr. 22	2024	668	51	534
Music notation.....	E. F. Clemens.....	438,429	Oct. 14	1152	312	53	226
Music-rack.....	D. L. Rice.....	427,614	May 13	886	223	51	995
Music-rollers. Machine for preparing.....	H. B. Morris.....	442,130	Dec. 9	791	213 214	53	1424
Music-sheet cabinet.....	G. W. Newberry.....	429,769	June 10	999	245	51	1675
Music-sheet for mechanical musical instruments.....	F. E. P. Ehrlich.....	425,935	Apr. 15	2290	606	51	460
Music stand and portfolio.....	V. Moore. (Reissue).....	11,066	Mar. 11	1581	414	50	1445
Music stand and rack.....	C. S. Stevens.....	430,240	June 17	1739	433 434	51	1827
Music-stands. Instrument-holder for.....	G. H. Foley.....	432,305	July 15	1989	508	52	399
Musical box.....	C. A. Roepke.....	443,114	Dec. 23	2414	616 617	53	1758
Musical instrument.....	L. V. Barnard.....	419,625	Jan. 21	1456	391	50	311
Musical instrument.....	L. Campiche.....	418,681	Jan. 7	21	6	50	6
Musical instrument.....	T. F. Crane and W. R. Withers.....	425,987	Apr. 22	2387	633	51	488
Musical instrument.....	J. A. Mackenzie.....	440,601	Nov. 11	1541	397	53	913
Musical instrument.....	M. J. N. Poussot.....	442,913	Dec. 16	2072	532	53	1683
Musical instrument.....	S. Tanaka.....	443,305	Dec. 23	2757	707	53	1824
Musical instrument. Automatic.....	J. M. Farmer.....	443,909	Dec. 30	3696	946	53	2015
Musical-instrument head.....	J. Bohmann.....	427,962	May 13	1427	360	51	1099
Musical instrument. Mechanical.....	F. E. P. Ehrlich.....	433,935	Aug. 12	739	193	52	919
Musical instrument. Stringed.....	A. Shaeffer.....	421,033	Feb. 11	913	236	50	746
Musical instrument. Stringed.....	G. W. Van Dusen.....	440,979	Nov. 18	2163	560	53	1040
Musical instrument. Stringed.....	I. L. Ximenes.....	439,230	Oct. 28	2421	649	53	479
Musical instrument. Wind.....	J. Heald.....	434,270	Aug. 12	1258	326	52	1011
Musical instruments. Book-holder for.....	W. J. Howell.....	431,356	July 1	492	122	52	100
Musical instruments. Key-board attachment for.....	C. De Vilbiss.....	440,995	Nov. 18	2185	565	53	1045
Musical instruments. Key-board for.....	E. H. Hefinghoff.....	426,812	Apr. 29	3627	946	51	741
Musical instruments. Mouth-piece for wind.....	H. J. Distin.....	419,424	Jan. 14	1173	311	50	247
Musical instruments. Music-sheet for mechanical.....	G. H. Chinneck.....	443,252	Dec. 23	2661	683	53	1806
Musical instruments. String for.....	C. F. Albert.....	443,809	Dec. 30	3558	912	53	1988
Musical instruments. Tail-piece for.....	W. J. Abel.....	421,466	Feb. 18	1524	395	50	869
Musical-key indicator.....	W. F. Donovan.....	428,806	May 27	2700	625	51	1373
Musical notation.....	C. Clements-Kropp.....	429,841	June 10	1112	274	51	1696
Musical-scale register.....	G. B. W. Bliss.....	426,229	Apr. 22	2744	719	51	559
Musical sounds by electricity. Method of and apparatus for producing.....	G. Breed.....	435,679	Sept. 2	472	124 125	52	1466
Musical wind-instrument.....	C. G. Conn.....	436,696	Sept. 16	2061	540	52	1781
Musicians. Exercising device for.....	E. S. Bonelli.....	440,837	Nov. 18	1939	498	53	997

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Musicians. Mechanical indicator for	J. McTammany	422,964	Mar. 11	917	240	50	1319
Mustache-guard	I. G. Gross	441,155	Nov. 25	2457	637	53	1107
Mustache-guard	W. P. Hellings	426,723	Apr. 29	3495	914	51	715
Mustache-guard	R. P. Hollinshead	435,748	Sept. 2	566	151	52	1484
Mustache-guard for drinking-vessels	L. S. Ware	441,911	Dec. 2	438	117	53	1351
Mustache-holder	J. H. Booth	438,055	Oct. 7	591	161	53	112
Mustache-shield	H. B. Chandler	440,541	Nov. 11	1436	370	53	894
Mute for stringed instruments	J. H. Amme	433,192	July 29	3373	872	52	681
Muzzle	G. W. Johnson	435,308	Aug. 26	2896	767	52	1343
Muzzle	H. Sherrill	430,547	June 17	2233	548	51	1922
Muzzle for horses	H. Lowe	432,317	July 15	2006	513	52	402
Muzzle. Horse-	B. S. Seaman	421,109	Feb. 11	1020	261	50	766
Nail:							
See Box-corner nail.	Picture-nail.						
Cnt nail.	Screw-nail.						
Heel-nail.							
Nail.	J. Haish	428,091	May 20	1612	410	51	1145
Nail.	W. V. Kay	418,844	Jan. 7	293	71	50	62
Nail and tack driving machine	C. S. Gooding and S. W. Ladd	423,920	Mar. 25	2353	620	50	1606
Nail-blank plate	M. Chase	436,401	Sept. 16	1507	492	52	1695
Nail-driving machine	C. S. Gooding and S. W. Ladd	441,482	Nov. 25	3008	775	53	1207
Nail-driving tool	W. B. Brady	432,113	July 15	1687	433	52	344
Nail-extractor	M. D. Converse	432,019	July 15	1542	392	52	316
Nail-head, &c	J. B. Perraud and W. Bechtold	440,364	Nov. 11	1130	290	53	836
Nail-head. Ornamental.	O. F. Wegener	442,838	Dec. 16	1933	497	53	1657
Nail-machine	B. Yoch	423,017	Mar. 11	994	262	50	1333
Nail machine. Automatic cut-	L. E. Curtis	424,925	Apr. 1	757	201	51	147
Nail machine. Wire-	W. L. Clonse	422,918	Mar. 11	847	219	50	1306
Nail machine. Wire-	J. B. Hastings	419,944	Jan. 21	1944	512	50	407
Nail machine. Wire-	J. A. Horton	423,254	Mar. 11	1349	351	50	1400
Nail machine. Wire-	P. J. Kent and W. F. Bancroft	439,665	Nov. 4	61	16, 17	53	619
Nail machine. Wire-	F. Phillips	433,961	Aug. 12	778	204	52	918
Nail machine. Wire-	H. E. Piggott	429,950	June 10	1268	314	51	1726
Nail machine. Wire-	A. J. Sweeney	435,256	Aug. 26	2799	742	52	1327
Nail-making machine	L. Goddu	443,077	Dec. 16	2330	595	53	1735
Nail or spike	W. Taylor	423,535	Mar. 18	1774	466	50	1489
Nail or tack attachment	J. C. Tilley	429,071	May 27	3100	600	51	1451
Nail-plate feeder	J. M. Edson	420,492	Feb. 4	93	22, 23	50	582
Nail-plate feeder	R. Hersey	427,866	May 13	1272	321	51	1070
Nail-pointing machine. Cut-	B. Yoch	423,366	Mar. 11	1520	399	50	1433
Nail-puller	D. and E. H. Davis	426,491	Apr. 29	3141	825	51	648
Nails. Apparatus for the manufacture of	P. A. Nilsson	438,557	Oct. 14	1335	361	53	264
Nails. Machine for barbing wire.	J. M. Schiltz	424,227	Mar. 25	2792	745	50	1691
Nails. Machine for making corrugated	A. Samson	419,973	Jan. 21	1985	521	50	415
Nails. Machine for the manufacture of horseshoe and other	P. A. Nilsson	438,556	Oct. 14	1334	522	53	263
Nails. Manufacture of	J. W. Ellis	438,371	Oct. 14	1068	291	53	210
Nails. Manufacture of hook-	S. Taylor	421,019	Feb. 11	890	230	50	741
Nailing implement. Hand	J. Jessop	428,105	May 20	1641	416	51	1152
Nailing-machine	W. S. Fitzgerald	419,762	Jan. 21	1655	440	50	349
Nailing-machine	L. Goddu	440,805	Nov. 18	1878	483	53	986
Nailing-machine	J. Hyslop, Jr	429,527	June 3	641	157	51	1594
Nailing-machine	J. Hyslop, Jr	429,528	June 3	646	158	51	1595
Nailing-machine	J. E. Matzeliger	421,954	Feb. 25	2227	585	50	1011
Nailing-machine	W. Ross and J. Bilbie	428,255	May 20	1862	467	51	1194
Nailing-machine	A. H. Wolcott	437,073	Sept. 23	2702	705	52	1914
Nailing machine. Box-	J. Casey	432,477	July 15	2232	577	52	448
Nailing-machine jack	P. H. Pratt	432,074	July 15	1628	579	52	333
Nailing-machines. Driving-spring for	E. L. Howard	434,274	Aug. 12	1963	417	52	1012
Nailing-machines. Pointing mechanism for	E. L. Howard	436,274	Apr. 22	2802	736	51	572
Nailing moldings in panels. Device for.	J. N. Hubbard	440,808	Nov. 18	1882	484	53	987
Nap-bats. Apparatus for forming	T. F. Judd and C. A. Mallory	424,791	Apr. 1	562	149	51	109
Napkin and towel supporter	A. J. Adamson	434,857	Aug. 19	2164	507	52	1199
Napkin-holder	J. E. Church	441,282	Nov. 25	2695	639	53	1148
Napkin-supporter	E. A. Foster	433,340	July 29	3578	707	52	723
Nautical magnetic tracer apparatus	F. Aramburu	437,169	Sept. 23	2878	748	52	1945
Neck-wear retaining-pin	G. Selowsky	424,137	Mar. 25	2674	711	50	1667
Neckscarf	S. Adler	430,360	June 17	1966	483	51	1871
Neckscarf	G. L. Dale	437,579	Sept. 30	3527	920	52	2080
Neckscarf	L. Datner	429,806	June 10	1055	259	51	1684
Neckscarf	W. A. Laverty	433,293	July 29	3514	907	52	711
Necktie	P. Hess	435,828	Sept. 2	692	185	52	1509
Necktie-fastener	M. N. Bailey	438,048	Oct. 7	582	158	53	110
Necktie-fastener	H. H. Baker, Jr	439,371	Oct. 28	2655	707	53	522
Necktie-fastener	H. Beichling	422,283	Feb. 25	2725	717	50	1103
Necktie-fastener	T. K. Conway	425,865	Apr. 15	2180	580	51	440
Necktie-fastener	M. Cummings and L. Greenwald	437,578	Sept. 30	3526	920	52	2080

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Necktie-fastener	J. D. Ennes	436,128	Sept. 9	1166	304	52	1603
Necktie-fastener	J. M. Guilbert	441,617	Nov. 25	3220	831	53	1250
Necktie-fastener	J. B. Pendergast	434,836	Aug. 19	2138	560	52	1194
Necktie-pin	J. M. Guilbert	430,940	June 24	2886	709	51	2056
Needle	O. H. Blood	428,263	May 20	1875	471	51	1196
Needle-case	R. L. Wilburn	437,543	Sept. 30	3483	909	52	2071
Needle-spray and shower bath	G. Taylor	430,257	June 17	1768	439	51	1833
Needle-threader	C. E. Van Norman	424,518	Apr. 1	116	33	51	26
Negative. Direct-printed adhesive	J. Baynes	418,675	Jan. 7	13	4	50	5
Negative-holder	E. Gillis	425,420	Apr. 15	1505	404	51	310
Negatives. Device for holding sensitized paper in contact with	W. Read, Jr.	425,958	Apr. 15	2330	618	51	469
Nest. Hen's	F. W. Bridenbecker	429,008	May 27	3004	771	51	1434
Nest. Hen's	J. H. Manlove	436,249	Sept. 9	1350	352	52	1639
Net. Fly	R. H. Wagner	419,901	Jan. 21	1883	495	50	395
Net. Fly	A. Wabra	439,911	Nov. 4	428	110	53	691
Net. Folding landing-	C. S. Hebard	440,568	Nov. 11	1480	382	53	901
Net for horses or cattle. Fly	J. Monk	430,742	June 24	2574	{ 630 631 }	51	1996
Net frame. Landing-	T. H. Chubb	422,502	Mar. 4	201	55	50	1175
Net puller. Automatic gill	R. O'Neill	423,627	Mar. 18	1904	{ 502 503 504 505 }	50	1513
Newspaper-vending machine	G. A. Welch	437,407	Sept. 30	3257	849	52	2025
Night-soil absorbent	C. W. Doughty	429,190	June 3	128		51	1495
Nippers	T. G. Hall	419,666	Jan. 21	1529	407	50	324
Nippers	G. W. Hubbard	441,844	Dec. 2	339	90	53	1330
Nipple-holder	G. H. Aschenbach	429,832	June 10	1098	271	51	1693
Nipple-holder	D. A. Holland	441,007	Nov. 18	2202	569	53	1048
Nipple. Nursing	J. B. Fowler	420,651	Feb. 4	323	83	50	627
Nipple. Nursing-bottle	A. C. Eggers. (Reissue)	11,086	June 17	2333	572	51	1942
Nipple. Nursing-bottle	A. C. Eggers. (Reissue)	11,087	June 17	2334	572	51	1942
Nitro-cellulose and preparing the same. Insoluble	J. R. France	420,446	Feb. 4	29		50	570
Nitro-cellulose and process of manufacture. Soluble	J. R. France	420,445	Feb. 4	26		50	570
Nitro-cellulose. Machine for the continuous manufacture of	G. M. Mowbray	434,288	Aug. 12	1283	333	52	1016
Nitro-cellulose. Manufacturing	G. M. Mowbray	434,287	Aug. 12	1280	333	52	1016
Nitro-cellulose, &c. Manufacturing thin sheets of	E. N. Todd	428,654	May 27	2465	627	51	1328
Nitro-cellulose. Preparing	G. M. Mowbray	443,105	Dec. 23	2401		53	1756
Non-conducting covering	H. W. Johns	433,471	Aug. 5	51	16	52	766
Non-conducting covering	H. W. Johns	433,472	Aug. 5	51	16	52	766
Non-conducting covering	H. W. Johns	433,473	Aug. 5	52	16	52	766
Non-conducting covering	H. W. Johns	441,165	Nov. 25	2475		53	1110
Non-conducting covering	J. L. Stillman	427,928	May 13	1376	348	51	1089
Non-conducting covering	H. W. Johns	441,163	Nov. 25	2474		53	1110
Non-conducting sheet or mass	F. Sauter	426,572	Apr. 29	3258	855	51	671
Nose-bag	I. Fisher	440,025	Nov. 4	602	160	53	726
Nozzle	J. Fulmer	439,499	Oct. 28	2844	757	53	559
Nozzle. Exhaust	Q. J. Hoke	436,527	Sept. 16	1781	470	52	1730
Nozzle. Exhaust-steam	C. D. Oatman	430,746	June 24	2581	632	51	1997
Nozzle for bags or pouches	J. L. and H. K. Potter	423,390	Mar. 11	1553	408	50	1438
Nozzle for street-sprinkling carts	W. S. Bacon and S. L. Holsinger	441,048	Nov. 18	2265	527	53	1060
Nozzle-sprayer	E. Mertz	434,518	Aug. 19	1641	430	52	1097
Nozzle. Spraying	W. Wainwright	442,762	Dec. 16	1-01	467	53	1630
Nozzle. Vaporizing spray	J. H. Reinhardt	425,580	Apr. 15	1742	468	51	356
Numbering head. Consecutive	H. C. Hadstate and S. J. Martin	443,517	Dec. 30	3085	795	53	1698
Numbering machine	J. H. Reinhardt	425,581	Apr. 15	1744	468	51	356
Numbering machine. Consecutive	C. Spielmann	436,109	Sept. 9	1140	298	52	1599
Numbering machine. Consecutive	J. R. Carter. (Reissue)	11,091	June 24	3019	741	51	2081
Numbering machine. Paper	W. P. Uhlinger	439,446	Oct. 28	2766	737	53	544
Numbering machines. Governing device for	J. L. Tischler, M. Gaebel, and M. Lengyel	436,444	Sept. 16	1666	438	52	1707
Nursery-chair	J. M. Thorp	431,788	July 8	1189	298	52	241
Nut. Adjustable axle	J. T. Harker	433,730	Aug. 5	427	109	52	839
Nut. Axle	H. C. Boedicker	426,656	Apr. 29	3383	888	51	694
Nut-blanks. Machine for making	G. H. Webb	433,666	Aug. 5	334	86	52	821
Nut-chamfering machine	T. Holmes	425,428	Apr. 15	1522	407	51	314
Nut-cracker	G. Dunham	420,931	Feb. 11	761	{ 197 198 }	50	717
Nut-finishing machine	J. Swan	435,079	Aug. 26	2549	672	52	1278
Nut for axles. Lock	W. J. Keep	421,723	Feb. 18	1902	499	50	942
Nut for mica-frame bolts	T. Mills	422,818	Mar. 4	657	{ 168 169 }	50	1263
Nut-kernels. Machine for granulating	J. H. Allen	435,786	Sept. 2	630	166	52	1496
Nut-lock	L. Anderson	419,596	Jan. 14	1410	377	50	296
Nut-lock	E. F. Besse	438,748	Oct. 21	1658	445	53	328
Nut-lock	I. L. Blakeslee	437,327	Sept. 30	3123	817	52	1999
Nut-lock	F. O. Boswell	432,014	July 15	1537	390	52	315
Nut-lock	W. Brock and F. W. Vetter	424,853	Apr. 1	649	172	51	126
Nut-lock	C. Brown	424,457	Apr. 1	15	6	51	6
Nut-lock	J. A. Bryan	427,040	May 6	12	4	51	813
Nut-lock	J. C. Clifford	431,252	July 1	333	82	52	67
Nut-lock	C. C. Coleman	420,294	Jan. 28	2505	664	50	521
Nut-lock	F. W. Collins	423,738	Mar. 18	2078	547	50	1545
Nut-lock	R. Conway	423,028	Mar. 11	1009	265	50	1336
Nut-lock	W. T. Cozart	441,749	Dec. 2	188	49	53	1299
Nut-lock	J. Davis	419,322	Jan. 14	1017	269	50	215
Nut-lock	A. A. Dickie	440,769	Nov. 18	1823	470	53	976
Nut-lock	J. Dickson	421,910	Feb. 25	2169	569	50	1001
Nut-lock	J. R. Dobson and J. D. Peirson	422,337	Feb. 25	2816	743	50	1120
Nut-lock	L. A. Elster, E. Young, and J. E. Knapp	419,844	Jan. 21	1793	474	50	375
Nut-lock	A. C. Fletcher	443,911	Dec. 30	3698	947	53	2015
Nut-lock	L. L. Frierson	431,966	July 8	1457	369	52	293

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Nut-lock	S. Gissinger	442,970	Dec. 16	2153	554	53	1700
Nut-lock	I. J. Griffin	443,675	Dec. 30	3344	861	53	1946
Nut-lock	T. C. Harris	426,270	Apr. 22	2798	735	51	571
Nut-lock	W. Harrison	430,802	June 24	2670	655	51	2015
Nut-lock	I. C. Hawes	438,922	Oct. 21	1932	514	53	379
Nut-lock	W. K. Hawk	422,346	Feb. 25	2828	746	50	1123
Nut-lock	C. J. Hill	435,832	Sept. 2	697	186	52	1510
Nut-lock	J. Howard	433,128	July 29	3282	845	52	662
Nut-lock	I. S. Humbert	418,949	Jan. 7	468	116	50	98
Nut-lock	D. K. Jackman	434,933	Aug. 26	2338	618	52	1238
Nut-lock	G. M. Kifer	426,387	Apr. 22	2978	780	51	608
Nut-lock	J. and C. Kramer	439,279	Oct. 28	2505	671	53	494
Nut-lock	R. Marshall	422,027	Feb. 25	2323	613	50	1030
Nut-lock	W. McCarthy	431,705	July 8	1068	267	52	217
Nut-lock	R. McDonah	421,358	Feb. 11	1374	355	50	332
Nut-lock	W. C. McLimans	421,960	Feb. 25	2234	587	50	1013
Nut-lock	W. McQuiston	427,479	May 6	681	171	51	946
Nut-lock	J. A. Mitsch	442,589	Dec. 9	1501	386	53	1564
Nut-lock	A. R. Moseley and C. Benbon	439,540	Oct. 28	2900	771	53	570
Nut-lock	A. F. Pritschau	430,404	June 17	2026	499	51	1883
Nut-lock	E. R. Procter	427,611	May 13	883	222	51	995
Nut-lock	A. R. Pullin	422,250	Feb. 25	2671	705	50	1094
Nut-lock	J. Putman	423,441	Mar. 18	1633	429	50	1463
Nut-lock	W. Rayner	425,457	Apr. 15	1566	420	51	322
Nut-lock	D. E. Reagan	436,380	Sept. 16	1566	411	52	1690
Nut-lock	L. H. Redfield	441,194	Nov. 25	2518	651	53	1119
Nut-lock	W. C. Roby	442,642	Dec. 16	1580	409	53	1588
Nut-lock	A. Simon	432,572	July 22	2382	614	52	485
Nut-lock	S. F. Stever	434,005	Aug. 12	833	219	52	927
Nut-lock	J. M. Telfer	441,990	Dec. 2	560	151	53	1373
Nut-lock	C. H. Thomas	435,126	Aug. 26	2618	693	52	1291
Nut-lock	C. A. Thompson	439,754	Nov. 4	184	48	53	644
Nut-lock	P. C. Thompson	424,836	Apr. 1	629	165	51	122
Nut-lock	B. E. Tilden	428,769	May 27	2680	679	51	1369
Nut-lock	C. D. Tisdale	439,212	Oct. 28	2388	642	53	474
Nut-lock	J. S. Trimble and W. M. Kirkpatrick	428,183	May 20	1745	441	51	1171
Nut-lock	A. C. Vaughan	423,193	Mar. 11	1265	329	50	1385
Nut-lock	A. C. Vaughan	431,296	July 1	397	100	52	81
Nut-lock	J. W. Watson and R. F. Randolph	430,715	June 24	2527	619	51	1987
Nut-lock	T. F. Wells	429,785	June 10	1025	251	51	1679
Nut-lock	W. Wells	434,574	Aug. 19	1723	451	52	1113
Nut-lock	J. G. Wenninger	427,718	May 13	1046	262	51	1027
Nut-lock	J. H. Williams	423,890	Mar. 18	2299	606	50	1589
Nut-lock	W. M. Wotton	441,224	Nov. 25	2575	667	53	1129
Nut-lock-making machine.	W. Dunn	420,266	Jan. 28	2464	654	50	513
Nut-locks. Making	J. C. Richardson	432,061	July 15	1640	420	52	335
Nut-machine	G. J. Forrey	432,522	July 22	2307	597	52	470
Nut-making machine	G. Dunham	436,172	Sept. 9	1231	321	52	1615
Nut. Screw.	G. H. Alton	422,361	Mar. 4	1	1	50	1137
Nut. Screw.	C. C. Bradley	431,324	July 1	438	108	52	90
Nut-shell-severing machine	G. W. Woodside	442,657	Dec. 16	1599	413	53	1592
Nut-tapping machine	F. S. Cook	438,605	Oct. 21	1412	382	53	284
Nut. Top-prop.	A. Searls	443,799	Dec. 30	3537	907	53	1983
Nut-wrench	B. and G. E. Clow	436,073	Sept. 9	1078	279	52	1588
Nut-wrench	D. Steiner	424,583	Apr. 1	227	61	51	46
Nut-wrench	B. F. Stockford	431,081	July 1	78	19	52	18
Nut-wrench and tool. Combined	W. H. Huston	439,071	Oct. 21	2157	578	53	424
Nut-wrench. Ratchet	E. P. Justice	429,034	May 27	3046	786	51	1442
Nuts for screw-bolts. Manufacture of lock-	A. B. Ibbotson	426,185	Apr. 22	2680	703	51	545
Nuts of tire-bolts. Machine for manipulating the	J. R. Stunkard	439,257	Oct. 28	2463	660	53	487
Oar	J. V. D. Eldredge	435,410	Sept. 2	48	16	52	1384
Oar. Bow-facing	J. T. Anderson	420,925	Feb. 11	753	195	50	715
Oar. Bow-facing	J. H. Stewart	419,898	Jan. 21	1879	494	50	394
Oar-lock	J. A. Bailey	421,806	Feb. 18	2006	529	50	961
Oar-lock	L. F. Holz	429,919	June 10	1225	303	51	1718
Oar-lock	G. N. Spaulding and C. H. Eaton	426,743	Apr. 29	3527	920	51	732
Oar or paddle. Submerged folding	J. G. Dice and G. O. Houck	427,842	May 13	1234	312	51	1063
Oat-huller	L. C. Dibert	418,865	Jan. 7	325	79	50	68
Oats or cotton-seed. Machine for hulling	M. W. Leonhardt	425,331	Apr. 8	1371	366	51	276
Obstetrical apparatus	W. S. Hall	439,399	Oct. 28	2698	718	53	531
Obstetrical forceps	J. R. Brown	424,702	Apr. 1	411	108	51	81
Obstetrical forceps	A. B. Lyman	441,427	Nov. 25	2920	753	53	1192
Obstetrical forceps	J. N. Reimers	424,689	Apr. 1	388	103	51	76
Ocean-signal	W. Thompson and A. Gartner	420,217	Jan. 28	2384	634	50	499
Odometer	J. Paoli	442,388	Dec. 9	1177	306	53	1498
Odometer	A. W. Slayton and F. J. Reinhold	430,443	June 17	2074	512	51	1892
Odometer	A. Wareham	441,520	Nov. 25	3059	787	53	1218
Office-indicator	H. B. Ellicott and C. A. Higinbottom	435,808	Sept. 2	665	175	52	1503
Oil. Apparatus for testing the burning qualities of.	F. W. Arvine	431,795	July 8	1207	301	52	244
Oil as fuel. Apparatus for burning hydrocarbon	J. P. Swift	431,237	July 1	315	77	52	64
Oil-burner	E. M. Arnold	433,639	Aug. 5	289	77	52	813
Oil-burner	J. F. Beals	422,329	Feb. 25	2799	736	50	1118
Oil-burner	C. H. Boeck	442,304	Dec. 9	1050	276	53	1474
Oil-burner	J. J. Busenbenz	429,302	June 3	301	71	51	1527
Oil-burner	N. S. Clement	429,755	June 10	982	241	51	1672
Oil-burner	J. F. Coates	443,477	Dec. 23	3027	345	53	1877
Oil-burner	W. N. Graves	419,515	Jan. 14	1293	378	50	271

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Oil-burner	M. Hathaway	428,096	May 20	1623	412	51	1148
Oil-burner	G. R. Moore	428,759	May 27	2635	667	51	1361
Oil-burner	W. N. Robison	438,645	Oct. 21	1473	398	53	296
Oil-burner	G. P. Way	436,816	Sept. 23	2224	602	52	1833
Oil-burner	C. F. Wood	429,588	June 3	737	177	51	1614
Oil burner. Fuel-	C. O. Wilder	429,205	June 3	150	36	51	1500
Oil-burner. Injector.	W. M. Jennings	422,222	Feb. 25	2620	693	50	1025
Oil-burner. Injector.	H. L. Marbach	419,020	Jan. 7	565	142	50	119
Oil-burner. Injector.	J. B. Moore	426,040	Apr. 22	2460	650	51	501
Oil-burner. Injector.	E. H. Thompson	430,549	June 17	2235	548	51	1922
Oil-can	N. H. Barnes	433,613	Aug. 5	256	68	52	806
Oil-can	C. L. Bellamy	438,396	Oct. 14	1103	300	53	217
Oil-can	A. Gralike	432,870	July 22	2855	730	52	576
Oil-can	C. E. Herman	428,775	May 27	2656	674	51	1364
Oil-can	J. W. Jackson	421,282	Feb. 11	1263	326	50	812
Oil-can	J. M. N. Jay	423,164	Mar. 11	1228	319	50	1377
Oil-can	D. E. Johnson	432,736	July 22	2646	676	52	535
Oil-can	M. Jolly	433,244	July 29	3444	890	52	697
Oil-can	P. J. Moore	437,865	Oct. 7	292	88	53	57
Oil-can	J. D. Newton	440,188	Nov. 11	853	219	53	766
Oil-can	O. Piper	429,951	June 10	1270	314	51	1726
Oil-can	J. Rau	423,812	Mar. 18	2178	576	50	1565
Oil-can	J. A. Raleigh	442,638	Dec. 16	1575	407	53	1587
Oil-can	F. B. Smith	440,205	Nov. 11	879	226	53	791
Oil-can	E. T. Summer	434,211	Aug. 12	1160	302	52	992
Oil can and filler	E. W. Luce	420,812	Feb. 4	558	143	50	670
Oil-can attachment	C. J. Hill	443,140	Dec. 23	2462	630	53	1766
Oil-can. Safety	G. W. Cook	432,229	July 15	1864	479	52	377
Oil-can stand	M. E. Spofford	433,966	Aug. 12	788	206	52	919
Oil-can vent	D. G. Stone	439,983	Nov. 4	549	145	53	714
Oil-cans or lamp-fillers. Stopper for	D. G. Stone	439,984	Nov. 4	550	145	53	715
Oil-cup	C. W. Booth and T. Brabson	433,069	July 29	3181	819	52	643
Oil-cup	C. L. Burbeck	433,849	Aug. 5	610	159	52	875
Oil-cup	E. M. Grace	419,436	Jan. 14	1187	315	50	250
Oil-cup	J. S. Hall	427,312	May 6	433	112	51	897
Oil-cup	J. T. Hayden	425,031	Apr. 8	927	247	51	188
Oil-cup	W. M. Herrick	440,771	Nov. 18	1825	470	53	976
Oil-cup	E. Lunkenheimer	435,607	Sept. 2	345	96	52	1441
Oil-cup	J. N. Patton	441,376	Nov. 25	2836	732	53	1174
Oil-cup	T. Pepton	433,089	July 29	3220	829	52	650
Oil-cup	W. H. Wilkinson	433,972	Aug. 12	799	208	52	921
Oil-cup	W. H. Wilkinson	441,731	Dec. 2	159	42	53	1293
Oil-cup. Pitman	E. Conrad	429,086	May 27	3130	807	51	1458
Oil. Device for collecting drip	J. Gross	442,972	Dec. 16	2154	555	53	1700
Oil-distributor	W. E. Banzett	436,282	Sept. 9	1395	362	52	1648
Oil-distributing apparatus	E. Williams	434,968	Aug. 26	2384	631	52	1247
Oil-drip cup	J. Simmons	439,568	Oct. 28	2941	781	53	578
Oil. Extracting	C. F. Binder	434,696	Aug. 19	1951	508	52	1156
Oil. Extracting	J. W. Evans	443,907	Dec. 30	3691	944	53	2014
Oil. Extracting	W. T. Forbes	427,410	May 6	583	145 146	51	927
Oil-extracting apparatus	H. A. A. Dombrain and O. Trumper	431,937	July 8	1409	357 358	52	264
Oil-feeder	C. Mueller	434,113	Aug. 12	1010	262	52	964
Oil-feeder	R. B. Price	428,135	May 20	1684	427	51	1160
Oil-flame furnace	T. M. Jarmain	440,038	Nov. 4	629	167	53	731
Oil from a supply-reservoir to tanks. Means for conveying	J. Burns	424,596	Apr. 1	246	65	51	50
Oil from fish. Extracting	P. C. Vogellus	432,808	July 22	2712	.....	52	559
Oil. Haruess-	O. H. Shaw	439,607	Oct. 28	3072	.....	53	592
Oil, &c. Means for effecting a uniform supply of	T. Macneill	429,042	May 27	3059	788 789	51	1444
Oil mills. Separator for cotton-seed	M. Wallace	440,981	Nov. 18	2167	561	53	1041
Oil or gas burner	F. R. Fennessy	424,964	Apr. 8	822	219 220	51	167
Oil or other liquid-fuel burner. Crude-	T. Wilh	443,342	Dec. 23	2816	724	53	1836
Oil or other vessels. Cap for	W. J. Jones	420,688	Feb. 4	367	97	50	636
Oil or similar liquids. Apparatus for forcing	W. R. Addicks	428,874	May 27	2802	712	51	1394
Oil-pipes. Means for detecting leaks in underground	J. Burns	424,597	Apr. 1	247	65	51	50
Oil. Preparing acidulated	H. Noerdlinger	441,803	Dec. 2	273	.....	53	1318
Oil-press	E. Van Wiukle	435,780	Sept. 2	621	164	52	1494
Oil-refining apparatus	C. Dorn and J. Carey	437,421	Sept. 30	3289	859	52	2032
Oil-refining apparatus	E. Noppel	437,659	Sept. 30	3636	950	52	2102
Oil tank and measure. Combined	E. Benson	420,402	Jan. 28	2655	704	50	549
Oil-tank strainer	J. C. Dilworth	439,486	Oct. 28	2825	753	53	555
Oil-testing machine	W. S. Boul	424,536	Apr. 1	152	44	51	32
Oil to burners. Apparatus for feeding	C. T. de St. Aubin and A. Y. Comstock	428,848	Mar. 4	711	182	50	1274
Oil-transporting tank and wagon	H. McFarland	436,840	Sept. 23	2326	612	52	1840
Oil-waste can	W. H. Hughes and J. O. Cope	420,273	Jan. 28	2474	657	50	515
Oils. Apparatus for burning hydrocarbon	J. H. Bullard and F. A. Nickerson	435,009	Aug. 26	2444	647	52	1258
Oils. Injector-burner for hydrocarbon	W. C. Jaegle	420,411	Jan. 28	2664	706 707	50	551
Oils. Refining fat	R. Hunt	439,515	Oct. 28	2867	762	53	563
Oils with the aid of solvents. Apparatus for extracting	W. T. Forbes	436,227	Sept. 9	1313	342	52	1631
Oiler	R. A. Weidman	431,829	July 8	1259	315	52	254
Oiling box or journal. Self-	J. Tregoning	421,991	Feb. 25	2271	598	50	1020
Oiling device. Automatic	E. Benner and W. B. Ayres	422,284	Feb. 25	2726	717 718	50	1103
Oiling device. Automatic	V. Popp	426,468	Apr. 29	3102	813 814	51	640
Ointment	F. D. Hall	439,581	Oct. 28	2962	53	522
Ointment for goiter	H. H. Hayssen	418,717	Jan. 7	95	50	21

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Ointment for skin diseases	A. Bergmann	422,703	Mar. 4	500	50	50	1232
Omnibus. Car.	W. A. Russell	434,527	Aug. 19	1657	434	52	1100
Omnibus. Car.	W. A. Russell	434,726	Aug. 19	1987	517 518	52	1163
Omnibuses, &c. Heater for	A. S. Hart	439,874	Nov. 4	369	95	53	680
Open-hearth furnace	R. O. Young	421,220	Feb. 11	1181	303 304	50	796
Opera-chair	H. J. Harwood	427,570	May 13	827	206	51	985
Opera-chair	S. W. Peregrine	430,433	June 17	2063	509	51	1290
Opera-glass boxes. Coin-controlled lock for	C. S. Patterson	423,947	Mar. 25	2395	636	50	1614
Opera-glass. Coin-controlled	E. J. Colby	434,377	Aug. 12	1412	371	52	1043
Opera-glass. Coin-controlled	T. H. Costello	440,248	Nov. 11	948	244	53	805
Opera-glass. Coin-controlled	T. H. Costello	440,249	Nov. 11	950	244	53	805
Opera-glass holder	L. W. Levy and J. U. Gerow	424,611	Apr. 1	270	71	51	54
Opera-glass holder	L. Winterdorf	441,915	Dec. 2	442	118	53	1352
Opera-glass receptacle. Coin-controlled	S. M. Dowst	439,127	Oct. 28	2245	604	53	447
Operating-chair	H. R. Allen	439,088	Oct. 28	2189	587 588 589	53	437
Optical instrument. Coin-controlled	E. J. Colby	436,905	Sept. 23	2469	644	52	1867
Optical instruments. Focusing mechanism for	E. T. de Wogan	424,399	Mar. 25	3092	821	50	1749
Optical measuring, nose-conforming, and recording instrument. Combined	D. V. Brown	438,401	Oct. 14	1117	302	53	219
Optometer	D. R. Pruden	430,591	June 17	2303	566	51	1936
Orange-grader	A. Ayer	435,300	Aug. 26	2723	719	52	1312
Orange-picker	W. B. Snyder	438,292	Oct. 14	956	259	53	188
Orange-wrapping machine	T. Hiatt	429,759	June 10	987	242	51	1673
Orchards. Device for laying out	J. B. Yount	422,104	Feb. 25	2446	646	50	1051
Order-holder	J. F. Brown	430,169	June 17	1622	405	51	1205
Order-holder	J. F. Brown	436,396	Sept. 16	1591	420	52	1694
Order-indicator and throttle-lock. Combined	J. T. Pinckney	435,634	Sept. 2	403	109	52	1451
Order-plate and paper-roll holder. Combined	H. Stretcher	427,020	Apr. 29	3915	1021	51	797
Ordinance	J. A. Longridge	431,270	July 1	360	90	52	73
Ordinance and projectile for throwing high explosives.	S. H. Emmens	424,283	Mar. 25	2870	766	50	1706
Ordinance. Apparatus for operating heavy	T. Nordenfelt	425,623	Apr. 15	1818	486 487	51	371
Ordinance. Apparatus for working	H. S. Maxim	430,136	June 17	1581	393 394	51	1797
Ordinance. Breech-loading	J. B. G. A. Canet	430,102	June 10	1529	379 380	51	1776
Ordinance. Breech-loading	J. P. Lavigne	421,730	Feb. 18	1909	502	50	943
Ordinance. Breech-loading	W. H. Lyons	433,013	July 29	3094	794	52	626
Ordinance. Breech-loading	A. Victorin	426,403	Apr. 22	2399	785 786 787	51	611
Ordinance. Breech mechanism and attachment for	S. H. Emmens	440,625	Nov. 18	1578	406 407	53	929
Ordinance. Breech mechanism for	T. Nordenfelt	422,965	Mar. 11	920	240 241 242 243	50	1319
Ordinance. Firing-valve for pneumatic	N. W. Pratt	435,367	Aug. 26	2993	793	52	1361
Ordinance. Gas-check for	H. Schneider	427,370	May 6	512	131	51	912
Ordinance. Gas-cylinder for elevating heavy	J. J. E. H. Payne	437,237	Sept. 30	2981	779	52	1973
Ordinance. Hydraulic brake for	H. Schneider	428,418	May 20	2120	533	51	1245
Ordinance. Mounting	W. Anderson	422,002	Feb. 25	2292	603 604	50	1024
Ordinance mounting. Heavy.	W. Anderson	439,570	Oct. 28	2944	782	53	578
Ordinance. Recoil apparatus for	S. P. Hatfield	439,947	Nov. 4	485	126	53	703
Ordinance. Recoil-check for	W. Anderson	424,947	Apr. 8	795	212 213	51	162
Ordinance. Recoil-check for	H. S. Maxim	430,214	June 17	1900	423	51	1820
Ordinance. Recoil-check for	H. Schneider	428,960	May 27	2727	750 751	51	1419
Ordinance. Recoil-check for heavy	W. Anderson	424,448	Apr. 1	4	2, 3	51	3
Ordinance. Recoil-check for heavy	H. Schneider	442,919	Dec. 16	2080	534 535	53	1685
Ordinance-sight	H. H. Grenfell	418,789	Jan. 7	195	47 48 49	50	43
Ordinance, &c. Utilization of fluids in checking recoil in	J. A. C. de Latonche	424,889	Apr. 1	706	187	51	136
Ordinance. Vent-stopper for	J. Kelly	426,592	Apr. 29	3289	863	51	677
Ore concentrating and amalgamating apparatus	O. Campbell	433,850	Aug. 5	611	159	52	875
Ore-concentrating apparatus	R. D. Gates	420,933	Feb. 11	765	198	50	717
Ore-concentrating machinery	J. C. Garvin	436,285	Sept. 9	1399	364	52	1649
Ore-concentrator	S. L. Burke	427,551	May 13	793	198 199	51	979
Ore-concentrator	T. J. Hatch	436,476	Sept. 16	1719	454	52	1718
Ore-concentrator	J. H. Miller	443,836	Dec. 30	3600	925	53	1996
Ore-concentrator	C. E. Seymour	436,808	Sept. 23	2270	599	52	1830
Ore-concentrator	J. Talley	435,530	Sept. 2	225	62 63 64	52	1418
Ore-concentrator	C. W. Tremain	437,875	Oct. 7	309	92	53	60
Ore-concentrator	J. Tulloch	443,171	Dec. 23	2515	643	53	1776
Ore concentrator and separator	D. P. Hatch and P. M. Guion	433,983	Aug. 12	811	212	52	923
Ore-concentrator. Pneumatic	C. Ballard	431,313	July 1	425	105	52	87
Ore concentrator, separator, and washer	L. Look	439,962	Nov. 4	505	132 133	53	706
Ore-concentrators. Belt or apron for	G. E. Woodbury	434,693	Aug. 19	1945	506	52	1155
Ore containing lead, silver, and zinc. Treating	C. L. Coffin	442,016	Dec. 2	606	53	53	1381
Ore-conveyer	W. E. Richardson	435,667	Sept. 2	455	120	52	1462

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Ore-crusher	T. A. Blake	439,374	Oct. 28	2660	708	53	524
Ore-crusher	J. M. Bryan	435,622	Sept. 2	385	104	52	1447
Ore-crusher	T. R. Jordan	440,572	Nov. 11	1486	384	53	903
Ore-crusher	S. R. Krom	419,459	Jan. 14	1220	324	50	257
Ore-crusher	S. R. Krom	419,460	Jan. 14	1223	324	50	257
Ore-crusher	E. D. Roth	427,441	May 6	632	159	51	937
Ore-crusher	G. W. Weller	430,049	June 10	1438	357	51	1758
Ore-crusher	J. F. Wiswell	421,151	Feb. 11	1080	277	50	778
Ore-crushing mill	W. C. Stiles	423,832	Mar. 18	2207	583	50	1571
Ore distributor and sampler	J. D. Coplen	442,017	Dec. 2	607	163	53	1381
Ore-feeder	C. B. Bingham	425,733	Apr. 15	1987	530	51	404
Ore-feeder	L. D. Craig	426,245	Apr. 22	2765	724	51	563
Ore-feeder	P. Hinkle	420,424	Jan. 28	2681	710	50	554
Ore-feeder	E. C. Loftus and E. H. Booth	429,857	June 10	1135	281	51	1700
Ore-feeder	G. C. Mueller	428,346	May 20	2005	504	51	1222
Ore-leaching apparatus	D. Dennes and T. K. Rose	425,025	Apr. 8	919	244	51	186
Ore. Machinery for separating	R. H. Richards	429,154	June 3	67	17	51	1185
Ore. Magnetically concentrating	G. Conkling	441,060	Nov. 18	2292	594	53	1066
Ore-mill	I. L. Carl and J. B. Paterson	433,670	Aug. 5	341	87	52	822
Ore-mill	H. J. Clark	437,017	Sept. 23	2623	685	52	1897
Ore-mill	J. S. Kingsland	425,836	Apr. 15	2204	586	51	445
Ore oxidizing or desulphurizing apparatus	E. M. Clark	428,830	May 27	2741	696	51	1381
Ore-pulverizer	C. M. Fitch	441,867	Dec. 2	376	99	53	1338
Ore-pulverizer	A. Hendey	442,974	Dec. 16	2161	556	53	1702
Ore-pulverizer	T. H. Tregoning	424,515	Apr. 1	114	33	51	25
Ore. Reducing	J. Johnson	441,166	Nov. 25	2477	—	53	1110
Ore-reducing apparatus	D. Brennan, Jr.	442,765	Dec. 16	1809	469	53	1632
Ore-roasting apparatus	E. M. Clark	440,468	Nov. 11	1314	340	53	871
Ore-roasting apparatus	J. R. Moffitt	430,741	June 24	2371	630	51	1995
Ore-roasting furnace	S. B. Dexter	436,340	Sept. 16	1488	388	52	1674
Ore-roasting furnace	S. Trivick	434,744	Aug. 19	2008	324	52	1167
Ore-roasting furnaces. Feeding device for	I. B. Hammond	423,924	Mar. 25	2365	629	50	1608
Ore-sampler	H. L. Bridgman	433,714	Aug. 5	402	103	52	834
Ore-separator	A. Emmons	440,587	Nov. 11	1510	389	53	907
Ore-separator. Centrifugal	S. D. Smith	431,858	July 8	1306	327	52	264
Ore-separator. Magnetic	T. A. Edison and W. K. L. Dickson	434,588	Aug. 19	1750	458	52	1119
Ore-separator. Magnetic	G. S. Finney	443,042	Dec. 16	2267	582	53	1723
Ore-separator. Magnetic	G. S. Finney	443,044	Dec. 16	2269	582	53	1723
Ore-separator. Magnetic	H. B. Smith	430,758	June 24	2606	638	51	2002
Ore-washer	L. W. Lewis	439,961	Nov. 4	503	132	53	706
Ore-washer	S. C. McLanahan and W. F. Kirk	419,790	Jan. 21	1793	452	50	358
Ores. Apparatus for oxidizing and desulphurizing	E. M. Clark	440,469	Nov. 11	1315	340	53	871
Ores. Apparatus for separating and grading	E. L. Craig	443,901	Dec. 30	3681	948	53	2012
Ores. Apparatus for the reduction of argentiferous	O. Lumaghi	425,813	Apr. 15	2096	560	51	426
Ores, &c. Crushing or pulverizing	T. R. Jordan	442,055	Dec. 2	676	182	53	1395
Ores. Disintegrating refractory	J. L. Hopper	437,999	Oct. 7	489	—	53	93
Ores. Jigger for treating	O. Bilharz	427,251	May 6	352	90	51	879
Ores magnetically. Separating	C. M. Ball and S. Norton	430,058	June 10	1454	361	51	1761
Ores. Method of and apparatus for magnetic separation of	J. M. McMahan	438,357	Oct. 14	1051	286	53	207
Ores. Muffle-furnace for desulphurizing	G. H. Chick	434,502	Aug. 19	1622	425	52	1093
Ores of copper or other metals. Melting the	C. Wessell	428,659	May 27	2473	426	51	1329
Ores. Percussion-frame with revolving belt for the treatment of	O. Bilharz	427,250	May 6	351	90	51	879
Ores. Separating the valuable portions of the tailings produced in the treatment of	R. E. Boeraem	420,432	Feb. 4	6	—	50	566
Ores to obtain precious metals therefrom. Apparatus for treating	S. Trivick	442,262	Dec. 9	984	259	53	1462
Ores. Treating silver and zinc	F. L. Bartlett	420,030	Jan. 28	2080	550	50	441
Ores with heated gases. Reducing iron	C. Adams	434,694	Aug. 19	1946	506	52	1155
Organ	J. Gildersleeve	439,397	Oct. 28	2696	717	53	530
Organ	A. J. Reynolds	440,060	Nov. 4	656	175	53	736
Organ-action	M. Clark	439,111	Oct. 28	2924	598	53	444
Organ-action	H. A. Vogel	439,616	Oct. 28	3034	803	53	597
Organ-action	E. S. Votey	422,100	Feb. 25	2433	643	50	1049
Organ-action. Pneumatic	J. E. Treat	428,706	May 27	2558	648	51	1345
Organ-bellows	F. S. Smith	440,375	Nov. 11	1146	295	53	839
Organ-case	R. A. Stout	420,254	Jan. 28	2445	650	50	510
Organ-case	O. C. Whitney	419,000	Jan. 7	532	133	50	112
Organ-pedal cover	H. Buikema	439,863	Nov. 4	350	91	53	676
Organ. Pipe	R. Callender	426,711	Apr. 29	3471	909	51	711
Organ. Portable	P. Bilhorn	439,625	Nov. 4	10	3	53	608
Organ. Reed	L. K. Fuller	430,382	June 17	1993	492	51	1877
Organ. Reed	J. Peloubet	437,131	Sept. 23	2798	729	52	1932
Organ. Reed	F. Pritchard	427,360	May 6	501	128	51	910
Organ. Reed	G. W. Scribner	441,589	Nov. 25	3168	817	53	1239
Organ. Reed	C. S. Warren	425,155	Apr. 8	1113	296	51	224
Organ stop-action	N. M. Boynton	443,426	Dec. 23	2936	755	53	1859
Organ stop-action	J. A. Hillstrom	420,998	Feb. 11	861	223	50	736
Organ stop-action	A. S. Rand	441,328	Nov. 25	2763	714	53	1161
Organ stop-action	M. Washburn	442,343	Dec. 9	1114	290	53	1485
Organ stop-action. Combination	R. Callender	420,435	Feb. 4	10	2, 3	50	566

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Organ stop-action. Combination	C. C. Michell	441,370	Nov. 25	2822	{ 728 729 }	53	1171
Organ stop-action. Reed	A. F. Florey	423,750	Mar. 18	2091	552	50	1548
Organ stop-action. Reed	C. S. Warren	425,156	Apr. 8	1115	296	51	224
Organs. Key-desk for	J. E. Treat	419,737	Jan. 21	1617	431	50	341
Organs. Mechanism for testing reed	C. O. Hillstrom	437,201	Sept. 30	2930	763	52	1963
Organs. Pneumatic action for	A. Hickmann	442,253	Dec. 9	974	256	53	1460
Organs. Pneumatic action for	V. Willis	427,209	May 6	284	72, 73	51	867
Organs. Tube attachment for reed	C. S. Warren	421,997	Feb. 25	2378	600	50	1021
Organic matter from aqueous components. Machine for separating	E. Wright	430,456	June 17	2100	51	51	1896
Ornamental articles. Producing	J. Baynes	434,907	Aug. 26	2300	606	52	1231
Ornamenting and embossing machine	E. Geisel	419,847	Jan. 21	1797	475	50	375
Ornamenting hollow ware. Apparatus for	R. P. Chapman	442,246	Dec. 9	960	253	53	1458
Ornamenting hollow ware. Apparatus for	R. P. Chapman and E. T. Carter	426,557	Apr. 29	3235	848	51	666
Ornamenting plates	C. F. Jozs	439,160	Oct. 28	2295		53	456
Ornamenting strips of composition or for coating moldings therewith. Machine for	B. C. J. Anderson	443,421	Dec. 23	2926	{ 753 754 }	53	1858
Orthomitroparadiao-diphenyl	J. Schmid	425,525	Apr. 15	1668		51	342
Orthopedic marching-machine	J. L. Naish	430,808	June 24	2685	{ 658 659 }	51	2018
Oscillating meter	M. C. Henley and J. P. Fulgham	443,711	Dec. 30	3539	873	53	1956
Osteotome. Electro	M. J. Roberts	436,804	Sept. 23	2261	{ 596 597 }	52	1828
Oven	F. W. Bergmann	434,577	Aug. 19	1727	{ 452 453 }	52	1115
Oven	A. S. Cox	440,840	Nov. 18	1944	499	53	998
Oven and heater	M. Powell	429,772	June 10	1002	246	51	1676
Oven. Baker's	J. H. Eisenhart	425,307	Apr. 8	1345	357	51	270
Oven. Baker's	E. P. Hilcher	436,134	Sept. 9	1173	306	52	1604
Oven. Baker's	T. B. McFadden	436,670	Sept. 16	2028	599	52	1775
Oven. Baker's	E. A. C. Petersen	428,521	May 20	2257	573	51	1270
Oven. Baker's	A. T. Simpkins	419,369	Jan. 14	1090	288	50	230
Oven. Baking	G. Mohring	441,961	Dec. 2	515	138	53	1364
Oven-door	P. Abrahamson	431,159	July 1	186	47	52	39
Oven for stoves or ranges	W. L. McDowell	419,021	Jan. 7	566	142	50	119
Oven-grate	J. H. Allyn	434,970	Aug. 26	2387	632	52	1248
Oven. Hot-blast	E. Tourangin	423,357	Mar. 11	1504	{ 394 395 }	50	1429
Oven. Portable	J. Middleby	434,023	Aug. 12	856	226	52	932
Oven. Portable	G. W. Walker	426,085	Apr. 22	2526	666	51	514
Oven. Portable	G. W. Walker	433,501	Aug. 5	87	25	52	774
Oven. Portable bake	F. H. Buzzacott	434,242	Aug. 12	1209	{ 314 315 }	52	1002
Oven. Revolving-reel bake	J. Rayney	422,629	Mar. 4	401	{ 99 100 }	50	1213
Oven. Revolving self basting	J. W. Carpenter	427,671	May 13	967	243	51	1012
Oven shelf. Outside	E. Kuhn	423,480	Mar. 18	1690	446	50	1474
Oven-shelf. Sliding	J. H. Knight	420,295	Jan. 28	2506	665	50	521
Oven-slide	H. T. Gilbert	420,380	June 3	429	101	51	1553
Ovens. Door for admitting light to	S. L. Hall	433,342	July 29	3579	923	52	724
Overalls	I. M. Appel	440,984	Nov. 18	2175	563	53	1043
Overalls	I. M. Appel	440,989	Nov. 18	2176	563	53	1043
Overalls	C. Erlanger	422,386	Mar. 4	36	11	50	1143
Overalls	J. A. Holman and C. E. Cunningham	432,669	July 22	2539	651	52	514
Overalls. Manufacture of	C. Erlanger	423,139	Mar. 11	1191	311	50	1369
Overcheck. Safety	F. J. Ayers	419,400	Jan. 14	1135	300	50	238
Overcoat. Cape	B. Sands	423,346	Mar. 11	1490	391	50	1427
Overcoats, &c. Fastening for	W. S. Richardson	443,634	Dec. 30	3277	845	53	1933
Overdraw-loop	S. E. Harsh	428,487	May 20	2212	559	51	1261
Overflow and waste. Standing	C. A. Blessing	420,328	Jan. 28	2547	675	50	529
Overflow-gate and liquid-separator	G. A. Hyde, Jr.	428,613	May 27	2400	610	51	1317
Overflow-pipe and soap-holder for wash-hovels	J. Barrett	435,674	Sept. 2	462	122	52	1463
Overshoe	C. J. Bailey	432,967	July 29	3020	776	52	611
Overshoe	T. H. Benedict	422,492	Mar. 4	186	51	50	1171
Overshoe-clasp	H. J. Kistler	442,627	Dec. 16	1562	404	53	1584
Overshoe-securer	J. L. Gourley	440,148	Nov. 11	785	206	53	772
Overshoe securing device	J. L. Heffernan	438,923	Oct. 21	1932	514	53	379
Overshoes. Retaining device for	J. A. Patton	426,312	Apr. 22	2853	751	51	582
Oxides of metals. Apparatus for manufacturing	S. R. and A. C. Bradley	425,292	Apr. 8	1319	353	51	265
Oxides to the metallic state. Reducing metallic	L. G. Laureau	420,945	Feb. 11	780	202	50	721
Oxygen. Apparatus for the production of	L. Chapman	418,864	Jan. 7	322	78	50	68
Oxygen from air. Obtaining	A. Brin	432,815	July 22	2781		52	561
Oxygen. Obtaining	F. Salomon	440,777	Nov. 18	1837		53	978
Oyster-heds. Machine for removing star-fish from	S. M. Corwin	436,935	Sept. 23	2517	659	52	1876
Oyster-packages. Ice-pocket for	J. T. Stone	438,391	Oct. 14	1098	298	53	216
Oyster-tongs	J. A. Bristow and W. M. Dixon	426,909	Apr. 29	3756	981	51	767
Oyster-tongs. Apparatus for operating	E. H. Pratt	441,192	Nov. 25	2515	650	53	1118
Ozone-water. Making	C. F. W. Stelzer	420,394	Jan. 28	2045		50	547
Package-carrier	H. B. Williams	433,111	July 29	3253	{ 837 838 }	52	657
Package-fastening device	M. E. Hanover	419,853	Jan. 21	1808	478	50	378
Package. Safety	S. Wales	427,643	May 13	924	232	51	1003
Package stringing and tying machine	W. T. Shute	431,060	July 1	77	19	52	17
Package-tie	W. H. Anderson	437,548	Sept. 30	3490	911	52	2073
Package-tie	E. C. Plumer	419,879	Jan. 21	1855	488	50	389
Packing and living fabrics. Machine for making	R. H. Thompson	430,447	June 17	2079	514	51	1893
Packing and lubricant. Combined	C. E. Thompson	420,477	Feb. 4	79		50	579
Packing and refrigerating case	J. Barker	431,930	July 8	1397	{ 354 355 }	52	282
Packing and refrigerating vessel	J. Barker and L. L. Frierson	431,931	July 8	1398	355	52	282
Packing and refrigerating vessel	L. L. Frierson and J. Barker	431,941	July 8	1414	359	52	285
Packing and refrigerating vessel	L. L. Frierson and J. Barker	431,942	July 8	1416	359	52	285
Packing and refrigerating vessel	L. L. Frierson and J. Barker	432,868	July 22	2851	730	52	575

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Packing and show card. Combined	W. C. Thompson	438,203	Oct. 14	808	220	53	162
Packing-box	J. George	429,517	June 3	625	153	51	1591
Packing-case	G. W. Banker	423,547	Mar. 18	1787	469	50	1491
Packing-case	A. Heinemann	430,997	June 24	2967	728	51	2071
Packing-case	W. H. Mixson	424,567	Apr. 1	203	56	51	42
Packing-case for coffee, &c.	L. J. Richards	420,736	Feb. 4	429	113	50	648
Packing-case. Telescopic	G. C. Henning	421,496	Feb. 18	1573	407	50	878
Packing-case. Woven-wire-and-slat	M. A. Hamilton	437,594	Sept. 30	3550	926 927	52	2084
Packing device	G. B. Garrison	426,178	Apr. 22	2667	700	51	543
Packing. Engine	J. Moseley and B. Blundstone	425,042	Apr. 8	944	252	51	191
Packing for pistons, piston-rods, &c	E. B. Cox	419,034	Jan. 7	579	146 147	50	123
Packing for steam-condenser tubes. Tubular	T. P. Ford	433,282	July 29	3500	903	52	708
Packing for stuffing-boxes	W. S. Getchell and R. E. French	425,776	Apr. 15	2043	544	51	415
Packing for volatile gas. Rod	T. J. Sullivan	431,293	July 1	393	99	52	80
Packing. Metallic	W. T. Harris	424,978	Apr. 8	847	225	51	172
Packing. Metallic	W. G. Nixon	434,418	Aug. 12	1493	389	52	1060
Packing. Metallic	W. I. Page	424,814	Apr. 1	591	156	51	114
Packing. Metallic	W. I. Page	432,327	July 15	2018	519	52	404
Packing. Metallic piston	E. C. Fasoldt	441,866	Dec. 2	375	98	53	1338
Packing. Metallic piston-rod	J. L. Halyburton	430,074	June 10	1483	368	51	1767
Packing. Metallic rod	P. H., Jr., and O. T. X. Adams	432,717	July 22	2616	669	52	529
Packing. Metallic steam	D. Hanney	435,141	Aug. 26	2638	698	52	1295
Packing. Piston	F. D. Child	423,985	Mar. 25	2455	652	50	1625
Packing. Piston	F. D. Child	424,856	Apr. 1	653	172	51	126
Packing. Piston-rod	F. A. Carlson	427,045	May 6	19	67	51	814
Packing. Piston-rod	S. Hughes	423,160	Mar. 11	1221	318	50	1376
Packing. Piston-rod	A. D. Lewis	421,944	Feb. 25	2216	581	50	1009
Packing. Piston-rod	W. S. Rhodes	419,069	Jan. 7	635	165	50	134
Packing. Piston-rod	A. J. Sypher	426,399	Apr. 22	2992	784	51	610
Packing. Piston-rod	F. D. Toucey	424,662	Apr. 1	349	92	51	67
Packing. Piston-rod	F. D. Toucey	424,809	Apr. 1	733	196	51	141
Packing. Piston-rod	F. D. Toucey	441,432	Nov. 25	2960	763	53	1199
Packing-ring and making the same	C. L. Eastman	436,652	Sept. 16	1996	522	52	1768
Packing ring. Piston	R. L. Ambrose	421,646	Feb. 18	1799	470	50	922
Packing-ring. Piston	J. Brandon	426,634	Apr. 29	3352	878	51	688
Packing-rings. Gripping device for spring	E. Campbell	419,413	Jan. 14	1159	308	50	244
Packing. Rod	W. E. Facer	429,611	June 10	770	186	51	1631
Packing. Rod	J. P. Jones	443,918	Dec. 30	3710	949	53	2017
Packing. Rod	F. P. Martin	418,802	Jan. 7	215	53	50	47
Packing. Rod	W. H. Richmond	434,808	Aug. 19	2102	551	52	1187
Packing. Rod	R. C. Snedeker	431,532	July 1	771	192	52	154
Packing. Rod	F. F. Swain	434,736	Aug. 19	2000	522	52	1166
Packing. Stuffing-box	C. H. Ensign and P. B. Wright	430,313	June 17	1889	464	51	1856
Packing. Stuffing-box	R. Walsh	437,737	Oct. 7	92	30	53	21
Pad:							
See Blotting-pad.	Ink-pad.						
Collar-pad.	Inking-pad.						
Collar sweat-pad.	Liniment-pad.						
Copying-pad.	Saddle-pad.						
Drawing-pad.	Stair-pad.						
Envelope-moistening pad.	Truss-pad.						
Harness-pad.	Water-closet seat-pad.						
Horse-foot pad.	Wax-pad.						
Paddle for handling butter, &c	C. N. Shaw	438,953	Oct. 21	1979	528	53	388
Paddle-wheel	J. Cobban	424,704	Apr. 1	413	108	51	82
Paddle-wheel	M. Richter	435,859	Sept. 2	737	198	52	1517
Paddle-wheel. Feathering	H. A. and F. E. Pirrung	437,619	Sept. 30	3580	936	52	2090
Paddle-wheel for vessels	W. H. Wigmore	431,096	July 1	94	24	52	22
Paddle-wheel with feathering-blades. Steering	J. Merkel	421,955	Feb. 25	2228	585	50	1012
Padlock	W. H. Bramble	418,824	Jan. 7	361	87	50	76
Padlock	W. D. Bryant	439,635	Nov. 4	23	7	53	611
Padlock	E. E. Dunn	427,754	May 13	1113	279	51	1040
Padlock	J. Ede	427,755	May 13	1114	279	51	1040
Padlock	F. Egge	427,843	May 13	1235	312	51	1063
Padlock	A. S. Fisher	422,759	Mar. 4	572	147	50	1246
Padlock	W. Mosley	426,734	Apr. 29	3508	917	51	718
Padlock	J. S. Peacock	421,966	Feb. 25	2240	589	50	1014
Padlock	A. T. Perrine	443,537	Dec. 30	3118	802	53	1903
Padlock	W. H. Eric	438,824	Oct. 21	1780	476	53	352
Padlock	S. P. Stein	440,069	Nov. 4	665	177	53	738
Padlock	D. M. Thomas	430,815	June 24	2700	661	51	2020
Padlock	F. Wheaton	432,587	July 22	2400	618	52	488
Padlock. Combination	H. H. Daniels	431,336	July 1	453	112	52	93
Padlock. Permutation	W. M. Brooke	426,233	Apr. 22	2748	720	51	560
Padlock. Permutation	C. D. Cowgill	429,017	May 27	3015	774	51	1436
Padlock. Permutation	C. E. Peck	430,145	June 17	1595	397	51	1799
Padlock. Permutation	J. A. Porter	419,553	Jan. 14	1343	359 360	50	282
Padlock. Registering	R. G. Ward	427,284	May 6	398	103	51	889
Paging and numbering machine	E. G. Black and J. F. Werle	423,209	Mar. 11	1284	334 335 336	50	1389
Pail. Anti-rust	R. M. Reed	434,464	Aug. 19	1561	406	52	1080
Pail-bottom	G. W. Lisk and C. Van Auken	440,642	Nov. 18	1608	413	53	936
Pail, brush-holder, and paint-stirrer. Paint	S. E. Crapo	419,585	Jan. 14	1385	371	50	291
Pail-cover holder. Dinner	J. Dorsch	433,452	Aug. 5	26	7	52	761
Pail. Dinner	C. Heckstadt and A. Moe	428,097	May 20	1624	412 413	51	1148
Pail. Milk	W. Blakeslee	438,264	Oct. 14	907	246	53	179
Pail. Milk	J. Philley	419,551	Jan. 14	1341	358 359	50	282

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Pail. Milk.....	W. M. Piper.....	440,193	Nov. 11	858	221	53	787
Pail or tub.....	R. S. Stratton.....	419,377	Jan. 14	1097	290	50	231
Pail. Strainer.....	E. Shobe and J. F. Platt.....	428,699	May 27	2547	646	51	1341
Pail support. Milk.....	G. E. Le Clair.....	441,424	Nov. 25	2911	751	53	1190
Pails. Cover-fastening and bail-ear for.....	G. D. Strayer.....	432,913	July 22	2912	746	52	587
Pails, &c. Ears for securing bails to.....	H. L. Ferris.....	432,181	July 15	1792	461	52	364
Pails. Suspending device for.....	G. C. Muesel.....	441,187	Nov. 25	2508	648	53	1116
Paint.....	C. L. Baker and M. Thorkelson.....	423,656	Mar. 18	1903	.....	50	1525
Paint.....	J. H. Baker.....	443,422	Dec. 23	2931	.....	53	1858
Paint.....	W. B. Grover.....	423,047	Mar. 11	1046	.....	50	1342
Paint.....	W. A. Hall.....	438,621	Oct. 21	1441	.....	53	290
Paint.....	H. Le Bates and E. P. Lawrence.....	431,268	July 1	357	.....	52	73
Paint.....	J. G. W. Martens.....	434,798	Aug. 19	2085	.....	52	1183
Paint.....	J. T. McKim.....	442,195	Dec. 9	891	.....	53	1444
Paint.....	R. Morris and W. T. Gent.....	424,653	Apr. 1	333	.....	51	65
Paint.....	J. Smith.....	441,075	Nov. 18	2322	.....	53	1071
Paint. Anti-fouling.....	M. E. Dejonge.....	441,290	Nov. 25	2707	.....	53	1150
Paint. Anti-fouling.....	M. E. Dejonge.....	441,292	Nov. 25	2708	.....	53	1150
Paint-carrier. Fountain.....	W. C. Shaw.....	437,519	Sept. 30	3441	900	52	2063
Paint composition.....	N. A. Bibikov.....	421,229	Feb. 11	1189	.....	50	798
Paint composition.....	N. A. Bibikov. (Reissue).....	11,082	June 10	1533	.....	51	1778
Paint composition.....	J. Bollinger.....	419,106	Jan. 7	64	.....	50	144
Paint composition.....	J. P. Moser.....	420,082	Jan. 28	2156	.....	50	457
Paint composition.....	D. S. Robinson.....	421,360	Feb. 11	1376	.....	50	832
Paint compound.....	A. A. Jackson and C. M. Neal.....	432,240	July 15	1881	.....	52	380
Paint-distributor.....	C. L. Burdick.....	434,105	Aug. 12	991	258	52	960
Paint. Fire-proof.....	J. T. Durkee.....	434,556	Aug. 19	1702	.....	52	1109
Paint. Hydrocarbon device for burning off.....	J. P. Hayes.....	427,474	May 6	676	109	51	945
Paint, &c. Implement for removing.....	H. A. Gillis.....	427,759	May 13	1119	280	51	1041
Paint-mill.....	T. H. Morgan.....	436,370	Sept. 16	1552	407	52	1687
Paint or varnish. Apparatus for polishing.....	F. Harrington.....	436,892	Sept. 23	2446	639	52	1864
Paint. Transparent water-color.....	R. T. Swenning.....	432,151	July 15	1756	.....	52	357
Paint-tube box.....	H. C. Sanders.....	440,507	Nov. 11	1386	358 359	53	884
Paint vessel and package.....	H. J. Koempel.....	428,109	May 20	1646	418	51	1153
Paint. Water-color.....	G. S. Hodges and J. M. Tracy.....	430,250	June 17	1759	.....	51	1831
Paints. Machine for mixing.....	J. H. Scott.....	434,728	Aug. 19	1988	518	52	1163
Painter's and decorator's tool.....	R. L. Hutchins.....	431,586	July 8	858	213	52	179
Painter's implement.....	M. Fred.....	429,515	June 3	624	153	51	1591
Painting. Decorative.....	F. Barnett.....	438,833	Oct. 21	1799	479	53	355
Painting-machine.....	E. S. Hawks.....	443,576	Dec. 30	3179	817 818	53	1915
Painting-machine.....	S. W. Peregrine.....	425,547	Apr. 15	1696	453	51	348
Pallets. Fastening for escapement.....	A. M. Lane.....	436,920	Sept. 23	2498	653	52	1873
Pamphlet-covering machine.....	H. R. Corkbill, Sr.....	438,265	Oct. 14	908	247 248	53	179
Pamphlets. Machine for attaching covers to.....	F. Van Benthuyssen.....	426,629	Apr. 29	3343	876 877	51	687
Pan:							
See Bake-pan. Dish-pan.							
Baking-pan. Dust-pan.							
Baking and roasting pan. Evaporating-pan.							
pan. Forge-pan.							
Bed-pan. Frying-pan.							
Bread-pan. Loom drip-pan.							
Cake or baking pan. Salt-pan.							
Pan-drivers. Adjusting-collar for.....	T. A. Washburn.....	420,752	Feb. 4	449	119	50	652
Pan-making machine.....	C. A. Coddling and L. E. Wilbur.....	430,835	June 24	2724	668	51	2025
Pans. Making muffin or bake.....	C. L. Wagandt.....	436,883	Sept. 23	2437	636	52	1862
Paneling doors or other wood-work.....	J. A. Smith.....	422,844	Mar. 4	706	181	50	1273
Panels. Making ornamental open-work.....	A. B. Cameron.....	419,636	Jan. 21	1472	395	50	315
Panoramic camera.....	G. G. Rockwood and H. B. Shallenberger.....	441,704	Dec. 2	119	32	53	1285
Pantaloon.....	J. Bloch.....	441,637	Dec. 2	14	5	53	1265
Pantaloon-fastener.....	H. H. Baker, Jr.....	439,372	Oct. 28	2656	707	53	523
Pantograph.....	V. L. Ourdan and C. A. Kolb.....	435,242	Aug. 26	2773	733	52	1321
Pantograph.....	L. Walknp.....	441,909	Dec. 2	436	116 117	53	1350
Paper bag.....	E. E. Claussen.....	426,774	Apr. 29	3566	930 931	51	730
Paper bag.....	J. M. Guilbert.....	432,308	July 15	1993	509	52	400
Paper bag.....	F. E. Porter.....	421,191	Feb. 11	1143	292	50	789
Paper bag.....	J. Single.....	426,607	Apr. 29	3306	868	51	680
Paper bag.....	N. W. Taylor and F. H. Kelliher.....	439,849	Nov. 4	329	85	53	672
Paper bag and making the same.....	E. E. Claussen.....	426,772	Apr. 29	3565	929 930	51	729
Paper-bag and twine holder.....	D. D. Nolley.....	428,936	May 27	2894	740	51	1413
Paper-bag fastening.....	J. S. Fielder.....	424,411	Mar. 25	3114	826	50	1753
Paper-bag hanger.....	W. B. Lawrence.....	427,583	May 13	847	213	51	988
Paper-bag holder.....	C. W. Freeman and W. H. McCann-levy.....	442,578	Dec. 9	1484	381	53	1560
Paper-bag holder.....	W. B. Morlan.....	426,194	Apr. 22	2694	707	51	548
Paper-bag holder.....	W. B. Shafer.....	427,918	May 13	1363	343	51	1086
Paper-bag machine.....	A. Bredenberg.....	429,007	May 27	2993	768 769 770 771	51	1432
Paper-bag machine.....	A. H. Fiola.....	439,058	Oct. 21	2136	573 574	53	420
Paper-bag machine.....	E. Metzenaar.....	434,939	Aug. 26	2344	619 620	52	1240
Paper-bag machine.....	W. H. Patterson.....	426,852	Apr. 29	3686	961	51	752
Paper-bag machine.....	W. B. Purvis.....	420,099	Jan. 28	2188	578	50	463

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Paper-bag machine	W. B. Purvis	430,684	June 24	2476	{ 604 605 }	{ 51 52 }	1977
Paper-bag machine	W. B. Purvis	434,461	Aug. 19	1557	405	52	1079
Paper-bag machine	W. B. Purvis	435,524	Sept. 2	212	59	52	1116
Paper-bag machine	N. W. Taylor	439,703	Nov. 4	113	{ 29 30 31 }	{ 53 54 }	630
Paper-bag machines. Delivery mechanism for	J. Arkell	427,289	May 6	404	105	51	890
Paper-bag machines. Striping attachment for	T. R. Troendle	428,184	May 20	1746	442	51	1171
Paper-bag machinery	G. Mortson	426,843	Apr. 29	3673	956	51	750
Paper-bag machinery	E. Stanley	432,742	July 22	2656	{ 679 680 }	{ 52 53 }	537
Paper-bag-making machine	J. Arkell	425,197	Apr. 8	1181	313	51	239
Paper-bag-making machine	F. H. Kelliher	439,842	Nov. 4	317	80	53	670
Paper-bag-making machine	F. H. Kelliher	439,843	Nov. 4	320	81, 82	53	670
Paper bag. Triangular	E. E. Claussen	426,770	Apr. 29	3563	929	51	729
Paper bag. Triangular	G. Mortson	426,841	Apr. 29	3671	955	51	750
Paper bag. Triangular	G. Mortson	426,842	Apr. 29	3672	956	51	750
Paper bags. Making	E. E. Claussen	426,771	Apr. 29	3564	929	51	729
Paper bags. Making	E. E. Claussen	426,773	Apr. 29	3566	930	51	729
Paper bags. Manufacturing	W. H. Patterson	426,851	Apr. 29	3685	{ 960 961 }	{ 51 52 }	752
Paper bags, &c. Mechanism for bundling	A. C. Getten	427,849	May 13	1245	{ 314 315 }	{ 51 52 }	1065
Paper bags. Mechanism for making striped	C. A. Dean and F. H. Robie	437,176	Sept. 30	2899	754	52	1956
Paper basket	J. F. Donley	427,753	May 13	1112	278	51	1040
Paper. Blotting	G. L. Jaeger	439,405	Oct. 28	2705	732	53	532
Paper bottle	H. F. Barnard	423,114	Mar. 11	1147	297	50	1361
Paper box	M. N. Bailey	439,993	Nov. 4	558	147	53	717
Paper box	R. P. Brown	432,475	July 15	2229	577	52	448
Paper box	F. G. Hotchkiss	440,758	Nov. 18	1800	465	53	972
Paper box	S. J. Murray	434,878	Aug. 19	2207	577	52	1207
Paper box	J. C. Powell	421,302	Feb. 11	1287	332	50	816
Paper box	J. H. Riedell	425,188	Apr. 8	1171	{ 309 310 }	{ 51 52 }	237
Paper box	J. H. Riedell	429,960	June 10	1299	321	51	1732
Paper box	J. H. Russell	437,383	Sept. 30	3227	841	52	2019
Paper box	J. L. Sefton and J. T. Ferres	440,650	Nov. 18	1626	419	53	939
Paper box	P. O. Soper	430,045	June 10	1433	356	51	1737
Paper-box blank	W. Johnston	422,792	Mar. 4	622	159	50	1256
Paper-box blank	A. C. Lohmann	436,141	Sept. 9	1180	{ 309 310 }	{ 52 53 }	1606
Paper box. Knockdown	A. C. Lohmann	432,885	July 22	2876	737	52	580
Paper box. Knockdown	A. C. Lohmann	436,142	Sept. 9	1188	310	52	1607
Paper-box machine	P. H. Knight	428,677	May 27	2504	{ 636 637 }	{ 51 52 }	1335
Paper-box machines. Printing and sanding mechanism for	G. M. Griswold	441,759	Dec. 2	205	54, 55	53	1303
Paper-box-making machine	G. A. Barnes	437,963	Oct. 7	439	{ 123 124 125 126 }	{ 53 54 }	84
Paper-box-making machine	G. H. Cushman and E. H. Taylor	418,090	Jan. 7	31	9, 10	50	8
Paper-box-making machine	G. H. Cushman and E. H. Taylor	420,901	Feb. 4	707	{ 182 183 184 }	{ 50 51 }	697
Paper-box-making machine	S. G. Damren	423,415	Mar. 18	1593	{ 418 419 }	{ 50 51 }	1455
Paper-box-making machine	G. M. Griswold	429,236	June 3	193	47, 48	51	1509
Paper box or basket. Knockdown	F. S. Elwell	426,928	Apr. 29	3780	987	51	772
Paper box. Slide	A. L. Munson	422,032	Feb. 25	2328	615	50	1031
Paper boxes. Machine for affixing flies to	G. A. Bisler	421,157	Feb. 11	1093	281	50	781
Paper boxes, &c. Machine for making tubes or cases for	W. G. Chapin	440,585	Nov. 11	1504	388	53	906
Paper boxes. Machine for the manufacture of	J. W. Hunt	440,570	Nov. 11	1484	383	53	902
Paper. Bundle of toilet	O. H. Hicks	443,851	Dec. 30	3615	930	53	2000
Paper. Bundle of toilet or wrapping	O. H. Hicks	425,033	Apr. 8	330	247	51	188
Paper-calendering machine	J. Snover	440,377	Nov. 11	1149	296	53	840
Paper cases. Tool for crimping or closing the ends of	E. S. Hunt	438,268	Oct. 14	919	249	53	181
Paper-clip	W. K. Crofford	433,979	Aug. 12	805	211	52	922
Paper. Compound for parchmentizing	E. Andrews	420,615	Feb. 4	268	50	50	617
Paper cover	J. M. Jones	421,028	Feb. 11	904	233	50	744
Paper-cutter	A. I. Blanchard	442,414	Dec. 9	1324	316	53	1508
Paper-cutter	G. H. Clarke and S. W. Robinson	423,855	Mar. 18	2243	593	50	1578
Paper-cutter	H. E. Wilson	440,293	Nov. 11	1031	265	53	818
Paper cutter and printer	A. J. Kletzker	420,388	Jan. 28	2635	699	50	545
Paper-cutter attachment	J. F. McAfee	420,823	Feb. 4	577	147	50	674
Paper cutter. Roll	D. F. Crowder	428,464	May 20	2182	550	51	1256
Paper cutter. Roll	C. K. Pickles	423,806	Mar. 18	2171	574	50	1564
Paper cutter. Roll	J. Reynolds	434,466	Aug. 19	1563	406	52	1080
Paper cutter. Roll	C. R. Williamson	426,578	Apr. 29	3266	856	51	672
Paper-cutting machine	A. Malm	434,285	Aug. 12	1378	332	52	1015
Paper-cutting machine	A. Malm	443,398	Dec. 23	2898	745	53	1852
Paper-cutting machine	L. W. Morse	425,519	Apr. 15	1660	443	51	340
Paper-cutting machine	C. Seybold	432,088	July 15	1647	{ 423 424 }	{ 52 53 }	337
Paper-cutting-machine gage	A. P. Brown	421,546	Feb. 18	1652	428	50	893
Paper-cutting machine. Guillotine	L. U. Gill and A. Bradley	439,817	Nov. 4	276	69, 70	53	602
Paper-cutting machines. Stabbing attachment for	A. C. Stonder	433,496	Aug. 5	81	24	52	773
Paper-cutting mechanism	S. Wheeler	443,708	Dec. 30	3395	872	53	1955
Paper elbow or bend. Tubular	E. T. Greenfield	441,836	Dec. 2	326	87	53	1328
Paper-fastener	J. M. Jones	434,047	Aug. 12	888	234	52	939
Paper-fastener	G. W. McGill	424,337	Mar. 25	2971	792	50	1724
Paper-fastener	P. L. Walter	434,101	Aug. 12	985	257	52	959

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Paper-feeder	F. Hart	434,630	Aug. 19	1827	{ 478 479	52	1134
Paper-feeder	J. Naylor, Jr.	434,643	Aug. 19	1854	{ 485 486	52	1139
Paper-feeding apparatus	E. M. Low	435,100	Aug. 26	2577	{ 680 112	52	1283
Paper-feeding device	G. W. Crane and H. Bradshaw	418,942	Jan. 7	458	{ 113 114 475	50	96
Paper-feeding machine	F. Hart	434,629	Aug. 19	1818	{ 476 477 478	52	1133
Paper-feeding machine	W. Womersley	434,649	Aug. 19	1867	{ 488 489	52	1141
Paper-finishing rolls. Water-box for	H. F. Case	430,112	June 17	1551	386	51	1791
Paper fixture. Toilet	J. T. and W. J. Donovan	427,407	May 6	577	144	51	926
Paper fixture. Toilet	S. Wheeler	438,567	Oct. 14	1351	366	53	267
Paper-folding machine	J. L. Cox	441,646	Dec. 2	26	8	53	1267
Paper-folding machine	R. Cundall	429,262	June 3	224	56	51	1515
Paper-folding machines. Side guide for	H. Gardiner	438,804	Oct. 21	1733	465	53	343
Paper flour-sack	W. A. Lorenz	418,919	Jan. 7	425	104	50	89
Paper. Frame for coating aristotype	E. A. Gilbert	428,089	May 20	1610	409	51	1145
Paper-guide and envelope-holder	E. Johnson	433,944	Aug. 12	750	195	52	913
Paper-hanger's shears and roller combined	J. W. Rountree	419,712	Jan. 21	1588	424	50	336
Paper-hanging machine	P. McQueney	436,924	Sept. 23	2502	{ 654 655	52	1873
Paper-hanging machine	F. H. Miller	421,596	Feb. 18	1725	450	50	907
Paper-hanging machine	H. W. Mundhenk	436,144	Sept. 9	1190	311	52	1607
Paper-holder	J. F. Frankney	434,506	Aug. 19	1626	427	52	1094
Paper holder and cutter. Roll	J. Baines	421,225	Feb. 11	1186	305	50	797
Paper holder and cutter. Roll	T. P. Chapman	424,923	Apr. 1	754	201	51	146
Paper holder and cutter. Roll	F. W. Drosten	434,256	Aug. 12	1237	320	52	1007
Paper holder and cutter. Roll	J. A. Eastin	432,384	July 15	2094	537	52	419
Paper holder and cutter. Roll	L. Ehrlich	423,745	Mar. 18	2086	550	50	1547
Paper holder and cutter. Roll	L. Ehrlich	428,473	May 20	2199	555	51	1258
Paper holder and cutter. Roll	L. Ehrlich	428,471	May 20	2200	555	51	1258
Paper holder and cutter. Roll	K. Ellerman	423,328	Mar. 11	1313	341	50	1394
Paper holder and cutter. Roll	E. C. Ford and G. T. Jacobs	429,566	June 3	702	170	51	1607
Paper holder and cutter. Roll	W. T. Geltz	429,029	May 27	3030	779	51	1439
Paper holder and cutter. Roll	W. G. Haas	439,872	Nov. 4	365	94	53	679
Paper holder and cutter. Roll	H. T. Henderson	429,524	June 3	635	156	51	1593
Paper holder and cutter. Roll	H. Hubbell	424,788	Apr. 1	556	148	51	109
Paper holder and cutter. Roll	S. C. Johns	436,789	Sept. 23	2224	586	52	1821
Paper holder and cutter. Roll	M. N. Jones	411,669	Dec. 2	59	16	53	1273
Paper holder and cutter. Roll	E. S. Knight	428,496	May 20	2223	562	51	1263
Paper holder and cutter. Roll	E. E. Lake	434,668	Aug. 19	1896	495	52	1146
Paper holder and cutter. Roll	J. B. Lawton	423,565	Mar. 18	1811	478	50	1495
Paper holder and cutter. Roll	J. H. Nentrup	423,798	Mar. 18	2162	571	50	1562
Paper holder and cutter. Roll	W. E. Nott	432,246	July 15	1886	485	52	381
Paper holder and cutter. Roll	A. G. A. Palm	442,823	Dec. 16	1913	491	53	1653
Paper holder and cutter. Roll	C. K. Pickles	428,523	May 20	2260	573	51	1271
Paper holder and cutter. Roll	W. Rabich	423,810	Mar. 18	2176	575	50	1564
Paper holder and cutter. Roll	G. Rein	423,813	Mar. 18	2180	576	50	1566
Paper holder and cutter. Roll	G. Rein	428,525	May 20	2261	574	51	1271
Paper holder and cutter. Roll	G. Rein	441,381	Nov. 25	2844	731	53	1176
Paper holder and cutter. Roll	J. Rovane	429,548	June 3	677	165	51	1602
Paper holder and cutter. Roll	W. A. Schenck	440,923	Nov. 18	2098	539	53	1025
Paper holder and cutter. Roll	J. E. State	430,153	June 17	1604	399	51	1801
Paper holder and cutter. Roll	W. H. Tivy	441,383	Nov. 25	2846	734	53	1176
Paper holder and cutter. Roll	E. B. Weston	428,192	May 20	1756	444	51	1174
Paper holder and cutter. Roll	J. W. Wilson	427,246	May 6	347	88	51	878
Paper holder and cutter. Roll	G. E. Yarger	426,088	Apr. 22	2530	667	51	515
Paper holder and cutter. Roll	G. E. Yarger	432,107	July 15	1680	432	52	343
Paper holder and cutter. Roll	J. Zerr	419,811	Jan. 21	1734	459	50	364
Paper holder and cutter. Wrapping	G. M. D. Manahan	442,066	Dec. 2	693	186	53	1398
Paper holder, printer, and cutter. Wrapping	G. W. Sprague and J. Studer	421,776	Feb. 18	1969	518	50	954
Paper holder. Roll	E. Morgan	432,738	July 22	2650	677	52	536
Paper into geometrical forms. Machine for cutting	S. Wheeler	420,524	Feb. 4	136	34	50	590
Paper-jogger	H. M. Aldrich	439,337	Oct. 28	2604	694	53	514
Paper-machine felts. Guide for	L. Ensing	432,993	July 29	3064	787	52	621
Paper. Machine for applying adhesive material to strips of	C. F. Taylor	439,332	Oct. 28	2593	692	53	512
Paper, &c. Machine for applying adhesive material to the surface of	J. M. Carew	423,593	Mar. 18	1847	487	50	1502
Paper. Machine for applying wax to	A. Watts and R. Henry	428,190	May 20	1753	443	51	1173
Paper. Machine for furnishing toilet	E. S. Graver	430,848	June 24	2746	673	51	2029
Paper. Machine for making tubes or cartons from	W. G. Chapin	438,838	Oct. 21	1806	{ 481 482 439	53	356
Paper. Machine for marbling	C. H. Bellamy	438,739	Oct. 21	1634	{ 440 441	53	324
Paper-machines. Mechanism for operating the decks of	N. E. Ackley	424,159	Mar. 25	2704	719	50	1673
Paper-machines. Suction-roll for	G. F. Germanson	439,871	Nov. 4	363	93	53	678
Paper-maker's felt	D. M. Fuller	431,112	July 1	121	52	26	
Paper-making machine	C. E. Johnson	421,574	Feb. 18	1690	438	50	900
Paper-making machine	J. B. McNamar	424,342	Mar. 25	2982	794	50	1726
Paper-making machine	S. S. Stovens	430,766	June 24	2512	615	51	1984
Paper-making machine	S. Wilnot	427,943	May 13	1399	354	51	1094
Paper-making machines. Couch-roll for	F. W. Miller and J. J. Newman	439,538	Oct. 28	2898	770	53	569
Paper-making machines. Suction apparatus for	M. Van Ryzin, O. W. Dodge, and T. Patten	419,900	Jan. 21	1881	494	50	394
Paper-making machines. Suction-box for	J. C. Young and G. A. Davis	426,089	Apr. 22	2531	667	51	515
Paper. Manufacturing antiseptic	A. Grossich and P. Mateovich	420,933	Apr. 29	3766	51	773	

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Paper. Manufacturing colored	J. H. Carpenter	443,658	Dec. 30	3311	853	53	1940
Paper. Manufacturing writing	G. F. Bardeen	427,453	May 6	648	162	51	940
Paper match-boxes. Casing for	T. Harbeck	422,405	Mar. 4	61	16	50	1148
Paper. Mechanism for feeding sheets of	C. H. Heywood	428,606	May 27	2391	{ 608 609 }	51	1315
Paper. Medicated	W. Schultz	433,827	Aug. 5	582		52	870
Paper or board. Composition for fire-proof	J. G. Merrill	424,328	Mar. 25	2951	786	50	1721
Paper or card rack	R. A. Hartman	436,600	Sept. 16	1909	501	52	1751
Paper. Package of	F. H. Allen	442,214	Dec. 9	919	{ 243 244 }	53	1449
Paper. Package of toilet	O. H. Hicks	441,162	Nov. 25	2473	641	53	1110
Paper. Packing-frame for shipping	W. Brown	443,474	Dec. 23	3017	774	53	1875
Paper pail	W. E. Montgomery	440,643	Nov. 18	1608	413	53	936
Paper pail	F. W. Wilcox and W. D. Moshier	426,698	Apr. 29	3450	904	51	707
Paper pails. Machine for making	U. Hull and W. W. McEwan	440,594	Nov. 11	1531	315	53	910
Paper. Process of and apparatus for applying paraf- fine to	W. B. Howe	437,435	Sept. 30	3309	864	52	2036
Paper pulp. Contractible cylinder for making cylin- ders from	J. R. Thame	434,740	Aug. 19	2003	523	52	1166
Paper-pulp digester	W. W. Keys	420,275	Jan. 28	2477	658	50	516
Paper-pulp from tobacco. Producing	H. Endemann	430,516	June 17	2191		51	1915
Paper-pulp. Machine for making hollow articles from	H. Parker	442,389	Dec. 9	1178	{ 306 307 }	53	1498
Paper-pulp. Magnetic separator for	F. H. Richards	438,897	Oct. 21	1897	{ 504 505 }	53	373
Paper-pulp-refining engine	J. H. Horne	428,913	May 27	2864	732	51	1407
Paper-reel	D. E. Deweese and S. Lane	439,591	Oct. 28	2978	791	53	586
Paper-roll holder	S. Wheeler	438,457	Oct. 14	1197	325	53	235
Paper roll. Toilet	S. Wheeler	422,866	Mar. 4	746	190	50	1279
Paper sacks. Machine for making	A. Weidenbusch	424,742	Apr. 1	468	{ 125 126 127 128 129 }	51	93
Paper safe. Toilet	E. L. Moodie	441,620	Nov. 25	3223	831	53	1250
Paper-slitter	H. E. Tidmarsh	430,492	June 17	2151	529	51	1907
Paper-slitting machine	G. Kaffenberger	437,896	Oct. 7	338	99	53	66
Paper-stock. Apparatus for making	J. D. Tompkins	430,595	June 17	2310	568	51	1937
Paper stucco. Composition for	O. Klette	439,526	Oct. 28	2883		53	566
Paper. Toilet	O. H. Hicks	421,497	Feb. 18	1574	407	50	879
Paper. Toilet	E. Jerome	440,828	Nov. 18	1926	494	53	994
Paper-trimming knife	L. P. Jackson	440,879	Nov. 18	2001	515	53	1009
Paper-trimming machine	L. P. Jackson	439,954	Nov. 4	494	129	53	704
Paper tube	D. N. Hurlbut	441,846	Dec. 2	346	91	53	1332
Paper tubes. Machine for making	E. D. McCracken	427,705	May 13	1024	{ 257 258 259 260 }	51	1023
Paper vessels. Machine for forming	W. Foglesong	432,028	July 15	1556	395	52	319
Paper vessels. Machine for making	W. Foglesong	432,029	July 15	1558	396	52	319
Paper vest	W. Stephenson	439,765	Nov. 4	204	53	53	648
Paper web. Mechanism for cutting variable lengths of sheets from	J. Brooks	439,862	Nov. 4	347	90	53	675
Paper-weight	C. Dickinson	434,705	Aug. 19	1966	510	52	1158
Paper-weight	H. P. Krell	436,665	Sept. 16	2021	527	52	1774
Paper-weight	R. Parker	429,863	June 10	1146	283	51	1762
Paper-weight and envelope-opener. Combined	F. E. Knight	419,682	Jan. 21	1549	413	50	328
Paper. White safety	A. Schlumberger	443,116	Dec. 23	2417		53	1759
Paper-winding apparatus. Equalizing mechanism for	C. D. Bingham	429,497	June 3	604	148	51	1587
Paper-winding device	T. H. Savery	423,448	Mar. 18	1641	{ 432 433 434 }	50	1464
Paper-winding machine	W. C. Jones and J. G. D. Mack	431,771	July 8	1163	{ 289 290 }	52	226
Paper-winding machine	G. Kaffenberger	424,608	Apr. 1	264	70	51	54
Papier-maché-matrix-drying apparatus	J. W. Osborne	440,923	Nov. 18	2078	537	53	1023
Parcel and letter box	R. F. Register	431,399	July 1	560	140	52	114
Parcel-carrier	D. A. Phelps	423,696	Mar. 18	2023	534	50	1535
Parcel-carrier	H. B. Williams	434,222	Aug. 12	1175	{ 305 306 }	50	995
Parcel-handler	J. C. Louny, Jr., and J. H. Doyle	426,830	Apr. 29	3656	952	51	747
Parcel or bundle holder	G. B. Rowe	424,578	Apr. 1	221	60	51	45
Parcel strap-holder	G. M. Morris	424,806	Apr. 1	578	153	51	112
Parcher	G. W. Boll	423,211	Mar. 11	1290	336	50	1389
Parchmentized fiber. Manufacture of	H. W. Morrow	439,970	Nov. 4	524		53	709
Parchmentized fiber. Manufacture of rods of	R. P. Frist	424,876	Apr. 1	687	181	51	132
Parchmentized-fiber waste. Treating	J. W. Barnes	441,462	Nov. 25	2984		53	1203
Parer and corer. Vegetable	P. T. Gates	440,705	Nov. 18	1713	439	53	955
Parer. Apple	H. A. and W. Tripp	440,338	Nov. 11	1093	{ 280 281 }	53	829
Parer. Fruit	W. A. C. Oaks	434,398	Aug. 12	1451	378	52	1051
Parer. Potato	R. Meyer	430,139	June 17	1586	395	51	1798
Parer. Vegetable and fruit	W. H. Dawson and H. Goodwin	427,056	May 6	33	10	51	817
Paring and coring machine. Fruit	W. Marshall	427,337	May 6	470	121	51	904
Paring-machine	C. M. Heffron	423,318	Mar. 11	1456	{ 381 382 }	50	1420
Paris-green distributor	J. Tucker	433,426	July 29	3697	955	52	748
Partition. Fire-proof	C. W. White	432,917	July 22	2918	748	52	588
Passenger-guard and ticket-collecting gate	E. E. Warner	443,883	Dec. 30	3655	942	53	2007
Passenger-recorder	A. Torrey	437,003	July 8	1510	{ 383 384 134 135 136 137 }	52	304
Passenger-register. Automatic	A. Gajardo	437,985	Oct. 7	476		53	91
Pasteboard, &c. Apparatus for drying	G. Kaiser	442,229	Dec. 9	939	248	53	1453

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Pasteboard boxes. Machine for cutting out tops and bottoms of	I. L. Sheldon	427,199	May 6	265	69	51	864
Pasting device. Wrapper	E. E. Porter	440,607	Nov. 11	1552	399	53	915
Pasting-machine	G. A. Fullerton	424,472	Apr. 1	42	12	51	11
Pasting-machine	M. F. Wilson	437,545	Sept. 30	3484	909	52	2072
Pasting paper strips. Machine for	P. Hanck	432,751	July 22	2676	{ 685 686 }	{ 52 52 }	{ 540 540 }
Pattern: See Adjustable pattern. Founding-pattern. Drawers-pattern. Shoe-pattern. Garment-pattern. Sleeve-pattern.							
Pattern-grading device	E. F. Dwyer	438,147	Oct. 14	734	{ 201 202 }	{ 53 53 }	{ 148 148 }
Pattern-plate for garments	J. S. and M. E. Baughman	422,282	Feb. 25	2722	717	50	1103
Patterns for garments. Apparatus for drafting	E. E. O'Halloran	431,781	July 8	1178	{ 294 295 }	{ 52 52 }	{ 239 239 }
Patterns. Manufacturing transparent	J. Baynes	419,674	Jan. 7	12	4	50	5
Pavement	J. S. Schaeffer	421,618	Feb. 18	1759	461	50	913
Pavement	J. J. Schilling	425,258	Apr. 8	1265		51	256
Pavement	F. C. Schmidt	442,784	Dec. 16	1835	475	53	1634
Pavement and gutter	O. S. Burdett	421,235	Feb. 11	1198	308	50	800
Pavement. Artificial-stone-block	E. Dart	421,483	Feb. 18	1552	401	50	874
Pavement. Artificial-stone-block	E. Dart	421,560	Feb. 18	1671	433	50	896
Pavement-curb	I. L. Landis	431,898	July 8	1358	343	52	274
Pavement. Street	H. B. Alexander	438,046	Oct. 7	579		53	110
Pavement. Street	D. W. Campbell	429,303	June 3	304	72	51	1525
Pavement. Street	G. W. Parker	433,540	Aug. 5	137	39	52	784
Paving-block	P. Arnold	422,690	Mar. 4	484	123	50	1229
Paving-block	D. E. McDowell	436,989	Sept. 23	2583	676	52	1889
Paving-block	A. B. Schofield	441,332	Nov. 25	2769	716	53	1162
Paving-block	G. Schreyer	420,020	Jan. 21	2059	542	50	429
Paving-block or tile mold	G. Winding	438,875	Oct. 21	1867	495	53	367
Paving compound	D. C. Cregier	429,117	June 3	20		51	1476
Paving streets	P. Griffin	430,013	June 10	1380	343	51	1748
Pawl-and-ratchet device	A. B. Case	435,087	Aug. 26	2560	675	52	1280
Pawl-and-ratchet mechanism	W. Bayley	422,696	Mar. 4	493	126	50	1231
Pawl-and-ratchet mechanism	H. H. Dille and E. W. McGuire	426,368	Apr. 22	2934	772	51	599
Pawl-and-ratchet mechanism	H. Farmer	423,232	Mar. 11	1317	342	50	1394
Pawl-and-ratchet mechanism	F. G. Tallyday	439,612	Oct. 28	3021	801	53	594
Pawl-and-ratchet mechanism	F. G. Tallyday	439,613	Oct. 28	3023	802	53	594
Pea-grader	N. G. Nunnson	435,153	Aug. 26	2654	702	52	1298
Pea-shelling machine	J. W. Harbin	437,987	Oct. 7	485	139	53	92
Pea-shelling machine	G. Paci	433,302	July 29	3528	{ 910 911 911 }	{ 52 52 52 }	{ 713 713 713 }
Pea thrasher and separator	E. E. Sanford	428,958	May 27	2924	{ 749 750 }	{ 51 51 }	{ 1419 1419 }
Peas. Hulling	C. P. and J. A. Chisholm	421,244	Feb. 11	1214	314	50	803
Peach-stoner	J. C. Bryan	440,463	Nov. 11	1307	338	53	869
Peanut-cleaning machine	J. M. Williams	436,645	Sept. 16	1981	{ 519 520 }	{ 52 52 }	{ 1765 1765 }
Peanut roaster and warmer	J. B. Bartholomew	428,879	May 27	2810	715	51	1396
Peat-machine	T. Messenger	423,261	Mar. 11	1363	{ 354 355 }	{ 50 50 }	{ 1403 1403 }
Pedal-protector	H. I. Tinkham	424,038	Mar. 25	2535	675	50	1640
Peg	S. W. Robinson	440,723	Nov. 18	1737	446	53	961
Pegging and sewing jack	R. T. Lemmon, Jr.	440,483	Nov. 11	1343	347	53	876
Pegging-jack	G. S. Dusenbery	430,732	June 24	2553	625	51	1992
Pegging-jack	J. D. Fiske	436,974	Sept. 23	2568	671	52	1886
Pegging-jack	R. E. Kidder	431,168	July 1	204	51	52	42
Pegging-machine	C. S. Gooding and S. W. Ladd	423,921	Mar. 25	2355	{ 620 621 }	{ 50 50 }	{ 1607 1607 }
Pelts. Machine for removing water-hairs from	A. Hedbavny. (Reissue)	11,079	May 27	3160	814	51	1464
Pen	I. Bergmann	431,245	July 1	323	80	52	65
Pen and pencil holder	U. Bohren	420,033	Jan. 28	2084	550	50	442
Pen and pencil holder and eraser. Combined	R. Spear	425,527	Apr. 15	1669	445	51	342
Pen attachment. Fountain	L. Bernhard	427,959	May 13	1425	359	51	1098
Pen cleaner and support	J. J. C. Smith	433,878	Aug. 5	653	169	52	884
Pen. Cyclostyle	D. Gestetner	434,331	Aug. 12	1343	350	52	1029
Pen-extractor	J. McElroy	429,218	June 3	171	41	51	1504
Pen feeder. Fountain	E. S. Johnson	440,712	Nov. 18	1724	442	53	958
Pen for swine. Breeding	B. F. Osborn	436,962	Sept. 23	2466	643	52	1866
Pen. Fountain	G. Armeny	429,405	June 3	465	110	51	1560
Pen. Fountain	C. W. Bonan	426,758	Apr. 29	3547	925	51	726
Pen. Fountain	F. S. Heath	423,684	Mar. 18	1996	526	50	1531
Pen. Fountain	J. Holland	426,813	Apr. 29	3628	947	51	741
Pen. Fountain	A. B. Hyde	426,021	Apr. 22	2436	644	51	497
Pen. Fountain	E. Marble, Jr.	426,833	Apr. 29	3660	953	51	748
Pen. Fountain	M. W. Moore	435,900	Sept. 2	815	216	52	1533
Pen. Fountain	G. S. Parker	423,804	Mar. 18	2169	573	50	1563
Pen. Fountain	R. B. Pitcairn	427,358	May 6	499	128	51	910
Pen. Fountain	W. B. Purvis	419,065	Jan. 7	629	163	50	132
Pen. Fountain	J. Raynald	438,895	Oct. 21	1895	504	53	372
Pen. Fountain	A. Reid	421,614	Feb. 18	1755	460	50	912
Pen. Fountain	L. A. Shattuck	423,822	Mar. 18	2191	579	50	1568
Pen. Fountain	L. A. Shattuck	440,292	Nov. 11	872	224	53	790
Pen. Fountain	L. A. Shattuck	441,111	Nov. 18	2378	617	53	1082
Pen. Fountain	L. A. Shattuck	443,628	Dec. 30	3264	840	53	1931
Pen. Fountain	P. B. Smith	442,644	Dec. 16	1582	409	53	1588
Pen. Fountain	W. E. Smith	427,444	May 6	637	160	51	938
Pen. Fountain	W. W. Stewart	426,692	Apr. 29	3442	902	51	705
Pen. Fountain	N. C. Stiles	428,969	May 27	2942	755	51	1423
Pen. Fountain	E. Tyrrell	443,017	Dec. 16	2921	572	53	1715
Pen. Fountain	R. Valentine	440,077	Nov. 4	674	179	53	740
Pen. Fountain	W. Van Demark	433,109	July 29	3251	837	52	657

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Pen. Fountain.....	O. E. Weidlich.....	432,474	Mar. 4	163	44	50	1167
Pen. Fountain.....	J. T. Wilcox.....	420,504	Feb. 4	110	27	50	585
Pen. Glass.....	A. Heinz.....	435,969	Sept. 9	914	241	52	1557
Pen. Hog.....	W. McDaniel.....	434,800	Aug. 19	2089	546 547	52	1184
Pen-holder.....	B. H. Barnes.....	432,355	July 15	2050	523	52	411
Pen-holder.....	E. Faber.....	426,119	Apr. 22	2579	678	51	525
Pen-holder.....	B. B. Goldsmith.....	434,265	Aug. 12	1250	324	52	1010
Pen-holder.....	J. I. Harris.....	424,552	Apr. 1	181	50	51	37
Pen-holder.....	H. Hewitt.....	434,781	Aug. 19	2065	540	52	1179
Pen-holder.....	C. Hollwede.....	437,361	Sept. 30	3191	813	52	2012
Pen-holder.....	F. Knade.....	422,805	Mar. 4	640	164	50	1260
Pen-holder.....	J. C. Palmer.....	433,303	July 29	3531	911	52	714
Pen-holder.....	F. Petersen.....	431,391	July 1	552	138	52	112
Pen-holder.....	S. A. Scholz.....	425,583	Apr. 15	1750	468	51	357
Pen-holder.....	J. H. Spigener.....	419,083	Jan. 7	652	171	50	138
Pen-holder, Discharging.....	T. Hooper and S. G. Moore.....	420,799	Feb. 4	528	137	50	665
Pen-holder, Electric.....	C. W. Reitler. (Reissue).....	11,053	Jan. 7	784	207	50	163
Pen-holder for cripples.....	R. Ramsey.....	426,324	Apr. 22	2870	755	51	586
Pen-holder, Fountain.....	H. Pearse.....	423,339	Mar. 11	1423	399	50	1426
Pen-holder, Fountain.....	E. Tyrell.....	443,016	Dec. 16	2221	572	53	1715
Pen-holder, Magnetic.....	E. A. Hill.....	424,786	Apr. 1	551	147	51	108
Pen-holders, Thumb and finger guide for.....	J. Barter.....	424,587	Mar. 18	1840	455	50	1500
Pen. Marking.....	R. L. McCready.....	437,312	Sept. 30	3103	812	52	1991
Pen. Mechanical tracing.....	E. H. Craige.....	426,925	Apr. 29	3776	986	51	771
Pen. Mechanical tracing.....	E. H. Craige.....	426,987	Apr. 29	3860	1009 1010	51	787
Pen or pencil holder and supporter.....	C. A. Higinbottom.....	420,793	Feb. 4	520	135	50	664
Pen-rack or case.....	F. Rosewater.....	438,185	Oct. 14	785	214	53	157
Pen. Ruling.....	H. H. Hazen, H. Lyddon, and T. Farmer.....	428,250	May 20	1850	465	51	1192
Pen. Stylographic.....	T. W. Evans.....	421,069	Feb. 11	965	248	50	755
Pen. Stylographic.....	C. W. Robinson.....	443,542	Dec. 30	3124	804	53	1904
Pens, brushes, &c. Absorbent device for cleaning.....	H. B. Helffrich.....	442,888	Dec. 16	2032	521	53	1675
Pencil attachment.....	L. A. Negral.....	426,950	Apr. 29	3807	995	51	777
Pencil-box.....	H. Legge.....	432,331	July 22	2806	716	52	564
Pencil-case, Magazine.....	M. Schreiber.....	424,621	Apr. 1	287	74	51	57
Pencil-clasp.....	G. B. Adams.....	436,591	Sept. 16	1899	499	52	1750
Pencil-clasp.....	H. C. Evans.....	429,789	June 10	1029	252	51	1680
Pencil-holder.....	C. M. E. Gleeson.....	433,938	Aug. 12	743	194	52	912
Pencil-holder.....	E. Wehrli.....	439,220	Oct. 28	2402	646	53	476
Pencil-holders, Pointing apparatus to be employed in.....	F. W. H. Haas.....	419,768	Jan. 21	1665	442	50	375
Pencil, Lead.....	L. H. Sondheim.....	426,742	Apr. 29	3524	920	51	721
Pencil, Magazine.....	D. A. Keizer.....	442,754	Dec. 16	1792	464	53	1628
Pencil or pen calendar attachment.....	J. A. Faust.....	423,232	Mar. 11	1318	342	50	1494
Pencil or pen calendar attachment.....	J. A. Faust.....	423,234	Mar. 11	1320	343	50	1395
Pencil-rack.....	J. K. Abrams.....	421,862	July 8	1310	328	52	265
Pencil safety attachment.....	J. C. Gores.....	428,752	May 27	2629	665	51	1359
Pencil-sharpener.....	J. B. Bartlett.....	430,417	June 17	2041	503	51	1886
Pencil-sharpener.....	E. Bernhardt.....	418,883	Jan. 7	360	86	50	76
Pencil-sharpener.....	J. Bigham.....	419,307	Jan. 14	993	263	50	210
Pencil-sharpener.....	E. E. Blakeslee.....	421,810	Feb. 18	2010	531	50	962
Pencil-sharpener.....	E. F. Bumpus.....	437,285	Sept. 30	3063	802	52	1989
Pencil-sharpener.....	C. L. Burger.....	432,789	July 22	2743	702	52	553
Pencil-sharpener.....	A. G. Buzly.....	435,917	Sept. 9	842	222	52	1544
Pencil-sharpener.....	C. E. Carpenter.....	440,540	Nov. 11	1435	370	53	894
Pencil-sharpener.....	E. S. Drake.....	426,716	Apr. 29	3488	912	51	713
Pencil-sharpener.....	F. Dnnworth.....	422,126	Feb. 25	2479	655	50	1058
Pencil-sharpener.....	W. J. Gill.....	431,769	July 8	1160	289	52	235
Pencil-sharpener.....	E. Hamblur.....	429,130	June 3	35	8	51	1479
Pencil-sharpener.....	H. K. Harker.....	431,517	July 1	746	186	52	149
Pencil-sharpener.....	T. Jenni.....	426,125	Apr. 22	2587	680	51	527
Pencil-sharpener.....	J. H. Jones.....	429,689	June 10	683	214	51	1653
Pencil-sharpener.....	W. H. Jones.....	433,684	Aug. 5	362	92	52	826
Pencil-sharpener.....	L. A. Jordan and S. O. Meader.....	426,940	Apr. 29	3795	991	51	775
Pencil-sharpener.....	E. H. Lyon.....	423,787	Mar. 18	2146	566 567	50	1559
Pencil-sharpener.....	A. J. Mundy.....	441,016	Nov. 18	2213	572	53	1050
Pencil-sharpener.....	G. R. Sandell.....	421,767	Feb. 18	1957	514	50	951
Pencil-sharpener.....	F. A. Taylor.....	437,873	Oct. 7	305	91	53	60
Pencil-sharpener.....	C. B. Wanamaker.....	418,997	Jan. 7	523	132	50	111
Pencil-sharpener.....	J. Watrons.....	431,422	July 1	596	150	52	120
Pencil-sharpener.....	B. Wesselmann.....	423,845	Mar. 18	2223	567	50	1575
Pencil-sharpener and pencil-holder, Combined.....	H. Fancourt.....	423,678	Mar. 18	1991	525	50	1530
Pencil sharpener, Lead.....	A. Ames.....	422,435	Mar. 4	178	49	50	1170
Pencil sharpener, Slate.....	E. F. Montgomery.....	433,533	Aug. 5	120	37	52	782
Pencil-sharpening machine.....	W. Rundquist and L. N. Jackman.....	438,569	Oct. 14	1353	367	53	267
Pencil tip and sharpener, Combined.....	A. Trego.....	441,284	Nov. 25	2847	735	53	1177
Pencil-tip eraser and twine-cutter, Combined.....	G. Weirter.....	421,795	Feb. 13	1994	525	50	950
Pencil-tip, Brasive.....	O. Mussen, Jr.....	423,563	Mar. 18	1815	478	50	1496
Pendent handle.....	F. W. Smith.....	443,013	Dec. 16	2218	571	53	1714
Pendulum, Compensation.....	C. E. Emery.....	436,343	Sept. 16	1496	390 391	52	1676
Pepper-grinder.....	J. C. Levi.....	430,661	June 24	2411	594	51	1970
Pepsin.....	J. B. Russell.....	424,357	Mar. 25	3002	.....	50	1730
Pepsin, Making vegetable.....	V. Marcato.....	441,182	Nov. 25	2500	.....	53	1115
Pepsin, Obtaining.....	J. Brill.....	433,395	July 29	3650	.....	52	738
Peptone and maltose, Obtaining.....	A. Bruun.....	423,213	Mar. 11	1291	.....	50	1390
Peptones, Making.....	V. Marcato.....	441,180	Nov. 25	2498	.....	53	1114
Peptonized meat, Making.....	V. Marcato.....	441,181	Nov. 25	2499	.....	53	1115
Perambulator.....	E. A. Harris.....	422,407	Mar. 4	62	17	50	1149
Perambulator.....	U. McClinchie.....	428,780	May 27	2665	676	51	1366
Percolating-table, Portable.....	C. J. Ellison.....	435,411	Sept. 2	49	17	52	7384

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Percolator	W. D. Warnick and C. E. Cunningham.	436,199	Sept. 9	1278	333	52	1623
Perforating characters. Machine for	E. C. Phillips	441,581	Nov. 25	3159	{ 812 813 }	{ 53 }	1237
Perforating device	C. J. Glasier	420,535	Feb. 4	154	38	50	594
Perforating-machine	J. Caster	424,759	Apr. 1	502	136	51	98
Perforating-machine	L. H. Stellmann	436,810	Sept. 23	2273	599	52	1831
Perforating-machine	T. P. Taylor	431,155	July 1	180	46	52	38
Perforating-machine	J. White and A. O. Kittredge	435,003	Aug. 26	2436	645	52	1257
Perforating paper patterns. Machine for	(J. W. Weiss	440,799	Nov. 18	1870	481	53	984
Perforating-wheel	J. Jensik and C. Stoll	424,676	Apr. 1	368	97	51	71
Perforator	F. P. Rosback	421,765	Feb. 18	1950	{ 513 514 }	{ 50 }	951
Perforator	L. P. Valiquet	436,048	Sept. 9	1039	970	52	1581
Perforator. Gripper	W. T. Nickerson	442,536	Dec. 9	1413	361	53	1545
Perfume-ejector. Coin-operated	F. W. Brooks	427,967	May 13	1434	362	51	1101
Perfume-holder	H. Tappan	432,451	July 15	2188	564	52	439
Perfume. Solidified	G. H. Dubelle	423,455	Aug. 5	29	52	762	
Permutation-lock	W. H. Bechtel	426,427	Apr. 29	3049	798	51	630
Permutation-lock	W. M. Brooke	435,915	Sept. 9	841	222	52	1544
Permutation-lock	J. J. Deal	436,597	Sept. 16	1905	501	52	1751
Permutation-lock	B. J. Donds	431,450	July 1	645	161	52	130
Permutation-lock	B. J. Donds	431,451	July 1	646	161	52	130
Permutation-lock	W. F. Feistner	429,192	June 3	130	32	51	1495
Permutation-lock	H. C. Griffin	423,148	Mar. 11	1204	314	50	1372
Permutation-lock	L. Houck	429,092	May 27	3135	808	51	1459
Permutation-lock	C. E. Johanson	420,625	Feb. 4	284	75	50	619
Permutation-lock	J. K. Magie	425,893	Apr. 15	2215	588	51	447
Permutation-lock	A. Metzger	442,778	Dec. 16	1827	473	53	1637
Permutation-lock	A. H. Van Pelt	420,841	Feb. 4	606	156	50	678
Pessary	J. S. McCants	421,958	Feb. 25	2232	587	50	1013
Pessary	C. P. Tatro	443,878	Dec. 30	3947	940	53	2006
Petroleum-burner	D. C. Wilgus	443,808	Dec. 30	3557	912	53	1988
Petroleum-burner	J. Wilson and A. Mason	438,512	Oct. 14	1268	343	53	249
Petroleum-burners. Automatic feeding device for	C. V. Fleetwood	421,826	Feb. 18	2034	537	50	966
Petroleum. Burning crude	L. Goddu	443,660	Dec. 30	3313	854	53	1940
Petroleum-engine	J. Roots	425,909	Apr. 15	2239	{ 593 594 }	{ 51 }	451
Petroleum engine or motor	H. A. Stuart	439,702	Nov. 4	111	29	53	630
Petroleum. Manufacturing articles for containing	H. Thame	434,739	Aug. 19	2002	52	1166	
Petroleum or oil motor engine	N. A. Otto	437,507	Sept. 30	3421	895	52	2059
Petroleum or other hydrocarbons. Burning	J. Wilson and A. Mason	423,012	Mar. 11	987	260	50	1332
Petroleum or similar motor	C. von Lüde	435,439	Sept. 2	90	26	52	1392
Petroleum. Purifying and deodorizing crude	R. M. Perrine	419,347	Jan. 14	1061	50	224	
Pharoah s serpent	C. Nelson	418,814	Jan. 7	232	56	50	50
Pharmaceutical powder-divider	W. F. Dessau	432,986	July 29	3053	784	52	619
Phenylidihydroquinazoline	C. Paal	428,286	May 20	1913	51	1204	
Phone-receiver holder	J. T. Moore	436,717	Sept. 16	2090	550	52	1788
Phonogram-blank	T. A. Edison	430,274	June 17	1829	51	1843	
Phonogram-blank	T. A. Edison	430,570	June 17	2269	558	51	1928
Phonogram-blank	T. A. Edison	437,429	Sept. 30	3301	862	52	2034
Phonogram-blanks. Making	T. A. Edison	437,427	Sept. 30	3298	861	52	2033
Phonogram-blanks. Resurfacing	O. P. Austin	429,079	May 27	3120	51	1455	
Phonograph	T. A. Edison	430,276	June 17	1831	449	51	1844
Phonograph	T. A. Edison	430,278	June 17	1837	450	51	1845
Phonograph	T. A. Edison	437,423	Sept. 30	3294	860	52	2032
Phonograph	T. A. Edison	437,424	Sept. 30	3295	860	52	2033
Phonograph	T. A. Edison	437,426	Sept. 30	3297	861	52	2033
Phonograph	T. A. Edison	443,507	Dec. 30	3074	792	53	1895
Phonograph	I. W. Heysinger	440,155	Nov. 11	793	208	53	773
Phonograph	J. P. Magenis	432,886	July 22	2877	737	52	580
Phonograph	J. H. White	440,524	Nov. 11	1410	365	53	889
Phonograph. Automatic coin-controlled	L. F. Douglass	431,883	July 8	1341	338	52	270
Phonograph-cylinders. Machine for paring and polishing	G. A. Beach	441,609	Nov. 25	3199	{ 824 825 }	{ 53 }	1246
Phonograph for dolls or other toys	T. A. Edison	423,039	Mar. 11	1036	270	50	1340
Phonograph-recorder	T. A. Edison	437,425	Sept. 30	3296	860	52	2033
Phonograph-recorder	J. H. White	425,840	Apr. 15	2141	571	51	433
Phonographs. Automatic determining device for	T. A. Edison	426,527	Apr. 29	3191	837	51	657
Phonographs. Automatic determining device for	T. A. Edison	430,277	June 17	1835	450	51	1844
Phonographs. Automatic repeating mechanism for	J. H. Ling	440,046	Nov. 4	637	170	53	733
Phonographs. Coin-actuated attachment for	L. Glass and W. S. Arnold	428,750	May 27	2621	{ 664 665 }	{ 51 }	1357
Phonographs. Coin-actuated attachment for	L. Glass and W. S. Arnold	428,751	May 27	2626	665	51	1358
Phonographs. Stop and start device for	H. D. Goodwin and W. S. Burnett	441,361	Nov. 25	2807	725	53	1168
Photo-chemical printing	W. Willis	423,649	Mar. 18	2231	50	1576	
Photo-engraving apparatus	W. A. Blomgren	432,783	July 22	2729	698	52	351
Photo-engraving frame	J. Baynes	436,687	Sept. 16	2051	536	52	1780
Photo-mechanical printing-plate	O. Dubois	428,472	May 20	2197	554	51	1258
Photo-mechanical printing-plates. Producing	R. Aramburo	437,170	Sept. 23	2882	52	1946	
Photo-negative bath-dish	J. R. Moeller	422,143	Feb. 25	2497	660	50	1062
Photo-plate holder	J. Barnett	419,105	Jan. 7	683	180	50	144
Photograph-hurishing machine	W. G. Entrekkin	424,768	Apr. 1	515	139	51	101
Photograph-camera. Panoramic	P. Moëssard	429,792	June 10	1032	253	51	1680
Photograph-mount	H. N. Gale	425,775	Apr. 15	2042	544	51	415
Photograph-mounting machine	L. C. Madsen	434,451	Aug. 19	1545	{ 402 403 }	{ 52 }	1076
Photograph-washing apparatus	J. L. Morris	431,120	July 1	131	34	52	28
Photographs. Background for	E. N. Howe	439,512	Oct. 28	2864	761	53	563
Photographs. Oil-finish for	A. C. Brandecke	429,558	June 3	688	51	1604	
Photographs or other pictures. Mount for	R. H. L. Talcott	437,949	Oct. 7	418	117	53	60
Photographer's background	E. H. Hague	443,762	Dec. 30	3483	893	53	1973
Photographers' developing-pans. Device for oscillating	V. H. Buschmann	435,681	Sept. 2	476	126	52	1466
Photographers. Timing apparatus for	H. Ford	423,473	Mar. 18	1680	444	50	1472

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Photographic apparatus	E. Kipper and E. W. Perry, Jr	424,315	Mar. 25	2930	781	50	1717
Photographic apparatus. Automatic	M. J. Steffens	429,705	June 10	911	{ 223 224	{ 51	1658
Photographic apparatus. Coin-operated	C. H. C. Föge, C. H. Griesse, and J. L. F. Raders	437,104	Sept. 23	2748	718	52	1923
Photographic apparatus. Flash-light	W. H. Harbeck	441,158	Nov. 25	2465	{ 638 639	{ 53	1108
Photographic apparatus. Lens-tube for	W. H. Trueman	435,335	Aug. 26	2937	780	52	1350
Photographic apparatus. Magazine plate-holder for	E. Kipper and E. W. Perry, Jr	439,012	Oct. 21	2066	553	53	407
Photographic apparatus. Pocket	A. Goldschmid	441,064	Nov. 18	2297	596	53	1067
Photographic-apparatus shutter	E. W. Perry, Jr	438,943	Oct. 21	1961	523	53	385
Photographic camera	W. I. Adams	436,391	Sept. 16	1584	418	52	1693
Photographic camera	J. T. Bedford	436,012	Sept. 9	974	{ 255 256	{ 52	1569
Photographic camera	L. M. Berthon	419,910	Jan. 21	1894	{ 497 498	{ 50	397
Photographic camera	J. E. Blackmore	435,342	Aug. 26	2952	783	52	1353
Photographic camera	W. A. Brice	422,700	Mar. 4	506	129	50	1233
Photographic camera	F. A. Brownell	442,216	Dec. 9	921	244	53	1450
Photographic camera	A. E. Colgate	437,290	Sept. 30	3068	{ 803 804	{ 52	1989
Photographic camera	N. Crane	439,121	Oct. 28	2237	601	53	446
Photographic camera	W. H. Fuller	436,347	Sept. 16	1503	392	52	1677
Photographic camera	H. N. B. Good	421,923	Feb. 25	2189	574	50	1005
Photographic camera	H. J. Gray	440,427	Nov. 11	1257	326	53	859
Photographic camera	H. Heinrich	436,098	Sept. 9	1112	{ 288 289	{ 52	1594
Photographic camera	F. W. Hutchins	434,046	Aug. 12	886	234	52	938
Photographic camera	W. H. Lewis	439,804	Nov. 4	258	65	53	658
Photographic camera	W. B. Luce	424,564	Apr. 1	199	54	51	41
Photographic camera	J. Merritt and W. E. Spencer	426,295	Apr. 22	2826	{ 743 744	{ 51	577
Photographic camera	J. Merritt and W. E. Spencer	426,296	Apr. 22	2828	{ 744 745	{ 51	577
Photographic camera	E. W. Perry, Jr	438,944	Oct. 21	1963	524	53	385
Photographic camera	O. Plaul	434,090	Aug. 12	964	253	52	955
Photographic camera	J. M. Rhodes	434,807	Aug. 19	2077	{ 550 551	{ 52	1186
Photographic camera	P. E. Rndell	421,436	Feb. 18	1482	384	50	861
Photographic camera	W. Sanders	413,963	Aug. 12	780	{ 204 205	{ 52	918
Photographic camera	G. Shorkley	438,494	Oct. 14	1241	{ 336 337	{ 53	244
Photographic camera	A. W. Simon	422,984	Mar. 11	954	251	50	1325
Photographic camera	C. R. Smith	418,764	Jan. 7	158	38, 39	50	35
Photographic camera	D. J. Tapley	424,146	Mar. 25	2683	714	50	1669
Photographic camera	G. D. Thompson	433,553	Aug. 5	167	45	52	789
Photographic camera	F. Whitney	430,794	June 24	2658	652	51	2013
Photographic-camera attachment	A. Vignos	443,555	Dec. 30	3149	810	53	1909
Photographic-camera-beds rigid. Device for making	H. P. Ball	434,622	Aug. 19	1807	473	52	1131
Photographic-camera shutter	J. J. Dossert	423,913	Mar. 25	2344	617	50	1605
Photographic-camera shutter	F. A. Hetherington	436,855	Sept. 23	2390	624	52	1852
Photographic-camera shutter	E. W. Perry, Jr	422,825	Mar. 4	669	171	50	1265
Photographic-camera shutter	E. W. Perry, Jr	439,037	Oct. 21	2102	563	53	413
Photographic-camera-shutter attachment	H. W. Hales	436,658	Sept. 16	2008	524	52	1771
Photographic cameras. Adjustable support for	C. S. Blake	439,098	Oct. 28	2205	591	53	440
Photographic cameras. Magazine for	T. S. Wiles	423,649	Mar. 18	1950	514	50	1522
Photographic cameras. Plate-holder for	W. F. Carlton	432,974	July 29	3031	779	52	614
Photographic cameras. Roll-holder for	W. H. Fuller	439,650	Nov. 4	40	12	53	614
Photographic cameras. Stop or diaphragm for	L. G. Bigelow	443,386	Dec. 23	2881	740	53	1849
Photographic dark-rooms. Lamp for use in	F. Haes	425,319	Apr. 8	1358	362	51	273
Photographic developing apparatus	C. Spiro	437,631	Sept. 30	3597	940	52	2094
Photographic dipper	E. W. Perry, Jr	420,355	Jan. 28	2586	687	50	536
Photographic dry-plate-coating machine	F. J. Swaine and C. S. Moody	426,420	Apr. 22	3038	{ 795 796	{ 51	619
Photographic dry-plates. Packing-box for	E. Lear	423,059	Mar. 11	1065	276	50	1345
Photographic film	G. Eastman	441,831	Dec. 2	319	85	53	1326
Photographic film. Flexible	W. H. Walker and G. Eastman	420,130	Jan. 28	2238	593	50	473
Photographic films. Producing	Y. Schwartz	436,587	Sept. 16	1896	...	52	1749
Photographic films. Roller-holder for	G. Eastman	433,775	Aug. 5	498	129	52	852
Photographic films. Roller-holder for	G. Eastman and P. H. Yawman	432,990	July 29	3059	786	52	620
Photographic films. Roller-holder for	G. Eastman and P. H. Yawman	433,774	Aug. 5	495	129	52	852
Photographic films. Roller-holder for	S. D. McKellen	433,020	July 29	3107	797	52	620
Photographic flash-light diffuser	J. S. Bridges	439,999	Nov. 4	568	150	53	718
Photographic instruments. Focusing attachment for	F. B. Quimby	439,556	Oct. 28	2926	778	53	575
Photographic magazine-camera	J. Lalor	436,060	Sept. 9	1053	{ 273 274	{ 52	1584
Photographic magazine-camera	F. H. D. Schwarz	425,005	Apr. 8	888	235	51	180
Photographic-negative-film holder	F. S. Osborne	426,054	Apr. 22	2478	655	51	505
Photographic objective	E. Abbe and P. Rudolph	435,271	Aug. 26	2830	749	52	1332
Photographic objective	D. Gundlach	442,251	Dec. 9	968	253	53	1460
Photographic or laboratory lamp	H. G. Ramsperger	427,187	May 6	248	64	51	860
Photographic-plate holder	R. A. Anthony	439,808	Nov. 4	262	66	53	659
Photographic-plate holder	P. Chouteau	424,857	Apr. 1	654	173	51	127
Photographic-plate holder	W. H. Fuller	428,809	May 27	2703	686	51	1374
Photographic-plate holder	E. Kipper and E. W. Perry, Jr	439,013	Oct. 21	2068	554	53	408
Photographic-plate holder and mechanism for operating the same	A. Dom and C. H. Sheen	419,505	Jan. 14	1281	{ 341 342	{ 50	269
Photographic-plate holder. Magazine	T. S. Wiles	424,396	Mar. 25	3087	820	50	1748
Photographic-plate holders without a dark-room. Means for filling	C. Spiro	437,630	Sept. 30	3596	940	52	2094
Photographic posing-chair	J. M. Dow	435,056	Aug. 26	2513	664	52	1271
Photographic-print washer	J. F. Way	430,242	June 17	1745	435	51	1821
Photographic-printing frame	D. Bartlett	437,843	Oct. 7	261	79	53	15

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. \$	Vol.	Page.
Photographic-printing frame	W. H. Lewis	434,188	Aug. 12	1123	292	52	986
Photographic-printing frame	L. Rouillon	419,360	Jan. 14	1078	285	50	228
Photographic-printing paper. Emulsion for	L. F. Marten	439,021	Oct. 21	2080	53	410	
Photographic purposes. Flush-washer for	G. H. Richards	440,325	Nov. 11	1074	276	53	826
Photographic purposes. Petroleum-lamp for	M. Jijinsky	426,023	Apr. 22	2440	645	51	498
Photographic shutter	E. B. Barker	440,583	Nov. 11	1501	387	53	906
Photographic shutter	J. B. Church	440,137	Nov. 11	770	{ 202 203 }	53	769
Photographic shutter	T. R. Dallmeyer and F. Beauchamp	436,404	Sept. 16	1600	423	52	1696
Photographic shutter	G. F. Green	432,999	July 29	3074	789	52	622
Photographic shutter	W. H. Lewis	437,655	Sept. 30	3630	748	52	2100
Photographic shutter	W. B. Luce	429,929	June 10	1242	308	51	1727
Photographic shutter	J. R. Trego	422,664	Mar. 4	451	114	50	1222
Photographic stand	H. Wild	422,559	Mar. 4	281	71	50	1190
Photographing and other purposes. Apparatus for producing flash-lights for	A. Hemsley	442,224	Dec. 9	933	247	53	1452
Photographing, developing, and delivering the finished pictures. Apparatus for automatically	J. Sacco	432,903	July 22	2899	{ 742 743 744 }	52	584
Photographing-machine. Coin-operated	P. V. W. Welsh	438,261	Oct. 14	898	{ 244 245 }	53	177
Photographing without a dark-room	C. Spiro	437,629	Sept. 30	3595	939	52	2094
Photography. Apparatus for automatic	T. E. Enjalbert	436,627	Sept. 16	1945	{ 510 511 512 }	52	1759
Photography. Making iron prints by	C. R. McBlair	442,450	Dec. 9	1275		53	1518
Pianissimo device	F. H. Toles	421,845	Feb. 18	2074	{ 545 546 }	50	973
Piano	L. W. Blasius	423,510	Mar. 18	1734	457	50	1482
Piano	A. W. Davidson and C. Sigmund	427,840	May 13	1231	312	51	1063
Piano	E. Gabler	429,434	June 3	505	121	51	1569
Piano	W. Hirl	441,559	Nov. 25	3120	801	53	1329
Piano	E. R. Holmes	421,134	Feb. 11	1056	{ 271 272 }	50	773
Piano	G. Steck	436,385	Sept. 16	1572	413	52	1691
Piano-action	C. H. Clemons	441,283	Nov. 25	2696	699	53	1148
Piano-action	E. N. Cummings	420,007	Jan. 21	2043	539	50	425
Piano-action	A. D. Dimick	432,516	July 22	2296	594	52	467
Piano-action	S. Hansing. (Reissue)	11,055	Jan. 14	1437	385	50	302
Piano-action	B. Hartleb	439,147	Oct. 28	2277	611	53	452
Piano-action	J. Herrburger	424,202	Mar. 25	2761	736	50	1684
Piano-action	R. N. Hutchinson	419,678	Jan. 21	1544	412	50	327
Piano-action	P. D. Strauch	418,769	Jan. 7	169	41	50	37
Piano-action	O. Wessell	436,511	Sept. 16	1761	465	52	1726
Piano action. Upright-	C. Bunce and E. H. Benedict	427,667	May 13	956	241	51	1010
Piano attachment	C. C. Polk	443,538	Dec. 30	3119	803	53	1903
Piano attachment	F. S. Warren	443,156	Dec. 23	2494	638	53	1772
Piano-case	A. Gleitz	421,265	Feb. 11	1238	320	50	808
Piano-case attachment	J. J. Elias	430,571	June 17	2270	558	51	1928
Piano-damper	C. C. Wickman	424,841	Apr. 1	634	167	51	123
Piano damper-action	J. P. Richardson and G. F. Dyer	427,525	May 6	749	186	51	960
Piano-forte	P. Krumnscheid	443,578	Dec. 30	3188	819	53	1917
Piano-forte action	S. P. Brooks	439,633	Nov. 4	20	6	53	610
Piano-forte action. Upright-	C. Knitt	427,177	May 6	226	61	51	858
Piano-forte straining-pin	H. B. Nickerson	441,438	Nov. 25	2939	757	53	1195
Piano-fortes, &c. Music-desk for	A. H. Hastings	439,875	Nov. 4	370	95	53	680
Piano-fortes. Pedal-action for	C. L. Weser	422,477	Mar. 4	168	47	50	1168
Piano-fortes. Straining-pin for	C. L. Tripp	442,557	Dec. 9	1456	373	53	1554
Piano-key lever	F. B. Boyes	442,166	Dec. 9	846	227	53	1435
Piano-player. Electric	J. D. Case and C. W. Evans	430,066	June 10	1471	365	51	1765
Piano-protector	J. C. Schleicher	433,826	Aug. 5	581	152	52	870
Piano sounding-board	A. J. Dewing	419,842	Jan. 21	1792	473	50	374
Piano-string-frame brace	J. Jaworsky	423,163	Mar. 11	1327	319	50	1377
Piano transposing key-board	I. Boos	427,826	May 13	1214	306	51	1059
Piano-tuning apparatus	A. Feldlin	443,041	Dec. 16	2266	5-1	53	1723
Piano tuning-pin	H. Müller	420,914	Feb. 4	732	188	50	702
Piano tuning-pin	J. S. Thorpe	436,163	Sept. 9	1219	318	52	1612
Pianos. Key-board attachment for	C. De Vilbiss	434,384	Aug. 12	1420	373	52	1045
Pianos. Lamp-holder for upright	T. E. King and A. T. Goodsell	424,004	Mar. 25	2486	{ 661 662 }	50	1631
Pianos. Lid and music-rack for	S. Hansing	442,373	Dec. 9	1158	361	53	1494
Pianos, melodeons, &c. Bracket for	N. G. Nilsson	438,256	Oct. 14	892	242	53	176
Pianos. Music-desk for	D. L. Rice	433,655	Aug. 5	320	82	52	818
Pianos. Music-rack for upright	G. M. Guild	426,268	Apr. 22	2794	{ 733 734 }	51	570
Pianos. Pianissimo-action for	E. N. Cummings	430,002	June 10	1359	336	51	1744
Pianos. Pressure-bar for upright	S. Hansing	443,277	Dec. 23	2700	693	53	1813
Pianos. Repetition-action for	F. Schaafl	426,332	Apr. 22	2882	758	51	588
Pianos. Sounding-board bridge for	G. M. Guild	440,251	Nov. 11	953	245	53	806
Pianos. Stringing	P. Weher	438,393	Oct. 14	1100	299	53	216
Pianos. Transposing key-board for	O. Berggren	433,315	July 29	3546	915	52	717
Pianos. Wrest-plank for	V. M. Risch	439,688	Nov. 4	95	25	53	626
Pick	A. Bode	438,877	Oct. 21	1868	496	53	367
Pick	W. F. Walker	434,896	Aug. 19	2249	590	52	1215
Pick-handle sleeve and head-brace	G. J. Schoettle	428,528	May 20	2265	575	51	1272
Picker:							
See Berry-picker.	Land-picker.						
Cotton-picker.	Loom-picker.						
Cotton-waste picker.	Mixing-picker.						
Cranberry-picker.	Orange-picker.						
Fruit-picker.	Waste-picker.						
Hop-picker							
Picker-cylinder and applying coverings thereto	F. G. and A. C. Sargent	425,087	Apr. 8	1005	269	51	203
Picker for berries, fruits, &c	A. Buchman	421,665	Feb. 18	1825	477	50	927
Picker-stem and cleaner	G. N. Todd	423,538	Mar. 18	1778	466	50	1489

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Picker-stem and cleaner. Combined.....	G. N. Todd	423,539	Mar. 18	1779	467	50	1489
Picker-stems and cleaners. Making.....	G. N. Todd	423,540	Mar. 18	1780	467	50	1499
Picking and carding machines. Feeding mechanism for.....	H. Tindell	439,311	Oct. 28	2568	685	53	507
Picture-card	W. Hagelberg	422,522	Mar. 4	228	60	50	1179
Picture-exhibitor.....	H. Boussemaere	438,341	Oct. 14	1024	278 279	53	202
Picture-exhibitor. Coin-operated.....	J. F. Goodridge	431,049	July 1	32	7 8	52	8
Picture-frame.....	J. H. Howard, Jr.	433,864	Aug. 5	633	164	52	880
Picture-frame.....	W. C. Tidball	435,161	Aug. 26	2667	705	52	1301
Picture-frame hanger. Adjustable.....	W. C. Keithly	440,599	Nov. 11	1539	397	53	913
Picture-frame locking device.....	F. Servus	440,201	Nov. 11	870	224	53	789
Picture-frame support.....	L. Raquet	438,257	Oct. 14	593	242	53	177
Picture-hanger, &c.....	M. May	426,460	Apr. 29	3091	811	51	639
Picture-hanger.....	W. Wolfe	437,546	Sept. 30	3487	910	52	2072
Picture-hook.....	J. M. Segur	441,511	Nov. 25	3046	784	53	1215
Picture-nail.....	A. Hauger	427,317	May 6	439	113	51	898
Picture or other frames. Support for.....	S. E. Condon	430,377	June 17	1986	490	51	1875
Picture-rail.....	T. P. Dunne	429,788	June 10	1028	252	51	1679
Picture. Sectional.....	W. Hagelberg	422,521	Mar. 4	227	60	50	1179
Picture. Surprise.....	C. Nelson	420,582	Feb. 4	218	57	50	607
Picture-wire hanger. Adjustable.....	J. R. Wright	437,470	Sept. 30	3367	881	52	2048
Pictures and like articles. Device for exhibiting.....	G. W. Bolton	435,388	Sept. 2	11	3	52	1377
Pictures. Manufacturing transparent relief.....	W. Hagelberg	428,483	May 20	2910	1	51	1261
Pictures, mirrors, &c. Frame for.....	F. Servus	432,910	July 22	2908	745	52	586
Pie-lifter.....	I. J. Pettit	420,546	Feb. 4	166	41	50	596
Piers or other structures. Foundation for.....	R. L. Harris	435,142	Aug. 26	2639	699	52	1295
Pig-trough.....	S. E. Smith	436,956	Sept. 23	2542	665	52	1882
Pigeon-hole box.....	A. Petersen	438,713	Oct. 21	1588	426	53	315
Pigment and paint base. Combined red.....	J. P. Perkins	429,054	May 27	3080	1	51	1448
Pigment. Apparatus for the manufacture of sulphate-of-lead.....	J. B. Hannay	429,523	June 3	633	155	51	1593
Pigment. Black.....	A. G. Wass	419,163	Jan. 7	770	1	50	160
Pigment. Manufacturing sulphate-of-lead.....	J. B. Hannay	429,522	June 3	632	155	51	1592
Pigments. Manufacture of.....	J. C. Martin	440,232	Nov. 11	928	1	53	801
Pigments. Treating slag for the production of red.....	J. P. Perkins	429,055	May 27	3081	1	51	1448
Pigments. Treating slag for the production of red.....	J. P. Perkins	429,056	May 27	3083	1	51	1448
Pile-covering.....	A. Ames	433,609	Aug. 5	250	67	52	805
Pile-covering.....	H. Anderson	419,998	Jan. 21	2030	535	50	423
Pile-driver.....	W. H. Blair	433,929	Aug. 12	730	189 190	52	909
Pile-driver.....	M. Walsh	431,539	July 1	783	194 195	52	155
Pile-driver-hammer guide.....	H. Sias	438,899	Oct. 21	1901	505	53	373
Piles. Composition for protecting.....	J. Rowe	440,832	Nov. 18	1929	1	53	995
Piles or other timbers. Device for protecting.....	J. Clark	443,897	Dec. 30	3676	946	53	2011
Piles. Protecting and preserving.....	F. Rives	441,584	Nov. 25	3164	815	53	1238
Piled fabrics.....	C. H. Landenberger	423,781	Mar. 18	2136	564	50	1557
Pill-machine.....	A. G. Wright	432,502	July 15	2267	588	52	455
Pill-making machine.....	P. B. Abrell	429,803	June 10	1050	258	51	1683
Pills. Device for facilitating taking.....	J. Yates	442,698	Dec. 16	1678	430	53	1607
Pillars or supports for buildings, &c. Construction of.....	F. R. Kirchhoff	435,429	Sept. 2	75	23	52	1389
Pillow-block.....	G. Leverich	426,568	Apr. 29	3249	852	51	669
Pillow or body-support. Adjustable.....	M. A. Campbell	420,860	Feb. 4	637	164	50	684
Pillow-sham holder.....	F. E. Clark	432,261	July 15	1913	490	52	336
Pillow-sham holder.....	J. R. Kidder	438,000	Oct. 7	503	142	53	95
Pillow-sham holder.....	L. E. Pease	434,801	Aug. 19	2091	547	52	1184
Pin:							
See Clothes-pin. Neck-wear retaining-pin.							
Crank-pin. Piano-forte straining-pin.							
Gage-pin. Piano tuning-pin.							
Hair-pin. Rolling-pin.							
Hat-pin. Safety-pin.							
Husking-pin. Scarf-retaining-pin.							
Lambrequin-pin. Suspender-securing pin.							
Marline-pin. Wrist-pin.							
Necktie-pin.							
Pin.....	J. Weil	430,903	June 24	2830	694	51	2045
Pin-fastening.....	F. E. De Long	432,302	July 15	1984	507	52	398
Pins for pin-fasteners. Machine for forming.....	R. J. Shipley	420,362	Jan. 28	2597	690 691	50	538
Pinch-dog.....	J. L. Wildemore	426,893	Apr. 29	3740	976	51	764
Pinchers. Lasting.....	A. Siegel	418,762	Jan. 7	156	37	50	34
Pinchers. Lasting.....	F. W. Whitcher	442,814	Dec. 16	1943	500	53	1659
Pincushion.....	G. F. Atkinson	443,739	Dec. 30	3446	884	53	1966
Pincushion and paper-weight. Combined.....	R. K. Chandler	429,083	May 27	3126	806	51	1457
Pine-needle fiber. Making.....	J. B. N. Berry	437,555	Sept. 30	3499	1	52	2074
Pine-needles. Disintegrating.....	E. O'Grosky	436,007	Sept. 9	967	1	52	1567
Pinion. Composite.....	J. C. Chamberlain and W. L. Silber-eisen.	426,982	Apr. 29	3854	1007 152 154	51	786
Pinions. Automatic machine for cutting small.....	T. F. Sheridan	420,836	Feb. 4	596	1	50	676
Pipe:							
See Blow-pipe. Metal pipe.							
Bubble-pipe. Overflow-pipe.							
Cement-lined pipe. Sheet-metal pipe.							
Gas blow-pipe. Smoking-pipe.							
Hot-air pipe. Soap-bubble pipe.							
Jeweler's blow-pipe. Stand-pipe.							
Locomotive exhaust-pipe. Stove-pipe.							
Locomotive sand-pipe. Tobacco-pipe.							
Water-conductor pipe.							
Pipe.....	J. P. Culver	429,844	June 10	1116	275	51	1697
Pipe.....	J. E. Turner	419,803	Jan. 21	1719	456	50	361
Pipe and nut wrench. Combination.....	E. E. King	430,656	June 24	2427	591	51	1967

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Pipe-ball	S. J. Adams	427,722	May 13	1050	263	51	1027
Pipe-ball	S. J. Adams	433,585	Aug. 5	215	58	52	798
Pipe bender and former	W. Vanderman	423,544	Mar. 18	1785	469	50	1490
Pipe-bending core	J. H. Wingate and J. L. Mell	425,395	Apr. 8	1469	393	51	294
Pipe branch	S. Loyd	419,694	Jan. 21	1563	419	50	331
Pipe-casing	A. and E. L. Wyckoff	438,516	Oct. 14	1272	344	53	250
Pipe-clamping device	W. A. Henderson	431,054	July 1	41	9	52	10
Pipe-connection. Flexible	H. Vering	423,186	May 20	1748	442	51	1172
Pipe-coupling	H. Balbian	436,115	Sept. 9	1147	300	52	1600
Pipe-coupling	J. C. Bayles	424,951	Apr. 8	799	215	51	163
Pipe-coupling	W. Bowers	412,947	Dec. 16	2124	546 547	53	1694
Pipe-coupling	W. Bramwell	436,574	Sept. 16	1872	492	52	1745
Pipe-coupling	R. G. Chase	424,463	Apr. 1	31	9	51	9
Pipe-coupling	A. Cochran	428,076	May 20	1592	404	51	1141
Pipe-coupling	W. M. Harris and T. B. Reese	422,017	Feb. 25	2311	610	50	1027
Pipe-coupling	W. H. Hart	432,733	July 22	2642	675	52	535
Pipe-coupling	C. B. Hübnermann	437,845	Oct. 7	263	79	53	52
Pipe-coupling	W. S. Johnson	423,323	Mar. 11	1466	383	50	1422
Pipe-coupling	E. Lawson	438,752	Oct. 21	1663	446	53	329
Pipe-coupling	C. T. Leonard	428,846	May 27	2761	702	51	1336
Pipe-coupling	W. F. Lomasney	431,816	July 8	1241	309 310	52	251
Pipe-coupling	W. Martin	439,022	Oct. 21	2081	567	53	410
Pipe-coupling	N. Nilson	420,281	Jan. 28	2489	660	50	517
Pipe-coupling	D. R. Pryor	435,711	Sept. 2	520	137	52	1475
Pipe-coupling	H. B. Ward	442,837	Dec. 16	1932	496	53	1657
Pipe-coupling and expanding metallic sleeve. Combined	J. Giuty	435,927	Sept. 9	837	225	52	1547
Pipe-coupling. Automatic	N. Nilson	427,520	May 6	743	185	51	959
Pipe-coupling. Detachable	A. Côté	432,296	Feb. 25	2749	724	50	1107
Pipe-coupling. Detachable	I. B. Potts	424,123	Mar. 25	2663	709	50	1665
Pipe-coupling. Detachable	I. B. Potts	424,130	Mar. 25	2664	710	50	1665
Pipe-coupling. Detachable metallic	E. F. Roberts	431,136	July 1	243	62	52	51
Pipe-coupling. Double	T. W. Moran	441,108	Nov. 18	2374	616	53	1081
Pipe-coupling. Flanged	J. C. Bayles	422,065	Feb. 25	2380	629	50	1040
Pipe-coupling for flasks, &c.	T. Morris	422,242	Feb. 25	2660	702	50	1092
Pipe-coupling. Railway steam-heating	R. I. Hampton	422,208	Feb. 25	2597	687	50	1081
Pipe-coupling. Steam	N. Nilson	420,210	Jan. 28	2372	630	50	497
Pipe-coupling with lead joint	J. C. Bayles	422,177	Feb. 25	2549	674	50	1071
Pipe-covering	H. M. Hammore	432,162	July 15	1770	455	52	360
Pipe-covering	J. F. Tracey	438,507	Oct. 14	1259	341	53	248
Pipe-covering. Steam	L. A. Palmer and J. Baier	437,041	Sept. 23	2660	695	52	1905
Pipe-crimper	B. D. McDowell	435,764	Sept. 2	594	158	52	1489
Pipe-cutter	T. Byrne	422,115	Feb. 25	2461	651	50	1054
Pipe-cutter	H. Comstock	426,171	Apr. 22	2656	697	51	541
Pipe-cutter	H. Comstock	440,017	Nov. 4	596	158	53	725
Pipe-cutter	M. V. B. Hill	424,710	Apr. 1	424	112	51	84
Pipe-cutter	C. M. and C. E. Kemp	439,407	Oct. 28	2708	722	53	533
Pipe-cutter	C. Miller	438,702	Oct. 21	1567	421	53	311
Pipe-cutter	L. Weuman	430,552	June 17	2238	549	51	1223
Pipe-cutting apparatus	S. P. Denison	432,480	July 15	2243	580	52	450
Pipe-cutting machine. Soil-	A. C. G. Caleb and J. B. Couture	430,727	June 24	2544	622	51	1990
Pipe-die	H. C. Bradford	423,410	Mar. 18	1588	417	50	1454
Pipe-die	J. Kreger	419,458	Jan. 14	1219	323	50	257
Pipe exhaust-head. Steam	E. Rutzler	434,119	Aug. 12	1022	265	52	966
Pipe-expanding tool	F. I. Lessard	424,800	Apr. 1	571	152	51	111
Pipe-fastener	M. Feldheiser	429,721	June 10	932	229	51	1662
Pipe fitting. Hot-water and steam	D. L. Dwinell	431,452	July 1	647	162	52	130
Pipe-fittings. Apparatus for threading	J. L. Clark, C. H. Culver, and J. H. Stratton	420,189	Jan. 28	2338	618	50	490
Pipe-fittings. Manufacturing glass-lined	D. Rylands, J. Crowder, and R. Morant	430,041	June 10	1425	354 355	51	1756
Pipe from sheet metal. Machine for making corrugated	O. P. Briggs	430,266	June 17	1806	445 446	51	1839
Pipe-hanger	G. W. Clark	430,623	June 24	2364	578	51	1955
Pipe-hanger	E. V. Clemens	437,018	Sept. 23	2626	686	52	1898
Pipe-hanger	R. K. Cooke, Jr.	437,482	Sept. 30	3382	886	52	2052
Pipe-hanger	G. M. Jones	422,945	Mar. 11	891	233	50	1314
Pipe-hanger	R. McBee	429,357	June 3	388	92	51	1545
Pipe-hanger	W. J. McKelvey	428,690	May 27	2531	643	51	1341
Pipe-hanger	A. H. Peterson	429,057	May 27	3085	796	51	1448
Pipe-hanger	E. Rutzler	429,816	June 10	1073	264	51	1688
Pipe-hanger	E. Rutzler	431,010	June 24	2989	734	51	2075
Pipe-hanger	E. Rutzler	443,198	Dec. 23	2584	664	53	1792
Pipe hanger. Rain-water	M. F. Mahin	441,428	Nov. 25	2921	753	53	1192
Pipe-hood	G. H. Harrington	421,098	Feb. 11	1009	258	50	764
Pipe-hooks. Process of and machine for making	H. Lilley	425,232	Apr. 8	1228	326 327	51	249
Pipe-joint	E. V. Clemens	437,019	Sept. 23	2627	686	52	1898
Pipe-joint	J. P. Costigan	426,924	Apr. 29	3775	985	51	771
Pipe-joint	J. P. Costigan	437,915	Oct. 7	364	105	53	71
Pipe-joint	F. I. Lessard	424,799	Apr. 1	569	151	51	111
Pipe-joint	F. I. Lessard	424,801	Apr. 1	572	152	51	111
Pipe-joint	G. O. Rinman	432,248	July 15	1889	486	52	382
Pipe-joint	C. Shields	433,750	Aug. 5	463	119	52	845
Pipe-joint	A. Wilbur	441,525	Nov. 25	3067	789	53	1219
Pipe-joints. Apparatus for constructing cold-packed	A. N. Rankin	419,995	Jan. 21	2024	534	50	422
Pipe-jointing apparatus	J. F. Fischer	436,915	Sept. 23	2491	652	52	1871
Pipe-laying apparatus	J. F. Fischer	436,914	Sept. 23	2488	650 651	52	1871
Pipe-machine	F. M. Speed	437,871	Oct. 7	301	89	53	59
Pipe. Machine for cold-drawing metallic	T. J. Bray	441,227	Dec. 2	459	123	53	1354
Pipe. Machine for making lead	S. Traber	419,573	Jan. 14	1369	367	50	288

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. ^g	Vol.	Page.
Pipe-making machine	O. P. Briggs	430,265	June 17	1780	{ 442 443 444 445 }	51	1835
Pipe. Making spirally-seamed	C. L. Hart	435,419	Sept. 2	60	20	52	1386
Pipe or cable supporting device	H. W. Brown	420,767	Feb. 4	470	124	50	656
Pipe or tube cleaner	H. G. Booz and J. C. Vandegrift	427,963	May 13	1428	360	51	1099
Pipe or tube cutter	J. Warren	440,982	Nov. 18	2169	561	53	1041
Pipe or rod wrench	H. Zuber	421,062	Feb. 11	957	246	50	754
Pipe or tubing	J. C. Bayles	422,064	Feb. 25	2379	629	50	1039
Pipe or tubing	J. C. Bayles	422,066	Feb. 25	2381	629	50	1040
Pipe or tubing	J. C. Bayles	427,659	May 13	946	238	51	1007
Pipe or tubing	J. C. Bayles	431,028	July 1	3	1	52	3
Pipe plug. Soil or other	J. A. Rossman	424,690	Apr. 1	3-9	103	51	76
Pipe. Process of and apparatus for making couplings for wrought-iron	T. J. Bray	412,604	Dec. 16	1533	395	53	1578
Pipe-rack	C. H. Coit	419,112	Jan. 7	691	182	50	146
Pipe-rack	C. H. Coit	429,421	June 3	483	115	51	1564
Pipe-section	J. C. Bayles	427,658	May 13	945	238	51	1007
Pipe-skelps. Tang for	J. Simpson	441,201	Nov. 25	2546	658	53	1122
Pipe splice-joint	F. C. Kimmel	431,697	July 8	1053	263	52	214
Pipe-stopper	W. Baguley	428,364	May 20	2034	511	51	1228
Pipe-stopper	W. Baguley	443,952	Dec. 30	3768	962	53	2027
Pipe stopper or closer. Soil	F. Darmstadt	422,739	Mar. 4	548	140	50	1241
Pipe-testing device	T. F. Fallon	431,939	July 8	1411	{ 358 359 }	52	284
Pipe-testing gage	F. M. Ashton	432,597	Oct. 21	1395	379	53	281
Pipe-thimble	W. A. Turner	435,987	Sept. 9	940	247	52	1562
Pipe-thread protector	J. A. Kurtz	440,167	Nov. 11	825	213	53	780
Pipe-threading and cutting-off machine	A. W. Cash	434,424	Aug. 19	1502	{ 392 393 }	52	1068
Pipe-threading device	J. C. Williams	441,223	Nov. 25	2573	666	53	1128
Pipe-threading die	J. C. Williams	425,394	Apr. 8	1468	393	51	293
Pipe-threading machine	R. P. Curtis	443,501	Dec. 30	3068	790	53	1894
Pipe-threading machine	R. P. Curtis	443,502	Dec. 30	3069	790	53	1894
Pipe-threading machine	R. P. and L. B. Curtis	443,500	Dec. 30	3067	789	53	1894
Pipe-threading machine. Sheet-metal	T. J. Leavy	425,516	Apr. 15	1649	440	51	339
Pipe-welding apparatus	J. Simpson	420,213	Jan. 28	2378	{ 631 632 }	50	497
Pipe-welding apparatus	J. Simpson	437,725	Oct. 7	75	24, 25	53	17
Pipe-welding apparatus	J. Simpson	437,726	Oct. 7	77	26	53	18
Pipe-welding ball	S. J. Adams	433,589	Aug. 5	222	59	52	799
Pipe-wrench	A. J. Barber and H. A. Tripp	421,892	Feb. 25	2145	563	50	996
Pipe-wrench	W. G. Bartlett and J. W. McCoy	421,023	Feb. 11	897	232	50	743
Pipe-wrench	T. W. Bryant	429,258	June 3	219	55	51	1514
Pipe-wrench	G. H. Buzzell	438,343	Oct. 14	1029	280	53	203
Pipe-wrench	W. Cann	429,676	June 10	866	210	51	1648
Pipe-wrench	C. C. Coleman	429,719	June 10	930	228	51	1661
Pipe-wrench	E. Cook	420,039	Jan. 28	2093	552	50	444
Pipe-wrench	A. J. Curtis	425,371	Apr. 8	1432	383	51	286
Pipe-wrench	E. O. Ely	429,0-8	May 27	3132	807	51	1458
Pipe-wrench	E. O. Ely	430,994	June 24	2964	727	51	2070
Pipe-wrench	T. W. Fisher	421,68-8	Feb. 18	1850	4-4	50	932
Pipe-wrench	G. W. Hammond	440,564	Nov. 11	1475	3-0	53	900
Pipe-wrench	D. J. Hirsey	419,854	Jan. 21	1-09	478	50	379
Pipe-wrench	W. E. Murbarger	441,188	Nov. 25	2509	648	53	1117
Pipe-wrench	A. A. Peterkin	441,020	Nov. 18	2219	573	53	1051
Pipe-wrench	A. P. Quigley	440,501	Nov. 11	1375	355	53	882
Pipe-wrench	P. H. Quinlan	432,079	July 15	1637	420	52	335
Pipe-wrench	J. L. Taylor	434,847	Aug. 19	2154	564	52	1197
Pipe-wrench	F. Virgin	426,223	Apr. 22	2738	717	51	557
Pipe-wrench and pipe and bolt cutter	E. A. Smead	422-2-7	Feb. 25	2680	707	50	1095
Pipes and fittings. Coupling glass-lined	D. Rylands	438,023	Oct. 7	546	150	53	103
Pipes. Apparatus for detecting leaks in	W. W. Rosenfield	429,286	June 3	265	64, 65	51	1522
Pipes. Automatic shut-off for water	H. A. Skinner	418,900	Jan. 7	395	97	50	82
Pipes. Band for protecting screw-threads of	J. A. Kurtz	440,168	Nov. 11	826	213	53	780
Pipes. Branch connection for	H. McEvoy	427,478	May 6	680	170	51	946
Pipes. Die for manufacturing earthenware	A. R. English	427,562	May 13	813	204	51	9-3
Pipes. Combined union and elbow for	I. B. Potts	433,489	Aug. 5	74	22	52	771
Pipes. Detecting leaks in soil	R. T. Crane	434,106	Aug. 12	993	259	52	960
Pipes. Electric welding of	E. Thomson	438,658	Oct. 21	1494	403	53	299
Pipes. Hub or coupling for ventilating	A. F. Curtin	441,299	Nov. 25	2706	702	53	1150
Pipes. Universal-joint coupling for	J. Walker	437,736	Oct. 7	91	29	53	20
Piping for building-walls	W. W. Dnnnett	438,068	Oct. 7	614	167	53	117
Pistol. Breech-loading fire-cracker	G. W. Ogle	427,356	May 6	496	127	51	909
Pistol. Cap	C. M. Rider	434,203	Aug. 12	1147	297	52	990
Pistol. Repeating	P. L. Loron	422,135	Feb. 25	2487	657	50	10-9
Piston	W. G. Kent and H. S. Price	443,857	Dec. 30	3623	933	53	2001
Piston	H. See	422,453	Mar. 4	133	36, 37	50	1162
Piston	J. Thierry	423,499	Mar. 18	1718	453	50	1479
Piston	S. P. Watt	442,729	Dec. 16	1756	455	53	1621
Piston and pitman rods. Flexible connection for	C. A. MacDonald	443,860	Dec. 30	3626	934	53	2002
Piston-cylinder	E. I. Blount	419,916	Jan. 21	1903	500	50	399
Piston engine	L. M. Shaw	442,401	Dec. 9	1197	311	53	1502
Piston engine. Angle	R. C. Berry	432,359	July 15	2054	{ 528 529 }	52	412
Piston engine. Compound vibrating	P. F. Holmgren	430,288	June 17	1852	454	51	1848
Piston. Expandable	G. P. Fenner	430,517	June 17	2192	538	51	1913
Piston. Horizontal	H. See	422,454	Mar. 4	134	37	50	1162
Piston. Locomotive	E. P. Cowles	421,164	Feb. 11	1104	{ 283 284 }	50	783
Piston meter	A. Bonna	441,925	Dec. 2	455	{ 121 122 }	53	1354
Piston-rod	E. Preuveille and P. Stein	434,524	Aug. 19	1651	432	52	1099

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Pitch-board	C. W. Choney and F. A. Haskins	440,344	Nov. 11	1105	283	53	831
Pitch-board	W. H. Wood	433,343	July 29	3633	937	52	734
Pitchfork	F. C. Kriz	438,004	Oct. 7	508	143	53	96
Pitching-machine	W. Arneemann	440,296	Nov. 11	1035	266	53	818
Pitching-machine	W. Arneemann	440,297	Nov. 11	1036	266	53	819
Pitman	S. Arnold	422,489	Mar. 4	182	50	50	1171
Pitman-connection	C. A. Bauer	437,276	Sept. 30	3049	799	52	1986
Pitman-connection	F. Casto	422,914	Mar. 11	839	218	50	1304
Pitman-connection	C. E. Hewett	420,791	Feb. 4	507	133	50	662
Pitman-connection	H. L. Hopkins	421,715	Feb. 18	1890	{ 496 497 }	50	940
Pitman-connection	J. M. Hutchinson	428,612	May 27	2399	610	51	1317
Pitman-connection for knife-heads	W. N. Whiteley	426,485	Apr. 29	3130	822	51	646
Pitman-coupling	C. C. Shults	420,112	Jan. 28	2208	584	50	468
Plait gage, Kilt	S. R. Camp	439,106	Oct. 28	2215	594	53	442
Plaiting apparatus	C. Lehmann	437,212	Sept. 30	2947	770	52	1966
Plaiting-machine	C. C. Emmons	442,872	Dec. 16	1992	511	53	1669
Plaiting-machine	C. M. Hine	420,382	Jan. 28	2625	697	50	541
Plaiting-machine	C. M. Hine	422,215	Feb. 25	2610	691	50	1083
Plaiting machine, Accordion-	E. E. Howell	422,787	Mar. 4	612	157	50	1254
Plane	A. Frömming	440,558	Nov. 11	1464	377	53	899
Plane	E. P. Hann	426,806	Apr. 29	3618	943	51	739
Plane	O. O. Skattebo	434,361	Aug. 12	1387	365	52	1038
Plane attachment, Bench-	T. W. Bartholomew	435,789	Sept. 2	633	167	52	1496
Plane, Bench-	S. Frisbie	423,424	Mar. 18	1609	422	50	1458
Plane, Bench-	J. E. Greene	439,061	Oct. 21	2143	575	53	421
Plane, Bench-	A. E. Rust	435,951	Sept. 9	890	234	52	1552
Plane-bit	H. Condron	426,636	Apr. 29	3357	880	51	689
Plane-bits. Device for setting the edges of	E. Gowdy	441,758	Dec. 2	204	52	53	1303
Plane for planing the bottoms of grooves in moldings and ornamental wood-work.	G. Heymeier	420,232	Jan. 28	2407	641	50	503
Plane, Molding-	R. Kreinberg	421,407	Feb. 18	1445	{ 374 375 }	50	853
Plane, Wood-	C. J. Jacobsen	420,386	Jan. 28	2632	699	50	544
Planes, Machine for beveling the so-called wedge-grips of wooden	J. A. Montgomery	431,383	July 1	541	135	52	109
Planes, Machine for dressing the throats of wooden	J. A. Montgomery	431,381	July 1	538	134	52	109
Planes, Machine for sawing the mouths of molding-	J. A. Montgomery	431,382	July 1	540	{ 134 135 136 }	52	109
Planes, Machine for scooping wedges for	J. A. Montgomery	431,380	July 1	536	{ 133 134 135 }	52	108
Planer and shaper	F. I. Getty	441,152	Nov. 25	2453	636	53	1106
Planer cutter-head	J. Bopp and J. McCort	420,569	Feb. 4	198	51	50	603
Planer, Hand-	S. M. Neely	436,735	Apr. 29	3510	918	51	719
Planer head, Machine-	J. Bopp	417,329	Sept. 30	3126	817	52	1999
Planer tool attachment	J. Wilkinson	428,360	May 20	2027	509	51	1227
Planing-machine	A. B. Hutchinson and E. F. Autenrieth	420,202	Jan. 28	2361	627	50	494
Planing-machine	G. F. Wetherell	433,428	July 29	3698	955	52	748
Planing-machine	S. A. Woods and J. R. Thomas	438,746	Oct. 21	1654	{ 443 444 }	53	327
Planing-machine beading attachment	E. C. Merston	418,920	Jan. 7	427	105	50	89
Planing machine, Metal-	G. A. Gray	419,437	Jan. 14	1188	315	50	250
Planing machine, Wood-	C. Hammelmann	427,860	May 13	1262	{ 319 320 }	51	1069
Planing machines, Device for adjusting the pressure-plates of	F. H. Crafts	440,018	Nov. 4	597	158	53	725
Planing-machines, Pressure-bar for	J. R. Thomas	429,395	June 3	452	106	51	1557
Plant-protector	R. G. Bass	436,329	Sept. 16	1471	343	52	1671
Plant-protector	A. E. Knapp	433,898	Aug. 5	680	176	52	890
Plant-protector	L. B. Moore and M. S. Love	436,183	Sept. 9	1250	326	52	1618
Plant-protector	H. T. Shepherd	427,921	May 13	1369	346	51	1088
Plant-protector	F. A. J. Smart	419,370	Jan. 14	1091	288	50	231
Plant-setting machine	N. M. Chew	440,738	Nov. 18	1758	453	53	965
Plauts, Device for distributing paris-green on	W. W. Hills and O. M. Jurgenson	422,782	Mar. 4	603	154	50	1252
Plauts fertilizing, insect-destroying, or other compounds in liquid form. Apparatus for diffusing upon	S. H. Stott	441,989	Dec. 2	558	{ 150 151 }	53	1372
Planter	W. C. Bateman	438,771	Oct. 21	1687	453	53	334
Planter	L. B. Berrien	425,364	Apr. 8	1416	{ 377 378 }	51	284
Planter	E. P. Ferriss	436,224	Sept. 9	1309	341	52	1630
Planter	J. M. Jackson	443,596	Dec. 30	3214	826	53	1922
Planter	J. D. Schofield	434,051	Aug. 12	892	235	52	939
Planter	F. F. Shanks	431,288	July 1	366	97	52	79
Planter	J. T. Wright	426,354	Apr. 22	2913	766	51	595
Planter and check-rower, Combined corn-	S. C. Mains	432,440	Oct. 14	1164	{ 314 315 316 }	53	229
Planter and fertilizer-distributor	W. J. Mitchell	423,794	Mar. 18	2155	570	50	1561
Planter and fertilizer-distributor	W. E. Tucker	442,499	Dec. 9	1358	348	53	1535
Planter and fertilizer-distributor, Combined cotton-	W. M. Rape	423,811	Mar. 18	2177	575	50	1565
Planter and fertilizer-distributor, Combined seed-	J. T. Scarbrough	422,452	Mar. 4	131	36	50	1162
Planter and fertilizer-distributor, Corn-	J. W. and W. C. Duryea	436,649	Sept. 16	1990	521	52	1767
Planter and fertilizer-distributor, Corn and cotton-seed	J. Morgau	440,492	Nov. 11	1366	{ 352 353 354 }	53	880
Planter and fertilizer-distributor, Cotton-	T. M. Yarbrough	437,075	Sept. 23	2707	{ 707 708 }	52	1914
Planter and fertilizer-distributor, Seed-	C. T. Chapman	423,311	Mar. 11	1444	376	50	1418
Planter and fertilizer-distributor, Seed-	W. H. Cooper	439,411	Nov. 4	268	68	53	660
Planter and fertilizer-distributor, Seed-	J. M. Johnson	428,341	May 20	1997	503	51	1220
Planter and fertilizer-distributor, Seed-	N. F. Yoake	441,346	Nov. 25	2849	735	53	1177
Planter and marker, Corn	J. De Butts	440,917	Nov. 18	2067	534	53	1021
Planter attachment	J. E. Hedges	437,595	Sept. 30	3552	927	52	2084

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Planter. Automatic check-row corn.	A. H. Hull	442,682	Dec. 16	1642	423	53	1601
Planter. Automatic corn.	R. Richey and W. R. Frost	437,243	Sept. 30	2990	782	52	1974
Planter. Bean.	W. W. Brady	443,816	Dec. 30	3568	914	53	1990
Planter. Check-row.	S. Ketchum	435,428	Sept. 2	74	23	52	1389
Planter. Check-row.	W. R. Morse	420,280	Jan. 28	2486	660	50	517
Planter check-row attachment. Corn.	A. F. Batcheller and J. B. Kerr	422,176	Feb. 25	2548	673	50	1071
Planter check-row attachment. Corn.	J. C. Simmons and W. H. Turner	426,219	Apr. 22	2732	674	51	555
Planter. Check-row corn.	J. Flynn	442,032	Dec. 2	634	171	53	1387
Planter. Check-row corn.	M. W. Hart	437,338	Sept. 30	3136	820	52	2001
Planter. Check-row corn.	A. J. Higbee	426,448	Apr. 29	3076	807	51	635
Planter. Check-row corn.	C. W. May	437,220	Sept. 30	2956	773	52	1968
Planter. Check-row corn.	N. O. Starks	437,633	Sept. 30	3599	941	52	2094
Planter. Check-row corn.	R. L. Woodling	433,757	Aug. 5	471	121	52	847
Planter, chopper, and cultivator	J. L. Murdock	443,293	Dec. 23	2732	122	53	1820
Planter. Combined cotton-seed and corn.	W. H. Holsclaw	435,750	Sept. 2	570	152	52	1485
Planter. Corn.	J. Admire	424,447	Apr. 1	3	153	51	3
Planter. Corn.	W. H. Benford	441,091	Nov. 18	2346	1	53	1076
Planter. Corn.	A. Blakley	434,758	Aug. 19	2032	607	52	1172
Planter. Corn.	K. Buland	428,377	May 20	2057	531	51	1233
Planter. Corn.	K. Buland	438,058	Oct. 7	598	518	53	114
Planter. Corn.	M. Burke	442,350	Dec. 9	1126	163	53	1487
Planter. Corn.	J. G. Busch	431,647	July 8	957	293	52	198
Planter. Corn.	B. E. Cagle	428,827	May 27	2736	294	51	1380
Planter. Corn.	G. W. Campbell	431,935	July 8	1406	695	52	283
Planter. Corn.	J. B. Campbell	431,555	July 8	809	357	52	169
Planter. Corn.	O. J. Colton	419,318	Jan. 14	1009	202	50	213
Planter. Corn.	T. L. Cromer	421,674	Feb. 18	1835	267	50	929
Planter. Corn.	A. Davis	424,541	Apr. 1	138	450	51	33
Planter. Corn.	G. A. Ferguson	431,040	July 1	17	5	52	6
Planter. Corn.	G. Fry	441,795	Dec. 2	261	70	53	1315
Planter. Corn.	J. G. Gibson	420,652	Feb. 4	324	83	50	627
Planter. Corn.	W. M. Harsin	434,268	Aug. 12	1253	325	52	1010
Planter. Corn.	G. D. Haworth	427,234	May 6	326	84	51	875
Planter. Corn.	A. Hearst	431,053	July 1	39	9	52	10
Planter. Corn.	E. A. Johnson	429,532	June 3	655	160	51	1586
Planter. Corn.	W. E. Koch and F. M. Shook	423,520	Mar. 18	1747	460	50	1485
Planter. Corn.	G. R. McGinnis	426,947	Apr. 29	3803	461	51	776
Planter. Corn.	N. V. Moore	442,988	Dec. 16	2184	562	53	1706
Planter. Corn.	G. W. and F. P. Murphey	426,043	Apr. 22	2464	563	51	502
Planter. Corn.	L. W. Powell	433,092	July 29	3223	651	52	651
Planter. Corn.	H. Prather	418,747	Jan. 7	128	829	50	28
Planter. Corn.	H. Prather	431,619	July 8	901	830	52	1-7
Planter. Corn.	G. W. Price	424,131	Mar. 25	2665	225	50	1665
Planter. Corn.	G. W. Price	439,685	Nov. 4	91	710	53	626
Planter. Corn.	E. R. Procter	426,212	Apr. 22	2719	712	51	553
Planter. Corn.	J. W. Spangler	418,823	Jan. 7	250	713	50	53
Planter. Corn.	H. Staggs	432,448	July 15	2181	61	52	437
Planter. Corn.	J. B. Stotlenmyer	438,503	Oct. 14	1253	562	53	247
Planter. Corn.	J. K. Thompson	431,787	July 8	1187	339	52	240
Planter. Corn.	W. S. Walker	430,451	June 17	2087	297	51	1895
Planter. Corn.	E. Walter	435,909	Sept. 2	830	298	52	1535
Planter. Corn.	A. Wenzel	419,807	Jan. 21	1728	515	50	363
Planter. Corn.	J. Wise	424,240	Mar. 25	2810	457	50	1694
Planter. Corn.	J. M. Young	419,095	Jan. 7	670	750	50	141
Planter. Corn or cotton-seed.	J. W. Peeler	421,755	Feb. 18	1938	175	50	949
Planter. Cotton.	I. Bartley	441,849	Nov. 25	2791	176	53	1166
Planter. Cotton.	B. Bowers	440,787	Nov. 18	1851	509	52	981
Planter. Cotton.	T. J. Brooks	431,434	July 1	622	722	53	125
Planter. Cotton.	J. W. Estes	438,995	Oct. 21	2045	155	52	403
Planter. Cotton.	D. T. Harris and V. R. Smith	434,985	Aug. 26	2405	547	52	1252
Planter. Cotton.	L. Moseley	435,317	Aug. 26	2906	637	52	1344
Planter. Cotton.	E. Truss	429,102	May 27	3153	770	51	1462
Planter. Cotton-seed.	E. L. Harris	419,330	Jan. 14	1029	813	50	217
Planter. Cotton-seed.	W. H. Holsclaw	435,749	Sept. 2	567	272	52	1485
Planter. Cotton-seed.	D. Kennedy	433,350	July 29	3590	152	52	726
Planter, cultivator, and fertilizer-distributer. Combined.	W. W. Harris	427,417	May 6	592	926	51	929
Planter gage. Corn.	P. Kangley	443,832	Dec. 30	3596	148	53	1995
Planter. Hand.	J. S. Davis	431,841	July 8	1279	924	52	259
Planter. Hand.	G. W. Haupt	433,288	July 29	3508	321	52	709
Planter. Hand corn.	J. M. Segur	427,625	May 13	903	905	51	999
Planter. Hand corn.	J. M. Segur. (Reissue)	11,094	July 8	1516	226	52	305
Planter. Hand corn.	J. M. Segur. (Reissue)	11,095	July 8	1519	354	52	306
Planter. Hand seed.	W. L. Kling	435,430	Sept. 2	76	385	52	1390
Planter, harrow, and cultivator. Combined seed.	J. Silvertooth	426,689	Apr. 29	3434	900	51	704
Planter. Peanut.	B. Hicks	423,686	Mar. 18	1998	901	50	1532
Planter. Potato.	A. E. Brumwell	429,498	June 3	605	148	51	1587

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et	Vol.	Page.
Planter. Potato.....	J. V. Green.....	422,016	Feb. 25	2310	610	50	1027
Planter. Potato.....	S. Grenon and C. F. La Clair.....	440,404	Nov. 11	1207	{ 311 312 }	53	851
Planter. Potato.....	A. Loudenslager.....	421,738	Feb. 18	1917	504	50	945
Planter. Potato.....	P. J. Rabb.....	433,031	July 29	3130	804	52	633
Planter. Seed.....	S. L. Allen.....	420,181	Jan. 28	2326	615	50	488
Planter. Seed.....	A. Almstrom.....	421,888	Feb. 25	2138	561	50	995
Planter. Seed.....	W. G. Burchfield.....	437,563	Sept. 30	3508	915	52	2076
Planter. Seed.....	E. M. Cole.....	439,773	Nov. 4	214	56	53	650
Planter. Seed.....	T. L. Cromer and C. Schuwirth.....	437,774	Oct. 7	156	48	53	32
Planter. Seed.....	A. B. C. Dehnam.....	419,838	Jan. 21	1784	472	50	372
Planter. Seed.....	T. A. Galt and G. S. Tracy.....	422,931	Mar. 11	866	226	50	1309
Planter. Seed.....	J. H. Gardner.....	436,871	Sept. 23	2415	630	52	1656
Planter. Seed.....	J. S. Greenleaf.....	434,267	Aug. 12	1253	325	52	1010
Planter. Seed.....	T. H. Hester.....	423,251	Mar. 11	1343	349	50	1399
Planter. Seed.....	H. D. Reese and M. F. Game.....	437,612	May 13	884	222	51	995
Planter. Seed.....	J. Windler, Jr.....	432,382	July 29	3631	{ 936 937 }	52	733
Planters. Drop-regulating attachment for seed.....	R. E. Brakey.....	440,736	Nov. 18	1756	452	53	965
Planters. Marker for corn.....	E. E. Witter.....	423,363	Mar. 11	1515	398	50	1431
Planters. Seed-dropping attachment for.....	A. J. Helvern and W. B. Schwalm.....	443,443	Dec. 23	2962	762	53	1864
Planters. Seed-potato cutter for.....	G. P. Webster.....	440,521	Nov. 11	1404	363	53	887
Planting. Check-wire for hand.....	A. and E. Prebster.....	437,239	Sept. 30	2985	780	52	1973
Planting hedges. Implement for.....	W. Young.....	425,531	Apr. 15	1675	{ 446 447 }	51	343
Planting machine. Corn.....	A. H. Hull.....	422,416	Mar. 4	77	21	50	1152
Plashing device.....	C. E. Hagarty.....	435,300	Aug. 26	2886	764	52	1340
Plaster.....	J. E. Turner.....	424,517	Apr. 1	116	.....	51	26
Plaster. Adhesive.....	R. K. Gregory.....	443,963	Dec. 30	3790	.....	53	2032
Plaster. Artificial.....	H. Leichenring.....	433,899	Aug. 5	681	.....	52	890
Plaster. Composition of matter for.....	D. Haigh.....	433,861	Aug. 5	628	.....	52	880
Plaster. Compound.....	T. Jones.....	421,172	Feb. 11	1112	.....	50	784
Plaster slabs. Mold for making.....	T. Curran.....	442,957	Dec. 16	2136	550	53	1697
Plaster slabs. Mold for making.....	T. Curran.....	442,958	Dec. 16	2138	550	53	1697
Plasterer's tool.....	F. Kelly and W. A. Williams.....	437,860	Oct. 7	285	85	53	56
Plastering composition.....	W. Robinson.....	434,569	Aug. 19	1719	.....	52	1113
Plastering. Composition for.....	G. M. Ford.....	420,008	Jan. 21	2045	.....	50	426
Plastering compound.....	G. West.....	422,269	Feb. 25	2700	.....	50	1099
Plastering compound. Manufacturing.....	S. S. Ruston, W. E. Hopkins, and B. Ruston.....	433,743	Aug. 5	448	.....	52	843
Plastering device.....	J. Hudson.....	422,528	Mar. 4	235	61	50	1181
Plastic composition.....	C. A. Carlin.....	429,999	June 10	1351	.....	51	1743
Plastic material from plates or pads. Machine for stripping dried.....	H. M. Steintal.....	420,633	Feb. 4	295	78	50	621
Plastic material. Machine for molding.....	F. C. Damm.....	422,186	Feb. 25	2565	{ 679 680 }	50	1074
Plastic material. Mold for.....	H. W. Jayne.....	422,221	Feb. 25	2619	693	50	1084
Plastic material. Molding-machine for.....	M. H. Howell and E. C. Simmons.....	419,676	Jan. 21	1540	{ 410 411 }	50	326
Plastic material upon traveling surfaces. Machine for running.....	H. M. Steintal.....	420,631	Feb. 4	292	77, 78	50	620
Plastic materials. Frame and press for forming and hardening.....	J. F. Gesner.....	419,656	Jan. 21	1508	{ 401 402 }	50	321
Plate, cup, and sifter holder.....	J. H. Yund.....	428,543	May 20	2284	580	51	1276
Plate-holder.....	J. F. Hein.....	427,322	May 6	448	116	51	900
Plate-holder.....	W. H. Lewis.....	437,656	Sept. 30	3632	949	52	2101
Plate holder and shifter.....	E. Ripper and E. W. Perry, Jr.....	422,804	Mar. 4	639	163	50	1259
Plate-lifter.....	S. Waterman.....	424,913	Apr. 1	741	198	51	143
Plate or pan lifter.....	D. B. James.....	435,563	Sept. 2	281	78	52	1430
Plate. Party.....	R. Gibbons.....	421,264	Feb. 11	1237	320	50	808
Platform: See Car-platform. Harvester grain-platform. Harvester-platform. Wagon-platform.							
Plating metal.....	G. U. Meyer.....	440,847	Nov. 18	1954	501	53	999
Plating on solid wire.....	S. F. Merritt.....	428,727	May 27	2501	656	51	1351
Play-house. Child's.....	S. E. Groff.....	436,705	Sept. 16	2076	546	52	1785
Pliers.....	W. A. Beruard.....	427,220	May 6	299	77	51	870
Pliers.....	J. Donnelly.....	442,426	Dec. 9	1242	321	53	1512
Pliers.....	A. A. Low.....	419,270	Jan. 14	932	247	50	199
Pliers.....	A. A. Low.....	419,272	Jan. 14	934	247	50	199
Pliers.....	J. Mouto.....	421,598	Feb. 18	1729	451	50	908
Pliers and callipers. Balance-wheel.....	G. B. Widdifield.....	428,193	May 20	1757	444	51	1174
Pliers. Bending.....	C. H. Adams.....	429,989	June 10	1337	332	51	1740
Pliers. Sheet-metal.....	N. B. Keyes.....	438,848	Oct. 21	1828	487	53	360
Plotter.....	A. Kingsbury.....	438,350	Oct. 14	1042	283	53	205
Plotter.....	L. F. Rondinella.....	434,073	Aug. 12	939	246	52	950
Plotting-stake.....	J. A. Scott.....	429,650	June 10	830	202	51	1641
Plow.....	S. T. Bauman.....	430,166	June 17	1619	404	51	1804
Plow.....	J. W. Beard and A. H. Spears.....	425,287	Apr. 8	1315	352	51	264
Plow.....	N. Bellis.....	430,983	June 24	2946	723	51	2066
Plow.....	H. B. Boddie.....	427,545	May 13	787	196	51	977
Plow.....	T. A. Bromell.....	439,719	Nov. 4	137	37	53	634
Plow.....	J. M. Burrows.....	426,166	Apr. 22	2649	696	51	539
Plow.....	C. W. Clark.....	434,245	Aug. 12	1211	315	52	1003
Plow.....	J. J. Cook.....	425,211	Apr. 8	1203	318	51	244
Plow.....	H. J. Davis.....	436,339	Sept. 16	1486	328	52	1674
Plow.....	L. M. Dickerman.....	438,347	Oct. 14	1039	282	53	205
Plow.....	W. T. Dodd.....	424,470	Apr. 1	41	11	51	11
Plow.....	G. W. Doolittle.....	435,172	Aug. 26	2683	{ 708 709 }	52	1304
Plow.....	C. C. Echols.....	437,775	Oct. 7	157	48	53	33
Plow.....	J. W. Fields.....	422,756	Mar. 4	569	145	50	1245
Plow.....	F. Freck.....	441,478	Nov. 25	3003	{ 773 774 }	53	1206

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Plow	J. H. N. Gnilford and W. M. Quinn	443,275	Dec. 23	2698	692	53	1813
Plow	C. Hansen	424,294	Mar. 25	2889	771	50	1709
Plow	S. W. Hatcher	431,891	July 3	1350	341	52	272
Plow	M. B. Heller	430,123	June 17	1565	389	51	1793
Plow	W. E. Hendricks	419,946	Jan. 21	1949	513	50	408
Plow	R. S. Hyer	430,027	June 10	1404	349	51	1753
Plow	F. B. Hunt	429,451	June 3	526	126	51	1574
Plow	J. W. Jackson	422,418	Mar. 4	81	22	50	1153
Plow	W. W. Leak	443,579	Dec. 30	3129	819	53	1917
Plow	E. C. Lester	423,062	Mar. 11	1069	277	50	1346
Plow	S. C. Lesueur and T. M. Holsey	433,353	July 29	3593	{ 926 927 }	52	726
Plow	J. D. Marley	441,313	Nov. 25	2745	710	53	1157
Plow	C. Marsh	443,861	Dec. 30	3627	934	53	2002
Plow	J. A. Martin	437,217	Sept. 30	2952	772	52	1967
Plow	T. J. Mason	429,767	June 10	997	244	51	1675
Plow	H. A. Mattox and E. Evans	421,506	Feb. 18	1588	410	50	881
Plow	J. C. Messer and A. Garner	434,938	Aug. 26	2342	619	52	1239
Plow	W. Miller and T. Anderson	420,359	Jan. 28	2581	685	50	534
Plow	A. F. Molitor	424,492	Apr. 1	82	23	51	19
Plow	R. Muesse	435,045	Aug. 26	2499	661	52	1269
Plow	J. Pohrson	441,891	Dec. 2	405	107	53	1344
Plow	H. Peterson	442,200	Dec. 9	899	239	53	1445
Plow	W. J. Pirkle	438,487	Oct. 14	1232	334	53	243
Plow	W. H. Prisk	429,060	May 27	3088	786	51	1449
Plow	H. Reid	430,149	June 17	1600	398	51	1600
Plow	H. H. Sater	420,347	Jan. 28	2434	647	50	508
Plow	H. H. Sater	420,249	Jan. 28	2437	648	50	508
Plow	F. Schulz	433,373	July 29	3620	934	52	731
Plow	J. Silberman	443,229	Dec. 23	2631	676	53	1801
Plow	J. A. Stewart	422,896	Mar. 4	804	205	50	1289
Plow	J. M. Stone	438,961	Oct. 21	1989	531	53	391
Plow	E. J. Swiedom	436,273	Sept. 9	1380	360	52	1645
Plow	S. Tanner	421,633	Feb. 18	1784	466	50	918
Plow	C. E. Tower	442,671	Dec. 16	1632	418	53	1597
Plow	S. H. Walton	421,336	Feb. 11	1344	348	50	827
Plow	S. H. Walton	432,103	July 15	1674	430	52	342
Plow	L. B. White	419,165	Jan. 7	773	{ 204 205 }	50	160
Plow	L. B. White	420,587	Feb. 4	225	58, 59	50	608
Plow	A. Wilhelm	429,670	June 10	859	208	51	1647
Plow	F. H. Wissler	420,259	Jan. 28	2453	651	50	511
Plow and cultivator. Combination sulky	I. W. Stevens	420,472	Feb. 4	74	17	50	578
Plow and cultivator. Shovel	S. D. Gifford	420,994	Feb. 11	856	221	50	735
Plow and fertilizer-dropper. Combined	F. M. Haines	439,944	Nov. 4	420	125	53	702
Plow and harrow. Combined	M. Bruner	443,117	Dec. 30	3569	915	53	1990
Plow and harrow. Combined	T. H. Whitlock and C. L. Etberidge	425,845	Apr. 15	2151	575	51	435
Plow and pulverizer. Combined sulky	A. Nelson	421,189	Feb. 11	1141	{ 291 292 }	50	789
Plow attachment	J. W. Bridge	427,733	May 13	1066	267	51	1031
Plow attachment	J. M. Burrows	430,511	June 17	2180	536	51	1913
Plow attachment	A. B. De Bruce	439,575	Oct. 28	2953	784	53	580
Plow attachment	J. C. McQuary	425,690	Apr. 15	1925	512	51	392
Plow attachment. Cotton	J. T. Collier	418,686	Jan. 7	27	8	50	8
Plow-cleaner	E. S. Ballentine	419,624	Jan. 21	1455	390	50	311
Plow-cleaning attachment	C. V. Dyer	427,408	May 6	578	144	51	926
Plow-clearing attachment	M. B. Sutley	427,932	May 13	1322	350	51	1090
Plow. Combination	J. G. Walton	439,214	Oct. 28	2391	{ 642 643 }	53	474
Plow. Cultivating	G. B. Hart	429,171	June 3	98	23	51	1491
Plow-cutter mechanism	I. D. Roy	437,721	Oct. 7	70	23	53	17
Plow. Cylinder breaking	W. C. Bridges	426,908	Apr. 29	3755	981	51	767
Plow-cvener	J. A. Kenney	437,032	Sept. 23	2648	692	52	1903
Plow-fastener	W. J. Mercer	422,028	Feb. 25	2324	613	50	1038
Plow-fender	R. Jefferson	435,586	Sept. 2	318	88	52	1436
Plow-fender	W. W. Watson	441,015	June 24	2997	736	51	2077
Plow-fender attachment	J. W. Heaton	424,647	Apr. 1	325	84	51	63
Plow for listed corn	A. D. Cave	422,010	Feb. 25	2302	608	50	1026
Plow frame. Gang	A. F. McMillan	435,567	Sept. 2	291	81	52	1432
Plow. Gang	G. W. Rife	440,900	Nov. 18	2036	{ 524 525 }	53	1016
Plow. Gang	A. B. and T. A. Voelkerding and G. C. Siem	424,151	Mar. 25	2690	716	50	1670
Plow. Garden	W. C. McLysire	429,219	June 3	172	41	51	1504
Plow-irons. Press for shaping	W. W. Speer	428,151	May 20	1702	432	51	1163
Plow-jointer	L. P. Thompson	435,617	Sept. 2	379	102	52	1446
Plow landside-wheel	A. Lindgren	427,881	May 13	1309	331	51	1077
Plow. Listing	A. B. Perine	421,510	Feb. 18	1594	411	50	882
Plow. Oscillating gang	C. McGuire	435,513	Sept. 2	197	54	52	1413
Plow-point	J. S. Fox	419,935	Jan. 21	1928	508	50	405
Plow-point	S. D. Freeman	423,918	Mar. 25	2352	619	50	1606
Plow-point and colter. Combined	L. B. Conant	438,911	Oct. 21	1917	510	53	376
Plow point and share	M. E. Tibbitts	429,980	June 10	1325	328	51	1737
Plow-points and mold-boards. Die for forming	P. C. Pagett	429,543	June 3	669	163	51	1600
Plow. Reversible	E. S. Gerow	424,926	Apr. 1	759	202	51	147
Plow. Reversible	H. R. Underhill	430,307	June 17	1877	461	51	1854
Plow. Reversible mold-board	C. Anderson	424,400	Mar. 25	3095	822	50	1749
Plow-shield	J. Shearer	425,259	Apr. 8	1266	338	51	256
Plow. Shovel	G. A. Jacobs	425,079	Apr. 8	996	267	51	201
Plow. Side-hill	E. M. Hickman	426,447	Apr. 29	3074	{ 806 807 }	51	635
Plow. Side-hill	H. Wiard and J. L. Judd	420,218	Jan. 28	2385	634	50	499
Plow. Side-hill	H. Wiard and J. L. Judd	420,647	Feb. 4	317	82	50	626
Plow-slide	T. M. Bowers	437,768	Oct. 7	149	46	53	31

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Plow. Steam.....	C. P. Brown.....	424,265	Mar. 25	2837	759	50	1699
Plow-stock.....	J. L. O. King.....	438,549	Oct. 14	1321	359	53	261
Plow. Sulky.....	C. Anderson.....	428,295	May 20	1929	484 485	51	1206
Plow. Sulky.....	C. Anderson.....	431,683	July 8	1029	257 258 259	52	210
Plow. Sulky.....	W. G. Danielson and W. Merrill.....	430,423	June 17	2050	505	51	1888
Plow. Sulky.....	F. J. Merrow.....	422,605	Mar. 4	360	89	50	1205
Plow. Sulky.....	A. V. Ryder.....	429,064	May 27	3092	797	51	1450
Plow. Sulky.....	W. Sobey.....	437,666	Sept. 30	3645	952	52	2104
Plow. Sulky.....	C. E. Tower.....	442,672	Dec. 16	1623	418 419	53	1597
Plow. Sulky.....	C. E. Tower.....	442,673	Dec. 16	1626	419 420	53	1598
Plow. Sulky.....	G. Wilkinson.....	427,942	May 13	1398	353	51	1093
Plow. Three-wheel.....	B. F. Butler.....	419,180	Jan. 14	803	212	50	173
Plow. Turning.....	W. A. Lovels.....	436,484	Sept. 16	1730	456	52	1720
Plow. Wheel.....	J. C. Boughner.....	425,592	Apr. 15	1762	473	51	360
Plow. Wheel.....	M. H. Garwood.....	438,539	Oct. 14	1307	354	53	258
Plow. Wheel.....	W. H. Melder.....	436,985	Sept. 23	2580	674 675	52	1889
Plow. Wheel.....	G. Moore.....	442,644	Nov. 18	1609	414	53	436
Plow-wheel.....	M. Sughrone.....	430,046	June 10	1134	356	51	1758
Plows and listers. Open mold-board and share for.....	J. Hammell.....	426,012	Apr. 22	2426	641	51	495
Plows. Cultivator attachment for double shovel.....	R. D. Snyder.....	441,532	Nov. 25	3172	818	53	1239
Plows. Fertilizer attachment for.....	J. E. Peil.....	434,293	Aug. 12	1290	335	52	1018
Plows. Helm for.....	J. F. Packer.....	440,647	Nov. 18	1615	416	53	937
Plows. Plant-fender for.....	R. Jones.....	437,651	Sept. 30	3622	947	52	2099
Plows. Pulverizer attachment for.....	J. Creighton.....	439,587	Oct. 28	2974	789	53	584
Plows. Seed-dropping attachment for.....	C. A. Anderson.....	434,749	Aug. 19	2018	527	52	1169
Plows. Wheel attachment for.....	A. Lindgren.....	421,410	Feb. 18	1449	375	50	874
Plowshare.....	G. S. Briggs.....	421,661	Feb. 18	1417	476	50	925
Plowshare.....	J. E. Ransome.....	421,971	Feb. 25	2248	591	50	1015
Plowshare. Reversible.....	W. Heithersay.....	428,842	May 27	2755	700	51	1345
Plowshares. Mechanism for shaping.....	G. S. Briggs.....	430,988	June 24	2957	726	51	2069
Plowshares. Tongs for holding.....	I. W. Cox.....	419,599	Jan. 14	1413	378	50	297
Plug Basin.....	T. Susenbuhl.....	425,113	Apr. 8	1037	277	51	209
Plug-feeder or plug-cock. Automatic.....	J. J. Powers.....	424,688	Apr. 1	387	102	51	76
Plug for closing water-pipes, &c.....	A. L. Finch.....	427,677	May 13	974	246	51	1013
Plug for t-sting pipes. Expandible.....	W. S. Clark.....	437,289	Sept. 30	3067	803	52	1989
Plugs. Device for manipulating breech.....	R. B. Dashiell.....	435,-03	Sept. 2	656	173	52	1501
Plugs. Tool for tapering.....	J. F. Brown.....	433,615	Aug. 5	257	69	52	807
Pimmb. Builder's.....	W. J. Workman.....	433,-42	Aug. 5	601	156	52	873
Plumbates of alkaline earths. Producing.....	G. Kassner.....	430,653	June 24	2424	51	51	1967
Plumber's or jeweler's furnace.....	B. Rein and A. W. Straight.....	430,196	June 17	1657	413	51	1811
Plumber's tool.....	M. E. Worden.....	441,347	Nov. 25	2789	721	53	1165
Plumber's trap.....	T. McHugh.....	425,339	Apr. 8	1382	368	51	278
Plumber's trap.....	W. W. Rosenfield.....	419,219	Jan. 14	864	227	50	185
Plumbers' traps. Making.....	G. W. Knapp.....	440,951	Nov. 18	2124	551	53	1032
Plunger needle-spray, and shower bath. Combined.....	J. Reid.....	440,253	June 17	1763	438	51	1831
Plush fabric. Woven.....	G. Rath.....	422,447	Mar. 4	125	34	50	1161
Pneumatic dispatch apparatus.....	A. Bryson, Jr.....	424,498	Mar. 4	194	53	50	1173
Pneumatic dispatch-tube.....	S. F. Leake.....	431,698	July 8	1054	264 265	52	215
Pneumatic dispatch-tube.....	S. F. Leake.....	431,699	July 8	1059	265 266	52	215
Pneumatic dispatch-tube carrier.....	S. F. Leake.....	431,900	July 8	1360	344	52	275
Pneumatic dispatch-tube carrier.....	S. F. Leake.....	431,901	July 8	1362	344	52	275
Pneumatic dispatch-tube receiver.....	S. F. Leake.....	431,700	July 8	1061	266	52	216
Pneumatic dispatch-tube receiver.....	S. F. Leake.....	431,701	July 8	1062	266	52	216
Pneumatic engine.....	H. W. Metzger.....	441,103	Nov. 18	2365	613	53	1079
Pneumatic separator and grader.....	J. F. Gent.....	420,153	Jan. 28	2274	603	50	479
Pocket-book.....	F. Lieker.....	442,231	Dec. 9	942	249	53	1454
Pocket-book clasp.....	C. G. Pfingsten.....	429,246	June 3	207	52	51	1512
Pocket-book clasp.....	S. Scheuer.....	427,801	May 13	1182	297	51	1053
Pocket-book frame and catch.....	B. von Eigen.....	425,475	Apr. 15	1595	426	51	327
Pocket-book protector.....	G. F. Peterson.....	426,680	Apr. 29	3419	297	51	701
Pocket-book snap-lock.....	E. Oldenbusch.....	427,790	May 13	1162	291	51	1050
Pocket-case.....	T. P. Heioemann.....	439,401	Oct. 28	2701	720	53	531
Pocket-fastener.....	B. Woodford.....	425,060	Apr. 8	967	259	51	195
Pocket for garments. Safety.....	E. Jacobs.....	437,903	Oct. 7	347	101	53	67
Pocket-frame.....	A. Brenowitz.....	432,224	July 15	1858	477	52	376
Pocket-knife.....	B. von Bülzingslöwen, M. Levy, and F. S. Klotz.....	436,888	Sept. 23	2443	638	52	1863
Pocket-knife.....	J. W. Harris.....	436,659	Sept. 16	2010	525	52	1771
Pocket-knife.....	A. F. Hasselstrom.....	426,445	Apr. 29	3071	805 806	51	634
Pocket-knife.....	J. Van Holland.....	431,584	July 8	855	212	52	178
Pocket-protector.....	W. V. S. Bastian.....	438,674	Oct. 21	1514	408	53	303
Pocket. Safety.....	C. R. Griffin.....	438,228	Oct. 14	951	257	53	187
Pocket. Vest.....	H. Greenberg.....	431,050	July 1	36	8	52	9
Poison-distributor.....	C. L. Bellamy.....	433,438	Aug. 5	7	2	52	758
Poison-distributor.....	T. Presley.....	434,357	Aug. 12	1381	363	52	1037
Poison-distributor.....	H. B. Richards.....	423,814	Mar. 18	2181	576	50	1566
Poison-indicator.....	H. H. Wallace, Jr.....	426,342	Apr. 22	2894	762	51	591
Poison on plants. Machine for distributing.....	G. R. and J. W. Brown.....	423,121	Mar. 11	1154	300	50	1363
Poke.....	F. B. Greer.....	435,175	Aug. 26	2687	710	52	1305
Poke. Animal.....	T. Miller and N. E. Lupton.....	425,446	Apr. 15	1552	415	51	319
Poke. Animal.....	I. S. Krick.....	428,005	May 13	1489	378	51	1112
Poke. Animal.....	A. R. Moore.....	422,820	Mar. 4	662	169	50	1264
Poke. Horse-neck.....	W. W. Huntoon and A. F. Perkins.....	439,598	Oct. 28	2990	794	53	588
Pokers or other implements. Handle for.....	G. W. Warner.....	441,343	Nov. 25	2786	720	53	1165
Pole and shaft for vehicles. Adjustable.....	J. A. Wilson and J. T. Hutchings.....	430,203	June 17	1667	415	51	1813

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Pole and shafts. Vehicle.....	J. Loewenthal.....	434,797	Aug. 19	2083	545	52	1182
Pole and thill. Convertible.....	J. H. Thomas.....	421,451	Feb. 18	1502	390	50	865
Pole and yoke coupling for vehicles.....	S. R. Tripp.....	435,871	Sept. 2	753	202	52	1521
Pole. Carriage.....	W. A. Galbraith.....	422,393	Mar. 4	43	13	50	1145
Pole. Carriage.....	W. A. Galbraith.....	422,394	Mar. 4	44	13	50	1145
Pole. Carriage.....	W. A. Galbraith.....	422,395	Mar. 4	45	13	50	1146
Pole. Carriage.....	W. A. Galbraith.....	422,396	Mar. 4	46	13	50	1146
Pole. Carriage.....	W. A. Galbraith.....	422,397	Mar. 4	47	14	50	1146
Pole. Carriage.....	W. A. Galbraith.....	422,398	Mar. 4	48	14	50	1146
Pole. Carriage.....	L. Miller.....	423,364	Aug. 26	2987	792	52	1360
Pole. Carriage.....	B. F. Wheeler.....	422,478	Mar. 4	170	47	50	1168
Pole coupling. Carriage.....	J. M. Smith.....	419,371	Jan. 14	1091	289	50	231
Pole-erecting apparatus.....	R. Hathaway.....	426,534	Apr. 29	3200	839	51	659
Pole-iron. Vehicle.....	F. O. and H. P. Spalding.....	421,202	Feb. 11	1159	297	50	792
Pole. Metal.....	S. H. Terry.....	433,189	July 29	3368	871	52	680
Pole or curtain ring.....	H. E. Swift.....	418,992	Jan. 7	523	131	50	110
Pole. Pike.....	A. E. Creigh.....	443,038	Dec. 16	2264	581	53	1722
Pole. Sectional metal.....	J. H. Van Dorn.....	421,532	Feb. 18	1631	421	50	8-9
Pole tip. Vehicle.....	L. G. Allen.....	437,960	Oct. 7	435	121	53	83
Pole tip. Vehicle.....	J. T. Bagby.....	425,848	Apr. 15	2159	575	51	436
Pole tip. Vehicle.....	G. W. Campbell.....	441,352	Nov. 25	2796	722	53	1167
Pole tip. Vehicle.....	E. Covert.....	430,116	June 17	1555	387	51	1792
Pole tip. Vehicle.....	C. F. Elrick.....	439,640	Nov. 4	30	9	53	612
Pole tip. Vehicle.....	C. H. Randall.....	426,544	Apr. 29	3215	843	51	662
Pole tip. Vehicle.....	W. V. Reed.....	423,277	Mar. 11	1400	364	50	1409
Pole. Vehicle.....	J. Atkins.....	425,847	Apr. 15	2158	574	51	436
Pole. Vehicle.....	S. R. Bailey.....	419,984	Jan. 21	2003	527	50	419
Pole. Vehicle.....	H. A. Burt.....	420,434	Feb. 4	9	2	50	566
Pole. Vehicle.....	R. G. W. Foster.....	424,106	Mar. 25	2634	701 702	50	1659
Pole. Vehicle.....	J. Hockman.....	426,500	Apr. 29	3152	829	51	650
Pole. Vehicle.....	J. Hockman.....	439,153	Oct. 28	2284	613	53	454
Pole. Vehicle.....	H. H. Lockwood.....	431,751	July 8	1136	283	52	231
Pole. Wagon.....	D. S. Tutbill.....	430,493	June 17	2151	529	51	1907
Polisher.....	J. B. Bennett and A. P. Boardman.....	441,635	Dec. 2	11	3	53	1264
Polishing and buffing device.....	W. Church.....	436,868	Sept. 23	2410	629	52	1856
Polishing apparatus.....	N. Peloquin.....	422,246	Feb. 25	2667	704	50	1093
Polishing-machine.....	J. B. Bennett.....	441,636	Dec. 2	12	4	53	1264
Polishing-machine.....	J. B. Bennett and A. P. Boardman.....	441,634	Dec. 2	8	2	53	1264
Polishing-machine.....	M. L. Powers.....	435,709	Sept. 2	517	136	52	1475
Polishing-machines. Vibrator attachment for.....	J. B. Bennett and A. P. Boardman.....	441,633	Dec. 2	6	2	53	1264
Polishing-powder.....	E. P. Eells.....	422,750	Mar. 4	563	.....	50	1243
Pool-register.....	J. H. Clark.....	433,117	July 29	3261	839 840	52	659
Pool-table.....	W. H. Violet.....	432,458	July 15	2205	569	52	442
Pop-corn balls. Mold for making.....	W. G. Wiatt and F. Pickering.....	436,818	Sept. 23	2287	603	52	1834
Pork. Method of and knife for cutting.....	F. W. Wilder.....	431,097	July 1	100	25	52	22
Porous bodies. Impregnating.....	E. T. Greenfield and J. Nagel.....	441,839	Dec. 2	329	.....	53	1328
Porous sheets or surfaces for the absorption of liquids, &c. Manufacture of.....	F. H. Glew.....	438,998	Oct. 21	2050	548	53	404
Portable case for fragile articles.....	H. Haussmann.....	440,633	Nov. 18	1589	409	53	932
Portable chair.....	C. A. Spahn and H. D. N. Miller.....	430,703	June 24	2507	613	51	1983
Portable house.....	C. H. Leonard.....	479,859	Jan. 21	1814	479 480	50	379
Portable table or desk.....	F. C. Lynde.....	425,814	Apr. 15	2098	561	51	426
Porte-electric.....	J. T. Williams.....	436,281	Sept. 9	1392	362	52	1648
Portfolio.....	J. M. Carrère.....	429,166	June 3	93	22	51	1490
Post: <i>See</i> Binding-post. Metal post. Fence-post. Metallic post. Hitching-post. Stone post. Jointed post. Tile post. Lamp-post. Trace-post.							
Post-driver.....	S. R. Anderson.....	434,620	Aug. 19	1804	470 471	52	1130
Post-driver.....	O. Birney and A. Lease.....	443,424	Dec. 23	2934	754	53	1859
Post-driver.....	T. J. Thorp.....	442,555	Dec. 9	1453	372	53	1554
Post-driving machine.....	W. B. Grigsby.....	435,222	Aug. 26	2749	726	52	1317
Post-hole-boring machine.....	J. R. Lamb.....	427,580	May 13	843	211	51	988
Post-hole digger.....	S. H. Gregg.....	429,903	June 10	1206	299	51	1714
Post-hole digger.....	I. J. Merrick.....	428,507	May 20	2235	566	51	1266
Post-marking and stamp-canceling machine.....	W. Groth.....	419,014	Jan. 7	549	137 138 139 140	50	116
Post-office distributing-case.....	J. P. Fogarty.....	439,646	Nov. 4	36	10	53	614
Post or pile driver.....	G. W. Wilson.....	431,306	July 1	416	103	52	85
Postal cabinet.....	A. Udell.....	431,679	July 8	1021	255 256	52	208
Postal cars and post-offices. Distributing-case for.....	A. J. Schliemann.....	426,964	Apr. 29	3828	1000	51	781
Postal examination-case.....	J. Straughan.....	435,254	Aug. 26	2797	742	52	1326
Pot: <i>See</i> Chocolate-pot. Furnace fire-pot. Coffee-pot. Glass-melting pot. Coffee or tea pot. Straining-pot. Dash-pot. Watering-pot. Flower-pot.							
Pot-lifter and stove-shelf. Combined.....	J. A. Wilson.....	440,453	Nov. 11	1292	335	53	866
Potato-bug exterminator.....	A. J. Kuehn.....	424,422	Mar. 25	3127	830	50	1755
Potato-bugs. Machine for exterminating.....	F. L. Alger.....	422,277	Feb. 25	2715	714	50	1101
Potato-chip holder.....	O. L. Perkins.....	422,247	Feb. 25	2668	704	50	1093
Potato cutters. Feeder for seed.....	G. P. Webster.....	440,522	Nov. 11	1406	364	53	888
Potato-cutting device.....	R. A. Toler.....	419,231	Jan. 14	883	232	50	189
Potato-digger.....	S. L. Allen.....	424,945	Apr. 8	791	211	51	161

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Potato-digger	P. Antonides	436,296	Sept. 9	1416	{ 369 370 470 471	{ 52	1653
Potato-digger	C. H. Ayres	430,330	June 17	1922	{ 470 471	{ 51	1862
Potato-digger	E. M. Baker	431,311	July 1	422	104	52	87
Potato-digger	J. N. Baker	424,531	Apr. 1	144	41	51	31
Potato-digger	C. Brick	431,433	July 1	620	155	52	125
Potato-digger	J. A. Buck	441,928	Dec. 2	461	123	53	1355
Potato-digger	J. Colgrove	437,679	Oct. 7	7	3	53	4
Potato-digger	J. B. Fellows	420,573	Feb. 4	205	52, 53	50	604
Potato-digger	J. Gohm	437,593	Sept. 30	3548	926	52	2084
Potato-digger	G. Goodrich	424,781	Apr. 1	545	145	51	107
Potato-digger	B. S. Howard	439,758	Nov. 4	187	49, 50	53	645
Potato-digger	J. E. Kelly	438,688	Oct. 21	1548	417	53	308
Potato-digger	A. Lauritzen and J. F. Nielsen	424,007	Mar. 25	2495	663	50	1632
Potato-digger	G. M. D. Pomeroy	428,288	May 20	1916	482	51	1204
Potato-digger	E. A. Smith	440,514	Nov. 11	1396	361	53	886
Potato-digger	C. H. Thomas	420,502	Feb. 4	107	26	50	584
Potato-digger	F. M. Thorn	437,528	Sept. 30	3454	902	52	2065
Potato-digger	C. Tonsager	438,963	Oct. 21	1990	{ 531 532	{ 53	391
Potato-digger	I. J. Trench	434,283	Aug. 12	1245	{ 322 323	{ 52	1009
Potato-digger	P. J. Tunny	441,783	Dec. 2	241	63, 64	53	1311
Potato-digger	W. B. Wheeler	440,673	Nov. 18	1652	426	53	944
Potato-digger	A. Wilkin	439,223	Oct. 28	2407	{ 646 647	{ 53	477
Potato-digger	A. N. Woodard	424,242	Mar. 25	2812	752	50	1695
Potato-digger and picker	G. A. Ellsworth	432,992	July 29	3062	786	52	620
Potato-digging machine	P. Boylan	419,495	Jan. 14	1268	338	50	267
Potato-masher	J. S. Blinn	442,850	Dec. 16	1952	502	53	1660
Potato masher and beater	E. R. Kirk	431,924	July 8	1485	375	52	299
Potato-mashers. Machine for making	W. C. Freeman	427,981	May 13	1454	368	51	1101
Potato-peeler	G. B. Haines	423,150	Mar. 11	1208	315	50	1373
Potato-peeling knife	W. Fraue	420,780	Feb. 4	493	129	50	659
Potential-controlling device	W. Stanley, Jr.	426,573	Apr. 29	3259	855	51	671
Potter's block and batter	E. Mayer	419,609	Jan. 14	1426	382	50	299
Pottery articles while burning. Suspending	H. Brunt	442,854	Dec. 16	1965	504	53	1663
Pottery-kiln	F. C. Roberts	434,953	Aug. 26	2364	626	52	1244
Pottery-kiln	F. C. Roberts	434,954	Aug. 26	2366	{ 626 627	{ 52	1244
Pottery-machine	J. G. Whildin	442,084	Dec. 2	716	192	53	1403
Poultry-holder	C. S. Hirst	432,798	July 22	2759	706	52	556
Poultry drinking-fountain	G. C. Burrell and E. H. Roblee	443,428	Dec. 23	2938	756	53	1260
Poultry-killing apparatus	A. Schönmemann	433,151	July 29	3315	{ 856 857	{ 52	669
Pouncing-roller	B. M. Walsh	438,786	Oct. 21	1708	458	53	338
Powder:							
See Baking-powder. Polishing-powder.							
Insect-powder. Soap-powder.							
Powder-box	G. Mennen	441,802	Dec. 2	272	74	53	1317
Powder-distributor	C. A. Shattuck	431,112	Feb. 11	1026	262	50	767
Powder-press	H. D. Loflin and R. E. Shaw	422,602	Mar. 4	333	88	50	1204
Power:							
See Churn-power. Sea and wave power.							
Foot-power. Tide-power.							
Horse-power. Treadle-power.							
Mechanical power. Water-power.							
Motive power. Wave-power.							
Propelling-power.							
Power apparatus	P. J. Dalton	433,771	Aug. 5	491	128	52	851
Power. Apparatus for the transmission of	E. E. Porter	429,153	June 3	66	17	51	1485
Power. Apparatus for transmission of	O. Krell	421,587	Feb. 18	1711	445	50	904
Power-brake	L. P. Lawrence	432,948	July 22	2982	766	52	598
Power by electricity. Transmission of	E. W. Rice, Jr.	421,193	Feb. 11	1146	293	50	790
Power-converter	I. Shoudy, Jr., and L. L. Miller	431,854	July 8	1300	326	52	263
Power. Electrical conductor for the transmission of	W. J. Cordley	427,746	May 13	1095	275	51	1037
Power. Electrical transmission of	W. Stanley, Jr.	439,042	Oct. 21	2109	566	53	415
Power indicator and recorder	E. Nixon	424,218	Mar. 25	2782	{ 741 742	{ 50	1628
Power machine drill	W. Lodge	425,438	Apr. 15	1538	412	51	317
Power mechanisms. Electric controller for	R. D. O. Smith	436,843	Sept. 23	2331	613	52	1841
Power or strength testing machine. Coin-operated	A. W. and A. H. Roovers	423,702	Mar. 18	2028	535	50	1536
Power-press	L. B. Newell	437,038	Sept. 23	2655	694	52	1940
Power-press	A. L. Platt	432,836	July 22	2803	{ 717 718	{ 52	565
Power-presses. Safety-treadle for	J. M. Mungiven	421,747	Feb. 18	1929	507	50	947
Power-shipping mechanism	W. H. Lafaele	420,160	Jan. 28	2286	605	50	482
Power. System of electrical transmission of	C. J. Van Depoele	440,976	Nov. 18	2159	560	53	1039
Power-transmission device	C. Davidson	433,772	Aug. 5	493	128	52	851
Power transmission. Electrical	R. M. Hunter	427,515	May 6	734	183	51	957
Power-transmission. Endless-rope	J. Gregg	423,046	Mar. 11	1045	272	50	1342
Power-transmitter	W. Hollis	436,081	Sept. 9	1091	2-2	52	1590
Power-transmitter	T. C. Hutchinson and T. W. Hugo	440,477	Nov. 11	1331	{ 343 344	{ 53	874
Power-transmitter	H. R. Knox	428,497	May 20	2224	562	51	1264
Power-transmitter	C. F. Littlejohn	423,064	Mar. 11	1071	{ 278 279	{ 50	1347
Power-transmitting apparatus	T. A. Edison	436,970	Sept. 23	2563	670	52	1885
Power-transmitting device	A. von Babo	419,386	Jan. 14	1110	293	50	234
Power-transmitting device	E. A. Jarvis	436,017	Sept. 9	981	257	52	1570
Power-transmitting device	E. H. Johnson	431,811	July 8	1232	308	52	249
Power-transmitting device	W. E. Laird	439,803	Nov. 4	257	65	53	658
Power-transmitting device	E. Prouty	443,608	Dec. 30	3233	831	53	1926

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.'s.	Vol.	Page.
Power-transmitting device	S. K. White	439,316	Oct. 23	2574	687	53	508
Power-transmitting mechanism	W. S. Belding	433,394	July 29	3648	942	52	737
Power-transmitting mechanism	W. S. Belding	440,688	Nov. 18	1675	432	53	949
Power-transmitting mechanism	E. Chaffey	434,916	Aug. 26	2314	611	52	1234
Power-transmitting mechanism	E. Chaffey	439,110	Oct. 28	2222	597	53	443
Power-transmitting mechanism	W. B. Cleveland	433,446	Aug. 5	17	5	52	760
Power-transmitting mechanism	G. F. Evans	426,370	Apr. 22	2939	773	51	599
Power-transmitting mechanism	J. H. Horne	443,080	Dec. 16	2335	596	53	1735
Prairie-grass. Apparatus for burning	E. C. Rice	419,559	Jan. 14	1349	361	50	284
Precious stones. Combination setting for	J. F. Morse	420,499	Feb. 4	103	25	50	583
Preservative	L. Benussi and C. Dondero	440,257	Nov. 11	960		53	807
Preserving and displaying vegetable products. Device for	U. and W. Dornell	431,509	July 1	735	183	52	146
Preserving bivalves	J. W. Morris	431,212	July 1	274	69	52	56
Preserving case. Vegetable and fruit	G. D. Basse	420,983	Feb. 11	898	217	50	731
Preserving compound	J. R. Bate and F. W. Owen	429,161	May 20	1714		51	1165
Preserving compound	O. Williams	435,911	Sept. 2	833	220	52	1536
Preserving fish or meat	M. Ams	423,545	Mar. 18	1766	469	50	1490
Preserving food. Apparatus for	J. B. Anderson	427,232	May 13	1210	305	51	1058
Preserving food. Composition for	W. Radam	425,904	Apr. 15	2228		51	449
Preserving food. Process of and apparatus for	C. L. Bachelierie	440,528	Nov. 11	1418	366	53	890
Preserving fruit, &c	E. F. Ayres	437,323	Sept. 30	3118	816	52	1998
Preserving meat, &c	W. Smith	431,407	July 1	570		52	116
Preserving milk	F. McIntyre	432,325	July 15	2016	518	52	404
Press:							
See Bale-press.	Glass-press.						
Baling-press.	Hay-press.						
Brick-press.	Hydraulic press.						
Bundle-wrapping press.	Hydraulic shaping-press.						
Bundling-press.	Lead-press.						
Capsule-press.	Molding-press.						
Cider-press.	Oil-press.						
Compound press.	Power-press.						
Copy-press.	Printing-press.						
Copying-press.	Proof-press.						
Cotton-press.	Screw-press.						
Culinary press.	Seal-press.						
Domestic press.	Scaling-press.						
Drill-press.	Section-press.						
Filter-press.	Soap-press.						
Filtering-press.	Telescopic press.						
Forging-press.	Veneering-press.						
Fruit-press.	Wood-press.						
Fuel-press.	Wood-bending press.						
Press	P. R. Cross	431,444	July 1	635	159	52	128
Press	P. J. Honaker, Jr., and G. F. Seiser	430,737	June 24	2564	628	51	1994
Press	H. McKay	427,604	May 13	873	219	51	993
Press-drill	W. and H. B. Craggs	431,504	Aug. 19	1625	427	52	1094
Press for fruit, pulp, or other substances	R. Heaton	429,238	June 3	199	49	51	1510
Press for fruit, vegetables, &c	J. A. Morrell	433,691	Aug. 5	370	94	52	828
Press or ironing board. Combination	E. B. Burkhalter	423,668	Mar. 18	1978	522	50	1528
Press-slide gage	C. E. Hart and T. Corscaden	425,131	Apr. 8	1072	284 285	51	216
Presses. Gripper for job	G. W. Banks	439,462	Oct. 28	2793	744	53	548
Pressure automatic brake. Fluid	G. Westinghouse, Jr	427,740	Oct. 7	96	30.31	53	21
Pressure-gage	A. E. Tavernier	420,287	Jan. 28	2497	662	50	519
Pressure-gage. Recording	J. B. Edson	443,360	Dec. 23	2841	731	53	1842
Pressure governor. Fluid	G. Kimball	436,558	Sept. 23	2394	624	52	1252
Pressure indicator and recorder	W. H. Bristol	420,570	Feb. 4	200	51	50	603
Pressure-indicator for steam-engines	F. M. Clark	430,467	June 17	2119	521	51	1900
Pressure motor. Fluid	D. E. Kempster	424,609	Apr. 1	265	70	51	54
Pressure-regulating apparatus	N. C. Locke	424,561	Apr. 1	192	53	51	39
Pressure-regulator	M. F. Abbe	429,591	June 10	745	179	51	1625
Pressure-regulator	J. Barrow	431,961	July 8	1447	366	52	292
Pressure-regulator	E. T. Winkler	430,720	June 24	2534	620	51	1988
Pressure-regulator. Automatic	J. B. Knickerbocker	427,516	May 6	737	184	51	958
Pressure-regulator. Fluid	I. J. Griffin	436,235	Sept. 9	1324	845	52	1633
Pressure-tension in tubular bodies. Producing	R. Mannesmann	440,489	Nov. 11	1361	351	53	879
Price-card fastener and exhibitor	D. K. Appenzeller	437,078	Sept. 23	2712	708	52	1915
Print or picture. Indelible	F. C. Colburn and J. R. France	426,170	Apr. 22	2654		51	540
Print or picture. Indelible	F. C. Colburn and J. R. France	429,243	June 10	1114		51	1696
Prints. Making colored and other	H. Sandham	439,566	Oct. 28	2939		53	578
Prints on triangular sheets. Production of	W. Ottman	424,813	Apr. 1	590	156	51	114
Prints or designs. Transferring	W. H. Maxwell	439,536	Oct. 28	2895		53	569
Printed and folded sheets of paper. Apparatus for gathering and classifying	R. Fricke and L. Schütz	428,598	May 27	2381	605	51	1314
Printed sheets for drying. Preparing	E. N. Blue	441,924	Dec. 2	452	120 121	53	1353
Printer's block	G. W. Harbon	421,929	Feb. 25	2198	576	50	1006
Printer's chase	H. J. Bauer	440,256	Nov. 11	959	246	53	807
Printer's chase	E. J. Rollings	435,771	Sept. 2	602	160	52	1490
Printer's composing-stick	W. F. Combs	431,440	July 1	630	158	52	127
Printer's composing-stick	C. Kimplen	436,981	Sept. 23	2575	673	52	1888
Printer's composing-stick	J. G. Webster	442,790	Dec. 16	1841	476	53	1640
Printer's galley	S. E. Horne	423,559	Mar. 18	1804	476	50	1494
Printer's galley	L. R. and A. D. Hoss	423,156	Mar. 11	1216	316	50	1375
Printer's galley	W. S. Rogers	421,617	Feb. 18	1758	461	50	913
Printer's quoin	H. A. Hennepel	443,280	Dec. 23	2705	694	53	1815
Printer's quoin	W. Wickersham	438,210	Oct. 14	823	223	53	164
Printers' rollers. Apparatus for making	L. K. Bingham	419,912	Jan. 21	1897	498 499	50	398
Printers' rollers. Apparatus for making	L. K. Bingham	419,913	Jan. 21	1898	499	50	398
Printers' rollers. Apparatus for making	L. K. Bingham	419,914	Jan. 21	1900	499	50	398

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & g.	Vol.	Page.
Printing, &c	O. G. Holt	424,557	Apr. 1	187	.....	51	39
Printing and delivering machine. Web.....	L. C. Crowell.....	431,840	July 8	1275	{ 320 321 }	52	258
Printing and numbering machine. Letter-press	D. Carlaw	425,298	Apr. 8	1331	356	51	268
Printing and vignetting frame	W. and W. Easson	440,399	Nov. 11	1198	309	53	850
Printing apparatus	W. H. Kerr	443,050	Dec. 16	2276	584	53	1725
Printing apparatus. Chromatic.....	W. Dicks, Sr.	429,848	June 10	1120	277	51	1697
Printing apparatus. Manifold.....	W. H. Folsom	440,892	Nov. 18	2021	520	53	1014
Printing attachment for envelope-machines	L. P. Bouvier	432,785	July 22	2733	{ 699 700 }	52	551
Printing attachment for paper-bag machines	E. Stanley	423,153	May 20	1705	432	51	1164
Printing attachment for paper-bag machines	T. R. Troendle	440,380	Nov. 11	1156	298	53	841
Printing attachment for paper-reels	T. G. Saxton	423,394	Mar. 11	1558	409	50	1439
Printing attachment for paper-roll holders	W. H. Harrison and G. C. Westervelt	441,660	Dec. 2	47	13	53	1371
Printing attachment for paper-roll holders	G. C. Westervelt	427,649	May 13	934	234	51	1005
Printing attachment for paper-roll holders	G. C. Westervelt	439,221	Oct. 28	2404	646	53	477
Printing backgrounds. Means for	E. N. Howe	427,761	May 13	1132	284	51	1044
Printing block or form	A. W. McCurdy and F. H. Wines	443,373	Dec. 23	2862	736	53	1846
Printing-blocks. Apparatus for producing	A. J. Dejeu	430,273	June 17	1827	448	51	1443
Printing calico	J. J. Hart	429,131	June 3	36	8	51	1479
Printing. Color.....	G. W. Turner	433,967	Aug. 12	789	206	52	919
Printing device. Can.....	C. R. Hay	431,165	July 1	199	50	52	41
Printing fabrics with flock	W. H. Locke, Jr.	418,800	Jan. 7	213	52	50	46
Printing-frame support	A. J. Dawdy	425,306	Apr. 8	1344	359	51	269
Printing from stencils	G. H. Davis	421,561	Feb. 18	1672	433	50	897
Printing in several colors by one impression	F. C. Taylor	432,530	July 22	2390	.....	52	487
Printing indexes. Apparatus for	F. French	427,229	May 6	312	80	51	873
Printing instrument or apparatus for telegraphic or other uses	J. H. Rogers	420,358	Jan. 28	2590	{ 688 689 }	50	537
Printing. Lithographic	W. Brings	420,765	Feb. 4	467	.....	50	655
Printing-machine	F. C. Barker and R. F. Sproule	432,257	July 15	1902	488	52	384
Printing-machine	H. G. Bender	419,240	Jan. 14	893	235	50	191
Printing-machine	E. Carney and J. H. Dixon	420,436	Feb. 4	14	3	50	567
Printing-machine	C. B. Cottrell	433,234	July 29	3428	885	52	693
Printing-machine	J. Derriey	423,911	Mar. 25	2339	{ 616 617 }	50	1604
Printing-machine	J. Derriey	428,668	May 27	2484	{ 632 633 }	51	1331
Printing-machine	J. T. Hawkins	423,153	Mar. 11	1213	316	50	1374
Printing-machine	C. H. Heywood	422,883	Mar. 4	781	{ 199 200 }	50	1286
Printing-machine	W. P. Kidder	432,413	July 15	2132	{ 548 549 }	52	427
Printing machine. Address.....	E. Woodward	434,412	Aug. 12	1480	{ 386 387 }	52	1057
Printing machine. Address.....	E. Woodward	442,752	Dec. 16	1789	{ 463 464 }	53	1628
Printing-machine and means for preventing offset in the same. Perfecting	J. T. Hawkins	418,979	Jan. 7	506	{ 126 127 }	50	106
Printing-machine. Chromatic.....	H. F. Wyatt	420,399	Jan. 28	2651	703	50	548
Printing-machine. Cloth.....	A. McNicol	439,676	Nov. 4	75	20, 21	53	622
Printing-machine. Color ticket.....	L. H. Hawes and A. Kimball	429,621	June 10	783	{ 190 191 }	51	1633
Printing-machine. Cylinder.....	C. B. Cottrell	424,097	Mar. 25	2616	{ 697 698 }	50	1656
Printing-machine. Cylinder.....	J. Hackett	422,206	Feb. 25	2594	686	50	1080
Printing-machine delivery apparatus	C. B. Cottrell	442,862	Dec. 16	1977	{ 507 508 }	53	1666
Printing-machine delivery apparatus	L. C. Crowell	419,834	Jan. 21	1773	{ 470 471 }	50	371
Printing-machine delivery apparatus	S. D. Tucker	441,453	Nov. 25	2963	{ 764 765 }	53	1200
Printing-machine delivery mechanism.....	L. C. Crowell	419,644	Jan. 21	1481	397	50	316
Printing-machine delivery or fly finger	H. Swain	428,025	May 13	1517	385	51	1118
Printing-machine. Dial	E. S. Bradford	424,651	Apr. 1	647	171	51	125
Printing-machine. Dial.....	E. S. Bradford	441,129	Nov. 25	2418	626	53	1099
Printing-machine. Dial.....	C. B. Nichols	423,077	Mar. 11	1094	285	50	1351
Printing-machine feeding apparatus	E. T. Cleathero and J. A. Nichols	430,513	June 17	2183	{ 536 537 }	51	1914
Printing-machine feeding apparatus	C. B. Cottrell	422,572	Mar. 4	301	77	50	1193
Printing-machine feeding apparatus	C. B. Cottrell	431,201	July 1	250	64	52	52
Printing-machine offset mechanism	C. B. Cottrell	425,123	Apr. 8	1057	{ 281 282 }	51	213
Printing-machine. Oil-cloth.....	W. H. Townsend	443,306	Dec. 23	2762	708	53	1824
Printing-machine. Oscillating-cylinder.....	P. S. Dodge	432,518	July 22	2299	595	52	468
Printing-machine. Plate.....	U. H. E., and F. L. Eberhardt	433,457	Aug. 5	31	8, 9	52	762
Printing-machine. Platen	F. Meisel	431,274	July 1	367	91, 92	52	75
Printing-machine. Platen	A. Morfit and C. Butterfield	429,281	Oct. 28	2508	{ 672 673 }	53	495
Printing-machine. Rotary	P. O. Laffitte	438,239	Oct. 14	870	{ 235 236 }	53	172
Printing-machine sheet-delivery apparatus	C. B. Cottrell	430,378	June 17	1987	{ 490 491 }	51	1875
Printing-machine sheet-delivery apparatus	R. Miehle	419,593	Jan. 14	1397	{ 374 375 }	50	298
Printing machine. Ticket.....	G. B. Massey	443,969	Dec. 30	3799	{ 968 969 }	53	2034
Printing machine. Ticket.....	R. A. Stewart	441,779	Dec. 2	237	61	53	1310
Printing machine. Ticket and card	T. Wrigley	443,129	Dec. 23	2431	{ 622 623 }	53	1761
Printing-machine. Two-color	J. T. Hawkins	429,905	June 10	1208	299	51	1714
Printing-machine. Two-color	J. T. Hawkins	429,906	June 10	1210	300	51	1715

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Printing machine. Web.....	W. Scott.....	436,155	Sept. 9	1206	315	52	1610
Printing machine. Web.....	J. H. Stonemetz.....	43,873	June 10	1162	{ 287 288 }	51	1705
Printing-machine, with means for preventing offset in the same. Perfecting.....	J. T. Hawkins.....	427,319	May 6	442	{ 114 115 }	51	899
Printing-machines. Bronzing attachment for.....	F. M. Mole.....	434,719	Aug. 19	1979	515	52	1161
Printing-machines. Cutting and winding mechanism for.....	J. C. Ford.....	441,476	Nov. 25	2999	{ 772 773 }	53	1206
Printing-machines. Delivery mechanism for web.....	S. D. Tucker.....	441,811	Dec. 2	229	78, 79	53	1320
Printing-machines. Feeding mechanism for cylinder.....	C. B. Cottrell.....	420,621	Feb. 4	278	74	50	613
Printing-machines. Frisket-placing apparatus for.....	C. Potter.....	433,224	July 29	3402	879	52	687
Printing-machines. Ink-fount-roller mechanism for.....	S. Whitlock.....	441,270	Nov. 25	2675	{ 694 695 }	53	1144
Printing-machines. Means for preventing offset in perfecting.....	J. T. Hawkins.....	419,017	Jan. 7	561	141	50	113
Printing-machines. Means for preventing offset in perfecting.....	J. T. Hawkins.....	427,318	May 6	440	114	51	898
Printing-machines. Offset-roller for perfecting.....	J. T. Hawkins.....	418,980	Jan. 7	510	127	50	107
Printing-machines. Paper-feeding mechanism for.....	J. Brooks.....	433,716	Aug. 5	406	104	52	834
Printing-machines. Paper-web-tension device for.....	J. L. Cox.....	438,529	Oct. 14	1295	350	53	255
Printing-machines. Preventing offset in.....	H. A. W. Wood.....	432,289	July 15	1962	501	52	395
Printing-machines. Rotary paper-cutter-adjusting device for.....	J. Brooks.....	433,715	Aug. 5	403	103	52	834
Printing. Means for stencil.....	J. W. Smith and H. L. Heiskell.....	443,801	Dec. 30	3539	908	53	1984
Printing mechanism.....	L. C. Crowell.....	429,891	June 10	1188	{ 295 296 }	51	1710
Printing mechanism. Web.....	L. C. Crowell.....	419,832	Jan. 21	1767	468	50	370
Printing on folded piece-goods. Apparatus for.....	J. A. Cundall.....	438,225	Oct. 14	845	229	53	168
Printing paper bags in connection with paper-bag-making machinery. Apparatus for.....	W. Ainsworth, R. P. Strachan, and G. Henshaw.....	419,399	Jan. 14	1132	300	50	238
Printing paper bags. Machine for.....	O. G. Vanderhoof.....	424,150	Mar. 25	2688	715	50	1670
Printing pictures on celluloid.....	P. H. Mandel.....	439,533	Oct. 28	2492	53	568	
Printing-plate.....	T. C. Eberhardt.....	432,822	July 22	2789	713	52	562
Printing. Plate-holder for mechanical.....	H. H. E. G. Kohl.....	426,283	Apr. 22	2814	739	51	574
Printing-plates. Bed for zinc.....	E. Jacek.....	423,691	Mar. 18	2016	532	50	1534
Printing-plates. Locking device for.....	M. Schwertführer.....	436,614	Sept. 16	1924	505	52	1754
Printing-plates. Means for securing flexible.....	J. T. Hawkins.....	427,320	May 6	446	115	51	899
Printing-plates on cylindrical or flat surfaces. Means for holding.....	H. Robischung.....	427,365	May 6	507	130	51	911
Printing-plates on cylindrical or flat surfaces. Means for holding.....	H. Robischung.....	427,366	May 6	508	130	51	911
Printing-plates upon cylindric surfaces. Fastening for.....	J. Brooks.....	433,232	July 29	3426	{ 884 885 }	52	692
Printing-plates upon cylindrical surfaces. Fastening for.....	J. A. Dear. (Reissue).....	11,056	Jan. 21	2072	546	50	431
Printing-press.....	C. H. Cotton.....	438,988	Oct. 21	2038	544	53	401
Printing-press.....	J. L. Cox.....	441,138	Nov. 25	2431	{ 630 631 632 }	53	1102
Printing-press.....	J. F. W. Dorman.....	432,382	July 15	2091	537	52	419
Printing-press.....	D. I. Eckerson.....	432,385	July 15	2095	{ 538 539 }	52	420
Printing-press.....	D. I. Eckerson.....	433,776	Aug. 5	500	{ 129 130 131 }	52	853
Printing-press.....	E. F. Edgecomb.....	437,184	Sept. 30	2908	{ 757 758 }	52	1958
Printing-press.....	M. Gally.....	430,281	June 17	1843	452	51	1446
Printing-press.....	W. H. Price, Jr.....	420,017	Jan. 21	2053	541	50	427
Printing-press.....	W. Scott.....	425,710	Apr. 15	1952	{ 519 520 }	51	397
Printing-press.....	R. C. Seymour.....	434,730	Aug. 19	1990	{ 518 519 }	52	1164
Printing-press.....	M. H. Sly.....	443,012	Dec. 16	2215	570	53	1713
Printing-press.....	B. II. Speckbauch.....	435,774	Sept. 2	604	{ 161 162 }	52	1491
Printing-press.....	J. Thomson.....	428,182	May 20	1743	441	51	1171
Printing-press attachment.....	G. W. Cook.....	431,224	July 1	295	73	52	60
Printing-press attachment.....	A. Ditson.....	418,944	Jan. 7	463	{ 114 115 }	50	97
Printing-press attachment.....	W. E. Freer.....	431,105	Sept. 23	2750	719	52	1923
Printing-press. Cylinder.....	B. Huber.....	432,800	July 22	2760	706	52	556
Printing-press delivery apparatus.....	S. G. Goss.....	432,035	July 15	1567	{ 400 401 402 }	52	321
Printing-press delivery apparatus.....	S. G. Goss.....	432,036	July 15	1568	{ 401 402 }	52	321
Printing-press feed-gage.....	E. L. Megill.....	438,853	Oct. 21	1835	488	53	361
Printing-press for printing addresses.....	H. Lewinsohn.....	436,631	Sept. 16	1954	513	52	1761
Printing-press gripper.....	W. J. Shea and C. Birkery.....	433,101	July 29	3238	833	52	654
Printing-press. Hand.....	B. B. Hill.....	433,169	July 29	3338	864	52	674
Printing-press. Hectograph.....	H. H. Harrison and F. C. Buffum.....	427,077	May 6	80	20, 21	51	827
Printing-press inking apparatus.....	W. Scott.....	430,889	June 24	2806	688	51	2041
Printing-press inking apparatus.....	J. Thomson.....	427,450	May 6	645	161	51	939
Printing-press inking device.....	J. L. Cox.....	441,789	Dec. 2	252	67	53	1313
Printing-press inking device.....	J. L. Cox.....	441,790	Dec. 2	254	68	53	1314
Printing-press. Oscillating-cylinder.....	J. T. Hawkins.....	423,052	Mar. 11	1052	{ 273 274 }	50	1343
Printing-press. Plate.....	W. P. Kidder and G. H. Kendall.....	442,776	Dec. 16	1824	472	53	1636
Printing-press sheet-adjuster.....	L. L. Lomer.....	438,585	Oct. 14	1375	373	53	271
Printing-press throw-off mechanism.....	H. F. Bechman.....	427,034	May 6	5	1, 2	51	812
Printing-press. Two-revolution cylinder.....	J. W. Butterfield.....	422,715	Mar. 4	515	{ 131 132 }	50	1235
Printing-presses, &c. Air-cushioning apparatus for.....	R. Miehle.....	430,665	June 24	2446	{ 596 597 }	51	1971

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et.	Vol.	Page.
Printing-presses. Automatic ink-distributor for.....	W. B. Sheffield.....	434,957	Aug. 26	2369	628	52	1245
Printing-presses. Brake and locking device for cylinder.....	J. Meinschock.....	441,504	Nov. 25	3039	782	53	1213
Printing-presses. Cushioning apparatus for.....	B. Huber.....	420,012	Jan. 21	2048	540	50	426
Printing-presses. Doctor-roller mechanism for.....	S. Whitlock.....	436,846	Sept. 23	2336	{ 615 616 }	52	1243
Printing-presses. Gage for job.....	C. E. Jones.....	442,255	Dec. 9	976	256	53	1461
Printing-presses. Impression throw-off for.....	C. J. Schiller.....	434,955	Aug. 26	2367	627	52	1214
Printing-presses. Ink-feeding attachment for.....	F. J. Seder.....	424,029	Mar. 25	2522	{ 670 671 }	50	1637
Printing-presses. Ink-fount for.....	M. N. Cormack and S. Whitlock.....	436,847	Sept. 23	2338	616	52	1843
Printing-presses. Inking attachment for job.....	W. A. and S. C. Thompson.....	443,978	Dec. 30	3813	{ 972 973 }	53	2037
Printing-presses. Inking device for.....	J. Kurten.....	433,352	July 29	3592	926	52	726
Printing-presses. Knife-box rubber for.....	W. H. Eager.....	432,576	Mar. 4	308	78	50	1195
Printing-presses. Mask attachment for.....	F. B. Freismuth.....	439,870	Nov. 4	361	93	53	678
Printing-presses. Paper-cutter for.....	J. L. Cox.....	439,479	Oct. 28	2814	749	53	552
Printing-presses. Paper-dust collector for.....	S. W. Marvin, W. Burnett, and C. S. Marvin.....	437,863	Oct. 7	288	86, 87	53	56
Printing-presses. Paper-feed mechanism for.....	J. L. Cox.....	438,528	Oct. 14	1292	350	53	255
Printing-presses. Registering-gage for.....	J. Brooks.....	423,661	Mar. 18	1968	519	50	1526
Printing-presses. Set-off mechanism for.....	J. Brooks.....	423,660	Mar. 18	1967	{ 518 519 }	50	1525
Printing-presses. Set-off mechanism for.....	J. Brooks.....	438,342	Oct. 14	1026	{ 279 280 }	53	202
Printing-presses. Sheet-delivery apparatus for.....	W. Scott.....	439,306	Oct. 28	2558	683	53	505
Printing-presses. Sheet-supplying mechanism for.....	J. Brooks.....	439,861	Nov. 4	345	89, 90	53	675
Printing-presses. Throw-off mechanism for.....	G. C. James.....	441,568	Nov. 25	3135	805	53	1232
Printing-presses. Web-adjusting mechanism for.....	J. L. Cox.....	439,723	Nov. 4	143	38	53	635
Printing-presses. Web-cutting mechanism for.....	J. L. Cox.....	435,355	Aug. 26	2976	789	52	1357
Printing-recorder.....	W. S. Burroughs.....	420,617	Feb. 4	270	71, 72	50	617
Printing-recorder.....	W. S. Burroughs.....	420,619	Feb. 4	275	73	50	618
Printing-recorder.....	J. F. Pfeiffer.....	423,273	Mar. 11	1395	363	50	1408
Printing-roller. Hand.....	W. W. McMains.....	419,540	Jan. 14	1327	354	50	279
Printing shade fabrics. Machine for.....	J. N. Wiggins and C. A. Collard.....	440,413	Nov. 11	1226	317	53	855
Printing. Surface.....	W. C. Robertson.....	420,698	Feb. 4	378	—	50	639
Printing upon bulged articles. Apparatus for.....	H. Schulze-Berge.....	435,459	Sept. 2	115	32	52	1397
Printing woven fabrics. Machine for.....	J. Shiun.....	440,750	Nov. 18	1784	460	53	969
Prison.....	C. Schoenfeld.....	424,936	Apr. 1	773	206	51	150
Prison-door mechanism.....	J. H. Van Dern.....	441,079	Nov. 18	2327	{ 602 603 }	53	1072
Privy.....	W. J. Wharten and J. T. Nalls.....	432,461	July 15	2210	570	52	444
Privy-seat.....	J. A. Kaley.....	428,001	May 13	1480	376	51	1111
Privy-seat.....	H. J. Mitchell.....	429,145	June 3	58	15	51	1483
Privy-vault. Removable.....	B. M. C. Walter.....	423,006	Mar. 11	981	258	50	1330
Projectile.....	W. Bowman.....	442,476	Dec. 9	1314	339	53	1526
Projectile.....	H. S. Maxim.....	443,101	Dec. 23	2391	611	53	1754
Projectile.....	G. H. Reynolds.....	431,313	Feb. 11	1316	340	50	821
Projectile.....	G. H. Reynolds and E. L. Zahinski.....	421,309	Feb. 11	1305	337	50	819
Projectile.....	E. Stern.....	423,829	Mar. 18	2203	582	50	1571
Projectile.....	W. M. Wood.....	424,442	Mar. 25	3163	839	50	1763
Projectile for fire-arms and ordnance.....	D. B. Wesson.....	440,672	Nov. 18	1650	426	53	944
Projectile. Subaquatic.....	V. F. Lássee.....	431,210	July 1	268	67, 68	52	55
Projectiles by electric welding. Manufacturing.....	W. M. Wood.....	424,441	Mar. 25	3160	839	50	1762
Projectiles. Detachable gas-check for.....	H. Maxim.....	428,311	May 20	1952	490	51	1211
Projectiles. Hardening or tempering steel.....	R. Low.....	442,065	Dec. 2	691	186	53	1397
Projectiles in pneumatic guns. Delaying the movement of.....	H. Eichbaum.....	433,648	Aug. 5	311	81	52	816
Projectiles. Pilot-shell and centering-ring for submarine.....	V. F. Lássee.....	425,616	Apr. 15	1804	{ 483 484 }	51	368
Proof-press.....	S. J. Whitbread.....	427,650	May 13	935	234	51	1005
Propeller.....	O. T. Welch.....	436,817	Sept. 23	2286	603	52	1833
Propeller. Boat.....	J. Hermans.....	435,583	Sept. 2	315	87, 88	52	1435
Propeller. Buoyant.....	D. W. Lord.....	438,815	Oct. 21	1765	473	53	349
Propeller. Buoyant.....	G. H. Pond.....	424,076	Mar. 25	2587	690	50	1651
Propeller. Buoyant.....	G. H. Pond.....	424,077	Mar. 25	2589	691	50	1651
Propeller. Buoyant.....	G. H. Pond.....	424,078	Mar. 25	2340	691	50	1651
Propeller. Buoyant.....	G. H. Pond.....	434,523	Aug. 19	1650	432	52	1098
Propeller. Buoyant screw.....	J. Smith and T. F. Horen.....	432,335	July 15	2027	521	52	406
Propeller. Feathering.....	W. H. Baxter and W. Cross.....	442,791	Dec. 16	1845	{ 477 478 }	53	1640
Propeller for steam-vessels.....	A. Cooper.....	421,818	Feb. 18	2020	535	50	964
Propeller for vessels. Reciprocating.....	S. Snellenburg.....	426,871	Apr. 29	3711	169	51	758
Propeller. Hydraulic.....	A. de Kunwald.....	426,285	Apr. 22	2817	740	51	575
Propeller. Marine.....	H. Dock.....	442,614	Dec. 16	1547	{ 399 400 }	53	1581
Propeller. Screw.....	J. A. y Gibert.....	424,056	Mar. 25	2559	684	50	1645
Propeller. Screw.....	J. Spanoghe.....	435,330	Aug. 26	2926	777	52	1348
Propeller-screw.....	H. Thomas.....	438,365	Oct. 14	1060	289	53	209
Propeller-shaft and mechanism for driving the same.....	F. W. Peel.....	434,803	Aug. 19	2093	547	52	1184
Propeller. Ship's.....	W. H. Wigmore.....	432,846	July 22	2217	721	52	568
Propeller. Steering.....	D. J. Reynolds.....	431,009	June 24	2987	{ 733 734 }	51	2074
Propeller-wheel.....	E. D. Bangs.....	436,769	Sept. 23	2189	577	52	1614
Propeller-wheel.....	G. W. Pelton.....	436,802	Sept. 23	2259	{ 595 596 }	52	1828
Propellers. Device for preventing the racing of ships'.....	J. H. Coe.....	433,274	July 29	3488	900	52	706
Propellers. Means for increasing the effect of screw.....	A. Gouilly.....	427,983	May 13	1457	369	51	1105
Propelling and steering boats. Apparatus for.....	H. Barcroft.....	431,428	July 1	605	{ 151 152 }	52	122
Propelling and steering boats. Apparatus for.....	H. Barcroft.....	441,049	Nov. 18	2266	587	53	1060
Propelling and steering vessels. Apparatus for.....	H. Barcroft.....	441,050	Nov. 18	2267	{ 587 588 }	53	1060
Propelling mechanism. Boat.....	S. Lehenheim.....	440,089	Nov. 4	693	184	53	744

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Propelling mechanism. Boat.....	G. Riexinger.....	424,026	Mar. 25	2518	670	50	1637
Propelling-power.....	T. H. Allen.....	443,347	Dec. 23	2823	725	53	1837
Propelling vessels.....	J. S. Morton.....	426,299	Apr. 22	2-35	747	51	578
Propelling vessels. Device for.....	J. Cochrane.....	432,864	July 22	2844	728	52	574
Propelling vessels. Means for.....	A. Heuman.....	432,129	Feb. 25	2481	{ 655 656	50	1058
Propelling vessels. Means for.....	J. S. Morton.....	426,300	Apr. 22	2838	{ 747 748	51	579
Propelling vessels. Pneumatic apparatus for.....	J. M. Glenn.....	436,350	Sept. 16	1510	393	52	1679
Propulsion. Hydraulic.....	F. G. Waterhouse.....	431,090	July 1	88	22	52	20
Propulsion. Marine.....	H. Dock.....	442,615	Dec. 16	1548	400	53	1581
Propulsion of vessels.....	S. A. Owen.....	441,965	Dec. 2	519	139	53	1365
Propulsion of vessels.....	J. Schroeder.....	443,168	Dec. 23	2512	642	53	1775
Protector:							
See Book-protector. Leader-protector.							
Boot or shoe sole protector. Lightning-protector.							
Bread, cake, and pie protector. Pedal-protector.							
Brick-protector. Piano-protector.							
Buggy-seat protect- or. Pipe-thread protector.							
Bunion-protector. Plant-protector.							
Clarinet-reed pro- tector. Pocket-protector.							
Corset-protector. Pocket-book protector.							
Ear-protector. Shaft-protector.							
Electric-machine protector. Shoe-protector.							
Fire-place protector. Skirt-protector.							
Flue-protector. Thermal protector.							
Hoof-protector. Throat and chest pro- tector.							
Journal-box pro- tector. Toe-nail protector.							
Journal-box pro- tector. Tree-protector.							
Journal-box pro- tector. Trunk corner-protector.							
Journal-box pro- tector. Wagon-reach protector.							
Journal-box pro- tector. Watch-protector.							
Journal-box pro- tector. Yard-protector.							
Protractor.....	J. H. Dolman.....	430,005	June 10	1363	337	51	1745
Protractor.....	D. J. Kelsey.....	433,084	July 29	3211	825	52	648
Protractor.....	J. Roe.....	431,484	July 1	696	{ 174 175	52	140
Protractor.....	J. P. B. Wells.....	432,779	July 22	2723	{ 696 697	52	549
Protractor. Bevel.....	R. Hakewessell and F. K. Rand	424,977	Apr. 8	846	225	51	172
Pruning implement.....	A. Bosch.....	419,311	Jan. 14	1000	264	50	211
Pruning implement.....	F. and F. C. Gerfin.....	432,396	July 15	2114	543	52	423
Pruning implement.....	C. Hamann.....	434,595	Aug. 19	1764	461	52	1122
Pruning implement.....	P. Hess.....	418,720	Jan. 7	98	22	50	21
Pruning implement.....	W. J. Nelson.....	425,820	Apr. 15	2106	563	51	427
Puddle-bars. Piling.....	R. R. Gubbins.....	426,443	Apr. 29	3069	804	51	634
Puff-winder.....	H. A. Emery.....	440,549	Nov. 11	1452	374	53	896
Pug-mill.....	J. Reichelt.....	426,470	Apr. 29	3105	814	51	641
Pug-mill.....	P. Stoerger.....	440,971	Nov. 18	2153	558	53	1038
Pug-mills. Elevator for.....	J. H. Steele.....	418,962	Jan. 7	4-6	121	50	102
Puller:							
See Bean-puller. Stamp-puller.							
Cork-puller. Tack-puller.							
Nail-puller. Thistle-puller.							
Net-puller.							
Pulley.....	H. T. Briggs.....	429,009	May 27	3005	771	51	1434
Pulley.....	J. T. Carmody.....	441,825	Dec. 2	311	84	53	1325
Pulley.....	V. W. Coddington.....	443,268	Dec. 23	2688	{ 689 690	53	1811
Pulley.....	C. M. Conradson.....	429,507	June 3	616	151	51	1589
Pulley.....	G. C. Cowles.....	426,662	Apr. 29	3390	890	51	696
Pulley.....	G. C. Cowles.....	429,116	June 3	19	5	51	1476
Pulley.....	W. H. Dodge.....	422,507	Mar. 4	207	56	50	1176
Pulley.....	W. H. Dodge.....	424,101	Mar. 25	2625	700	50	1657
Pulley.....	G. W. Dryden.....	439,491	Oct. 28	2834	755	53	556
Pulley.....	J. S. Ebert.....	426,117	Apr. 22	2576	{ 677 678	51	525
Pulley.....	E. Goss.....	432,667	July 22	2535	650	52	513
Pulley.....	P. H. Grimm.....	432,701	July 22	2598	664	52	525
Pulley.....	A. S. Held.....	439,402	Oct. 28	2701	720	53	531
Pulley.....	C. F. Henderson.....	425,322	Apr. 8	1363	363	51	273
Pulley.....	T. D. Keasey.....	436,5-2	Sept. 16	18-9	496	52	1748
Pulley.....	J. Kidder.....	441,170	Nov. 25	2487	643	53	1112
Pulley.....	A. W. Michael.....	426,036	Apr. 22	2457	649	51	500
Pulley.....	E. J. Pennington.....	419,791	Jan. 21	1705	452	50	358
Pulley.....	E. J. Pennington.....	419,792	Jan. 21	1705	452	50	358
Pulley.....	G. Philton.....	438,822	Oct. 21	1777	476	51	351
Pulley.....	W. G. Potter.....	425,827	Apr. 15	2120	566	51	429
Pulley.....	F. M. Powell.....	424,687	Apr. 1	385	{ 101 1-2	51	75
Pulley.....	J. Rieppel.....	423,180	Mar. 11	1250	325	50	1382
Pulley.....	E. D. Schmitt and H. I. Mason.....	434,610	Aug. 19	1787	466	52	1126
Pulley.....	W. Stoddard.....	435,169	Aug. 26	2666	705	52	1301
Pulley and block.....	A. Higginson.....	426,535	Apr. 29	3202	{ 839 840	51	659
Pulley. Band.....	P. Conyngham.....	423,132	Mar. 11	1177	306	50	1367
Pulley-block.....	T. E. Wardwell.....	420,177	Jan. 28	2319	613	50	487
Pulley-block.....	C. H. Weeks.....	438,454	Oct. 14	1194	324	53	234
Pulley-block. Differential.....	J. Holt.....	428,675	May 27	2199	635	51	1334
Pulley-blocks. Making.....	E. F. Weston.....	438,666	Oct. 21	1503	406	53	301
Pulley. Cable-tramway.....	W. E. and W. M. Winby.....	425,282	Apr. 8	1310	350	51	263
Pulley. Clutch.....	J. C. Gibson.....	439,140	Oct. 28	2371	610	53	451
Pulley. Clutch.....	F. Kruse.....	434,150	Aug. 12	1069	274	52	975

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Pulley-covering	F. Latulip	442,124	Dec. 9	781	211	53	1423
Pulley. Expansible	H. F. Hall	431,889	July 8	1347	340	52	271
Pulley. Expansion	J. G. Avery	443,561	Dec. 30	3159	812	53	1911
Pulley. Friction-clutch	J. M. Andersen	430,053	June 10	1447	360	51	1769
Pulley. Friction-clutch	H. R. Horton	428,048	May 13	1551	392	51	1124
Pulley. Friction-clutch	A. P. Kjoller	429,456	June 3	533	128	51	1575
Pulley-hub	W. R. Collier	438,283	Oct. 14	942	254	53	185
Pulley. Perforated	C. J. Jones	440,940	Nov. 4	631	167	53	731
Pulley. Sash	A. S. Held and D. C. Stover	432,406	July 15	2124	546	52	425
Pulley. Sash-cord	W. W. Richards	419,474	Jan. 14	1244	330	50	262
Pulley. Self-locking	F. W. Quitman	438,291	Oct. 14	951	259	53	188
Pulley. Self-lubricating	W. E. Badger	435,673	Sept. 2	461	122	52	1463
Pulley. Self-oiling	E. Goss	432,666	July 22	2535	650	52	513
Pulley. Self-oiling	D. D. Tompkins	425,272	Apr. 8	1286	344	51	260
Pulley. Separable	V. W. Coddington	420,038	Jan. 28	2092	552	50	443
Pulley. Separable	V. W. Coddington	443,269	Dec. 23	2669	690	53	1811
Pulley. Split	H. T. Briggs	432,857	July 22	2631	726	52	571
Pulley. Split	H. Burnham	422,568	Mar. 4	293	75	50	1192
Pulley. Split	G. T. Eames	439,493	Oct. 28	2737	756	53	557
Pulley. Split	H. C. Lewis	437,125	Sept. 23	2788	727	52	1930
Pulley. Split	W. S. Magers and F. P. Parker	439,029	Oct. 21	2079	557	53	410
Pulley. Split	W. F. Maish	436,292	Apr. 22	2-23	742	51	576
Pulley. Split	C. McNeal	426,675	Apr. 29	3412	896	51	700
Pulley. Split	C. McNeal	427,003	Apr. 29	38-9	1015	51	792
Pulley. Split	C. McNeal	427,004	Apr. 29	3891	1016	51	792
Pulley. Split	E. J. Pennington	424,520	May 20	2256	572	51	1270
Pulley. Split	M. O. Reeves	419,557	Jan. 14	1347	361	50	283
Pulley. Split	A. P. Sibley and G. O. Ware	437,529	Sept. 30	3443	900	52	2063
Pulley. Split loose	C. C. Miller	424,068	Mar. 11	1077	280	50	1348
Pulley. Split wooden	S. S. Adkins	424,300	Mar. 11	1430	372	50	1414
Pulley. Wood	W. R. Fee	420,267	Jan. 28	2466	654	30	513
Pulley. Wood-rim	G. Phillon	429,637	June 10	806	196	51	1637
Pulley. Wood split	J. B. Cornwall	429,564	June 3	698	170	51	1606
Pulley. Wrought-metal	C. O. Case	421,669	Feb. 18	1829	478	50	928
Pulleys. Making	C. O. Case	421,668	Feb. 18	1828	478	50	927
Pulleys. Manufacture of	J. T. Mitchell	422,606	Mar. 4	362	89	50	1205
Pulleys. Speed-regulator for	W. S. Sims	433,660	Aug. 5	326	84	52	819
Pulleys. Table for balancing	N. P. Bowsher	433,643	Aug. 5	298	78	52	815
Pulleys to shafts. Device for securing	J. W. Stanton	443,121	Dec. 23	2424	618	53	1760
Pulleys to shafts. Key for attaching	C. Cornwall	435,600	Sept. 2	33	93	52	1439
Pulleys to shafts. Means for attaching	J. S. Davis	438,608	Oct. 21	1421	384	53	286
Pulleys to shafts. Means for securing	M. O. Reeves	419,556	Jan. 14	1346	300	50	283
Pulleys to shafts. Means for securing	H. F. Stone	427,244	May 6	345	88	51	878
Pulling device	J. V. Hotchkiss	436,000	Sept. 9	961	251	52	1566
Pulp articles. Machine for finishing	M. L. Keyes	423,169	Mar. 11	1235	321	50	1379
Pulp articles. Molding	F. E. Keyes	424,003	Mar. 25	2484	661	50	1631
Pulp barrels. Drying-frame for	J. R. Thame	434,741	Aug. 19	2005	523	52	1166
Pulp-collecting machine	J. J. Dunn and C. J. Stricker	420,148	Jan. 28	2268	601	50	478
Pulp-digester	R. Lavery	431,267	July 1	354	89	52	72
Pulp-digester	E. A. D. Reynolds	423,531	Mar. 18	1768	464	50	1488
Pulp-digester	S. R. Wagg	440,242	Nov. 11	940	242	53	803
Pulp-distributor	F. E. Monteverde	431,607	July 8	883	220	52	184
Pulp-drier. Centrifugal	S. S. Stevens	439,700	Nov. 4	108	28	53	629
Pulp-engine	G. W. Cressman	432,300	July 15	1982	506	52	398
Pulp. Forming smooth surfaces on wood	G. C. Towle	424,513	Apr. 1	112	32	51	25
Pulp. Machine for making hollow articles from	C. M. Starr	429,366	June 3	402	96	51	1547
Pulp machine. Fruit and vegetable	C. S. Bucklin	426,236	Apr. 22	2753	721	51	561
Pulp. Manufacturing and bleaching	C. Ramsey	429,097	May 27	3113	810	51	1461
Pulp-molding machine	M. L. Deering	432,379	July 15	20-6	536	52	418
Pulp-screen cleaner	O. G. Farrington	432,024	July 15	1551	394	52	318
Pulp-screen shaker	P. Scholl	441,903	Dec. 2	430	114	53	1349
Pulp-strainer	T. Goodall and T. Webster	435,091	Aug. 28	2567	677	52	1282
Pulp strainer and clearer	C. J. Foster	436,345	Sept. 16	1501	391	52	1677
Pulp-tearing machine. Wood	W. O. Russell	426,217	Apr. 22	2728	714	51	554
Pulsometer	E. Lund, Jr.	443,532	Dec. 30	3107	890	53	1901
Pulverizer	H. S. Howard	440,036	Nov. 4	627	166	53	739
Pulverizer and pug-mill	W. J. Boland	421,811	Feb. 18	2011	531	50	962
Pulverizer. Centrifugal	J. Behm	422,698	Mar. 4	496	126	50	1231
Pulverizer. Soil	J. P. Parker	442,538	Dec. 9	1416	362	53	1545
Pulverizing apparatus	H. Herz and B. Terfloth	421,571	Feb. 18	1686	436	50	899
Pulverizing-machine	F. D. Cummer	432,984	July 29	3049	783	52	618
Pulverizing-machine	G. S. Finney	427,228	May 6	310	79, 80	51	872
Pulverizing-machine	R. D. Gates	436,349	Sept. 16	1506	392	52	1678
Pulverizing-mill	V. L. Rice	430,884	June 24	2860	6-6	51	2039
Pump	P. Anderson	428,997	May 27	2980	764	51	1429
Pump	R. Bean	429,411	June 3	469	111	51	1561
Pump	C. W. Canfield	442,103	Dec. 9	754	263	53	1417
Pump	C. W. Crannell	425,660	Apr. 15	1882	583	51	383
Pump	W. H. Culver	422,383	Mar. 4	31	10	50	1143
Pump	G. E. Dow	419,248	Jan. 14	904	238	50	193
Pump	F. O. Furber and G. S. Ayer	418,769	Jan. 7	85	19	50	19
Pump	L. J. Genett	436,232	Sept. 9	1320	344	52	1632
Pump	H. J. Gerbsch	431,575	July 8	838	208	52	175
Pump	E. P. Gleason	432,665	July 22	2533	650	52	513
Pump	W. J. Hearn	436,708	Sept. 16	2079	547	52	1785
Pump	N. S. Hill	419,197	Jan. 14	828	218	50	178

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Pump.....	A. J. Hopkins.....	433,406	July 29	3662	946	52	740
Pump.....	H. M. Johnston.....	419,957	Jan. 21	1965	516	50	411
Pump.....	F. Lansberg.....	436,714	Sept. 16	2088	549	52	1787
Pump.....	R. Lavery.....	428,682	May 27	2522	{ 640 641 }	{ 51 51 }	{ 1339 1339 }
Pump.....	C. von Lüde.....	437,216	Sept. 30	2951	771	52	1967
Pump.....	J. Menge.....	421,415	Feb. 18	1455	377	50	856
Pump.....	C. L. Merrill.....	429,464	June 3	543	131	51	1577
Pump.....	G. Montriehard.....	432,426	July 15	2150	554	52	431
Pump.....	J. M. Normand.....	422,535	Mar. 4	244	63	50	1182
Pump.....	A. N. Parkhurst.....	440,497	Nov. 11	1372	354	53	882
Pump.....	G. G. and T. T. Patchel.....	418,745	Jan. 7	126	31	50	28
Pump.....	W. S. Richardson.....	430,436	June 17	2066	{ 509 510 }	{ 51 51 }	{ 1891 1891 }
Pump.....	C. C. Shelburn.....	442,209	Dec. 9	911	242	53	1448
Pump.....	W. G. Stitt.....	426,476	Apr. 29	3118	819	51	643
Pump.....	J. Sutton.....	431,220	July 1	289	71, 72	52	59
Pump.....	H. C. Taft and L. Day.....	422,461	Mar. 4	148	40	50	1165
Pump.....	I. Thornton.....	428,238	May 20	1836	460	51	1190
Pump. Aerating and water.....	R. H. Dacus.....	438,061	Oct. 7	604	{ 164 165 }	{ 53 53 }	{ 116 116 }
Pump. Air.....	J. F. Barker.....	433,064	July 29	3175	817	52	642
Pump. Air.....	C. Birkery.....	435,008	Aug. 26	2443	646	52	1258
Pump. Air.....	G. R. Case.....	435,010	Aug. 26	2446	648	52	1259
Pump. Air.....	A. P. Massey.....	434,089	Aug. 12	963	253	52	955
Pump. Air.....	H. and F. G. A. Schulze-Berge.....	428,638	May 27	2434	{ 619 620 }	{ 51 51 }	{ 1323 1323 }
Pump. Air.....	A. M. Southard.....	438,716	Oct. 21	1590	{ 426 427 }	{ 53 53 }	{ 316 316 }
Pump and motor. Steam.....	F. C. Olin.....	426,511	Apr. 29	3163	{ 831 832 }	{ 51 51 }	{ 652 652 }
Pump attachment.....	W. W. Horr.....	426,814	Apr. 29	3639	947	51	741
Pump attachment.....	W. W. Horr.....	441,489	Nov. 25	3021	779	53	1210
Pump. Bilge-water.....	A. Cook.....	419,929	Jan. 21	1930	506	50	403
Pump. Centrifugal.....	J. Edwards and J. R. F. Kelly.....	427,060	May 6	41	11, 12	51	818
Pump. Centrifugal.....	B. Jackson.....	440,252	Nov. 11	954	245	53	806
Pump. Centrifugal.....	P. Nezéaux.....	441,252	Nov. 25	2639	{ 625 626 }	{ 53 53 }	{ 1138 1138 }
Pump. Centrifugal.....	S. E. Webbe.....	440,798	Nov. 18	1869	481	53	924
Pump. Chain.....	B. Rau.....	431,284	July 1	340	95	52	77
Pump. Compound.....	C. W. Crannell.....	425,933	Apr. 15	22-6	605	51	459
Pump-cylinder and valve mechanism therefor.....	M. H. Morris.....	433,019	July 29	3105	{ 796 797 }	{ 52 52 }	{ 628 628 }
Pump. Deep-well.....	A. F. Cook.....	421,247	Feb. 11	1216	315	50	803
Pump. Double-acting.....	J. M. Clark.....	432,373	July 15	2073	533	52	415
Pump. Double-acting force.....	C. F. Ziebarth, Jr., and F. C. Schade-wald.....	431,960	July 8	1446	366	52	291
Pump. Double force.....	A. B. Eby.....	441,402	Nov. 25	2850	743	53	1193
Pump. Duplex.....	A. Falkenan.....	419,147	Jan. 7	740	196	50	155
Pump. Duplex steam.....	J. H. McGowan.....	427,784	May 13	1156	2-9	51	1049
Pump. Electric rotary.....	E. I. Nichols.....	425,106	Apr. 8	1030	275	51	208
Pump. Feed.....	F. L. Stone.....	427,130	May 6	163	44	51	844
Pump. Fluid.....	I. E. Storey.....	439,792	Nov. 4	245	62	53	656
Pump for gaseous fluids. Compression.....	J. K. Kilbourn.....	439,520	Oct. 28	2875	765	53	565
Pump for removing liquids from low pressure.....	W. Royce.....	421,974	Feb. 25	2252	592	50	1016
Pump. Force.....	R. Bradley.....	436,300	Sept. 9	1421	371	52	1654
Pump. Force.....	B. F. Kendall.....	430,251	June 17	1760	437	51	1831
Pump. Force.....	J. W. Powers.....	425,389	Apr. 8	1460	391	51	292
Pump. Force.....	H. A. Stone.....	435,570	Sept. 2	296	82	52	1432
Pump. Gas.....	C. A. MacDonald.....	421,414	Feb. 18	1454	376	50	855
Pump governor.....	G. A. Boyden.....	442,568	Dec. 9	1470	377	53	1557
Pump governor. Air.....	C. R. Ord.....	442,492	Dec. 9	1344	346	53	1532
Pump governor. Automatic.....	H. Howard.....	420,687	Feb. 4	365	97	50	635
Pump governor. Steam.....	E. C. Johnson.....	429,570	June 3	708	172	51	1608
Pump-head.....	S. W. Martin.....	433,989	Aug. 12	817	213	52	924
Pump. Lift.....	N. Smith.....	436,548	Sept. 16	1835	483	52	1738
Pump. Lifting.....	H. Carmichael.....	431,686	July 8	1038	260	52	212
Pump. Measuring.....	L. D. and P. W. Miller.....	437,162	Sept. 23	2867	{ 745 746 }	{ 52 52 }	{ 1943 1943 }
Pump. Mercury.....	F. B. Hill.....	426,184	Apr. 22	2675	{ 702 703 }	{ 51 51 }	{ 545 545 }
Pump. Mining.....	D. Evans.....	442,311	Dec. 9	1063	278	53	1476
Pump-motor. Railway.....	J. Johnson.....	425,327	Apr. 8	1368	365	51	275
Pump. Oil.....	P. T. Campbell and W. H. Pick-ett.....	430,919	June 24	2850	699	51	2049
Pump-operating apparatus.....	F. Goodfellow.....	425,216	Apr. 8	1207	320	51	245
Pump-operating apparatus.....	J. W. Packard.....	426,417	Apr. 22	3033	794	51	618
Pump-piston.....	B. F. Sammons.....	419,713	Jan. 21	1589	424	50	336
Pump-piston guide.....	S. W. Martin.....	433,990	Aug. 12	818	214	52	924
Pump. Pneumatic beer.....	E. T. Glennan and J. Hamilton.....	420,052	Jan. 28	2109	557	50	447
Pump. Radial-cylinder.....	G. H. Reynolds.....	436,567	Sept. 16	1858	489	52	1742
Pump-regulator.....	W. O. Gunkel.....	433,680	Aug. 5	354	91	52	825
Pump-rod. Compensating.....	W. H. Burnham and J. H. Miller.....	428,800	May 27	2691	683	51	1371
Pump. Rotary.....	V. F. Carpenter.....	436,399	Sept. 16	1595	421	52	1695
Pump. Rotary.....	E. F. Smith.....	432,216	July 15	1848	474	52	374
Pump. Steam.....	F. M. Brown.....	421,179	Feb. 11	1096	2-2	50	782
Pump. Steam.....	R. Everitt.....	426,002	Apr. 22	2412	638	51	492
Pump. Steam.....	B. V. Nordberg.....	433,992	Aug. 12	819	{ 214 215 }	{ 52 52 }	{ 925 925 }
Pump. Steam.....	B. V. Nordberg.....	433,993	Aug. 12	821	216	52	925
Pump. Steam.....	B. V. Nordberg.....	433,994	Aug. 12	822	216	52	925
Pump. Steam.....	B. V. Nordberg.....	433,995	Aug. 12	823	216	52	925
Pump. Steam.....	B. V. Nordberg.....	433,996	Aug. 12	824	217	52	926
Pump. Steam air.....	A. P. Massey.....	428,120	May 20	1659	420	51	1156

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Pump. Steam and vacuum	G. E. Nye	440,719	Nov. 18	1733	{ 444 445	53	959
Pump. Steam vacuum	O. R. Davis	425,024	Apr. 8	918	244	51	186
Pump-strainer	C. G. Jaycox	442,052	Dec. 2	670	181	53	1394
Pump. Submerged metallic	G. J. Keller	438,163	Oct. 14	755	206	53	152
Pump. Treadle	W. H. Anderson	439,992	Nov. 4	557	147	53	717
Pump. Vacuum	A. Berrenberg	421,346	Feb. 11	1356	351	50	829
Pump-valve	T. A. Swann	441,339	Nov. 25	2779	718	53	1164
Pump-valve	B. H. Wells and E. B. French	436,470	Sept. 16	1678	442	52	1710
Pump valve. Steam	A. J. Sypher	431,413	July 1	576	145	52	117
Pump. Wave-force	G. F. Day and E. H. Cole	429,231	June 3	184	44	51	1507
Pumps. Anti-frost attachment for	J. A. Beard	440,458	Nov. 11	1300	{ 336 337	53	868
Pumps. Induction valve for compression	M. Denncy	422,385	Mar. 4	33	10, 11	50	1143
Pumps. Means for lubricating gas	J. Ryan	437,341	Sept. 30	3143	822	52	2003
Pumps, &c. Motive power for	W. D. Ware and M. I. Simpson	434,537	Aug. 19	1670	437	52	1103
Pumps. Rivet-catcher for	J. Darling	436,218	Sept. 9	1302	339	52	1629
Pumps. Stand for portable force	J. F. L. Crosland and W. H. Bailey	427,403	May 6	567	{ 141 142	51	924
Pumps. Steam-motor for	H. O. Beatty	424,045	Mar. 25	2544	679	50	1642
Pumps. Strainer for suction-pipes of	O. H. Jewell	419,606	Jan. 14	1432	381	50	298
Pumps. Valve mechanism for double-acting	L. Dahlstrom	439,480	Oct. 28	2815	750	51	553
Pumping apparatus. Air	S. E. Hughes	423,768	Mar. 18	2114	558	50	1552
Pumping apparatus. Beer	F. Hermann and J. R. B. Janssen	435,694	Sept. 2	496	131	52	1471
Pumping-engine	H. Davey	434,704	Aug. 19	1964	510	52	1158
Pumping-engine. Compound	J. N. Floyd and D. H. Merton	439,579	Oct. 28	2959	786	53	581
Pumping-engine. Compound	F. Moore	441,185	Nov. 25	2504	{ 646 647	53	1115
Pumping-engine. Compound	F. Moore	441,186	Nov. 25	2506	647	53	1116
Pumping-engine. Compound	G. Westinghouse, Jr	441,209	Nov. 25	2558	661	53	1125
Pumping-engine regulator	W. Fisher and G. H. Beebe	423,145	Mar. 11	1197	313	50	1371
Pumping-engine. Steam	J. L. Lowry	431,371	July 1	519	{ 129 130	52	104
Pumping-engines. Means for operating	J. F. Whiting	434,369	Apr. 12	1400	367	52	1041
Pumpkins. Preparing pulp from	G. Bartel	436,686	Sept. 16	2050		52	1780
Punch	W. A. Bernard	427,497	May 5	705	177	51	952
Punch	L. Piper	425,456	Apr. 15	1565	419	51	322
Punch	G. B. Tennant	434,738	Aug. 19	2001	522	52	1166
Punch	R. M. and T. E. Tull	422,666	Mar. 4	454	115	50	1223
Punch and die	F. B. Bristol	413,353	Dec. 23	2833	729	53	1840
Punch and making the same	J. A. House	430,315	June 17	1892	464	51	1857
Punch. Bank	A. V. Lane	423,609	Mar. 18	1871	{ 493 494	50	1506
Punch. Bank-check	F. W. Smith, Jr., and S. S. Williamson	419,161	Jan. 7	767	{ 203 204	50	159
Punch. Card	R. J. Krauthaim	421,938	Feb. 25	2307	578	50	1008
Punch. Check	F. R. Austin	431,496	Aug. 19	1611	421	52	1091
Punch. Check	F. M. Clark	422,728	Mar. 4	530	135	50	1237
Punch. Check	J. A. House	435,063	Aug. 26	2524	{ 666 667	52	1273
Punch. Check	F. J. Lockwood	433,176	July 29	3348	866	52	677
Punch. Check	G. W. Mallory	420,728	Feb. 4	419	111	50	646
Punch. Check	M. M. Manner	438,695	Oct. 21	1559	{ 419 420	53	310
Punch. Check	E. S. Raff	429,814	June 10	1069	263	51	1687
Punch. Check	E. N. Sperry	429,100	May 27	3151	812	51	1462
Punch. Check	S. S. Williamson	418,905	Jan. 7	401	98, 99	50	84
Punch. Check	S. S. Williamson	431,831	July 8	1261	{ 316 317	52	255
Punch. Conductor's recording	A. W. Coffin	434,142	Aug. 12	1055	272	52	972
Punch. Glove	J. Matejec	423,526	Mar. 18	1762	463	50	1487
Punch. Paper	J. F. Brown	430,168	June 17	1621	104	51	1805
Punch. Roller	A. Hamill	429,442	June 3	515	124	51	1571
Punch. Ticket	A. W. Coffin	440,839	Nov. 18	1942	498	53	997
Punch. Ticket	K. F. Peterson	439,038	Oct. 21	2104	564	53	414
Punch. Ticket	T. Theis	422,998	Mar. 11	971	256	50	1329
Punching and eyeletting machine	C. A. Cormau	443,570	Dec. 30	3171	{ 814 815 171	53	1913
Punching and flanging machine	E. W. Naylor	440,051	Nov. 4	644	{ 172	53	734
Punching and riveting machine	A. C. Harper and C. S. Hamlin	432,528	July 29	2319	599	52	472
Punching and shearing curved plates. Machine for	F. Rittenhouse	424,222	Mar. 25	2787	743	50	1690
Punching and shearing machine	C. A. Bertsch	430,284	June 17	1777	442	51	1835
Punching and shearing machine. Combined	C. A. Anderson	432,108	July 15	1681	432	52	343
Punching and shearing machine. Combined	H. Stolpe	426,340	Apr. 22	2891	761	51	591
Punching and shearing machine. Combined	H. Stolpe. (Reissue)	11,098	July 22	3013	774	52	604
Punching and shearing machine. Metal	A. Beaudry	421,635	Feb. 25	2147	564	50	997
Punching checks. Machine for	W. E. Barnum	438,136	Oct. 14	712	{ 195 196 197	53	144
Punching holes. Machine for	A. M. Schilling	424,358	Mar. 25	3003	{ 797 798 799	50	1730
Punching horseshoe-bars. Machine for	J. A. N. Rasmussen	428,949	May 27	2907	745	51	1416
Punching-machine	G. F. Breuer	423,119	Mar. 11	1152	300	50	1362
Punching-machine	J. M. Riley	428,414	May 20	2117	531	51	1244
Punching-sheet	T. P. Stuard	437,368	Sept. 30	3205	835	52	2014
Purse	C. E. Albright	439,086	Oct. 28	2125	587	53	437
Purse	G. Topham	443,880	Dec. 30	3652	941	53	2007
Purse and hat-brush. Combined	E. H. Peterson	440,191	Nov. 11	856	220	53	787
Purse or bag frame	A. Goertz	423,944	Mar. 25	2466	656	50	1627
Purses. Hinged cover for	E. Oldenbusch	426,951	Apr. 29	3808	995	51	777
Purses. Tablet attachment for the frames of	L. B. Prahar	430,351	June 17	1949	478	51	1868
Push-button	H. von Köhler	440,813	Nov. 18	1894	487	53	989
Push-button	G. H. Streichenberg	435,866	Sept. 2	747	200	52	1520

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Puzzle	J. B. Allen	436,751	Sept. 16	2160	567	52	1800
Puzzle	A. T. Bradshaw	427,392	May 6	542	137	51	919
Puzzle	J. W. Brown	433,444	Aug. 5	13	4	52	759
Puzzle	W. Brown	425,535	Apr. 15	1678	448	51	344
Puzzle	B. W. Charsbee	428,455	May 20	2169	545	51	1253
Puzzle	C. L. Church	442,511	Dec. 9	1378	353	53	1539
Puzzle	J. F. Deeves and R. U. J. Gauthreaux	432,865	July 22	2846	729	52	574
Puzzle	J. H. Flanagan	422,388	Mar. 4	37	11	50	1144
Puzzle	P. Foy	428,083	May 20	1602	407	51	1143
Puzzle	F. Jones	430,030	June 10	1406	350	51	1753
Puzzle	G. Mickow	425,041	Apr. 8	944	252	51	190
Puzzle	J. Rech, Jr.	423,276	Mar. 11	1399	364	50	1408
Puzzle	F. D. Rettich	427,613	May 13	886	223	51	995
Puzzle	E. M. Saettelo	432,904	July 22	2901	744	52	585
Puzzle	H. W. Souders	419,373	Jan. 14	1093	289	50	231
Puzzle	G. L. Stairs	441,988	Dec. 2	557	150	53	1372
Puzzle	J. Trumbull	438,661	Oct. 21	1497	404	53	300
Puzzle	F. J. Wooster	432,589	July 22	2402	618	52	488
Puzzle	J. F. Zachary	438,217	Oct. 14	834	226	53	166
Puzzle apparatus	J. W. Hale	423,381	Mar. 11	1540	405	50	1436
Puzzle. Block	W. T. Altekruze	430,502	June 17	2169	533	51	1911
Puzzle. Block	J. A. Rueger	437,002	Sept. 23	2606	681	52	1894
Puzzle-box	G. W. Altemus, Jr.	430,261	June 17	1774	441	51	1534
Puzzle-joint	H. Weiss	442,653	Dec. 16	1594	412	53	1591
Puzzle. Labyrinth	W. F. Trulsen	427,283	May 6	397	103	51	889
Puzzle. Mechanical	J. F. Deeves and R. U. J. Gauthreaux	435,804	Sept. 2	659	174	52	1502
Puzzle. Railway	C. W. Lurtey	442,445	Dec. 9	1269	328	53	1517
Pyromagnetic generator and motor	W. B. Cooper	422,295	Feb. 25	2743	723	50	1107
Pyrometer	E. B. Cooper	430,271	June 17	1825	447	51	1842
Pyrometer	W. S. Hensley and W. H. Grindley	441,488	Nov. 25	3017	778	53	1209
Pyrotechnic spinning-top	R. F. Nenzinger	421,424	Feb. 18	1464	379	50	857
Pyroxyline compounds. Manufacturing articles from	J. R. France	430,520	June 17	2195	539	51	1916
Pyroxyline compounds. Manufacturing hollow articles from	J. D. Ward	439,451	Oct. 28	2773	739	53	545
Quartz-mill	J. W. Fairfield	422,581	Mar. 4	315	80	50	1196
Quartz-mill-battery guide	J. Leyson and W. G. Dalling	422,812	Mar. 4	649	166	50	1261
Quill and bobbin supporter	A. J. Milstead	423,793	Mar. 18	2154	569	50	1560
Quill or bobbin	C. A. Carlstroem	431,800	July 8	1215	303	52	246
Quilled linings. Manufacture of	C. T. Wagner	425,717	Apr. 15	1964	522	51	400
Quilting-frame	B. W. Raines	422,972	Mar. 11	938	246	50	1322
Quilting-frame	M. Whiles	441,222	Nov. 25	2572	666	53	1128
Quilting-machine	A. Beck	429,002	May 27	2986	766	51	1431
Quilting-machine	A. Beck	438,138	Oct. 14	717	196	53	145
Quilting-machine	D. H. Coles	434,250	Aug. 12	1221	317	52	1004
Quilting-machine	M. Koch	420,276	Jan. 28	2479	658	50	516
Quilting-machine	M. Koch	421,584	Feb. 18	1705	443	50	903
Quilting-machine	H. Lefebvre	437,439	Sept. 30	3317	265	52	2037
Quilting-machine	R. Stocker	424,437	Mar. 25	3156	837	50	1761
Quoin	R. Atwater	434,906	Aug. 26	2299	606	52	1231
Quoin	G. H. Nitschke	419,212	Jan. 14	852	223	50	183
Race-course. Automatic	A. M. Coyle	425,370	Apr. 8	1429	382	51	286
Rack:							
See Advertising-rack. Hat and coat rack.							
Barrel-rack. Hay-rack.							
Book-rack. Meat-rack.							
Book and paper rack. Music-rack.							
Broom-rack. Paper or card rack.							
Card-rack. Pen-rack.							
Cloak-rack. Pencil-rack.							
Clothes-rack. Pipe-rack.							
Cnrry-comb rack. Refrigerator ice-rack.							
Curtain-rack. Show-rack.							
Display-rack. Stamp-rack.							
Exhibiting-rack. Towel-rack.							
Feed-rack. Umbrella-rack.							
Gun-rack. Wagon-bed rack.							
Whip-rack.							
Rack	F. A. Herrick	432,616	July 22	2435	628	52	495
Rack and dish-warmer. Combined	J. E. Curtwright	440,421	Nov. 11	1252	324	53	858
Rack for holding and exhibiting rolls of goods	L. F. Chapman and J. A. Montgomery	435,281	Aug. 26	2840	751	52	1334
Racking-machine	G. W. Packer	426,056	Apr. 22	2480	655	51	505
Radiator	A. J. and E. Brown, Jr., and D. Shay	439,471	Oct. 28	2803	747	53	550
Radiator	W. G. Cannon	423,728	Mar. 18	2063	544	50	1543
Radiator	F. Clare	420,437	Feb. 4	15	4	50	567
Radiator	H. A. Crossloy	437,680	Oct. 7	9	3	53	4
Radiator	J. B. Dyar	430,930	June 24	2867	704	51	2033
Radiator	J. Houston	431,975	July 8	1472	372	52	297
Radiator	J. Johnson and E. H. Packer	421,000	Feb. 11	863	223	50	736
Radiator	J. A. Losee	443,531	Dec. 30	3106	799	53	1901
Radiator	C. R. Nelson	422,092	Feb. 25	2422	640	50	1047
Radiator	J. P. Packer	430,083	June 10	1499	372	51	1771

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &g	Vol.	Page.
Radiator attachment. Steam.	H. E. Stager	436,159	Sept. 9	1212	316	52	1611
Radiator boring and tapping machine.	O. Bryant.	422,877	Mar. 4	767	194 195 196	50	1283
Radiator. Electric.	H. R. Butterfield and W. Mitchell.	424,047	Mar. 25	2550	680	50	1643
Radiator. Heating.	L. R. Blackmore.	421,042	Feb. 11	927	240	50	748
Radiator hood. Heat.	G. E. Dixon.	435,290	Aug. 26	2851	754	52	1336
Radiator. Hot-air.	E. W. Wells.	420,845	Feb. 4	612	157	50	679
Radiator. Portable hot-air.	H. W. Plough and E. N. Giles.	420,390	Jan. 28	2640	700	50	546
Radiator. Steam.	G. H. Roath.	422,541	Mar. 4	254	65	50	1184
Radiator-sections. Machine for boring and milling.	O. Bryant.	434,679	Aug. 12	948	249	52	952
Radiator-ventilator.	H. L. Reed.	440,964	Nov. 18	2143	555	53	1036
Radiators. Forming.	J. Honston.	431,976	July 8	1474	373	52	297
Radiators. Hot closet for steam.	M. L. Herr.	420,066	Jan. 23	2136	565	50	452
Radiators. Internal coupling for heating.	J. J. Hogan.	434,710	Aug. 10	1970	512	52	1150
Radiators. Manufacture of.	C. W. Nason.	427,240	May 6	336	86	51	877
Radiators, &c. Ornamental guard for.	H. L. White.	432,172	July 15	1785	458	52	363
Radiators. Return-bend for steam.	H. E. Stager.	439,907	Nov. 4	424	109	53	690
Rag-duster.	C. F. Taylor and H. D. Bradburn.	425,429	May 20	2134	537	51	1247
Rail and blank therefor. Switch.	A. V. du Pont.	435,408	Sept. 2	47	15, 16	52	1384
Rail and its fastening. Girder.	W. C. Wood.	433,923	Aug. 5	711	184	52	895
Rail and rail-chair.	A. J. Moxham.	427,348	May 6	487	125	51	908
Rail-brace.	J. Beeson.	442,506	Dec. 9	1372	351	53	1538
Rail-brace.	G. Hargreaves and S. A. Baugh.	427,315	May 6	436	113	51	898
Rail chair.	J. J. Anderson.	419,814	Jan. 21	1738	460	50	365
Rail chair.	W. M. Brown.	435,680	Sept. 2	475	125	52	1466
Rail chair.	H. F. Cox.	420,438	Feb. 4	16	4	50	567
Rail chair.	A. J. Moxham.	436,988	Sept. 23	2582	675	52	1889
Rail chair. Girder.	A. J. Moxham.	436,987	Sept. 23	2582	675	52	1889
Rail chair. Girder.	F. P. Reilly.	418,986	Jan. 7	516	129	50	109
Rail connector. Electric.	C. A. Lieb.	434,087	Aug. 12	961	252	52	955
Rail-fastening device.	W. Goldie.	443,274	Dec. 23	2696	691 692	53	1813
Rail fastening, joint, &c.	F. Back.	443,309	Dec. 23	2767	709	53	1825
Rail for elevated ways.	J. W. Davy.	421,820	Feb. 18	2023	535	50	964
Rail. Girder.	W. C. Wood.	443,470	Dec. 23	3009	773	53	1873
Rail. Guard.	G. R. Campbell.	437,975	Oct. 7	464	130	53	88
Rail. Guard.	F. M. Parmelee.	419,022	Jan. 7	567	142	50	120
Rail-joint.	R. M. Agee and E. Lane.	425,396	Apr. 15	1471	395	51	303
Rail-joint.	L. Aman.	434,631	Aug. 19	1833	479	52	1135
Rail-joint.	J. J. Anderson.	436,572	Sept. 16	1865	491	52	1744
Rail-joint.	W. Angerer.	431,835	July 8	1268	318	52	257
Rail-joint.	W. L. Aurand and G. F. Trackler.	432,812	July 22	2776	710	52	560
Rail-joint.	C. M. Carnahan.	439,757	Nov. 4	186	49	53	644
Rail-joint.	G. A. Christ.	444,766	Aug. 19	2047	535	52	1175
Rail-joint.	R. J. Colvin.	419,182	Jan. 14	806	212	50	174
Rail-joint.	W. H. Connell.	439,116	Oct. 28	2232	600	53	445
Rail-joint.	W. H. Connell.	439,117	Oct. 28	2233	600	53	445
Rail-joint.	W. H. Connell.	439,118	Oct. 28	2234	600	53	445
Rail-joint.	W. H. Connell.	439,119	Oct. 28	2235	601	53	446
Rail-joint.	H. F. Cox.	439,722	Nov. 4	142	37	53	635
Rail-joint.	G. W. Creighton.	433,329	July 29	3565	919	52	721
Rail-joint.	L. Dubé and L. Messier.	440,623	Nov. 18	1574	405	53	929
Rail-joint.	C. Fisher.	439,497	Oct. 28	2841	757	53	558
Rail-joint.	J. D. Green.	429,758	June 10	986	241	51	1672
Rail-joint.	F. F. Hoeflle.	443,965	Dec. 30	3794	967	53	2032
Rail-joint.	A. Kimber.	420,943	Feb. 11	779	202	50	720
Rail-joint.	A. Kimber.	420,944	Feb. 11	779	202	50	721
Rail-joint.	A. Klein.	433,571	Aug. 5	194	51	52	794
Rail-joint.	C. W. Lewis.	441,878	Dec. 2	390	102	53	1341
Rail-joint.	C. B. Lyon.	421,950	Feb. 25	2922	583	50	1010
Rail-joint.	W. L. McLaughlin.	431,988	July 8	1490	376	52	300
Rail-joint.	M. C. Niles.	432,551	July 22	2353	607	52	479
Rail-joint.	M. C. Niles.	432,552	July 22	2355	607 608	52	479
Rail-joint.	M. C. Niles.	438,707	Oct. 21	1573	423	53	313
Rail-joint.	W. A. Sweet.	436,441	Sept. 16	1663	437	52	1707
Rail-joint.	R. N. Wald.	432,101	July 15	1670	429	52	341
Rail-joint and rail-tie. Combination.	J. M. Fennerty.	425,937	Apr. 15	2293	606	51	460
Rail-joint fastener.	L. Avers.	430,503	June 17	2169	534	51	1911
Rail-joint fastener.	E. G. Patterson.	436,995	Sept. 23	2593	678	52	191
Rail-joint. Key.	R. A. Brogan.	421,545	Feb. 18	1651	427	50	892
Rail-joint support.	P. Riley.	424,221	Mar. 25	2786	743	50	1609
Rail-section.	P. H. Dudley.	442,366	Dec. 9	1148	299	53	1492
Rail support, grip, and conductor.	W. S. Hull and J. C. Anderson.	431,846	July 8	1287	323	52	260
Rail-supporter.	A. G. Willard.	438,594	Oct. 14	1387	376	53	274
Rail-tie.	D. Vanaman.	434,305	Aug. 12	1305	340	52	1021
Rails in tracks. Securing girder.	A. J. Moxham.	435,704	Sept. 2	509	134	52	1473
Railway.	G. E. Baldwin.	427,291	May 6	408	106	51	891
Railway.	E. M. Boynton.	424,168	Mar. 25	2715	723 724	50	1675
Railway.	M. W. Oliver.	426,051	Apr. 22	2474	654	51	504
Railway.	M. W. Oliver.	426,052	Apr. 22	2476	654	51	504
Railway.	H. L. Stillman.	435,253	Aug. 26	2797	741	52	1326
Railway.	G. W. Stone, Jr.	436,589	Sept. 16	1898	498	52	1749
Railway. Aerial.	H. N. B. Gusceppi.	420,154	Jan. 28	2276	604	50	480
Railway alarm and signal. Automatic.	M. M. Souders.	421,983	Feb. 25	2262	595	50	1018
Railway and cable. Cable.	H. W. Libbey.	430,232	June 17	1726	429	51	1825
Railway and car. Suspended electric.	F. E. Drown.	431,256	July 1	33	83, 84	52	68
Railway and conduit. Cable.	R. T. White.	437,955	Oct. 7	423	120	53	82
Railway apparatus. Cable.	L. Parker.	423,440	Mar. 18	1638	429	50	1462
Railway apparatus. Electric.	J. B. Odell.	425,388	Apr. 8	1456	390	51	291
Railway appliance.	E. D. Graff.	441,483	Nov. 25	3009	775	53	1208
Railway appliance.	E. D. Graff.	441,484	Nov. 25	3010	775	53	1208

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Railway-bedding	H. L. Gillette	429,436	June 3	507	121	51	1569
Railway-brake	A. F. Baatz	434,971	Aug. 26	2388	632	52	1248
Railway-brake	L. P. Lawrence	433,412	July 29	3671	948	52	743
Railway-brake. Cable	C. S. Moss	430,140	June 17	1587	395	51	1798
Railway-brake. Electric	C. J. Van Depoele	438,452	Oct. 14	1131	323	53	234
Railway-brake-pipe coupling	G. Massey	438,290	Oct. 14	953	258 259	53	187
Railway-brake-shoe	J. A. Criswell	425,304	Apr. 8	1342	358	51	269
Railway. Cable	W. J. Brewer	439,342	Oct. 28	2610	695	53	515
Railway. Cable	A. H. Mathesius	432,757	July 22	2690	688	52	543
Railway. Cable	H. F. Nehr	437,711	Oct. 7	49	15	53	12
Railway. Cable	J. H. Pendleton	436,102	Sept. 9	1117	290 291 292	52	1595
Railway. Cable	J. H. Pendleton	436,104	Sept. 9	1128	294	52	1597
Railway. Cable	J. H. Pendleton, C. Tiers, and A. Bryson, Jr.	436,106	Sept. 9	1135	296 297	52	1598
Railway. Cable	G. R. Ratto	424,500	Apr. 1	95	27	51	21
Railway. Cable	J. C. Shelley	438,259	Oct. 14	896	243	53	177
Railway-cable crossing	P. Somerville	441,040	Nov. 18	2256	585	53	1058
Railway-cable-grip	J. W. Gentry	438,761	Oct. 21	1675	450	53	331
Railway. Cable street	L. Heynemann	419,992	Jan. 21	2017	532	50	421
Railway. Cable suburban	C. E. Emery	428,384	May 20	2074	521	51	1237
Railway. Cable suburban	C. E. Emery	428,386	May 20	2076	522	51	1237
Railway. Cable suburban	C. E. Emery	430,178	June 17	1633	408	51	1807
Railway. Cable suburban	C. E. Emery	430,179	June 17	1636	408	51	1808
Railway. Cable suburban	C. E. Emery	430,180	June 17	1637	408	51	1808
Railway-cables. Brake-operating mechanism for	J. H. Pendleton, A. Bryson, Jr., and L. Moss.	431,478	July 1	685	171 172	52	138
Railway-carriage doors. Means for closing and locking or unlocking	R. N. Montgomery	437,708	Oct. 7	41	13	53	11
Railway-casting	E. Samuel	424,728	Apr. 1	452	120	51	89
Railway cattle-guard	J. C. Gould	432,827	July 22	2796	714	52	563
Railway cattle-guard	J. T. Hall	437,757	Oct. 7	125	38	53	27
Railway cattle-guard	T. W. Trammell	427,936	May 13	1388	351	51	1091
Railway cattle-guard	J. J. Travis	443,554	Dec. 30	3148	810	53	1909
Railway-chair	N. S. Bowne and M. Clune	422,180	Feb. 25	2553	675	50	1072
Railway-chair	T. S. Brooks	438,524	Oct. 14	1286	347	53	253
Railway-chair	F. Coblentz	431,138	July 1	153	40	52	32
Railway-chair	D. N. Cook	436,774	Sept. 23	2199	580	52	1816
Railway-chair	M. H. Pierce	422,830	Mar. 4	685	175	50	1268
Railway-chair	G. W. Rittersbach	420,167	Jan. 28	2297	608	50	423
Railway-chair	G. W. Rittersbach	411,109	Nov. 18	2375	616	53	1061
Railway-chair	J. B. Wilson	428,988	May 27	2968	761	51	1427
Railway chair and brace	J. W. Reeser	426,214	Apr. 22	2725	713	51	554
Railway-chair and cross-tie. Combined	M. M. Green	435,221	Aug. 26	2748	726	52	1317
Railway-chair and its fastening	R. T. White	420,133	Jan. 28	2245	593 594	50	474
Railway chair and support	C. H. Showalter	439,041	Oct. 21	2108	565	53	415
Railway chair. Street	J. M. Bailey	427,213	May 6	289	74	51	868
Railway-chairs. Head-rest for	W. H. Rowlett	438,279	Oct. 14	936	253	53	124
Railway-chairs. Machine for forming	V. Angerer and H. E. Brett	434,228	Aug. 12	1187	309 310	52	998
Railway-chairs. Machine for making spring-wedges for	A. O. David	424,408	Mar. 25	3109	824 825	50	1752
Railway-chairs. Securing rails in	J. Harrison	418,891	Jan. 7	376	91	50	78
Railway circuit. Electric	F. W. Sabold	442,140	Dec. 9	807	218	53	1428
Railway closed-circuit systems. Electric	M. Wheless	435,471	Sept. 2	131	37, 38	52	1400
Railway conductor. Electric	E. Thomson	431,414	July 1	578	145 146	52	117
Railway-conductor system. Electric	C. J. Van Depoele	429,981	June 10	1326	322 323	51	1738
Railway conductors. Support for electric	C. J. Kilian	425,101	Apr. 8	1024	273	51	206
Railway conduit. Cable	A. Bryson, Jr., and J. H. Pendleton	430,109	June 17	1547	384 385	51	1790
Railway conduit. Electric	B. J. Black	419,308	Jan. 14	994	263	50	210
Railway conduit. Electric	W. R. Elliott	435,486	Sept. 2	160	45	52	1406
Railway conduit. Electric	P. H. Griffin	421,398	Feb. 18	1433	372	50	851
Railway conduit. Electric	R. M. Hunter	439,597	Oct. 28	2988	793	53	587
Railway conduit. Electric	D. E. Johnson	420,804	Feb. 4	541	140	50	667
Railway conduit. Electric	N. Seibert	441,258	Nov. 25	2654	688 689	53	1140
Railway conduit. Electric	J. H. Wehrle	431,633	July 8	923	233	52	192
Railway conduit. Electric	S. E. Wheatley	441,221	Nov. 25	2572	666	53	1128
Railway conduit. Electric	M. Wheless	441,212	Nov. 25	2564	663	53	1126
Railway. Conduit electric	B. Jennings	432,670	July 22	2540	651	52	515
Railway. Conduit electric	B. Jennings	432,944	July 22	2963	760	52	596
Railway. Conduit electric	E. M. Reed	437,720	Oct. 7	67	21, 22	53	16
Railway conduit. Electric or cable	J. Lynch	432,416	July 15	2137	549 550	52	428
Railway-conduit system. Electric	M. Wheless	433,918	Aug. 5	704	183	52	894
Railway-conduit system. Electrical	M. Wheless	438,282	Oct. 14	902	245 246	53	178
Railway conduit with tubular conductor. Electric	C. J. Van Depoele	435,263	Aug. 26	2815	745 746	52	1329
Railway construction	M. E. Schmidt and J. L. Silsbee	440,725	Nov. 18	1739	446 447	53	961
Railway construction. Cable	G. F. Gray	432,730	July 22	2638	674	52	534
Railway construction. Machine for	J. W. Close	421,908	Feb. 25	2166	568 569	50	1000
Railway construction. Street	T. J. McTighe	443,947	Dec. 30	3759	961	53	2026
Railway construction. Street	R. T. White	437,956	Oct. 7	430	120	53	82
Railway construction. Street	R. T. White	443,027	Dec. 16	2240	577	53	1718
Railway contact. Electric	F. O. Blackwell	425,489	Apr. 15	1614	430	51	331

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Railway contact. Electric.....	F. O. Blackwell	426,102	Apr. 22	2558	673	51	521
Railway cross-tie	J. M. Bailey	423,586	Mar. 18	1839	{ 484 485 }	50	1500
Railway cross-tie	E. Brandwood	442,416	Dec. 9	1226	317	53	1508
Railway cross-tie	L. Wallace	427,813	May 13	1200	302	51	1056
Railway cross-tie	R. Whiteford	435,004	Aug. 26	2438	645	52	1257
Railway cross-tie and rail-fastening	D. Vanaman	415,162	Aug. 26	2668	705	52	1301
Railway cross-tie and rail-fastening. Metallic	S. L. Wiegand	420,485	Feb. 4	87	20	50	580
Railway cross-tie. Plate-metal	W. H. Dutton	435,806	Sept. 2	663	174	52	1502
Railway-crossing	W. M. Astell	442,411	Dec. 9	1220	315	53	1507
Railway-crossing	G. R. Campbell	437,974	Oct. 7	462	130	53	88
Railway-crossing	G. R. Campbell	437,976	Oct. 7	465	131	53	88
Railway-crossing	J. H. Hodskinson	430,383	June 17	1994	{ 492 493 }	51	1877
Railway-crossing	J. Jones	425,803	Apr. 15	2079	{ 555 556 }	51	423
Railway-crossing	A. F. Knib and C. F. Lampe	439,280	Oct. 28	2506	671	53	495
Railway-crossing	T. McGrath and G. C. Finley	436,146	Sept. 9	1193	312	52	1608
Railway-crossing	R. H. St. John	430,760	June 24	2610	639	51	2003
Railway crossing	J. Sweet	434,662	Aug. 5	329	85	52	820
Railway crossing. Automatic cable	E. A. Kellogg and W. W. Cox	442,704	Dec. 16	1669	433	53	1609
Railway crossing. Cable	J. P. Orr	439,547	Oct. 28	2413	775	53	572
Railway crossing. Cable	M. D. Pratt	423,081	Mar. 11	1100	287	50	1352
Railway crossing. Cable and street	J. Lamplugh	432,054	July 15	1601	409	52	327
Railway-crossing gate	A. R. Blethen and L. H. Alexander	441,226	Nov. 25	2577	667	53	1129
Railway-crossing gate	M. B. Mills	438,322	Oct. 14	999	271	53	197
Railway-crossing gate	M. I. Riggins	419,612	Jan. 14	1429	323	50	300
Railway-crossing gate. Automatic	A. B. Anthony	419,305	Jan. 14	991	262	50	209
Railway-crossing gate. Automatic	W. Burleigh	427,395	May 6	544	{ 138 139 }	51	919
Railway-crossing signal	R. H. St. John	443,124	Dec. 23	2429	620	53	1760
Railway-crossing stock-guard	C. O. Davidson	428,078	May 20	1596	405	51	1142
Railway crossing. Street	J. Quinn, Jr., and V. Angerer	439,426	Oct. 28	2737	{ 729 730 }	53	538
Railway-crossings. Movable frog for	G. Schumacher	430,441	June 17	2071	511	51	1692
Railway-crossings. Signaling apparatus for	A. Barnes	431,027	July 1	2	1	52	3
Railway curved track	H. M. Lane	418,798	Jan. 7	210	52	50	46
Railway cut-out. Electric	M. Wheless	441,214	Nov. 25	2566	{ 663 664 }	53	1127
Railway danger-signal	J. W. Steele	443,730	Dec. 30	3132	881	53	1963
Railway-ditcher	W. Prescott	442,457	Dec. 9	1284	332	53	1520
Railway. Electric	E. M. Bentley	424,845	Apr. 1	638	168	51	123
Railway. Electric	E. M. Bentley	426,500	Apr. 29	3268	857	51	672
Railway. Electric	E. M. Bentley	427,725	May 13	1053	263	51	1028
Railway. Electric	E. M. Bentley	444,084	Dec. 23	2345	599	53	1745
Railway. Electric	F. O. Blackwell	424,848	Apr. 1	642	{ 169 170 }	51	124
Railway. Electric	B. Cade	419,314	Jan. 14	1004	{ 265 266 }	50	212
Railway. Electric	D. B. Devore	430,515	June 17	2199	538	51	1914
Railway. Electric	M. W. Dewey	419,741	Jan. 21	1788	473	50	373
Railway. Electric	M. W. Dewey	439,867	Nov. 4	355	92	53	676
Railway. Electric	T. A. Evans	425,767	Apr. 15	2033	541	51	413
Railway. Electric	A. Gorton	434,827	Aug. 19	2128	557	52	1192
Railway. Electric	J. C. Henry	424,298	Mar. 25	2897	{ 773 774 }	50	1711
Railway. Electric	R. M. Hunter	424,928	Apr. 1	763	203	51	148
Railway. Electric	R. M. Hunter	426,382	Apr. 22	2958	777	51	603
Railway. Electric	R. M. Hunter	428,098	May 20	1625	413	51	1148
Railway. Electric	R. M. Hunter	428,210	May 20	1700	449	51	1178
Railway. Electric	R. M. Hunter	428,211	May 20	1783	450	51	1179
Railway. Electric	R. M. Hunter	429,093	May 27	3136	808	51	1459
Railway. Electric	R. M. Hunter	429,687	June 10	878	214	51	1651
Railway. Electric	R. M. Hunter	430,025	June 10	1398	348	51	1752
Railway. Electric	R. M. Hunter	430,076	June 10	1485	369	51	1768
Railway. Electric	R. M. Hunter	430,208	June 17	1675	417	51	1815
Railway. Electric	R. M. Hunter	430,580	June 17	2281	560	51	1930
Railway. Electric	R. M. Hunter	431,519	July 1	748	187	52	149
Railway. Electric	R. M. Hunter	431,720	July 8	1069	271	52	222
Railway. Electric	R. M. Hunter	431,977	July 8	1476	373	52	297
Railway. Electric	R. M. Hunter	432,049	July 15	1594	407	52	325
Railway. Electric	R. M. Hunter	432,623	July 22	2448	631	52	498
Railway. Electric	R. M. Hunter	432,752	July 22	2678	686	52	547
Railway. Electric	R. M. Hunter	432,753	July 22	2681	686	52	541
Railway. Electric	R. M. Hunter	433,170	July 29	3339	864	52	674
Railway. Electric	R. M. Hunter	433,407	July 29	3664	947	52	741
Railway. Electric	R. M. Hunter	433,408	July 29	3665	947	52	741
Railway. Electric	R. M. Hunter	434,030	Aug. 12	864	228	52	934
Railway. Electric	R. M. Hunter	434,147	Aug. 12	1062	274	52	973
Railway. Electric	R. M. Hunter	434,275	Aug. 12	1264	338	52	1012
Railway. Electric	R. M. Hunter	434,389	Aug. 12	1427	374	52	1046
Railway. Electric	R. M. Hunter	434,390	Aug. 12	1435	375	53	1048
Railway. Electric	R. M. Hunter	434,391	Aug. 12	1437	375	52	1049
Railway. Electric	R. M. Hunter	434,871	Aug. 19	2196	575	52	1205
Railway. Electric	R. M. Hunter	435,062	Sept. 2	446	119	52	1460
Railway. Electric	R. M. Hunter	435,879	Sept. 2	780	207	52	1525
Railway. Electric	R. M. Hunter	437,158	Sept. 23	2861	744	52	1942
Railway. Electric	R. M. Hunter	438,847	Oct. 21	1826	487	53	359
Railway. Electric	R. M. Hunter	439,069	Oct. 21	2154	578	53	423
Railway. Electric	R. M. Hunter	439,070	Oct. 21	2156	578	53	424
Railway. Electric	R. M. Hunter	439,662	Nov. 4	53	15	53	617
Railway. Electric	R. M. Hunter	440,595	Nov. 11	1532	395	53	910
Railway. Electric	R. M. Hunter	440,596	Nov. 11	1535	396	53	911
Railway. Electric	R. M. Hunter	443,451	Dec. 23	2978	766	53	1867

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Railway. Electric	R. M. Hunter	443,452	Dec. 23	2980	766	53	1868
Railway. Electric	H. R. Keithley	433,409	July 29	3667	947	52	742
Railway. Electric	I. Kitsee	419,588	Jan. 14	1389	372	50	292
Railway. Electric	W. H. Knight	424,887	Apr. 1	702	186	51	135
Railway. Electric	W. H. Knight	424,888	Apr. 1	704	186	51	136
Railway. Electric	W. H. Knight	425,950	Apr. 15	2319	615	51	466
Railway. Electric	W. H. Knight. (Reissue)	11,083	June 10	1534	381	51	1778
Railway. Electric	W. H. Knight. (Reissue)	11,084	June 10	1536	381	51	1778
Railway. Electric	J. B. Legg and J. Nile	428,499	May 20	2226	563	51	1264
Railway. Electric	H. W. Libbey	436,425	Sept. 16	1637	431	52	1702
Railway. Electric	H. W. Libbey	436,923	Sept. 23	2301	654	52	1873
Railway. Electric	H. W. Libbey	441,571	Nov. 25	3141	808	53	1233
Railway. Electric	H. W. Libbey	441,572	Nov. 25	3143	808	53	1234
Railway. Electric	F. Mansfield	432,673	July 22	2543	652	52	515
Railway. Electric	F. Mansfield	432,674	July 22	2547	653	52	516
Railway. Electric	J. F. McLaughlin	424,340	Mar. 25	2975	792	50	1725
Railway. Electric	J. K. P. Nourse	440,362	Nov. 11	1126	793	53	835
Railway. Electric	C. Richter	439,428	Oct. 28	2740	731	53	539
Railway. Electric	W. Robinson	430,690	June 24	2485	607	51	1979
Railway. Electric	A. A. Shobe and W. Embley	433,544	Aug. 5	144	41	52	785
Railway. Electric	S. H. Short	422,645	Mar. 4	422	105	50	1217
Railway. Electric	S. H. Short	431,711	July 8	1078	269	52	219
Railway. Electric	R. V. R. Sill	425,911	Apr. 15	2242	594	51	451
Railway. Electric	R. V. R. Sill	425,912	Apr. 15	2244	595	51	452
Railway. Electric	E. P. Slentz and J. B. McGrew	424,364	Mar. 25	3016	800	50	1732
Railway. Electric	H. E. Swift	438,564	Oct. 14	1347	365	53	266
Railway. Electric	W. Thompson	424,082	Mar. 25	2594	692	50	1652
Railway. Electric	S. Trott	440,906	Nov. 18	2045	529	53	1018
Railway. Electric	D. G. Weems	425,965	Apr. 15	2339	620	51	471
Railway. Electric	D. G. Weems	425,966	Apr. 15	2340	621	51	471
Railway. Electric	J. H. Wehrle	431,634	July 8	926	233	52	192
Railway. Electric	L. Westerland	439,262	Oct. 28	2473	663	53	489
Railway. Electric	M. J. Wightman	430,329	June 17	1918	470	51	1461
Railway. Electric	M. J. Wightman	442,407	Dec. 9	1213	313	53	1505
Railway electric signal	P. D. Cable	421,239	Feb. 11	1202	309	50	801
Railway. Electric street	B. J. Black and W. F. Jenkins	419,309	Jan. 14	997	263	50	211
Railway. Electrical	F. Mansfield	432,675	July 22	2551	654	52	517
Railway. Elevated	T. C. Clarke	427,836	May 13	1228	310	51	1062
Railway. Elevated	W. M. Morgan	419,594	Jan. 14	1399	375	50	294
Railway. Elevated	H. L. Norcross	437,230	Sept. 30	2971	776	52	1970
Railway, &c. Elevated	E. M. Turner and J. P. Taylor	424,693	Apr. 1	393	104	51	77
Railway. Elevated	J. N. Valley	428,871	May 27	2796	711	51	1393
Railway. Elevated cable	E. R. Guerra	427,761	May 13	1121	281	51	1042
Railway. Elevated cable	W. M. Morgan	425,518	Apr. 15	1652	441	51	339
Railway. Elevated single-rail	J. C. Jefferson and J. T. Pullon	419,450	Jan. 14	1207	319	50	254
Railway fog-signals. Safeguard for	J. Parsons and G. Lowe	423,570	Mar. 18	1817	479	50	1497
Railway foot-guard	A. G. Campbell	423,511	Mar. 18	1736	457	50	1483
Railway-frog	I. Allen	431,427	July 1	604	151	52	122
Railway-frog	J. Baird	438,979	Oct. 21	2020	539	53	398
Railway-frog	G. R. Campbell	437,977	Oct. 7	466	131	53	88
Railway-frog	A. M. Grubbs	436,906	Sept. 23	2470	644	52	1867
Railway-frog	N. Ratchford and L. D. Evans	433,148	July 29	3310	855	52	669
Railway-frog	N. Ratchford and L. D. Evans	434,525	Aug. 19	1652	432	52	1099
Railway-frog	A. A. Strom	422,097	Feb. 25	2429	641	50	1048
Railway-frog. Spring	N. W. Boyd	435,727	Sept. 2	538	143	52	1479
Railway-frogs. Danger-guard for	W. Driscoll	421,096	Feb. 11	1006	257	50	723
Railway-gate	S. L. Adkins	419,619	Jan. 21	1444	388	50	309
Railway-gate	J. B. Carey	437,089	Sept. 23	2725	712	52	1918
Railway-gate	V. A. Crandall	420,865	Feb. 4	645	167	50	666
Railway-gate	E. L. Edmondson	419,144	Jan. 7	734	192	50	154
Railway-gate	J. M. Grisham	441,952	Dec. 2	503	134	53	1363
Railway-gate	A. S. Hanger	436,236	Sept. 9	1325	345	52	1643
Railway-gate	M. B. Mills	424,074	Mar. 25	2585	690	50	1650
Railway-gate	M. B. Mills	442,755	Dec. 16	1793	464	53	1629
Railway-gate	E. T. Naley and M. H. Rideout	427,196	May 6	131	34	51	837
Railway-gate	R. H. Nelson	434,564	Aug. 19	1712	448	52	1111
Railway-gate	W. D. Sheldon	441,032	Nov. 18	2241	580	53	1055
Railway-gate	T. D. Smith	437,727	Oct. 7	79	27	53	18
Railway-gate	W. Zeller	442,001	Dec. 2	584	158	53	1377
Railway-gate. Electric	M. Toulmin	423,886	Mar. 18	2291	605	50	1587
Railway-gates. Pneumatic system for operating	J. Wayland and J. S. Baldwin	431,732	July 8	1108	275	52	226
Railway-grip attachment. Cable	J. F. Appleby	421,538	Feb. 18	1639	423	50	890
Railway-grip mechanism. Cable	J. H. Pendleton	436,103	Sept. 9	1122	292	52	1596
Railway-grip mechanism. Cable	J. H. Pendleton	436,105	Sept. 9	1130	293	52	1597

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Railway. Hydraulic.....	E. H. Crow.....	425,408	Apr. 15	1490	{ 400 401	{ 51	307
Railway-joint.....	R. M. Agee and E. Lane.....	430,052	June 10	1447	359	51	1760
Railway-joint.....	H. D. Avera.....	433,314	July 29	3544	915	52	716
Railway-joint.....	H. D. Avera.....	442,004	Dec. 2	580	159	53	1378
Railway-joint.....	F. T. Fearey.....	427,505	May 6	721	180	51	954
Railway-joint.....	F. S. Foltz.....	430,939	June 24	2884	709	51	2055
Railway-joint.....	J. D. Morgan and W. Daffron.....	441,683	Dec. 2	79	21	53	1277
Railway-joint.....	J. Speicher.....	427,017	Apr. 29	3911	1020	51	796
Railway-joint-bar and tie. Combined.....	L. Wallace.....	427,812	May 13	1199	301	51	1056
Railway-joints. Bolt-lock for.....	W. J. Hutchinson and T. A. Mitchell. ell.	423,560	Mar. 18	1805	476	50	1495
Railway-joints. Chair and fish-plate for.....	D. A. Chapin and C. A. King.....	437,288	Sept. 30	3066	803	52	1989
Railway-joints. Key-bolt and washer for.....	W. Teamer.....	425,468	Apr. 15	1586	424	51	325
Railway-joints. Plate or connector for connecting.....	J. G. Hunlock.....	429,628	June 10	796	194	51	1635
Railway. Logging.....	F. V. Holston.....	426,727	Apr. 29	3499	915	51	716
Railway mechanism. Cable.....	J. Hartman, Jr.....	421,494	Feb. 18	1570	406	50	878
Railway mileage-recorder.....	O. E. Micband.....	438,933	Oct. 21	1946	{ 518 519	{ 53	382
Railway motor. Electric.....	F. A. Perret.....	424,818	Apr. 1	597	157	51	115
Railway motor. Electric.....	M. H. Smith.....	432,646	July 22	2492	641	52	505
Railway motor. Electric.....	F. J. Sprague.....	424,436	Mar. 25	3153	{ 836 837	{ 50	1761
Railway motor. Electric.....	F. J. Sprague.....	429,327	June 3	342	81	51	1536
Railway motor. Electric.....	F. J. Sprague.....	431,823	July 8	1249	{ 312 313	{ 52	253
Railway motor. Electric.....	C. J. Van Depoele.....	424,911	Apr. 1	738	197	51	143
Railway motors. Supporting-frame for electric.....	E. D. Priest.....	422,445	Mar. 4	119	32, 33	50	1160
Railway or tramway. Street.....	J. M. Price.....	427,109	May 6	139	36	51	839
Railway. Pleasure.....	L. A. Thompson.....	422,466	Mar. 4	154	41, 42	50	1166
Railway, &c. Pleasure.....	L. A. Thompson.....	428,977	May 27	2955	759	51	1425
Railway. Pneumatic.....	M. A. Clemmam.....	423,130	Mar. 11	1174	306	50	1366
Railway. Pneumatic.....	J. B. Kelly.....	436,946	Sept. 23	2529	662	52	1879
Railway pneumatic switch and signal appliance.....	M. B. Mills.....	419,786	Jan. 21	1695	450	50	356
Railway point and signal levers Interlocking.....	J. P. O'Donnell.....	419,187	Jan. 7	762	202	50	159
Railway. Portable.....	A. Bryson, Jr., and C. Tiers.....	421,813	Feb. 18	2013	532	50	962
Railway. Portable.....	E. L. Stream.....	426,877	Apr. 29	3718	971	51	760
Railway-rail.....	J. M. Brosius.....	423,371	Mar. 11	1528	401	50	1434
Railway-rail.....	M. A. Glynn.....	411,002	Nov. 18	2197	568	53	1047
Railway-rail.....	J. P. Nettle.....	443,784	Dec. 30	3511	900	53	1978
Railway-rail.....	E. G. Patterson.....	423,078	Mar. 11	1095	285	50	1351
Railway-rail.....	F. L. Pitman.....	438,444	Oct. 14	1173	317	53	230
Railway-rail.....	R. H. Pugh.....	428,948	May 27	2907	745	51	1416
Railway-rail.....	J. H. Stewart and J. A. Faw.....	419,086	Jan. 7	657	172	50	138
Railway-rail and seat. Reversible.....	W. W. Kruttsch and R. K. Anderson. son.	438,351	Oct. 14	1043	284	53	205
Railway-rail bed.....	C. M. Culp.....	431,253	July. 1	334	82	52	67
Railway-rail brace.....	G. E. Daggett.....	429,168	June 3	95	23	51	1490
Railway-rail brace.....	W. Goldie.....	421,268	Feb. 11	1244	321	50	809
Railway-rail brace.....	W. H. Shumaker and D. Lawrence.....	442,643	Dec. 16	1581	409	33	1588
Railway-rail chair.....	W. Goldie.....	426,530	Apr. 29	3194	838	51	657
Railway-rail-chair. Street.....	A. J. Moxham.....	423,072	Mar. 11	1081	281	50	1349
Railway-rail cutter.....	E. H. Angell.....	435,476	Sept. 2	137	39	52	1401
Railway-rail fastener.....	W. Godard and W. Fiddler.....	443,594	Dec. 30	3212	826	53	1922
Railway-rail holder. Longitudinal.....	F. R. Johnson.....	437,362	Sept. 30	3086	808	52	1992
Railway-rail joint.....	D. Brennan, J. Jones, and E. Gold- thwait.	435,729	Sept. 2	542	143	52	1480
Railway-rail joint.....	C. S. Churchill.....	433,273	July 29	3488	900	52	706
Railway-rail joint.....	P. H. Fontaine.....	443,076	Dec. 16	2329	594	53	1734
Railway-rail joint.....	J. Hiron.....	427,512	May 6	730	183	51	956
Railway-rail joint.....	J. P. Kelly.....	428,757	May 27	2633	667	51	1360
Railway-rail joint.....	I. S. McGiehan.....	431,611	July 8	888	221	52	185
Railway-rail joint.....	R. I. Verplanck.....	421,456	Feb. 18	1508	391	50	866
Railway-rail joint.....	R. I. Verplanck.....	441,723	Dec. 2	148	40	53	1291
Railway-rail joint-fastener.....	E. J. Byrne.....	425,207	Apr. 8	1195	316	51	242
Railway-rail splice.....	D. C. Winn.....	439,228	Oct. 28	2419	649	53	479
Railway rail. Street.....	J. M. Bailey.....	427,214	May 6	290	75	51	868
Railway rail. Street.....	R. T. White.....	431,242	July 1	320	79	52	65
Railway-rail support.....	M. W. Oliver.....	426,050	Apr. 22	2473	654	51	504
Railway-rail support.....	J. M. Price.....	430,590	June 17	2301	{ 565 566	{ 51	1935
Railway-rail sweeper.....	N. Campbell.....	427,834	May 13	1226	309	51	1061
Railway-rail ties. Wear-plate for.....	T. A. Davies.....	421,678	Feb. 18	1240	430	50	930
Railway-rails and other bars. Splicer for.....	J. M. Bryant, C. H. Zimmerman, and J. Becker.	432,816	July 22	2782	711	52	561
Railway-rails. Apparatus for reducing.....	W. H. Howells.....	425,073	Apr. 8	987	265	51	199
Railway-rails. Box-chair for.....	E. B. Entwisle.....	442,175	Dec. 9	860	230	53	1438
Railway-rails. Brace-chair for.....	M. M. Suppes.....	436,959	Sept. 23	2545	666	52	1882
Railway-rails. Device for preventing the spreading of.....	C. B. Hutchins.....	441,416	Nov. 25	2901	748	53	1188
Railway-rails. Double-brace chair for.....	R. Berriman.....	442,165	Dec. 9	846	227	53	1435
Railway-rails. Finishing end for.....	N. C. Foster.....	431,654	July 8	971	242	52	201
Railway-rails. Planing.....	A. A. Strom.....	430,408	June 17	2030	500	51	1884
Railway-rails. Reducing.....	W. H. Howells.....	425,881	Apr. 15	2198	{ 584 585	{ 51	444
Railway-rails. Splice-bar.....	J. A. Martin.....	435,233	Aug. 26	2763	730	52	1320
Railway. Rope or similar.....	B. V. Garcés.....	429,235	June 3	191	46	51	1508
Railway safety-guard.....	H. Ewing.....	433,892	Aug. 5	675	175	52	889
Railway safety-lock and switch system.....	J. Chandler.....	438,604	Oct. 21	1408	381	53	283
Railway safety-signal. Automatic.....	H. F. Hunt.....	438,625	Oct. 21	1446	389	53	290
Railway-sanding apparatus.....	H. C. Noble.....	424,933	Apr. 1	770	205	51	150
Railway- semaphore.....	J. W. Steele.....	430,705	June 24	2510	614	51	1984
Railway semaphore-signal.....	W. M. Grafton.....	431,888	July 8	1346	339	52	271
Railway-signal.....	R. T. Bowne.....	429,185	June 3	116	27	51	1494

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Railway-signal.	M. Cortese	435,801	Sept. 2	652	172	52	1500
Railway-signal.	W. F. Z. Desant.	435,558	Sept. 2	273	76	52	1428
Railway-signal.	M. A. Dilley	424,051	Mar. 25	2554	{ 681 682 }	50	1644
Railway-signal.	S. T. Dutton	431,652	July 8	968	242	52	200
Railway-signal.	S. H. Harrington	433,567	Aug. 5	186	49, 50	52	792
Railway-signal.	J. H. McCartney	441,324	Nov. 25	2758	713	53	1160
Railway-signal.	P. C. Morse and H. D. Winton	436,371	Sept. 16	1555	408	52	1687
Railway-signal.	J. Richardson	436,191	Sept. 9	1264	329	52	1620
Railway-signal.	J. W. Riggs	440,925	Nov. 18	2022	538	53	1024
Railway-signal.	J. A. Rogers and A. A. Oden	422,158	Feb. 25	2523	667	50	1066
Railway-signal.	F. J. Shephard and H. Forncrook	429,390	June 3	445	105	51	1556
Railway-signal.	S. Townsend, A. Andrews, and F. E. Townsend.	442,152	Dec. 9	830	222	53	1432
Railway-signal.	A. C. White	431,300	July 1	401	101	52	82
Railway-signal.	C. R. Wilson	431,425	July 1	602	151	52	121
Railway-signal.	M. Wuerpel	432,469	July 15	2222	{ 574 575 }	52	446
Railway-signal apparatus. Electric	W. Snee	431,408	July 1	570	143	52	116
Railway-signal. Automatic	J. K. E. Diefenderfer	430,567	June 17	2261	555	51	1927
Railway-signal. Automatic	A. J. Griffin	432,440	Dec. 23	2956	761	53	1863
Railway-signal. Automatic	B. K. Hacker	440,405	Nov. 11	1209	312	53	852
Railway-signal. Automatic	A. Scotland and H. F. Brink	424,506	Apr. 1	101	29	51	23
Railway-signal. Automatic electric	R. O. Owen	441,773	Dec. 2	229	59	53	1308
Railway-signal. Automatic recording	J. B. Ivey	422,700	Mar. 4	616	158	50	1254
Railway-signal. Cable	J. H. Pendleton, A. Bryson, Jr., and C. Tiers	418,850	Jan. 7	299	73	50	63
Railway-signal compensator	W. W. Christie	432,155	July 15	1769	452	52	358
Railway-signal connections. Compensator for	J. Ledbrook	421,291	Feb. 11	1275	329	50	814
Railway-signal device	O. M. Williams	423,651	Mar. 18	1955	515	50	1523
Railway-signal. Electric	E. M. Bentley	430,263	June 17	1777	441	51	1834
Railway-signal. Electric	G. W. Boss	420,858	Feb. 4	633	163	50	683
Railway-signal. Electric	G. W. Boss	420,859	Feb. 4	636	164	50	684
Railway-signal. Electric	H. A. Parrish	429,582	June 3	726	176	51	1611
Railway-signal. Electric	W. J. Smith and J. W. Fox	431,011	June 24	2490	735	51	2075
Railway-signal. Electric	G. A. Tower	426,222	Apr. 22	2736	717	51	556
Railway-signal. Electric	W. H. Waddell	441,044	Nov. 18	2260	586	53	1059
Railway-signal. Electric	W. C. Walter	421,791	Feb. 18	1946	523	50	957
Railway-signal-flag and staff	J. Lanus	429,214	June 3	166	40	51	1502
Railway-signal holder	F. Mertsheimer and J. Follens	429,933	June 10	1248	309	51	1722
Railway-signal. Mechanical and electrical	B. R. Davidson	436,777	Sept. 23	2201	581	52	1816
Railway-signal-operating apparatus	J. W. Raub	431,481	July 1	689	{ 172 173 }	52	139
Railway-signal. Pneumatic	A. G. Inghram	423,477	Mar. 18	1686	445	50	1473
Railway-signal system	L. B. Firman	429,899	June 10	1201	298	51	1713
Railway signals and switches. Apparatus for working	J. P. O'Donnell	423,878	Mar. 18	2282	602	50	1585
Railway-signals. Electric circuit-closer for	F. E. Morgan and F. A. Lane	427,783	May 13	1153	289	51	1048
Railway-signals, &c. Mechanism for operating	G. N. Reiff	419,996	Jan. 21	2027	534	50	422
Railway-signals. Power-transmitter for	J. Ramsey, Jr.	427,361	May 6	503	129	51	910
Railway-signals. Track-instrument for	M. S. Conly	428,041	May 13	1538	390	51	1122
Railway signaling apparatus	W. Smith and J. P. O'Donnell	427,802	Oct. 7	199	61, 62	53	40
Railway signaling apparatus	H. D. Winton	427,387	May 6	534	136	51	917
Railway signaling apparatus. Electric	F. F. Loomis	440,881	Nov. 18	2003	515	53	1009
Railway signaling apparatus. Electric	C. H. Rudd	429,483	June 3	582	142	51	1583
Railway signaling. Apparatus for electric	C. H. Rudd	426,395	Apr. 22	2986	782	51	609
Railway signaling device	J. W. Riggs	440,926	Nov. 18	2044	538	53	1025
Railway signaling system	J. W. Riggs	440,927	Nov. 18	2066	539	53	1025
Railway. Single-rail elevated	J. N. Valley	419,739	Jan. 21	1619	432	50	342
Railway. Sinuous pleasure	H. Bormann	429,601	June 10	757	{ 182 183 }	51	1628
Railway. Sinuous pleasure	H. Bormann	434,554	Aug. 19	1698	{ 444 445 }	52	1108
Railway-sleeper	C. H. Ewing and C. G. Bockus	440,997	Nov. 18	2190	566	53	1046
Railway-sleeper	S. Fox	429,613	June 10	772	186	51	1631
Railway-sleeper and rail-fastener	M. A. Glynn	441,549	Nov. 25	3108	798	53	1927
Railway sleeper and tie. Metal	J. Richardson	430,197	June 17	1659	413	51	1812
Railway-sleeper. Metal	C. Delorme and E. Brochon	429,607	June 10	766	185	51	1630
Railway slots. Automatic cover for cable	G. W. Higgins	420,233	Jan. 28	2408	641	50	503
Railway-spike	J. Churchward	425,407	Apr. 15	1489	399	51	307
Railway-spike	E. Dietrich	440,422	Nov. 11	1252	324	53	858
Railway-spike	S. Emrich	431,259	July 1	340	84	52	69
Railway-spike	A. D. Kittle	439,524	Oct. 28	2881	767	53	566
Railway-spike	R. S. Merrill	427,436	May 6	628	157	51	936
Railway-spike	P. Petersen and H. A. Closser	433,816	Aug. 5	569	148	52	867
Railway-spike	H. M. Waltman	419,234	Jan. 14	887	233	50	190
Railway-spike	E. Wolfigram	432,351	July 15	2045	526	52	410
Railway-spike-finishing machine	W. Boecker	421,117	Mar. 25	2713	{ 722 723 }	50	1675
Railway-spike retainer	H. W. Libbey	421,007	Feb. 11	878	227	50	739
Railway-splice-bar bolt	H. Greer	432,526	July 22	2317	599	52	472
Railway. Street	W. L. Judson	423,871	Mar. 18	2271	{ 599 600 }	50	1583
Railway. Street	W. L. Judson	423,872	Mar. 18	2273	600	50	1584
Railway street-crossings. Automatic gate for	C. E. Darrow	431,877	July 8	1333	{ 335 336 }	52	268
Railway structure. Elevated	J. Stone	431,126	July 1	138	36	52	29
Railway support and cross-tie	J. M. Price	431,172	July 1	209	52	52	43
Railway-switch	A. Barton	435,724	Sept. 2	535	142	52	1478
Railway-switch	R. J. Booth and J. Baughman	442,096	Dec. 9	738	199	53	1415
Railway-switch	O. W. Brenizer	433,975	Aug. 12	802	{ 209 210 }	52	921
Railway-switch	E. A. Burgess	419,179	Jan. 14	801	212	50	173
Railway-switch	R. J. Davidson	422,573	Mar. 4	303	77	50	1194

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Railway-switch	J. A. Duggan	433,934	Aug. 12	737	{ 191 192 }	52	911
Railway-switch	J. H. Fisher	427,166	May 6	223	57	51	855
Railway-switch	F. Gardner and J. W. Moore	421,097	Feb. 11	1007	258	50	763
Railway-switch	L. M. Garfield	424,968	Apr. 8	828	221	51	168
Railway-switch	C. Ilager	430,801	June 24	2668	654	51	2015
Railway-switch	J. J. Hill	442,753	Dec. 16	1791	464	53	1628
Railway-switch	J. A. Johnson	431,360	July 1	498	124	52	101
Railway-switch	D. J. McOsker	422,610	Mar. 4	367	91	50	1206
Railway-switch	J. J. Murphy, Jr.	435,881	Sept. 2	784	208	52	1526
Railway-switch	S. J. Namburg	421,052	Feb. 11	942	243	50	751
Railway-switch	J. W. Norton	419,543	Jan. 14	1331	356	50	280
Railway-switch	J. W. Norton	440,793	Nov. 18	1860	479	53	982
Railway-switch	C. H. Ohm	423,944	Mar. 25	2388	635	50	1613
Railway-switch	J. M. Parlow and C. W. Tobey	419,061	Jan. 7	623	{ 161 162 380 }	50	131
Railway-switch	G. G. Passino	421,428	Feb. 18	1470	{ 361 362 }	50	859
Railway-switch	A. J. River	421,518	Feb. 18	1607	414	50	884
Railway-switch	C. W. Robinson	423,084	Mar. 11	1104	288	50	1352
Railway-switch	N. L. Tuck	419,980	Jan. 21	1997	525	50	417
Railway-switch and means for operating the same	F. C. Cash	441,397	Nov. 25	2870	741	53	1181
Railway switch and signal mechanism	A. H. Johnson	421,283	Feb. 11	1264	{ 326 327 }	50	812
Railway switch and signal mechanism. Electric	J. Ramsey, Jr., and F. C. Weir	440,502	Nov. 11	1376	{ 355 356 }	53	883
Railway-switch and signal-operating appliance	I. Randolph	431,726	July 8	1099	274	52	224
Railway-switch and signal-operating mechanism } Combined	I. Randolph	441,378	Nov. 25	2838	{ 732 733 }	53	1175
Railway-switch appliance	J. J. Hill	419,443	Jan. 14	1199	317	50	252
Railway-switch appliance	A. A. Strom	438,120	Oct. 7	687	187	53	132
Railway-switch. Automatic	C. Forth	423,865	Mar. 18	2260	597	50	1581
Railway-switch. Automatic	J. R. Matthews	442,904	Dec. 16	2058	528	53	1680
Railway-switch. Automatic	C. Saussy	441,586	Nov. 25	3166	816	53	1238
Railway-switch bar	W. C. Mecker and J. Wilson	422,241	Feb. 25	2659	702	50	1096
Railway switch. Cable	G. A. Stafford and A. S. Robinson	438,650	Oct. 21	1478	400	53	296
Railway switch. Electric	W. D. Swart	432,085	July 15	1658	426	52	338
Railway-switch. Electrically-operated	S. L. Powell	443,167	Dec. 23	2509	642	53	1775
Railway-switch lock	C. M. Hovey and R. Black	431,203	July 1	266	67	52	54
Railway-switch lock and keeper. Automatic	E. S. Batchelor	442,282	Dec. 9	1019	369	53	1468
Railway-switch mechanism	F. J. Heyt	431,357	July 1	494	{ 122 123 }	52	100
Railway-switch-operating device	W. W. Le Senr	449,880	Nov. 18	2001	515	53	1009
Railway-switch-operating system	S. L. Powell	443,149	Dec. 23	2478	{ 633 634 }	53	1769
Railway switch. Overhead	F. Schraudner	434,840	Aug. 19	2145	502	52	1195
Railway-switch signal	R. T. Bowne	441,351	Nov. 25	2793	732	53	1166
Railway-switch stand and signal	M. Wuempel	432,106	July 15	1679	431	52	342
Railway switch. Street	L. A. Copeland	440,305	Nov. 11	1049	270	53	821
Railway switch. Street	P. B. Dowling	430,118	June 17	1559	388	51	1792
Railway switch. Street	C. E. Garey	433,237	July 29	3432	{ 887 888 }	52	694
Railway switch. Street	W. H. Koehler and M. Roskoph	430,188	June 17	1650	411	51	1810
Railway switch. Street	W. Koenen	427,089	May 6	98	26	51	831
Railway switch. Street	J. H. Williams	434,692	Aug. 19	1943	{ 504 505 506 }	52	1154
Railway-switches. Detector appliance for	I. Randolph	441,379	Nov. 25	2841	733	53	1175
Railway-switches. Electrical attachment for	A. W. Berne	443,814	Dec. 30	3566	914	53	1989
Railway switching device. Street	R. T. Smith	433,547	Aug. 5	117	42	52	785
Railway switching device. Street	R. T. Smith	433,548	Aug. 5	119	42	52	786
Railway system. Cable	A. G. Bierbach	429,004	May 27	2989	767	51	1431
Railway system. Electric	T. E. Adams	419,618	Jan. 21	1441	387	50	309
Railway system. Electric	L. Gutmann	423,552	Mar. 18	1793	{ 470 471 472 }	50	1492
Railway system. Electric	L. Gutmann	426,269	Apr. 22	2795	{ 734 735 }	51	570
Railway system. Electric	C. K. Harding	437,358	Sept. 30	3178	830	52	2009
Railway system. Electric	W. D. MacQuesten	429,199	June 3	141	34	51	1498
Railway system. Electric	C. Richter	419,709	Jan. 21	1584	423	50	335
Railway system. Electric	F. J. Sprague	438,293	Oct. 14	956	{ 259 260 }	53	188
Railway system. Electric	C. J. Van Depoele	434,684	Aug. 19	1922	{ 501 502 }	52	1151
Railway system. Electric	C. J. Van Depoele	434,687	Aug. 19	1934	503	52	1153
Railway system. Electric	D. G. Weems	425,964	Apr. 15	2338	{ 619 620 }	51	470
Railway system. Electric	M. Wheless	441,216	Nov. 25	2567	664	53	1127
Railway system. Electric	M. Wheless	441,217	Nov. 25	2568	665	53	1127
Railway system. Electric	M. Wheless	441,219	Nov. 25	2570	665	53	1128
Railway system. Electric street	M. Wheless	441,210	Nov. 25	2561	662	53	1126
Railway system. Electric street	M. Wheless	441,211	Nov. 25	2563	662	53	1126
Railway system. Electrical	T. H. Hicks	419,673	Jan. 21	1536	449	50	325
Railway system. Interlocking electric	J. Ramsey, Jr., and F. C. Weir	429,478	June 3	572	{ 140 141 }	51	1582
Railway system. Pneumatic	G. W. King	427,330	May 6	460	118	51	902
Railway system. Pneumatic	G. W. King	438,928	Oct. 21	1940	517	53	381
Railway systems. Electric heating apparatus for electric	M. W. Dewey	418,911	Jan. 7	413	102	50	86
Railway systems. Electric heating apparatus for electric	M. W. Dewey	425,757	Apr. 15	2018	538	51	410
Railway systems. Switches for electric	F. Wheeler	431,094	July 1	94	23, 24	52	21

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Railway-tie	W. H. Bagby	419,101	Jan. 7	677	178	50	142
Railway-tie	L. Barnes	423,852	Mar. 18	2240	592	50	1577
Railway-tie	O. W. Brown	425,747	Apr. 15	2006	534	51	408
Railway-tie	H. D. Dasher	439,482	Oct. 28	2817	750	53	553
Railway-tie	F. F. Field and J. Driscoll	433,651	Aug. 5	314	81	52	817
Railway-tie	T. W. Gilmer	433,524	Aug. 5	119	34	52	780
Railway-tie	L. Haas	420,299	Jan. 28	2511	666	50	522
Railway-tie	F. J. Hoyt	423,929	Mar. 25	2370	630	50	1609
Railway-tie	A. Kimber	424,793	Apr. 1	565	150	51	110
Railway-tie	H. W. Libbey	430,780	June 24	2640	647	51	2010
Railway-tie	G. E. Marvin	426,458	Apr. 29	3089	810	51	638
Railway-tie	W. McManes and G. E. Lum	420,352	Jan. 28	2583	686	50	535
Railway-tie	R. Osborn	439,174	Oct. 28	2320	692	53	461
Railway-tie	J. Porter	426,319	Apr. 22	2863	754	51	584
Railway-tie	P. Rafferty	430,039	June 10	1423	353	51	1756
Railway-tie	J. Reifert	440,653	Nov. 18	1622	418	53	939
Railway-tie	S. D. Stauffer	425,266	Apr. 8	1276	342	51	258
Railway-tie	S. Vanstone	441,385	Nov. 25	2848	735	53	1177
Railway-tie	E. H. and W. F. Walker	439,333	Oct. 28	2597	693	53	512
Railway-tie	L. Wallace	427,384	May 6	530	135	51	916
Railway-tie	J. B. Wilson	420,295	Feb. 4	700	180	50	692
Railway-tie and chair	I. Brown	420,674	Feb. 4	346	91	50	681
Railway-tie and means for securing rails to the same	J. M. Fellows	433,778	Aug. 5	508	132	52	855
Railway-tie and sleeper. Combination	H. O. Cook	437,812	Oct. 7	215	65	53	43
Railway-tie and support	J. E. Taylor	434,848	Aug. 19	2155	565	52	1197
Railway-tie. Metal	M. Hubbell	438,583	Oct. 14	1371	372	53	271
Railway-tie. Metal	A. M. Kramer	438,764	Oct. 21	1650	451	53	333
Railway-tie. Metal	P. W. Ross	423,447	Mar. 18	1640	432	50	1464
Railway-tie. Metallic	J. J. Callahan	440,465	Nov. 11	1310	339	53	870
Railway-tie. Metallic	E. Dainty	432,377	July 15	2084	535	52	418
Railway-tie. Metallic	T. R. Dunning	426,637	Apr. 29	3357	680	51	689
Railway-tie. Metallic	T. Foulds	443,939	Dec. 30	3748	958	53	2024
Railway-tie. Metallic	A. Kimber	434,600	Aug. 19	1770	463	52	1123
Railway-tie. Metallic	H. Taylor and D. E. Sherman	434,213	Aug. 12	1162	302	52	993
Railway-tie. Metallic	V. A. Tyler	441,784	Dec. 2	245	64.65	53	1311
Railway-tie plate	V. Angerer and E. Samuel	438,395	Oct. 14	1103	300	53	217
Railway-tie plate	C. D. Halsey	437,153	Sept. 23	2853	742	52	1941
Railway-tie. Steel or metal	W. Bussard	431,239	July 8	1.74	320	52	258
Railway-ties. Metal pad for metal	L. Wallace	427,814	May 13	1200	302	51	1056
Railway-ties. Wear-plate for	J. Churchward	434,918	Aug. 26	2317	612	52	1234
Railway time-signal	C. Barry	420,140	Jan. 28	2256	597	50	476
Railway time-signal	R. M. Bechtel and J. Moebus	422,367	Mar. 4	9	3	50	1138
Railway time-signal	F. W. Coolbaugh and I. G. Hooper	440,890	Nov. 18	2015	518	53	1012
Railway time-signal	B. R. Davidson	436,913	Sept. 23	2487	650	52	1871
Railway time-signal	E. Fontaine	438,841	Oct. 21	1813	443	53	357
Railway time-signal	S. H. Harrington	433,565	Aug. 5	182	49	52	792
Railway time-signal	S. H. Harrington	433,566	Aug. 5	184	49	52	792
Railway time-signal	J. F. O'Brien and S. H. Harrington	433,906	Aug. 5	689	179	52	891
Railway time-signal	W. H. Sayles	441,981	Dec. 2	544	146	53	1369
Railway-track	P. H. Dudley	432,159	July 15	1766	454	52	359
Railway-track	J. P. McGuire	419,210	Jan. 14	850	223	50	182
Railway-track	S. J. Morse	433,803	Aug. 5	547	141	52	863
Railway-track and tie	P. Semounin	421,769	Feb. 18	1960	515	50	952
Railway-track cleaner	E. E. Andrews	433,433	Aug. 5	1	1	52	757
Railway-track cleaner	A. Day	420,640	Feb. 4	304	80	50	623
Railway-track drill	A. R. Paulus	428,516	May 20	2251	571	51	1269
Railway-track electrical annunciator	J. W. Lattig	439,409	Oct. 28	2710	723	53	533
Railway-track fastening	C. A. Harvey	418,892	Jan. 7	377	92	50	70
Railway-track fastening	C. A. Harvey	439,352	Oct. 28	2623	700	53	517
Railway-track foot-guard	J. M. Wilson	422,560	Mar. 4	282	72	50	1190
Railway-track-laying machine	G. Roberts	425,829	Apr. 15	2121	566	51	430
Railway-track-laying machine	G. Roberts	425,907	Apr. 15	2232	567	51	449
Railway-track rail	E. Robinson	429,868	June 10	1152	284	51	1703
Railway-track rails. Apparatus for blowing sand from	J. F. Bevin	440,690	Nov. 18	1680	433	53	950
Railway-track. Street	C. A. Beach and R. Dausinger	434,420	Aug. 19	1498	391	52	1067
Railway-track sweeper	L. H. Farnham	422,926	Mar. 11	860	224	50	1308
Railway-track switch	C. O. Carlson	437,675	Oct. 7	4	1.2	53	3
Railway-tracks. Apparatus for clearing	H. H. Kryger	426,129	Apr. 22	2593	682	51	528
Railway-tracks. Apparatus for detecting irregularities in	J. B. Glover	433,167	July 29	3334	863	52	674
Railway and tramway rails. Fish-joint and fish-joint chair for	F. C. Winby and W. Strickland	419,577	Jan. 14	1375	368	50	289
Railway-tracks. Bulk-head for	T. A. Davies	421,679	Feb. 18	1841	481	50	930
Railway-tracks. Construction of	C. L. Gibbon	429,128	June 3	33	8	51	1478
Railway-tracks. Construction of side-bearing	C. L. Gibbon	429,127	June 3	31	7	51	1478
Railway-tracks. Device for clearing the spaces between the rails of	H. H. Kryger	426,131	Apr. 22	2597	683	51	529
Railway-tracks. Device for setting cartridges on	C. Budde and D. C. McCalip	437,283	Sept. 30	3060	801	52	1988
Railway-train-order signals. Stylus-holder for	A. F. Mills	442,707	Dec. 16	1695	435	53	1610
Railway-train-signal	D. S. McElroy	438,084	Oct. 7	638	174	53	123
Railway-train-signal	W. D. Sheldon	441,030	Nov. 18	2234	578	53	1054
Railway-train-signal	W. D. Sheldon	441,033	Nov. 18	2243	581	53	1056
Railway-train signal and speed-indicator	J. A. McNight	427,788	May 13	1160	290	51	1049
Railway-train system. Alternate-current electric	C. J. Van Depoele	434,685	Aug. 19	1927	502	52	1151
Railway-train system. Electric	C. J. Van Depoele	434,686	Aug. 19	1931	502	52	1152
Railway-trains. Couling device for	E. A. Trapp	437,735	Oct. 7	88	29	53	20

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Railway-trains. Device for maintaining electrical connection between separate	D. M. Fike and J. Huffman	428,748	May 27	2619	643	51	1357
Railway-trains. Electric-circuit coupling for	W. P. Widdefield and A. H. Bowman	433,706	Aug. 5	391	{ 99 100	52	832
Railway-trains. Electric communication with	T. J. Houck	428,562	May 20	2313	{ 587 588	51	1281
Railway-trains. Electric lighting of	I. A. Timmis	432,657	July 22	2520	647	52	510
Railway-trains. Electric signaling apparatus for preventing collisions between	T. Perls	435,516	Sept. 2	202	55, 56	52	1414
Railway-trains. Means for controlling the movements of	Q. J. Hoke	438,160	Oct. 14	751	{ 205 206	53	151
Railway-trains. Smoke-conductor for	L. N. Chisholm	432,862	July 22	2940	{ 727 728	52	573
Railway transfer-table	C. Hathaway	423,762	Mar. 18	2107	556	50	1551
Railway transit. Aerial	W. L. Hight	433,941	Aug. 12	746	{ 194 195	52	912
Railway trolley. Electric	W. S. Blauvelt	429,413	June 3	473	112	51	1561
Railway trolley. Electric	F. B. Rae	421,304	Feb. 11	1289	{ 332 333	50	817
Railway trolley. Electric	J. H. Wehrle	434,036	Aug. 12	873	230	52	936
Railway trolley. Electrical	D. A. Ainslie	436,571	Sept. 16	1864	491	52	1743
Railway-trolley guard. Electric	E. Thomson	425,640	Apr. 15	1849	494	51	376
Railway trolley. Overhead electric	F. B. Rae	423,391	Mar. 11	1554	408	50	1439
Railway trolley-switch. Electric	H. W. Marcy	438,894	Oct. 21	1894	503	53	372
Railway trolleys. Safety attachment for electric	F. C. Wheeler	425,720	Apr. 15	1967	523	51	400
Railway-truss	O. C. Smith	430,304	June 17	1874	461	51	1853
Railway. Underground	B. S. Henuing	432,615	July 22	2434	627	52	495
Railway-vehicle brake	W. P. Trimble	437,531	Sept. 30	3457	903	52	2066
Railway water-column	A. K. Mansfield	429,141	June 3	53	14	51	1482
Railway wires. Guard and stay for electric	C. J. Kilian	427,878	May 13	1296	328	51	1075
Railways. Alarm for use on cable	C. M. E. Wendnagel	433,667	Aug. 5	336	86	52	821
Railways, &c. Apparatus for clearing the rails of	G. Nobes and R. H. Jackson	442,995	Dec. 16	2197	565	53	1710
Railways. Automatic block-signal system for	W. E. Swin	421,842	Feb. 18	2062	544	50	970
Railways. Automatic cable-lifter for cable	J. C. H. Stut	424,832	Apr. 1	622	163	51	120
Railways. Automatic catch for inclined	R. L. P. Henne	425,226	Apr. 8	1221	324	51	247
Railways. Automatic switch for cable	H. Sawyer	429,869	June 10	1152	285	51	1703
Railways. Automatic switch for street	H. W. Libbey	419,052	Jan. 7	610	157	50	128
Railways. Automatic tension device for cable	J. C. H. Stut	424,833	Apr. 1	624	164	51	121
Railways. Auxiliary contact for electric	M. Wheless	441,213	Nov. 25	2565	663	53	1126
Railways. Block signaling system for	M. S. Conly	431,017	June 24	3000	737	51	2077
Railways. Building the car-tracks of	J. A. Holliday	438,687	Oct. 21	1546	417	53	307
Railways. Cable-shifting device for cable	A. Bryson, Jr., J. H. Pendleton, and L. Moss	440,001	Nov. 4	571	{ 150 151 152	53	719
Railways. Cable-tightener for cable	J. C. H. Stut	427,205	May 6	275	71	51	865
Railways. Cable-winding mechanism for cable	J. Walker	441,457	Nov. 25	2977	766	53	1202
Railways. Chair-sleeper for	W. G. Olpherts	433,875	Aug. 5	651	{ 168 169	52	884
Railways. Combined conduit and overhead system for electric	C. J. Van Depoele	424,380	Mar. 25	3049	{ 810 811	50	1740
Railways. Combined fish-plate and chair for	G. A. Weber	427,452	May 6	647	162	51	939
Railways. Conduit for electric street	J. W. Reno	420,101	Jan. 28	2192	579	50	463
Railways. Conduit system for electric	N. Seibert	432,571	July 22	2381	{ 613 614	52	484
Railways. Construction of	W. H. Pope	435,768	Sept. 2	509	159	52	1490
Railways. Construction of road-beds of street	G. C. Watriss and L. Heynemanu	442,652	Dec. 16	1593	412	53	1591
Railways. Contact device and switch for electric	C. J. Van Depoele	424,910	Apr. 1	736	{ 196 197	51	142
Railways. Contact device for electric	E. M. Bentley	427,726	May 13	1054	284	51	1028
Railways. Contact device for electric	F. O. Blackwell	425,488	Apr. 15	1613	430	51	331
Railways. Contact device for electric	F. J. Sprague	433,425	July 29	3694	{ 953 954	52	747
Railways. Contact for overhead electric	A. H. Chadbourne	438,404	Oct. 14	1122	303	53	230
Railways. Contact-trolley for electric	N. C. Bassett	441,122	Nov. 25	2410	{ 623 624	53	1097
Railways. Crossing for elevated cable	E. R. Guerra	425,220	Apr. 8	1213	322	51	240
Railways. Device for leveling	W. Rose	420,245	Jan. 28	2431	647	50	507
Railways. Electric apparatus for	J. B. Odell	433,210	July 29	3396	878	52	686
Railways. Electric conductor for street	L. M. Perkins	435,447	Sept. 2	103	29	52	1395
Railways. Electric danger and safety signal for	E. M. Burt	436,168	Sept. 9	1227	{ 319 320	52	1614
Railways. Electric device for preventing accidents on	G. Thew	435,259	Aug. 26	2805	743	52	1328
Railways. Electric lighting and heating apparatus for electric	M. W. Dewey	436,125	Sept. 9	1158	302	52	1602
Railways. Electric signal for	F. C. Schroen	436,154	Sept. 9	1263	{ 314 315	52	1609
Railways. Electric signal for	G. A. Tower	436,025	Sept. 9	993	260	52	1572
Railways. Electric signal for cable	S. J. Jacobs	435,097	Aug. 26	2574	{ 679 680	52	1283
Railways. Electric signaling system and apparatus for	C. H. Koyl and J. W. Lattig	427,429	May 6	613	153	51	933
Railways. Electric signaling system and apparatus for	C. H. Koyl and J. W. Lattig	427,430	May 6	615	154	51	933
Railways. Electric train-signaling apparatus for	E. J. J. de Baillache	427,953	May 13	1416	358	51	1097
Railways. Electro-magnetic switch for electric	M. Wheless	441,218	Nov. 25	2569	665	53	1127
Railways. Fog signaling apparatus for	I. F. Taylor	436,880	Sept. 23	2430	{ 633 631	52	1860
Railways. Gear for driving the winding-drums of cable	G. Leverich	430,660	June 24	2435	{ 593 594	51	1969
Railways. Gripper for traction-rope	G. Whittaker	434,140	Aug. 12	1052	272	52	971
Railways. Guard-wire protector and lightning-arrester for electric	E. Thomson	428,653	May 27	2162	627	51	1328
Railways. Horizontal deflecting-pulley for cable	G. Leverich	428,216	May 20	1791	451	51	1140

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Railways. Lighting	W. D. Sheldon	441,034	Nov. 18	2245	581	53	1056
Railways. Means for annealing the wire cables of cable	H. W. Willson	436,552	Sept. 16	1840	484	52	1739
Railways. Means for preventing longitudinal movement of rails of	F. G. Johnson	437,301	Sept. 30	3085	808	52	1992
Railways. Mechanism for depressing cables at crossings of cable	F. G. Stallman	420,550	Feb. 4	170	42	50	597
Railways. Metal cross-tie for	J. P. Taylor	428,869	May 27	2794	710	51	1393
Railways. Metallic tie and rail for	J. A. Green	434,542	Aug. 19	1679	438	52	1104
Railways. Moving contact for electric	A. W. Adams	442,002	Dec. 2	586	159	53	1377
Railways. Operating electric	R. M. Hunter	424,607	Apr. 1	262	70	51	53
Railways. Overhead conductor for electric	R. D. Cushing	440,789	Nov. 18	1854	478	53	961
Railways. Overhead trolley for electric	F. B. Rae	421,305	Feb. 11	1290	333	50	817
Railways. Pneumatic signal and gate for	A. J. Griffin	433,860	Aug. 5	625	163	52	879
Railways. Portable cross-over for	V. Angerer and C. A. Psilander	432,292	July 15	1963	502	52	396
Railways. Power plant for cable	G. Leverich	436,423	Sept. 16	1635	430	52	1701
Railways. Protecting road-beds of	E. Bell	432,969	July 29	3021	776	52	612
Railways. Removable roller-support for cable	J. Walker	441,456	Nov. 25	2976	766	53	1201
Railways. Slot-switch for conduit systems of	F. O. Blackwell	442,475	Dec. 9	1313	339	53	1525
Railways. Staff apparatus for controlling traffic on single line	F. W. Webb and A. M. Thompson	429,074	May 27	3104	801	51	1452
Railways. Step-box frame for cable	J. Walker	441,455	Nov. 25	2974	765	53	1201
Railways. Suspended switch and traveling contact for electric	C. J. Van Depoele	424,695	Apr. 1	398	105	51	78
Railways. Switch for the moving contacts of electric	J. W. Murray	437,613	Sept. 30	3573	933	52	2089
Railways. Switch-movement for street	H. L. Nodder	426,306	Apr. 23	2846	750	51	581
Railways. System of distribution for electric	E. E. Ries	431,422	July 1	691	173	52	139
Railways. Tension-car indicator for cable	G. Leverich	431,065	July 1	53	12, 13	52	12
Railways. Terminal facility for suburban	C. E. Emery	428,385	May 20	2076	522	51	1237
Railways. Tie-plate for	H. Holgate	436,709	Sept. 16	2080	547	52	1786
Railways. Traction and brake device for electric	R. M. Hunter	443,661	Dec. 30	3314	854	53	1940
Railways. Traction and brake device for electric	R. M. Hunter	443,677	Dec. 30	3347	861	53	1947
Railways. Traction mechanism for	E. Samuel	421,840	Feb. 18	2060	543	50	970
Railways. Trolley-arm for electric	E. Thomson	410,665	Nov. 18	1640	423	53	942
Railways. Trolley-arm support for electric	F. B. Rae	428,136	May 20	2165	427	51	1160
Railways. Trolley-covering for electric	H. Jones	441,764	Dec. 2	616	57	53	1306
Railways. Trolley for electric	C. A. Lieb	440,814	Nov. 18	1895	487	53	929
Railways. Trolley for underground electric	S. E. Wheatley	441,220	Nov. 25	2571	666	53	1128
Railways. Trolley or collector wheel for electric	S. H. Short	427,624	May 13	906	227	51	1000
Railways. Trolley or plow for electric	E. Verstraete	440,781	Nov. 18	1842	474	53	979
Railways. Trolley-switch for electric	J. Jones	443,081	Dec. 16	2337	596	53	1736
Railways. Trolley system for electric	H. P. Brown	428,072	May 20	1586	402	51	1140
Railways. Upward-pressure contact device for electric	C. J. Van Depoele	437,534	Sept. 30	3466	904	52	2068
Railways. Upward-pressure contact for electric	J. A. Duggan	435,559	Sept. 2	275	76	52	1428
Railways with vertical tracks. Switch for	C. Ziperowsky	421,848	Feb. 18	2077	546	50	973
Rain-water conductor	J. A. W. Iusti	421,281	Feb. 11	1262	336	50	812
Rain-water conductors. Joint for	J. W. Abrahams	428,262	May 20	1875	471	51	1196
Raisin-grader	J. Porteous	421,881	Feb. 18	2123	557	50	982
Raisin-seeder	A. C. Moncrief	425,142	Apr. 8	1096	291	51	220
Rake:							
See Hay-rake.	Lawn-rake.						
Horse-rake.							
Ram and torpedo-exploder. Submarine	W. K. Cavett	420,406	Jan. 28	2659	705	50	550
Ram. Hydraulic	F. B. Hanson	422,936	Mar. 11	873	228	50	1310
Ramie and other fibrous materials. Machine for disintegrating	E. Marc	440,775	Nov. 18	1830	471	53	977
Rammer. Pavement	G. Donaldson	442,110	Dec. 9	761	204	53	1419
Rand-trimmer	J. W. Plummer	419,352	Jan. 14	1067	282	50	226
Range	E. W. Anthony	435,006	Aug. 26	2440	646	52	1257
Range	D. H. Erdman	428,245	May 20	1844	463	51	1191
Range	E. Lofts	422,426	Mar. 4	91	24	50	1154
Range	W. Miller	435,703	Sept. 2	508	134	52	1473
Range	J. L. Wells	442,563	Dec. 9	1462	375	53	1556
Range-boiler	G. Bejsovec	430,823	June 24	2709	663	51	2022
Range-boiler	V. Wilhelmi	434,075	Aug. 12	941	247	52	950
Range. Cooking	T. Rogers	429,546	June 3	673	164	51	1601
Range-door	W. W. Goodwin	432,267	July 15	1924	492	52	387
Range-finder	S. Pratt	434,950	Aug. 26	2361	625	52	1243
Range-finders. Indicator for	J. Rapieff	441,975	Dec. 2	537	143	53	1368
Range. Heating and ventilating	H. Howe	419,125	Jan. 7	708	187	50	149
Range of distant objects. Finding	J. Rapieff	441,974	Dec. 2	535	143	53	1367
Range or stove door	J. J. Graves	426,442	Apr. 29	3068	504	51	633
Range. Stove	J. H. Taylor	424,628	Apr. 1	293	76	51	59
Ranges or stoves. Flue structure of cooking	W. H. Pfahler	430,085	June 10	1503	373	51	1772
Ranges. Water-heating attachment for	H. C. Steinhoff	440,970	Nov. 18	1251	557	53	1037
Rapid-transit apparatus	J. S. Parke	443,972	Dec. 30	3804	970	53	2034
Rasp-making machine	C. Logan	428,011	May 13	1498	380	51	1114
Ratchet-brace	J. Herm	429,525	June 3	636	156	51	1593
Ratchet-drill	T. Bass	429,714	June 10	925	220	51	1660
Ratchet mechanism	E. W. McGuire	423,266	Mar. 11	1372	356	50	1404
Rattan construction	J. Ellis	429,264	June 3	226	57	51	1516
Rattan furniture	E. L. Taft	437,462	Sept. 30	3356	878	52	2046
Rattan structure. Re-enforced	E. Depersenaire	419,839	Jan. 21	1785	472	50	373

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et	Vol.	Page.
Razor	J. E. Fuller	436,056	Sept. 9	1049	272	52	1583
Razor	C. F. Laufer	443,773	Dec. 30	2497	897	53	1975
Razor-cleaning device	W. Otto	419,547	Jan. 14	1337	357	50	221
Razor-depository and call-bell. Combined	W. Kern	420,345	Jan. 28	2571	682	50	533
Razor-guard	T. Crookes	429,605	June 10	765	184	51	1629
Razor or other strops. Composition for	H. A. Parker	426,310	Apr. 22	2851	—	51	582
Razor. Safety	B. vom Eigen	424,601	Apr. 1	251	67	51	51
Razor. Safety	H. B. Leach	434,187	Aug. 12	1122	291	52	986
Razor-strop	C. L. Holland	431,696	July 8	1052	263	52	214
Razor-strop	G. Spiess	438,649	Oct. 21	1477	399	53	296
Razor-strop	J. R. Torrey	429,293	June 3	281	67	51	1524
Razor-strop case	J. H. Loback	423,784	Mar. 18	2143	565	50	1558
Re-pressing and molding machine	W. L. Gregg	419,043	Jan. 7	593	152	50	125
Reach-socket	F. E. Wilcox	439,827	Nov. 4	293	74	53	665
Reading-glass	O. Huff	439,514	Oct. 28	2866	762	53	513
Reamer	W. R. Welke	443,690	Dec. 30	3368	865	53	1950
Reamer. Expanding	G. Amborn, Jr.	430,105	June 17	1542	383	51	1789
Reamer-guide mechanism	W. J. Warner and I. Grace	434,035	Aug. 12	872	230	52	936
Reaming and tapping tool. Portable	F. Schoff	437,459	Sept. 30	3352	877	52	2045
Reaper and mower knife sharpener	J. Ross	440,119	Nov. 4	737	195	53	753
Reaper mechanism	W. Lottridge	434,048	Aug. 12	889	234	52	939
Reaper. Mowing and harvesting	C. Marick	420,458	Feb. 4	58	12	50	575
Reapers and mowers. Machine for sharpening the sickles of harvest	J. W. Green	426,122	Apr. 22	2583	679	51	526
Receiving payment and delivering value in exchange therefor. Apparatus for	J. Owen	428,514	May 20	2246	568 569 570	51	1268
Reciprocating members. Means for holding in place machines having	J. T. Hawkins	429,907	June 10	1213	300	51	1715
Reclining and folding chair	E. Smith	438,570	Oct. 14	1355	367	53	267
Reclining-chair	J. S. Emmert	421,353	Feb. 11	1365	354	50	831
Reclining-chair	E. N. Gillilan and J. S. Emmert	421,356	Feb. 11	1369	355	50	831
Reclining-chair	L. Goetel	425,778	Apr. 15	2046	545	51	416
Reclining-chair	G. E. Lord	435,938	Sept. 9	871	228	52	1549
Reclining-chair	F. M. McGrew	426,948	Apr. 29	3805	994 995	51	776
Reclining-chair	W. F. Mills	434,193	Aug. 12	1127	293	52	987
Record-sheet	J. J. Barnard	423,657	Mar. 18	1964	577	50	1525
Record-sheet	S. A. Smith	437,256	Sept. 30	3015	790	52	1979
Recorder:							
See Cash-recorder. Printing-recorder.							
Cash-drawer re-corder. Railway mileage-recorder.							
Order. Time-recorder.							
Passenger-recorder. Vote-recorder.							
Phonograph-recorder.							
Recording-instrument. Electrical	F. B. Wood	420,850	Feb. 4	618	159	50	680
Recording-machine	H. G. O'Neill	435,318	Aug. 26	2907	770 771 772	52	1345
Recording machine. Check	C. Zallnd	432,961	July 22	3003	771 772	52	602
Recording measurements of time, space, or quantity. Apparatus for	E. M. Hamilton	424,291	Mar. 25	2885	769	50	1709
Recording measurements of time, space, or quantity. Apparatus for	E. M. Hamilton	424,292	Mar. 25	2886	770	50	1709
Recording numbers. Device for	W. S. Burroughs	420,618	Feb. 4	273	72	50	617
Reduplicating apparatus	W. G. Fuerth	440,756	Nov. 18	1795	464	53	971
Reefing-gear for sailing-vessels	T. O. Mahoney	441,680	Dec. 2	75	20	53	1276
Reel:							
See Awning-rope reel. Paper-reel.							
Bolting-reel. Roll-reel.							
Centrifugal reel. Rope-reel.							
Clothes-line reel. Sand-reel.							
Fence-reel. Scalping-reel.							
Fishing-reel. Tape-reel.							
Harvester-reel. Wire-reel.							
Hose-reel. Yarn-reel.							
Reel	D. Campbell	426,434	Apr. 29	3057	801	51	631
Reel and take-off apparatus	C. C. Clifford	439,114	Oct. 28	2230	599	53	445
Reel for offset webs	J. C. Fowler and E. A. Henkle	432,233	July 15	1872	482	52	379
Reel-guide and reel	P. L. Day	423,674	Mar. 18	1986	523 524	50	1529
Reel-holder	H. A. Buchholz	427,831	May 13	1220	308	51	1060
Reels. Automatic stop-motion for	O. Carpenter	420,770	Feb. 4	474	125	50	656
Reflecting device. Train or boat	G. W. Morris	440,493	Nov. 11	1367	353	53	881
Reflector	T. Houghton	427,996	May 13	1473	374	51	1109
Reflector and holder. Adjustable	W. F. Wilcox	423,100	Mar. 11	1126	293	50	1357
Reflector for incandescent lamps	F. Holman	422,592	Mar. 4	334	83	50	1200
Reflectors. Manufacturing double-surface glass	E. A. Gillinder	425,939	Apr. 15	2295	607	51	461
Refrigerating agents. Circulating liquefied	H. J. Krebs	436,003	Sept. 9	964	252	52	1567
Refrigerating and freezing apparatus	L. Perkins	439,181	Oct. 28	2328	624 625 626	53	462
Refrigerating and heating pipes. Disk for	P. Weisel	440,671	Nov. 18	1649	426	53	944
Refrigerating apparatus	A. J. Chase	433,272	July 29	3485	900	52	705
Refrigerating apparatus	N. W. Condict, Jr.	421,673	Feb. 18	1834	479	50	929
Refrigerating apparatus	W. E. Facer	442,026	Dec. 2	622	167 168	53	1384
Refrigerating apparatus	P. J. Macdonald	429,198	June 3	139	34	51	1497
Refrigerating apparatus for railway-cars. Electric	M. W. Dewey	426,761	Apr. 29	3579	935	51	732
Refrigerating apparatus. Gas-compressor for	N. W. Wheeler	441,936	Dec. 2	570	154	53	1375
Refrigerating attachment for beer-barrels	A. B. Kokernot	419,203	Jan. 14	837	220	50	180
Refrigerating attachment for beer-barrels	A. B. Kokernot	433,867	Aug. 5	637	165	52	882

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Refrigerating-machine	J. L. Clark, C. H. Culver, and J. H. Stratton	420,188	Jan. 28	2337	618	50	490
Refrigerating or freezing system	J. Erny, Z. T. Subers, and W. L. Hoos	441,544	Nov. 25	3101	796	53	1226
Refrigerating purposes. System for distributing cooling liquids for	E. Armstrong	431,502	July 1	726	181	52	145
Refrigerating-tank for transporting milk and other dairy products.	H. Pearson	425,578	Apr. 15	1739	467	51	355
Refrigeration. Electric	M. W. Dewey	420,641	Feb. 4	306	81	50	623
Refrigeration. Machine for artificial	N. W. Wheeler	441,995	Dec. 2	567	153 154	53	1374
Refrigerative apparatus. Absorber for	P. R. Gray, Jr.	437,192	Sept. 30	2918	760	52	1960
Refrigerator	L. Bredeen and A. Morrison	432,722	July 22	2625	671	52	531
Refrigerator	J. Dixon	438,348	Oct. 14	1040	283	53	205
Refrigerator	W. L. Everit, Jr.	423,677	Mar. 18	1990	524	50	1530
Refrigerator	J. Hammerl	430,944	June 24	2889	710	51	2056
Refrigerator	J. F. Hanrahan	432,134	July 15	1730	444 445	52	352
Refrigerator	F. M. Keith	432,803	July 22	2766	708	52	558
Refrigerator	E. P. Koontz	430,963	June 24	2919	716	51	2061
Refrigerator	N. A. Laman	435,230	Aug. 26	2760	729	52	1319
Refrigerator	G. W. Lord and J. S. Gillett	422,134	Feb. 25	2486	657	50	1059
Refrigerator	A. W. Paris	423,946	Mar. 25	2393	636	50	1614
Refrigerator	E. Poole and J. A. Welty	432,711	July 22	2609	667 668	52	528
Refrigerator	J. Schneider and J. Miller	422,637	Mar. 4	412	102 103	50	1215
Refrigerator	L. Scofield	418,819	Jan. 7	239	59	50	52
Refrigerator	C. W. Trotter	433,606	Aug. 5	246	66	52	804
Refrigerator	S. di Vecchio and J. Mignola	436,278	Sept. 9	1388	361	52	1647
Refrigerator	T. H. Weirich	424,744	Apr. 1	476	130	51	94
Refrigerator	W. E. White	424,392	Mar. 25	3072	815 816	50	1745
Refrigerator	H. Wiese and J. Braack	433,709	Aug. 5	395	101	52	832
Refrigerator	G. S. Worthing and J. Eneix	423,403	Mar. 11	1575	413	50	1443
Refrigerator and water-filter combined	G. Fleming	421,689	Feb. 18	1851	484	50	932
Refrigerator attachment for beer-barrels	A. B. Kokernot	419,204	Jan. 14	838	221	50	180
Refrigerator-box	F. Beinbauer	421,156	Feb. 11	1091	280	50	781
Refrigerator-car	B. F. Adams	433,759	Aug. 5	475	123	52	848
Refrigerator-car	W. Deuchting	425,599	Apr. 15	1775	475	51	362
Refrigerator-car	M. A. Garrett	437,107	Sept. 23	2752	719	52	1924
Refrigerator-car	W. T. Hildrup, Jr.	432,828	July 22	2797	715	52	564
Refrigerator-car	H. F. Hogan	439,509	Oct. 28	2860	760 761	53	562
Refrigerator-car	I. J. and J. T. Hope	434,388	Aug. 12	1425	374	52	1046
Refrigerator-car	D. W. Riordan	436,545	Sept. 16	1830	482	52	1737
Refrigerator-car	J. Whittaker	423,889	Mar. 18	2297	606	50	1528
Refrigerator-car	J. H. Wickes	431,221	July 1	291	72	52	59
Refrigerator-car drain	A. A. Wood	430,599	June 17	2314	569	51	1938
Refrigerator-chambers. Ventilating-outlet for	L. Schladter	425,831	Apr. 15	2125	567	51	431
Refrigerator-crate	E. S. Thomas	435,953	Sept. 9	892	234	52	1552
Refrigerator-door fastener	A. W. Black	424,847	Apr. 1	641	169	51	124
Refrigerator. Hydraulic	J. J. and F. J. Geraghty	425,541	Apr. 15	1688	451	51	346
Refrigerator ice-rack	C. H. Leonard	431,903	July 8	1364	315	52	275
Refrigerator. Packing	J. Barker and L. L. Frierson	431,865	July 8	1318	330	52	266
Refrigerator-pipe attachment	F. W. Wolf	424,748	Apr. 1	483	132	51	95
Refrigerator-trap	C. H. Leonard	434,283	Aug. 12	1276	331	52	1015
Refrigerator-vehicle	C. A. Knight	439,958	Nov. 4	499	130 131	53	705
Refrigerator-wagon	C. G. Schmidt	430,150	June 17	1609	398	51	1891
Refrigerator-wall of wood pulp	C. D. Woolworth	429,330	June 10	1095	270	51	1693
Refrigerator. Window	S. J. Brown	433,322	July 29	3557	918	52	719
Refrigerators. Removable tank for	O. F. Glidden	437,299	Sept. 30	3079	806	52	1991
Refuse-burner	J. Lynch	429,693	June 10	890	216	51	1654
Refuse-burner, water-heater, and steam generator	H. Auchu	437,009	Sept. 23	2614	683	52	1895
Refuse-can. Underground	J. Zapp	419,905	Jan. 21	1887	496	50	396
Refuse-treating apparatus	V. D. Anderson	430,795	June 24	2660	653	51	2013
Regenerative furnace	S. R. Smythe	433,603	Aug. 5	241	63	52	803
Regenerative furnace	S. R. Smythe	433,604	Aug. 5	243	64, 65	52	803
Regenerator-furnace	J. A. Herrick	424,480	Apr. 1	55	16, 17	51	13
Register:							
See Autographic register.	Harvesting-machine register.						
Car-register.	Hot-air register.						
Cash-register.	Musical-scale register.						
Coin-receptacle register.	Passenger-register.						
Counting-register.	Pool-register.						
Fare-register.	Telephone-call register.						
Gas-meter register.	Time-register.						
Register	W. T. Barker	431,178	July 1	218	55	52	45
Register and file for office use	R. M. Rankin	431,621	July 8	903	226	52	188
Register for engines or machines	R. Ruhman	432,441	July 15	2169	559	52	434
Register for gas and other meters	A. T. Danks	433,331	July 29	3567	920	52	721
Registering and recording apparatus	E. Baldwin	427,215	May 6	291	75	51	869
Registering apparatus for key-operated machines	J. F. Pfeffer and E. Spencer	423,272	Mar. 11	1389	362 363	50	1407
Registering apparatus for watering-carts	S. A. Charles	433,071	July 29	3184	819	52	644
Registering machine. Check	C. Zallud	432,686	July 22	2570	658 659 660	52	520
Registering machine. Ticket	C. Zallud and I. Pforzheimer	432,685	July 22	2565	657 658	52	520

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Regulator:							
See Automatic regulator.	Electric-motor regulator.						
Blow-pipe regulator.	Electro-thermal current-regulator.						
Boiler water-regulator.	Feed-regulator.						
Brake-regulator.	Feed-water regulator.						
Current-regulator.	Fire-alarm regulator.						
Current-motor regulator.	Gas-regulator.						
Damper-regulator.	Gas-pressure regulator.						
Draft-regulator.	Heat-regulator.						
Dumb-waiter regulator.	Motor-regulator.						
Dynamo-regulator.	Pressure-regulator.						
Dynamo and motor regulator.	Pump-regulator.						
Electric regulator.	Pumping-engine regulator.						
Electric-current regulator.	Scale-regulator.						
Electric-current generator regulator.	Temperature-regulator.						
Electric-machine regulator.	Thermo-electric resistance-regulator.						
	Touch-regulator.						
	Valve-regulator.						
	Watch-regulator.						
	Water-level regulator.						
	Weigher-regulator.						
	Windmill-regulator.						
Regulator.	N. C. Locke	443,051	Dec. 16	2279	{ 581 585 }	53	1725
Regulator or rheostat	F. Bain	427,032	May 6	2	1	51	811
Rein-button	J. B. Frost	442,176	Dec. 9	860	230	53	1439
Rein. Driving	M. S. Dickinson	422,124	Feb. 25	2477	654	50	1057
Rein grip	E. L. Smith	434,362	Aug. 12	1389	365	52	1038
Rein-guard	H. C. Barlow	431,314	July 1	426	106	52	88
Rein-guard for horses	A. V. Callahan	426,913	Apr. 29	3761	982	51	768
Rein-guard for vehicle-thills	A. E. Choquette	441,134	Nov. 25	2424	628	53	1100
Rein-guide	J. C. Havens	437,197	Sept. 30	2926	762	52	1962
Rein-holder	J. W. Stoakes and T. F. Frith	428,868	May 27	2793	710	51	1392
Rein-holder	S. G. Bond	437,560	Sept. 30	3504	914	52	2075
Rein-holder	L. P. Cook	422,294	Feb. 25	2742	723	50	1106
Rein-holder	D. L. Croft	428,666	May 27	2481	631	51	1331
Rein-holder	W. A. Havens	438,373	Oct. 14	1072	292	53	211
Rein-holder	A. Jeffers	435,501	Sept. 2	184	51	52	1410
Rein-holder	J. W. Lane	419,687	Jan. 21	1556	415	50	329
Rein-holder	J. W. Lane	419,688	Jan. 21	1557	416	50	330
Rein-holder	L. Larson	436,793	Sept. 23	2243	591	52	1825
Rein-holder	W. E. Ross	427,617	May 13	891	224	51	996
Rein-holder and indicating plate	J. Haish	429,620	June 10	782	190	51	1633
Rein-holder for preventing runaways	W. E. Ross	427,616	May 13	889	224	51	996
Rein. Safety	W. H. Serjeant and A. Northcott	426,868	Apr. 29	3705	967	51	757
Rein-slide. Cam	D. Mosman	428,625	May 27	2419	615	51	1321
Rein-support	J. P. Thwaite	421,210	Feb. 11	1168	300	50	794
Rein-support	P. C. Welsh	441,208	Nov. 25	2558	661	53	1125
Rein-supporter	G. J. Lawrence	442,381	Dec. 9	1168	304	53	1496
Rein-supporter	H. L. de Zeng and C. Rees	435,601	Sept. 2	536	93, 94	52	1440
Relay	J. G. Schreuder	442,338	Dec. 9	1105	289	53	1483
Relay. Quadruplex	F. W. Jones	424,209	Mar. 25	2769	738	50	1656
Rendering apparatus	S. Stephens	422,260	Feb. 25	2684	708	50	1096
Rendering-tanks. Apparatus for consuming the gaseous products of	N. A. Foster	425,314	Apr. 8	1333	361	51	271
Rerolling old rails. Rolls for	A. Reese	438,642	Oct. 21	1468	396	53	294
Resawing-machine	G. W. Mason	442,528	Dec. 9	1404	359	53	1543
Reservoirs. Water way and gate for	T. B. Craycroft	436,170	Sept. 9	1229	320	52	1614
Resilient spiral washer	H. A. Harvey	440,631	Nov. 18	1588	409	53	932
Resins. Hardening	A. Kissel	441,366	Nov. 25	2816		53	1170
Resistance. Artificial	E. M. Bentley	437,011	Sept. 23	2616	383	52	1896
Respiration. Device for inducing full	C. C. Davis	443,204	Dec. 23	2591	666	53	1794
Respirator	K. Illing	443,191	Dec. 23	2563	658	53	1787
Respirator for firemen	G. H. Hurd	428,611	May 27	2397	610	51	1316
Respirator. Head-protecting	J. C. Jensen	437,995	Oct. 7	495	140	53	94
Rest. Adjustable supporting	L. Ewald	443,847	Dec. 30	3610	929	53	1999
Retort-charging apparatus	F. Bredel	440,617	Nov. 18	1568	403	53	927
Retorts. Apparatus for charging	J. H. du Vivier	425,538	Apr. 15	1681	449	51	345
Return-hall	W. E. P. French	439,396	Oct. 28	2695	717	53	530
Return-hall	H. W. Libbey	443,859	Dec. 30	3625	934	53	2002
Reversible engine	J. Moffet	440,491	Nov. 11	1364	{ 351 352 }	53	880
Reversing-key	E. A. Colby	442,800	Dec. 16	1864	481	53	1643
Reversing mechanism	R. Scheidler	421,523	Feb. 18	1614	416	50	886
Reversing mechanism	W. S. Whitman	431,636	July 8	931	234	52	194
Revolver	J. Carter and W. J. Whiting	432,368	July 15	2065	531	52	413
Revolver	J. Carter and W. J. Whiting	432,369	July 15	2067	532	52	414
Revolvers. Cylinder-catch for	H. M. Caldwell	419,412	Jan. 14	1157	307	50	244
Revolving and tilting chair	J. Gilson	430,314	June 17	1890	464	51	1857
Revolving chair	C. C. Trapp	424,083	Mar. 25	2509	693	50	1633
Revolving chair	C. C. Trapp	434,743	Aug. 19	2007	524	52	1167
Revolving chair and stool	J. W. A. Franklin	437,188	Sept. 30	2913	759	52	1959
Revolving-hook machine	A. Miller	419,863	Jan. 21	1821	481	50	380
Revolving table	G. H. Carlson	430,063	June 10	1467	364	51	1764
Rheostat	T. K. Ames	441,918	Dec. 2	445	119	53	1352
Rheostat	J. Doyle	441,293	Nov. 25	2709	{ 702 703 }	53	1150
Rheostat	E. R. Gilbert	439,939	Nov. 4	470	123	53	700
Rheostat	J. H. Gunning	437,111	Sept. 23	2759	721	52	1925
Rheostat	T. J. Parrish	432,894	July 22	2887	739	52	582

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Rheostat.....	W. Thomson.....	420,894	Feb. 4	699	{ 179 180 }	50	695
Rheostat.....	F. Thone.....	435,985	Sept. 9	936	246	52	1561
Rheostat.....	J. C. Vetter.....	438,037	Oct. 7	566	155	53	107
Rheostat or rheotome.....	M. Deprez.....	437,412	Sept. 30	3275	854	52	2028
Rheostat-switch.....	J. F. McLaughlin.....	433,359	July 29	3600	928	52	728
Rhubarb chips. Utilizing.....	A. Bartholf.....	443,249	Dec. 23	2659	551	53	1806
Ribbon-display case.....	E. J. Montigny.....	435,974	Sept. 9	922	243	52	1558
Rice huller and polisher.....	W. S. Mallard.....	425,683	Apr. 15	1913	510	51	389
Rice hulling, cleaning, and polishing machine.....	E. C. Engelberg.....	424,602	Apr. 1	253	67, 68	51	52
Rice-machine.....	S. A. Pickett.....	426,738	Apr. 29	3518	919	51	720
Rice or grain pounder.....	C. Hoelzel.....	420,383	Jan. 28	2627	697	50	543
Ridge-bar-forming machine.....	G. Nauman.....	421,961	Feb. 25	2235	588	50	1013
Riding-habit.....	J. Ulrich.....	443,587	Dec. 30	3203	{ 823 824 }	53	1920
Rifle and shotgun. Combined.....	C. C. Brooks.....	441,389	Nov. 25	2854	{ 736 737 }	53	1178
Rifle fore sight.....	J. Cochran and J. R. Bond.....	428,458	May 20	2174	547	51	1254
Rigging of vessels.....	C. M. Hayden.....	438,076	Oct. 7	628	171	53	120
Ring:							
See Curtain-ring. Packing-ring.							
Curtain-pole ring. Pole or curtain ring.							
Ear-ring. Spinning-ring.							
Finger-ring. Split ring.							
Metallic ring. Twister-ring.							
Ring.....	W. M. Kaas and P. Jeanne.....	424,211	Mar. 25	2772	739	50	1686
Ring.....	J. H. McIntire.....	418,812	Jan. 7	230	56	50	50
Ring and plug gages. Making.....	W. Lorenz.....	438,253	Oct. 14	288	241	53	176
Ring-gage.....	W. Durand.....	439,774	Nov. 4	216	57	53	650
Ring-gage.....	A. W. Engel.....	436,972	Sept. 23	2566	671	52	1886
Ring-gage.....	E. Wareham and W. F. Doll.....	434,453	Oct. 14	1193	321	53	234
Ring-mold.....	J. J. Sullivan.....	433,879	Aug. 5	654	170	52	885
Ring-stock. Roll for ornamenting.....	C. R. Smith.....	433,050	July 29	3155	811	52	639
Rings. Forming.....	J. B. Bowden and H. V. Bernhardt.....	432,365	July 15	2062	531	52	413
Riprap and jetty work. Wire.....	W. H. Harrelson.....	426,807	Apr. 29	3619	944	51	740
Rivers, &c. Apparatus for deepening channels of.....	J. M. B. Baker.....	432,716	Mar. 18	2045	539	50	1539
Rivet.....	M. Bray.....	421,659	Feb. 18	1815	475	50	925
Rivet.....	W. C. Bray.....	425,294	Apr. 8	1322	354	51	266
Rivet.....	W. C. Bray.....	428,824	May 27	2733	694	51	1379
Rivet.....	W. C. Bray.....	428,825	May 27	2734	694	51	1379
Rivet.....	S. V. Henckles.....	437,434	Sept. 30	3309	863	52	2035
Rivet.....	I. G. Platt.....	420,828	Feb. 4	584	150	50	675
Rivet.....	I. G. Platt.....	420,829	Feb. 4	584	150	50	675
Rivet.....	J. L. Thomson.....	432,498	July 15	2263	585	52	454
Rivet-forming machine.....	M. N. Bray.....	426,332	Sept. 16	1474	384	52	1672
Rivet. Hollow.....	I. F. Peck.....	422,824	Mar. 4	668	171	50	1265
Rivet-making machine.....	F. Danks.....	441,229	Nov. 25	2581	{ 668 669 }	53	1130
Rivet setting machine.....	M. N. Bray.....	420,264	Jan. 28	2461	653	50	512
Rivet-setting machine.....	M. N. Bray, E. M. Pope, and A. H. Taber.....	441,388	Nov. 25	2851	736	53	1178
Rivet-setting machine.....	W. C. Bray and G. Van Horne.....	429,334	June 3	356	84	51	1538
Rivet-setting machine.....	H. H. Cummings.....	427,557	May 13	804	202	51	981
Rivet-setting machine.....	H. H. Cummings.....	432,231	July 15	1866	{ 479 480 481 }	52	378
Rivet-setting machine.....	J. J. Unbehend.....	434,215	Aug. 12	1165	303	52	993
Rivet-setting machines. Receiver for.....	J. L. Thomson.....	434,214	Aug. 12	1163	303	52	993
Rivet-slotting machine.....	J. L. Thomson and J. J. Unbehend.....	434,894	Aug. 19	2244	{ 589 590 }	52	1214
Rivets. Die for upsetting flanges on.....	C. H. Brown.....	430,374	June 17	1981	489	51	1875
Rivets. Making.....	C. W. King.....	437,817	Oct. 7	223	67	53	44
Rivets. Making.....	J. L. Thomson.....	423,881	Mar. 18	2288	604	50	1587
Rivets. Making.....	J. J. Unbehend.....	432,499	July 15	2264	585	52	454
Rivets. Making.....	J. J. Unbehend.....	435,908	Sept. 2	828	219	52	1535
Rivets. Making pronged.....	W. C. Bray.....	428,826	May 27	2735	694	51	1380
Riveting.....	J. D. Stirkler.....	439,043	Oct. 21	2111	566	53	415
Riveting. Electric.....	M. W. Dewey.....	432,727	July 22	2633	673	52	533
Riveting-machine.....	R. A. Carl.....	424,668	Apr. 1	358	94	51	69
Riveting-machine.....	R. A. Carl.....	433,761	Aug. 5	478	124	52	848
Riveting-machine.....	A. G. Gallagher.....	435,624	Sept. 2	387	{ 104 105 }	52	1448
Riveting-machine.....	G. Pardy.....	434,677	Aug. 19	1913	499	52	1149
Riveting-machine.....	J. L. Saxe.....	437,249	Sept. 30	3002	{ 785 786 787 788 }	52	1977
Riveting-machine.....	W. Skaife.....	421,324	Feb. 11	1328	{ 343 344 }	50	824
Riveting-machine.....	J. J. Unbehend.....	434,745	Aug. 19	2010	525	52	1167
Riveting-machine.....	J. J. Unbehend.....	436,447	Sept. 16	1673	{ 440 441 442 }	52	1709
Riveting-machines. Mechanism for supporting and moving.....	W. B. Hughes.....	423,428	Mar. 18	1616	{ 424 425 271 }	50	1459
Road making and repairing machine.....	M. G. Bunnell.....	427,740	May 13	1079	{ 272 273 }	51	1034
Road-roller. Steam.....	P. Griffin.....	430,575	June 17	2275	559	51	1929
Roads. Construction of.....	E. A. Stare.....	443,059	Dec. 16	2288	587	53	1727
Roads. Rut-cutter for logging.....	L. G. Rose and D. S. Mooers.....	438,829	Oct. 21	1792	478	53	353
Roads. Track-cutter for logging.....	E. R. Week.....	428,658	May 27	2470	629	51	1329
Roadway.....	P. Griffin. (Reissue).....	11,088	June 17	2334	572	51	1942
Roadways, &c. Composition for.....	H. Benjamin.....	443,953	Dec. 30	3769	53	2028

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Roaster	G. E. Gary	434,440	Aug. 19	1527	399	52	1073
Roasting-furnace. Revolving	G. Duryee	430,929	June 24	2863	703	51	2052
Roasting-hearth attachment for operating stirrers	I. B. Hammond	428,094	May 20	1621	411	51	1147
Rock and earth drilling. Device for removing casing-tubes in	M. C. Bullock	434,860	Aug. 19	2172	569	52	1200
Rock and earth drilling machine	S. W. Douglass	443,750	Dec. 30	3462	887	53	1969
Rock-breaker	M. B. Dodge	419,246	Jan. 14	902	237	50	193
Rock-breaker	M. B. Dodge	419,247	Jan. 14	903	237	50	193
Rock-breaker	J. Spiers and E. H. Booth	419,294	Jan. 14	971	257	50	206
Rock-channeling machine	E. H. Kruger	435,973	Sept. 9	919	242	52	1558
Rock-drill	W. H. Adams	425,532	Apr. 15	1676	447	51	343
Rock-drill	J. L. Buckingham	436,558	Sept. 16	1846	486	52	1740
Rock-drill	U. Cummings	432,794	July 22	2750	704	52	554
Rock-drill	C. Franke	442,731	Dec. 16	1759	455	53	1621
Rock-drill	J. Frölich	435,139	Aug. 26	2635	698	52	1295
Rock-drill	J. C. Githens	421,490	Feb. 18	1563	404	50	876
Rock-drill	E. D. Hobart and M. Ahearn	439,275	Oct. 28	2496	668	53	493
Rock-drill	T. B. Kerr	430,292	June 17	1857	455	51	1849
Rock-drill	J. J. Martin and P. Cunningham	437,609	Sept. 30	3566	931	52	2087
Rock-drill	A. C. Rand	421,613	Feb. 18	1754	460	50	912
Rock-drill	W. S. Sharpneck	432,679	July 22	2558	655	52	518
Rock-drill	M. D. L. Windell	419,392	Jan. 14	1119	296	50	236
Rock-drill and instrument using revolving hammers	W. G. A. Bonwill	425,737	Apr. 15	1992	531	51	405
Rock-drill bits. Machine for making	S. C. Lewis	442,692	Dec. 16	1659	426	53	1604
Rock-drill. Hand	S. Ingersoll	431,144	July 1	162	41, 42	52	34
Rock-drills. Coupling for	A. Campbell	441,279	Nov. 25	2690	698	53	1147
Rock-drills. Cylinder-head for	G. J. Slining	437,051	Sept. 23	2670	698	52	1907
Rock-drills. Die for making	J. Cahill	426,710	Apr. 29	3469	908	51	711
Rock-drills. Elastic key for holding	G. M. Githens	426,640	Apr. 29	3361	881	51	690
Rock-drills. Tripod for	W. H. Adams	421,468	Feb. 18	1526	395	50	869
Rock, &c. Drilling	J. L. Buckingham	424,266	Mar. 25	2840	759	50	1700
Rock drilling and channeling machine	J. C. Githens	421,491	Feb. 18	1564	405	50	877
Rock-drilling machine	J. Irgens	422,130	Feb. 25	2482	656	50	1058
Rock-drilling machine	E. Moreau	440,745	Nov. 18	1771	456	53	967
Rock or coal drilling machine	C. B. Dawson	421,821	Feb. 18	2024	535	50	965
Rock or earth drill	M. C. Bullock	443,819	Dec. 30	3572	916	53	1991
Rockers. Safety attachment for platform	R. H. Krall	442,485	Dec. 9	1333	344	53	1530
Rockers. Spring-and-bracket connection for platform	G. J. Shults	425,149	Apr. 8	1105	294	51	222
Rocking and reclining chair or lounge	E. Mühl	426,601	Apr. 29	3298	865	51	679
Rocking-chair	C. L. Johnson	421,284	Feb. 11	1267	327	50	813
Rocking-chair	F. T. Kindahl and V. A. Hallqvist	424,114	Mar. 25	2643	704	50	1661
Rocking-chair. Spring	O. H. Ordway	426,053	Apr. 22	2477	655	51	505
Rocking-horse. Galloping	G. W. Wade	420,844	Feb. 4	611	157	50	679
Rod							
See Beading-machine							
rod. Flue-cleaner rod.							
Carbon-rod. Flue-cleaning rod.							
Connecting-rod. Gaging-rod.							
Eccentric-rod. Piston-rod.							
End-gate rod. Pump-rod.							
Fishing-rod. Stair-rod.							
Sucker-rod.							
Rod coupling or joint	H. Davidson and H. Hart	432,695	July 22	2591	663	52	524
Rod-mill	I. A. Kilmer	441,171	Nov. 25	2487	643	53	1113
Rod-mill	H. S. Smith, C. Pettigrew, and W. Garrett	440,376	Nov. 11	1148	295	53	839
Rod-mill	W. Swbank	443,304	Dec. 23	2755	706	53	1823
Rod-mill. Belgian	T. W. Fitch	435,813	Sept. 2	1671	176	52	1504
Rod-mill plant	I. A. Kilmer	440,863	Nov. 18	1976	509	53	1004
Rod-mills. Apparatus for driving	H. S. Smith and W. Garrett	423,326	Mar. 18	2198	580	50	1569
Rod or pipe enter	H. Diebel	443,431	Dec. 23	2944	758	53	1861
Rod-reel	C. E. Matteson	434,190	Aug. 12	1124	292	52	986
Rod-reel	C. E. Matteson	440,573	Nov. 11	1487	384	53	903
Rods, wire, wire rods, &c. Apparatus for heating continuous lengths of	H. Roberts	423,445	Mar. 18	1637	430	50	1463
Roll	W. S. Sims	421,625	Feb. 18	1772	463	50	915
Roll having removable journals	J. Kidder	441,169	Nov. 25	2485	642	53	1112
Roll-holder	W. H. Fuller	439,651	Nov. 4	42	12	53	615
Roll holding, severing, and printing apparatus	J. Nagel	421,749	Feb. 18	1931	508	50	948
Roll-pass	M. M. Suppes	436,960	Sept. 23	2546	666	52	1882
Rolls	S. P. Watt	437,540	Sept. 30	3475	907	52	2070
Rolls for ornamental forms. Making	W. B. Van Dyke	423,002	Mar. 11	975	257	50	1329
Rolls from hnsks, &c. Making	C. E. Getchell	419,327	Jan. 14	1025	271	50	217
Rolls. Scraper for cleaning the peripheries of	W. N. Cornell	438,143	Oct. 14	726	199	53	146
Roller							
See Barrel-roller. Hatch-roller.							
Cigar-bunch roller. Land-roller.							
Cotton-gin roller. Moistening-roller.							
Door-hanger roller. Pouncing-roller.							
Feed-roller. Road-roller.							
Feed-table roller. Shade-roller.							
Ground-roller. Wooden roller.							
Roller and drill. Combined	H. F. Jones	436,664	Sept. 16	2018	527	52	1773
Roller and harrow	F. B. Harvey	430,016	June 10	1384	344	51	1749
Roller and protector. Combination	E. M. Turner	430,902	June 24	2829	694	51	2045

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis'g.	Vol.	Page.
Roller, cultivator, and seeder. Combined	J. Rush	435,249	Aug. 26	2793	740	52	1325
Roller for listed corn	F. J. Clark	440,015	Nov. 4	594	157	53	724
Roller, harrow, and marker. Combined	J. W. Titus	418,828	Jan. 7	261	64	50	55
Roller-mill	F. Beall	420,507	Feb. 4	114	28	50	585
Roller-mill	F. H. Brewster	422,908	Mar. 11	829	215	50	1302
Roller-mill	H. A. Duc, Jr.	429,680	June 10	871	211 212	51	1649
Roller-mill	N. W. Holt	440,157	Nov. 11	805	209 210	53	777
Roller-mill	F. W. Howell	439,596	Oct. 28	2984	792 793	53	587
Roller-mill	L. E. Kruger	440,480	Nov. 11	1335	345	53	875
Roller-mill	C. F. Walters and P. Shellenback	421,996	Feb. 25	2276	599 600	50	1021
Roller-mill	C. F. Walters and P. Shellenback	434,028	Aug. 12	861	227	52	933
Roller-mill	J. L. Willford	420,026	Jan. 21	2069	545	50	431
Roller-mill feeder	L. Lash	440,920	Nov. 18	2071	535 536	53	1022
Roller-mills. Adjustable scraper for	J. Harvey	429,381	June 3	430	101	51	1553
Roller-mills. Feed-regulator for	D. Brennan, Jr.	442,766	Dec. 16	1811	469	53	1632
Rolling and polishing machine. Combined cold	W. G. Howell	424,985	Apr. 8	856	227	51	174
Rolling balls. Machine for	W. H. Wright	439,714	Nov. 4	129	35	53	633
Rolling car-wheel tires, &c. Apparatus for	N. Wasburn	437,270	Sept. 30	3038	796	52	1983
Rolling cylindrical forms of metal. Machine for	L. White	430,359	June 17	1964	482 483	51	1870
Rolling-machine for shaping and sizing rings	J. B. Bowden and H. V. Bernhardt	426,707	Apr. 29	3463	907	51	709
Rolling machine. Tire	W. P. Bettendorf	436,207	Sept. 9	1289	336	52	1626
Rolling machine. Tire	J. Kennedy	432,625	July 22	2451	632	52	498
Rolling metal	J. Guest	421,272	Feb. 11	1254	324	50	810
Rolling metal. Machine for	H. B. Sargent and B. C. Stevens	441,902	Dec. 2	423	114	53	1349
Rolling metal plates and bars. Machine for	G. Brisker	437,970	Oct. 7	456	128	53	86
Rolling metallic pipe. Machine for cold	T. J. Bray	440,130	Nov. 11	761	199 200	53	767
Rolling-mill	H. Aiken	421,039	Feb. 11	921	237 238 239	50	747
Rolling-mill	J. H. Bickley	431,179	July 1	219	55	52	45
Rolling-mill	F. H. Daniels	429,425	June 3	493	117	51	1566
Rolling-mill	F. H. Daniels	440,696	Nov. 18	1690	435 436	53	951
Rolling-mill	J. Hemphill and J. Fawell	431,261	July 1	342	85, 86	52	70
Rolling-mill	J. Hunter	437,893	Oct. 7	331	97	53	65
Rolling-mill	H. C. Kriete	420,498	Feb. 4	102	24, 25	50	583
Rolling-mill	A. J. Moxham	427,349	May 6	488	125	51	908
Rolling-mill	T. Reed and J. Rowley	420,100	Jan. 28	2189	578	50	463
Rolling-mill	P. H. Sack	431,623	July 8	906	227 228	52	188
Rolling-mill appliance	W. H. Maddock	439,078	Oct. 21	2168	582 583	53	427
Rolling-mill feed device	C. M. Schwab	431,626	July 8	913	229 230	52	189
Rolling-mill feed-table	T. J. Price	441,895	Dec. 2	416	111	53	1346
Rolling-mill for making seamless tubes	W. Heckert	429,623	June 10	786	191 192	51	1633
Rolling-mill gearing	G. W. Marble	433,416	July 29	3678	950	52	744
Rolling-mill plant	W. Garrett	419,008	Jan. 7	543	135 136	50	114
Rolling mill. Rod	F. H. Daniels	419,422	Jan. 14	1167	310	50	246
Rolling mill. Rod	I. A. Kihmer	430,998	June 24	2968	729	51	2071
Rolling mill. Rod	T. A. Meyenburg and W. Garrett	419,592	Jan. 14	1396	373 374	50	293
Rolling-mills. Feed-table for	H. Aiken	439,925	Nov. 4	448	116 117	53	696
Rolling mills. Screw-connection in metal	H. J. Harris	443,319	Dec. 23	2781	713	53	1829
Rolling-pin	W. C. Freeman	434,262	Aug. 12	1244	322	52	1008
Rolling-pin	H. Richardi	434,295	Aug. 12	1293	335	52	1019
Rolling plastic material. Apparatus for	S. Hallock	439,946	Nov. 4	483	126	53	703
Rolling screw-threads. Die for	C. D. Rogers	430,237	June 17	1734	431 432	51	1826
Rolling screw-threads. Machine for	H. K. Jones	419,777	Jan. 21	1680	446 447	50	353
Rolling seamless hollow bodies. Machine for	C. Telling	420,977	June 24	2938	721	51	2064
Rolling seamless tubes. Machine for	L. White	432,464	July 15	2215	572	52	445
Rolling seamless tubes. Mandrel for	C. Kellogg	424,213	Mar. 25	2774	739 740	50	1687
Rolling sheet metal	B. Lanth	431,748	July 8	1132	281 282	52	230
Rolling skelps for making pipe-couplings. Rolls for	T. J. Bray	442,606	Dec. 16	1534	396	53	1579
Rolling steel balls. Die for	W. H. Wright	439,712	Nov. 4	127	34	53	632
Rolling switch-points. Rolls for	I. D. Weaver	428,580	May 20	2347	595 596	51	1288
Rolling tubes. Cold	G. H. Everson	430,008	June 10	1371	340	51	1746
Rolling tubes. Machine for	C. Kellogg	439,878	Nov. 4	374	97, 98	53	680
Rolling wide bars or plates. Mill for	W. G. Howell	425,800	Apr. 15	2197	584	51	444
Roof	M. W. Powell	438,324	Oct. 14	1002	272	53	198
Roof	J. C. Zalke	438,973	Oct. 21	2013	537	53	396
Roof. Car or other	R. S. Merrill	431,474	July 1	678	169	52	136
Roof cleat. Metal	R. L. Dickelman	430,927	June 24	2861	703	51	2052
Roof-covering. Fire and water proof	J. G. Wolf	423,583	Mar. 18	1836		50	1499
Roof-cresting	C. B. Nelson	428,315	May 20	1957	491	51	1212
Roof-cresting. Sheet-metal	J. Hewitt	421,463	July 1	661	166	52	133
Roof for brick-yards, &c. Movable	F. B. Livingston	435,146	Aug. 26	2645	700	52	1297
Roof for drying-sheds	P. Goldrick	420,784	Feb. 4	498	130	50	660
Roof for drying-sheds	T. C. Hill	434,783	Aug. 19	2067	540	52	1179

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Roof for factory buildings. Shed-	L. Kick	428,494	May 20	2220	561	51	1263
Roof. Sheet-metal	W. C. Berger	435,960	Sept. 9	903	238	52	1555
Roof. Sheet-metal	E. A. Mallory	425,104	Apr. 8	1027	274	51	207
Roof structure. Tubular parabolic	F. Schmemann	432,771	July 22	2713	694	52	547
Roofs. Arch pipe-truss for	F. Schmemann	435,156	Aug. 26	2658	703	52	1299
Roofs. Implement for closing the seams of metal.	F. Kusel	431,814	July 8	1239	309	52	250
Roofs. Ridge and hip covering for	T. Toner and J. E. Carroll	420,707	Feb. 4	387	103	50	640
Roofs. Ridge-tile for	G. H. Babcock	430,370	June 17	1976	487	51	1873
Roofing	E. D. Bevirt	422,178	Feb. 25	2551	674	50	1071
Roofing	T. R. Carskadon	429,013	May 27	3010	772	51	1435
Roofing	J. L. Faulhaber	419,512	Jan. 14	1289	344	50	270
Roofing	E. Schumacher	442,920	Dec. 16	2081	535	53	1685
Roofing and isolating material	A. Siebel	441,036	Nov. 18	2247	582	53	1057
Roofing and sheathing tile	G. H. Babcock	430,363	June 17	1969	484	51	1871
Roofing and sheathing tile	G. H. Babcock	430,366	June 17	1971	485	51	1872
Roofing. Composite	D. Harger	419,120	Jan. 7	701	185	50	148
Roofing composition	M. W. Powell	423,699	Mar. 18	2026		50	1536
Roofing fabric	W. H. H. Childs	429,885	June 10	1181	223	51	1709
Roofing fabric	M. C. Kerbaugh	427,174	May 6	233	60	51	857
Roofing fabrics. Apparatus for making	H. Bornmann	427,147	May 6	192	50	51	849
Roofing fabrics. Method of and apparatus for making	H. Bornmann	427,146	May 6	190	49	51	849
Roofing. Gable-tile for	G. H. Babcock	430,369	June 17	1975	487	51	1873
Roofing. Hip-tile for	G. H. Babcock	430,367	June 17	1972	486	51	1872
Roofing machines. Scraper-bar for composite	J. A., G. W., Jr., H. L., and C. E. McGraw	422,609	Mar. 4	366	90	50	1206
Roofing material. Fabric	R. S. Merrill	437,033	Sept. 23	2649		52	1903
Roofing. Metallic	H. Anderson	418,860	Jan. 7	315	76	50	66
Roofing. Metallic	C. B. Cooper	429,015	May 27	3013	773	51	1436
Roofing. Metallic	L. L. Sagendorph	422,319	Feb. 25	2778	731	50	1114
Roofing. Metallic	L. L. Sagendorph	425,830	Apr. 15	2124	567	51	431
Roofing-plates. Machine for bending and cutting metallic	A. Heinzelman and N. Meyler	429,809	June 10	1058	260	51	1685
Roofing-sheet	J. White	437,271	Sept. 30	3039	796	52	1984
Roofing. Sheet-metal	W. Batdorf	432,176	July 15	1788	460	52	363
Roofing-tile	G. H. Babcock	430,364	June 17	1970	484	51	1872
Roofing-tile	G. H. Babcock	430,365	June 17	1970	484 } 485 } 486 }	51	1872
Roofing-tile	E. C. Lindemann	438,321	Oct. 14	999	271 }	53	197
Roofing-tiles. Series of	G. H. Babcock	430,362	June 17	1968	484 }	51	1871
Roofing-tool	J. W. and G. W. Crim	419,831	Jan. 21	1766	467 } 468 }	50	370
Roofing. Valley-tile for	G. H. Babcock	430,368	June 17	1973	486	51	1873
Roofing. Water-proof and fire-proof material for	A. Blank. (Reissue)	11,106	Aug. 26	3025	800	52	1367
Roofing, &c. Water-proof composition for	A. N. Ford	423,042	Mar. 11	1041		50	1341
Roofing. Water-proof joint for metal	L. L. Sageudorph	426,627	Apr. 29	3341	875	51	687
Root-cutting machine	H. E. Staples, L. T. Covell, and H. E. Heagle	430,704	June 24	2509	614	51	1984
Rope-clamp	J. Kinney	419,960	Jan. 21	1968	517	50	412
Rope-clamp	W. C. Mobley	427,782	May 13	1152	289	51	1048
Rope-clamp	H. S. Peck	430,315	Sept. 9	1443	376	52	1658
Rope-clamp	J. Weigel	424,388	Mar. 25	3068	814	50	1744
Rope-clasp	W. H. Seiders and G. H. Hood	430,043	June 10	1431	356	51	1757
Rope-coupling	M. M. Killinger	432,626	July 22	2454	632	52	499
Rope-holder	C. H. O. Strohbach	421,328	Feb. 11	1336	345	50	825
Rope, &c. Machine for making	G. R. Kress	438,627	Oct. 21	1448	390 } 391 }	53	290
Rope or twine hook	J. K. Miller	436,252	Sept. 9	1354	352	52	1640
Rope-reel. Adjustable	G. W. Diamond and S. Trudeau	442,309	Dec. 9	1060	277	53	1476
Rope-socket	W. D. Cross and J. P. Reagan	430,176	June 17	1631	407	51	1807
Rope-transmission	J. A. Dyblie	419,426	Jan. 14	1176	312	50	247
Ropes and cables. Splicing	S. W. Verrill	439,583	Oct. 28	2963	786 } 787 }	53	582
Ropes. Knot or protection in hauling	C. Bahlsen	440,582	Nov. 11	1500		53	906
Rosaniline. Sulphonating	E. D. Kendall	421,049	Feb. 11	937		50	750
Rose-engine. Automatic	A. C. Bates	433,846	Aug. 5	606	157 } 158 }	52	874
Rosette-machine	B. Bronson	426,105	Apr. 22	2563	674	51	522
Rotary chair	C. H. Purdy	426,323	Apr. 22	2869	755	51	585
Rotary cutter	G. W. Gillespie	437,298	Sept. 30	3078	806	52	1991
Rotary cutter	F. S. Madison	427,001	Apr. 29	3888	1015	51	792
Rotary cutter and trimmer	A. B. Fowler	425,214	Apr. 8	1205	319	51	244
Rotary cutting-knife	W. L. Hardy	435,627	Sept. 2	392	105	52	1449
Rotary engine	T. R. Almond	418,665	Jan. 7	1	1	50	3
Rotary engine	T. R. Almond	428,740	May 27	2609	661	51	1355
Rotary engine	W. H. Avis	427,952	May 13	1414	357	51	1096
Rotary engine	A. D. Baker	440,125	Nov. 11	751	198	53	764
Rotary engine	A. Beard	433,847	Aug. 5	607	158	52	875
Rotary engine	B. Beck	425,562	Apr. 15	1716	459	51	351
Rotary engine	B. B. Bower	436,867	Sept. 23	2408	628	52	1855
Rotary engine	A. F. G. Brown	420,331	Jan. 28	2552	676	50	530
Rotary engine	J. J. Clark	423,966	Mar. 25	2457	652	50	1625
Rotary engine	A. Denke	439,935	Nov. 4	464	121 } 122 }	53	699
Rotary engine	C. D. Farmer	435,293	Aug. 26	2857	755 } 756 }	52	1337
Rotary engine	J. M. Farmer	426,003	Apr. 22	2413	638 } 639 }	51	493
Rotary engine	J. M. Farmer	440,145	Nov. 11	782	205	53	771
Rotary engine	J. R. Hart, C. F. Currey, and C. F. Bridge	419,770	Jan. 21	1668	443	50	351
Rotary engine	L. Hausmann	430,342	June 17	1937	474	51	1865
Rotary engine	T. H. Herndon	431,462	July 1	660	166	52	133

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Rotary engine.	G. C. Hollar	437,892	Oct. 7	329	97	53	65
Rotary engine.	S. J. Holt and D. Kinney	436,663	Sept. 16	2016	527	52	1773
Rotary engine.	H. Knebel and A. Henning	420,347	Jan. 28	2576	684	50	534
Rotary engine.	A. Meyer	442,634	Dec. 16	1571	406	53	1586
Rotary engine.	A. N. Parnall	419,062	Jan. 7	626	163	50	132
Rotary engine.	W. I. Phifer	422,829	Mar. 4	681	174 175	50	1267
Rotary engine.	G. W. Worley and R. B. Davis	440,858	Nov. 18	1970	507 508	53	1003
Rotary engine.	B. F. Wright	426,976	Apr. 29	3846	1005	51	784
Rotary engine or water-wheel.	S. B. Goff	433,727	Aug. 5	420	107	52	837
Rotary furnace for heating blanks	J. H. Bullard	426,556	Apr. 29	3232	847 848	51	665
Rotary joint	W. F. Bowers	421,657	Feb. 18	1813	474	50	925
Rotary motor	E. Hammesfahr	430,417	Sept. 16	1622	427	52	1699
Rotary separator, grader, or bolter.	R. W. O. Rehmenklau	422,974	Mar. 11	940	246 247	50	1322
Rotary steam-engine	G. Abrams	437,076	Sept. 23	2709	708	52	1915
Rotary steam-engine	T. R. Almond	423,585	Mar. 18	1837	484	50	1500
Rotary steam-engine	J. H. Dow	430,568	June 17	2263	556	51	1927
Rotary steam-engine	J. Forsythe	440,120	Nov. 4	741	195	53	754
Rotary steam-engine	G. H. Weston	426,553	Apr. 29	3227	846	51	664
Rotating tools. Implement for	A. Vedöe	423,971	Mar. 25	2437	647	50	1622
Roundabout.	F. W. Allchin	420,758	Feb. 4	455	121 122	50	653
Roundabout.	A. Amelung	439,369	Oct. 28	2654	706	53	522
Roundabout	C. R. Hanson	439,003	Oct. 21	2054	550	53	405
Roundabout	J. S. Seymour	437,909	Oct. 7	358	103	53	69
Routing-machine	L. H. Frank	431,513	July 1	738	184	52	147
Routing-machine	R. Kirk	434,394	Aug. 12	1441	376	52	1050
Routing-machine	V. and J. Royle, Jr.	442,826	Dec. 16	1916	492	53	1653
Rowing apparatus	E. J. Kerns	421,080	Feb. 11	978	251	50	758
Rowing apparatus	C. H. Willits	420,137	Jan. 28	2249	595	50	475
Rowing-gear. Bow-facing	I. H. Conway	429,672	June 10	868	210 211	51	1649
Rowing-machine	S. H. Kimball	441,765	Dec. 2	217	57	53	1306
Rubber	I. Piles	421,757	Feb. 18	1943	511	50	949
Rubber. Apparatus for use in restoring	N. C. Mitchell	420,821	Feb. 4	572	146	50	673
Rubber boot	E. A. Saunders	437,907	Oct. 7	352	102	53	68
Rubber compound	W. H. Allen and C. Lovell	438,595	Oct. 14	1329		53	274
Rubber-cutting machine	J. T. Whittlesey and A. B. Keyes	426,577	Apr. 29	3265	856	51	672
Rubber-dam clamp	J. W. Ivory	435,228	Aug. 26	2758	728	52	1319
Rubber-dam clamp	H. H. Johnson and S. G. Hill	420,876	Feb. 4	663	172	50	690
Rubber from waste-rubber goods. Reclaiming	N. C. Mitchell	419,697	Jan. 21	1568		50	332
Rubber from waste-rubber stock. Reclaiming	N. C. Mitchell	425,896	Apr. 15	2219	589	51	448
Rubber goods. Machine for stripping	S. W. Guthrie	440,226	Nov. 11	918	236	53	799
Rubber goods. Manufacturing	G. C. Mandelberg, H. L. Rothband, and S. L. Mandelberg	441,501	Nov. 25	3035	782	53	1213
Rubber goods. Manufacturing	G. C. Mandelberg, H. L. Rothband, and S. L. Mandelberg	441,502	Nov. 25	3036		53	1213
Rubber goods. Manufacturing	G. C. Mandelberg, H. L. Rothband, and S. L. Mandelberg	441,503	Nov. 25	3038	782	53	1213
Rubber. Hand-	H. M. Snyder	425,054	Apr. 8	957	256	51	193
Rubber overshoe	E. F. Bickford	437,639	Sept. 30	3608	944	52	2096
Rubber. Production of restored or devulcanized	N. C. Mitchell	423,071	Mar. 11	1020		50	1348
Rubber. Restoring	N. C. Mitchell	420,820	Feb. 4	569	146	50	672
Rubber sandal	G. B. Siegenthaler	440,513	Nov. 11	1396	361	53	886
Rubber shoe	C. Schummel	432,149	July 15	1755	450	52	357
Rubber-shoe attachment	J. Teggart	439,909	Nov. 4	426	110	53	691
Rubber shoe. Ventilated.	J. H. McKechnie	429,944	June 10	1260	312	51	1725
Rubber shoes. Heel-protector for	J. Siegel	437,049	Sept. 23	2668	697	52	1907
Rubber-sole boot or shoe	H. T. Marshall	437,608	Sept. 30	3566	931	52	2087
Rubber stamps, &c. Press for molding vulcanized.	C. G. Schulze	419,290	Jan. 14	965	254 255	50	204
Rubber-stock and separating fine impurities therefrom. Apparatus for washing	N. C. Mitchell	419,465	Jan. 14	1231	327	50	259
Rubber-stock. Apparatus for washing	N. C. Mitchell and S. P. Sharples	420,515	Feb. 4	124	31	50	587
Rubber-stripping device	N. C. Videto	428,188	May 20	1749	443	51	1172
Rubber-tired wheel	P. J. Beiersmith	424,452	Apr. 1	9	4	51	4
Rubber water-bottle	J. Burbridge	421,160	Feb. 11	1098	282	50	782
Ruby-pin setter	L. W. Greb	421,831	Feb. 18	2040	539	50	967
Ruching	C. B. Simpson	424,732	Apr. 1	456	122	51	91
Rudder for vessels. Duplex	V. F. Lässoe	419,780	Jan. 21	1686	447 448	50	354
Rudder. Hanging	F. J. Baxter	439,573	Oct. 28	2950	784	53	580
Rudders. Mechanism for effecting the movement of ships'	J. B. Odell	435,608	Sept. 2	346	96	52	1442
Rule. Draftsman's	F. Benzinger and H. E. Grabau	422,701	Mar. 4	499	127	50	1232
Rule-gage	S. Dickins	429,087	May 27	3131	807	51	1458
Rule. Metal folding	W. Hohnstein	439,511	Oct. 28	2863	761	53	562
Rule. Printer's	E. P. Mowers	438,255	Oct. 14	890	242	53	176
Rule, square, bevel, scribe-gage, spirit-level, and dividers. Combined	R. E. Woodruff	439,458	Oct. 28	2785	743	53	547
Rule. Stair	C. E. Wilson	421,216	Feb. 11	1177	302	50	796
Rule. Triangular	F. Benzinger and H. E. Grabau	418,967	Jan. 7	491	122	50	103
Rule. Triangular	F. Benzinger and H. E. Grabau	418,968	Jan. 7	492	123	50	104
Rules. Machine for lining	W. R. Root	423,446	Mar. 18	1639	431 432	50	1464
Ruler	A. L. Baer	420,401	Jan. 28	2654	703	50	549
Ruler	A. E. Fitzgerald	434,660	Aug. 19	1885	492	52	1144
Ruler	C. E. and M. R. Jewell	443,652	Dec. 30	3304	852	53	1939
Ruler	C. E. and M. R. Jewell	443,653	Dec. 30	3305	852	53	1939
Ruler	O. S. Matthews	421,102	Feb. 11	1013	259	50	765
Ruler	F. Nisley	422,033	Feb. 25	2330	615	50	1031

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Ruler	F. G. Osborn	426,138	Apr. 22	2610	686	51	532
Ruler	N. B. Wheeler	421,338	Feb. 11	1346	348	50	827
Ruler and ink-pad. Combined	W. J. Boynton	436,887	Sept. 23	2442	628	52	1863
Ruler and pencil-sharpener. Combined	J. T. Hazlett	418,870	Jan. 7	332	81	50	69
Ruler. Duplex ledger	S. B. Whiteside	421,877	Feb. 18	2120	556	50	982
Ruler, ink-eraser, and paper-cutter. Combined	A. C. Merriman	432,632	July 22	2471	635	52	501
Ruler. Key-seat	J. Carr	428,890	May 27	2830	719	51	1400
Ruler. Parallel	J. R. Anderson	433,264	July 29	3474	897	52	702
Ruler. Parallel	H. Brunn	433,976	Aug. 12	803	210	52	921
Ruler. Parallel	R. Forwood	443,959	Dec. 30	3778	964	53	2029
Ruler. Parallel	B. E. Sawyer	436,842	Sept. 23	2329	613	52	1841
Ruler. School	W. H. H. Wright	437,879	Oct. 7	312	93	53	61
Ruler. Slate	P. E. Demarest	425,495	Apr. 15	1622	432	51	333
Ruling-machine	W. Byrne	442,101	Dec. 9	744	{ 201 202 }	53	1416
Ruling-machine	E. Knapp	430,583	June 17	2287	{ 561 562 }	51	1932
Ruling-machine	A. Sedgwick	441,905	Dec. 2	432	115	53	1349
Ruling-machine attachment	W. C. Smith	439,360	Oct. 28	2634	{ 703 704 }	53	519
Ruling machine. Paper	L. S. Bigelow	443,065	Dec. 16	2297	588	53	1729
Ruling machine. Paper	M. L. Metzger and A. Cooper	432,633	July 22	2472	{ 635 636 }	52	501
Ruling parallel lines. Device for	W. A. Shaw	423,823	Mar. 18	2194	579	50	1569
Rumble	W. T. Angell and C. G. Taylor	440,820	Nov. 18	1908	490	53	991
Running-gear	W. D. Mayfield	435,847	Sept. 2	720	193	52	1514
Running-gear	S. McGarvin	436,610	Sept. 16	1919	504	52	1753
Running-gear	F. G. Ohr	437,504	Sept. 30	3418	894	52	2059
Running-gear	J. B. Stanley and J. H. Cloyes	425,391	Apr. 8	1465	392	51	293
Rut-cutter	D. J. Arpin	430,361	June 17	1967	483	51	1871
Saccharification of amylaceous substances. Acid	A. H. J. Berge	432,358	July 15	2052	52	412	
Saccharine matter, &c. Open movable kettle for melting	C. M. Holden and H. B. Bopp	432,620	July 22	2442	{ 629 630 }	52	497
Sack-detacher	L. Martin	419,337	Jan. 14	1044	276	50	221
Sack-filler	C. E. Barnes	435,638	Sept. 2	408	110	52	1452
Sack-filler and scoop. Combined	W. H. Robinson	438,948	Oct. 21	1973	526	53	387
Sack-holder	S. T. Lamb	434,514	Aug. 19	1636	429	52	1096
Sack-holder	A. McDonald	426,208	Apr. 22	2715	711	51	552
Sacramental case	J. J. Kennedy	439,519	Oct. 28	2874	{ 764 765 }	53	565
Sad-iron	J. A. Berlin	424,753	Apr. 1	490	133	51	96
Sad-iron	C. Borg	430,167	June 17	1620	404	51	1804
Sad-iron	A. Carman	427,298	May 6	415	108	51	893
Sad-iron	D. Cook	442,513	Dec. 9	1380	353	53	1539
Sad-iron	C. Fox	428,836	May 27	2748	698	51	1383
Sad-iron	P. B. Hand	437,758	Oct. 7	126	38	53	27
Sad-iron	G. F. Hardinge	432,309	July 15	1994	509	52	400
Sad-iron	F. Long	430,663	June 24	2443	595	51	1970
Sad-iron	J. Rist	420,564	Feb. 4	193	50	50	602
Sad-iron	A. Rosa	429,202	June 3	146	35	51	1499
Sad-iron	H. B. Stafford	426,968	Apr. 29	3834	1002	51	782
Sad-iron	F. B. Thaler	436,951	Sept. 23	2536	664	52	1880
Sad-iron	M. Viroche	430,714	June 24	2527	618	51	1987
Sad-iron	J. F. Wood	438,968	Oct. 21	1998	534	53	393
Sad-iron. Gas-heating	H. Sintzel	436,384	Sept. 16	1572	413	52	1691
Sad-iron heater	J. A. Bourry	418,970	Jan. 7	494	123	50	104
Sad-iron. Self-heating	J. Morrow and F. Curtis, Jr.	428,403	May 20	2104	528	51	1823
Sad-iron. Self-heating	E. M. Roberts	422,448	Mar. 4	126	34, 35	50	1161
Sad-iron support	B. C. Gindorff	433,679	Aug. 5	353	90, 91	52	825
Sad-iron. Vapor	W. P. Young and C. D. Middlekauff	430,164	June 17	1616	402	51	1242
Saddle	C. K. Marshall	426,032	Apr. 22	2452	647	51	500
Saddle	O. Taber	424,626	Apr. 1	292	75	51	58
Saddle	O. Taber and H. F. Low	424,622	Apr. 1	288	74	51	57
Saddle	W. R. Thompson	419,383	Jan. 14	1107	292	50	233
Saddle and attachment. Harness	P. Donohue	428,167	May 20	1721	436	51	1166
Saddle and carriage clips. Die for making	H. E. Peck and P. Dooppensmith	434,197	Aug. 12	1135	295	52	988
Saddle-bag	W. S. Marshall	424,324	Mar. 25	2944	784	50	1719
Saddle-bags	J. N. Anderson	437,637	Sept. 30	3605	943	52	2096
Saddle-bags	N. H. Judy	433,083	July 29	3209	{ 824 825 }	52	648
Saddle-cover	J. L. Heffernan	426,934	Apr. 29	3787	989	51	773
Saddle. Harness	L. P. Best	425,731	Apr. 15	1986	529	51	403
Saddle. Harness	J. Fischer	427,470	May 6	671	168	51	945
Saddle. Harness	J. W. Garrett, Jr., and B. B. Hug- gin	422,762	Mar. 4	576	148	50	1246
Saddle. Harness	M. M. Hitt	425,175	Apr. 8	1154	304	51	233
Saddle. Harness	M. M. Hitt	425,792	Apr. 15	2063	550	51	419
Saddle. Harness	O. Kcen	442,188	Dec. 9	881	235	53	1442
Saddle. Harness	F. Rehkopf	432,642	July 22	2485	639	52	504
Saddle. Harness	E. G. Robertson	423,574	Mar. 18	1821	480	50	1497
Saddle. Harness	O. Taber	420,420	Jan. 28	2676	709	50	553
Saddle. Harness	O. Taber and H. F. Low	424,623	Apr. 1	289	75	51	58
Saddle. Harness	J. J. Traynor	428,655	May 27	2467	628	51	1328
Saddle. Harness	W. S. Webster	442,157	Dec. 9	835	224	53	1433
Saddle-jack	R. Garrett	424,674	Apr. 1	365	97	51	71
Saddle-pad	S. G. Jones	439,353	Oct. 28	2625	700	53	518
Saddle. Riding	C. Barth	423,302	Mar. 11	1433	373	50	1415
Saddle. Riding	C. W. Beard and G. F. Crummett	436,471	Sept. 16	1712	452	52	1717
Saddle. Riding	J. S. Cusson	443,087	Dec. 23	2367	604	53	1749
Saddle. Riding	J. D. Northrup	443,241	Dec. 23	2649	680	53	1804
Saddle. Roller-tree	E. O. Blackford	438,052	Oct. 7	588	160	53	112
Saddle. Side	D. W. Jones	421,406	Feb. 18	1444	374	50	853
Saddle-tree	O. Taber	424,625	Apr. 1	291	75	51	58
Saddle tree. Harness	S. McNicholl	433,207	July 29	3393	877	52	685

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Saddles. Cincture attachment for riding.....	H. Hartmann.....	438,477	Oct. 14	1220	330	53	240
Saddler's knife.....	P. Hise.....	436,479	Sept. 16	1724	454	52	1719
Safe.....	J. P. Harrison and J. L. Waring.....	425,508	Apr. 15	1636	435	51	336
Safe and vault.....	G. J. H. Goehler.....	419,658	Jan. 21	1516	402	50	321
Safe. Burglar-proof.....	A. G. Burton.....	425,403	Apr. 15	1484	{ 397 398 399 }	51	306
Safe. Burglar-proof.....	A. G. Burton.....	425,404	Apr. 15	1485	{ 398 399 }	51	306
Safe. Burglar-proof.....	C. O. Yale.....	428,240	May 20	1838	461	51	1190
Safe-door.....	G. L. Damon.....	440,695	Nov. 18	1689	434	53	951
Safe-door.....	G. J. H. Goehler.....	436,411	Sept. 16	1614	{ 425 426 }	52	1698
Safe. Floating.....	J. B. Marshall.....	433,530	Aug. 5	127	36	52	781
Safe-lock.....	A. Kirks.....	438,317	Oct. 14	990	{ 267 268 }	53	195
Safe-lock. Electric.....	G. L. Damon.....	437,682	Oct. 7	10	4	53	5
Safe-lock. Electric.....	W. H. Hollar and F. S. Holmes.....	438,236	Oct. 14	863	{ 233 234 }	53	171
Safe or vault.....	P. F. King.....	442,268	Dec. 9	995	263	53	1464
Safe or vault.....	D. O. Paige.....	425,451	Apr. 15	1558	417	51	321
Safe or vault lock.....	C. O. Yale.....	427,140	May 6	178	47	51	846
Safe or vault lock.....	C. O. Yale.....	427,141	May 6	182	47, 48	51	847
Safe, vault, &c.....	W. Corry.....	434,503	Aug. 19	1623	426	52	1093
Safe, vault, &c.....	J. Whittaker.....	425,280	Apr. 8	1306	{ 349 350 }	51	263
Safety-alarm for elevator or other belts.....	J. B. Soule.....	433,549	Aug. 5	150	42, 43	52	786
Safety attachment.....	J. A. Armentrout.....	437,550	Sept. 30	3492	911	52	2073
Safety attachment.....	C. T. Gaither.....	420,408	Jan. 28	2661	706	50	550
Safety attachment.....	G. L. Hohnstedt.....	423,687	Mar. 18	2000	527	50	1532
Safety-brake.....	J. Goodfellow.....	441,298	Nov. 25	2719	705	53	1152
Safety-connection.....	E. Thomson.....	426,082	Apr. 22	2520	665	51	513
Safety deposit box.....	B. F. Teal and E. J. Gross.....	423,095	Mar. 11	1117	292	50	1355
Safety-hook. Automatic spring.....	J. E. Sheehan.....	437,253	Sept. 30	3012	790	52	1979
Safety-machine.....	H. T. Hahn and J. Schröder.....	424,550	Apr. 1	178	50	51	37
Safety-pin.....	R. T. Lewis, Jr.....	420,811	Feb. 4	557	142	50	670
Safety-pin.....	C. E. Noyes.....	438,377	Sept. 16	1563	411	52	1689
Safety-pin shield.....	J. Jenkins.....	421,720	Feb. 18	1898	498	50	941
Safety-stopper.....	F. Deimel.....	427,255	May 6	256	91	51	8-0
Safety-trap for discharge-pipes.....	E. E. Scott.....	419,717	Jan. 21	1594	425	50	337
Sail.....	J. Cook.....	425,122	Apr. 8	1055	200	51	213
Sails. Cringle-clew for.....	E. Pinkham.....	439,422	Oct. 28	2731	728	53	537
Sails. Reefing and furling.....	M. W. Costello.....	436,169	Sept. 9	1228	320	52	1614
Sails. Reefing attachment for.....	J. N. Furman.....	436,231	Sept. 9	1319	343	52	1632
Sale apparatus. Automatic.....	G. A. Sinsel.....	432,333	July 15	2024	{ 520 521 }	52	405
Sales slip or sheet holder.....	J. H. Lawson.....	429,215	June 3	167	40	51	1503
Salt and crude glycerine from spent soap-lye. Recovering.....	E. K. Mitting.....	419,610	Jan. 14	1427	.....	50	299
Salt. Apparatus for manufacturing.....	A. Miller.....	428,121	May 20	1661	421	51	1156
Salt-box.....	A. Hirsch.....	434,083	Aug. 12	956	251	52	953
Salt-evaporating tank.....	A. Haller.....	439,945	Nov. 4	481	125	53	702
Salt-grainer.....	N. S. Beardslee.....	430,332	June 17	1925	471	51	1862
Salt-making apparatus.....	F. Siedentopf.....	418,761	Jan. 7	154	37	50	34
Salt. Manufacturing.....	A. Miller.....	428,282	May 20	1907	480	51	1203
Salt. Manufacturing.....	C. C. Peck.....	426,141	Apr. 22	2616	687	51	533
Salt. Manufacturing.....	C. C. Peck.....	426,142	Apr. 22	2618	687	51	533
Salt of beta-naphtholhydroquinone-beta-sulphonic acid. Ammonium.....	O. N. Witt.....	420,373	Jan. 28	2613	.....	50	541
Salt-pan.....	D. Shirley.....	443,948	Dec. 30	3761	961	53	2026
Salt. Purifying.....	E. K. Mitting.....	431,926	July 8	1487	.....	52	300
Salt. Purifying.....	E. K. Mitting. (Reissue).....	11,125	Nov. 18	2401	.....	53	1087
Salt. Separating impurities from.....	T. Higin.....	422,939	Mar. 11	877	229	50	1311
Salts. Apparatus for decomposing metallic.....	O. B. Peck.....	433,135	July 29	3291	847	52	664
Salts of antimony. Making alkaline.....	J. Holliday.....	421,935	Feb. 25	2205	.....	50	1007
Salve.....	W. R. Hall.....	432,611	July 22	2429	.....	52	494
Salve.....	J. J. Ryan.....	433,257	July 29	3464	.....	52	700
Salve.....	R. Weyforth.....	421,799	Feb. 18	1990	.....	50	960
Salve. Hoof.....	J. H. Mitchell.....	437,401	Sept. 30	3250	.....	52	2023
Salve. Tetter.....	T. J. Newbery.....	438,656	Oct. 21	1462	.....	53	293
Sample-case.....	W. W. Paynter.....	440,278	Nov. 11	1004	258	53	813
Sample holder or fastener for show and other cards.....	G. W. McGill.....	429,943	June 10	1259	312	51	1724
Sample-record.....	G. Widule.....	429,401	June 3	459	108	51	1559
Sand-band.....	G. W. Campbell.....	439,638	Nov. 4	28	8	53	612
Sand-band.....	A. Keiser.....	440,357	Nov. 11	1120	288	53	834
Sand-band.....	A. L. Putnam.....	425,252	Apr. 8	1258	336	51	254
Sand-band.....	F. S. Rolfe.....	419,889	Jan. 21	1865	490	50	391
Sand-band.....	H. Trembath.....	423,870	May 27	2796	711	51	1393
Sand-band.....	J. Van Curen.....	432,217	July 15	1849	475	52	374
Sand box and drier.....	R. McDowell.....	431,911	July 8	1371	347	52	277
Sand molds. Apparatus for forming.....	W. B. Sterritt.....	424,831	Apr. 1	620	163	51	120
Sand-paper.....	W. A. Lorenz.....	440,317	Nov. 11	1066	274	53	824
Sand-paper head.....	G. W. Smith.....	434,210	Aug. 12	1159	302	52	992
Sand-paper machine for boots or shoes.....	S. Ross, Jr.....	426,860	Apr. 29	3694	963	51	754
Sand-paper roll.....	S. Ross, Jr.....	426,859	Apr. 29	3693	963	51	754
Sand-paper roll.....	S. Ross, Jr.....	426,862	Apr. 29	3696	964	51	755
Sand-paper roll.....	S. Ross, Jr.....	431,997	July 8	1502	380	52	302
Sand-heel.....	D. J. Thayer.....	420,476	Feb. 4	78	18	50	579
Sand-screen.....	P. Drendil.....	437,025	Sept. 23	2638	689	52	1901
Sand-screen.....	H. A. Garvey.....	437,555	Oct. 7	277	83	53	54
Sand screen or filter.....	C. Monjeau.....	436,502	Sept. 16	1750	462	52	1724
Sand-screening apparatus.....	W. B. Craft.....	419,930	Jan. 21	1922	507	50	404
Sand-sifting machine.....	T. L. Jackson and J. Reese.....	420,455	Feb. 4	43	9	50	572
Sand-washing machine.....	H. S. Garrison.....	428,600	May 27	2383	606	51	1314
Sandpapering handles. Machine for.....	P. T. Lamkin.....	435,698	Sept. 2	500	133	52	1472

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Sandpapering-machine.....	A. K. Hatteberg.....	432,273	July 22	2857	{ 731 732	{ 52	576
Sandpapering-machine.....	W. R. Root.....	413,795	Dec. 30	3531	{ 905 906	{ 53	1982
Sanitary closet.....	T. F. McCamant.....	427,600	May 13	868	{ 217 218	{ 51	992
Sanitary stand or closet. Portaole.....	W. H. Willson.....	440,340	Nov. 11	1097	281	53	829
Sap-feeder and regulator.....	E. Minor.....	430,968	June 24	2925	718	51	2062
Sash and belt. Combined.....	D. Olivarius.....	437,340	Sept. 30	3143	822	52	2003
Sash and belt. Combined.....	W. S. Teel.....	435,257	Aug. 26	2803	743	52	1327
Sash and belt. Combined.....	G. E. Zeltmacher.....	428,793	May 27	2644	680	51	1370
Sash and casing. Window.....	T. Lewandowski and J. Zalikowski.....	420,457	Feb. 4	55	11, 12	50	574
Sash attachment.....	G. H. King.....	429,536	June 3	659	161	51	1597
Sash attachment. Window.....	J. De Long.....	427,977	May 13	1449	366	51	1103
Sash-balance.....	R. H. L. Arringdale.....	442,502	Dec. 9	1366	350	53	1536
Sash-balance.....	F. M. Baker.....	427,389	May 6	538	136	51	918
Sash-balance.....	W. Cashner.....	443,391	Dec. 23	2887	742	53	1850
Sash-balance.....	H. P. Cayce.....	439,742	Nov. 4	168	43	53	640
Sash-balance.....	G. A. Colton.....	434,700	Aug. 19	1957	509	52	1156
Sash-balance.....	C. S. Ellis and T. Langbein.....	422,580	Mar. 4	314	80	50	1196
Sash-balance.....	C. C. Estill.....	429,610	June 10	770	186	51	1630
Sash-balance.....	E. Farnsworth.....	431,653	July 8	969	242	52	200
Sash-balance.....	F. F. Fife and W. V. Bléha.....	430,938	June 24	2882	709	51	2055
Sash-balance.....	W. A. Ford.....	421,828	Feb. 18	2037	538	50	967
Sash-balance.....	C. Forth.....	424,414	Mar. 25	3116	826	50	1753
Sash-balance.....	G. C. Gardner.....	429,212	June 3	162	39	51	1502
Sash-balance.....	R. M. Gardner.....	441,757	Dec. 2	203	53	53	1303
Sash-balance.....	J. S. Headen and C. G. Farmer.....	418,948	Jan. 7	467	116	50	98
Sash-balance.....	S. Jenkinson.....	432,137	July 15	1735	445	52	353
Sash-balance.....	A. Johnson.....	433,596	Aug. 5	234	61	52	801
Sash-balance.....	B. Marshall.....	420,425	Jan. 28	2683	711	50	554
Sash-balance.....	J. McArthur.....	418,511	Jan. 7	228	56	50	49
Sash-balance.....	J. McArthur.....	429,941	June 10	1257	311	51	1724
Sash-balance.....	W. W. S. Orbeton.....	441,019	Nov. 18	2218	573	53	1051
Sash-balance.....	T. B. Ross.....	426,070	Apr. 22	2501	660	51	510
Sash-balance.....	H. Schmasen.....	423,881	Mar. 18	2286	{ 603 604	{ 50	1586
Sash-balance.....	J. M. Smith and R. M. Wright.....	428,643	May 27	2441	{ 621 622	{ 51	1325
Sash-balance.....	G. E. Taylor.....	424,940	Apr. 1	779	207	51	151
Sash bar. Window.....	W. Henderson.....	420,510	Feb. 4	118	29	50	586
Sash-clasp.....	E. W. Whittaker.....	424,440	Mar. 25	3160	838	50	1762
Sash-cord fastener.....	W. B. Bell.....	436,688	Sept. 16	2052	536	52	1780
Sash-cord fastener.....	L. W. Bowen.....	440,129	Nov. 11	760	199	53	766
Sash-cord fastener.....	G. Geyer.....	427,850	May 13	1248	315	51	1066
Sash-cord fastener.....	G. Moebis.....	428,122	May 20	1663	421	51	1156
Sash-cord fastener.....	W. Randel and C. A. French.....	428,180	May 20	1741	440	51	1170
Sash-cord fastener.....	D. L. Reber.....	425,906	Apr. 15	2231	591	51	449
Sash-cord fastener.....	N. Zogg.....	419,744	Jan. 21	1630	434	50	344
Sash-cord guide.....	F. W. Hoefler.....	425,940	Apr. 15	2296	607	51	461
Sash-fastener.....	J. H. Bearregard.....	434,909	Aug. 26	2304	609	52	1232
Sash-fastener.....	O. Beebe.....	421,092	Feb. 11	1001	256	50	762
Sash-fastener.....	T. Beecher.....	436,116	Sept. 9	1148	300	52	1600
Sash-fastener.....	J. S. Biery.....	424,454	Apr. 1	11	5	51	5
Sash-fastener.....	C. H. Brown.....	425,203	Apr. 8	1190	315	51	241
Sash-fastener.....	N. A. Buckingham.....	425,021	Apr. 8	914	242	51	185
Sash-fastener.....	N. A. Buckingham.....	426,581	Apr. 29	3270	858	51	673
Sash-fastener.....	E. M. Cattley.....	443,356	Dec. 23	2836	729	53	1840
Sash-fastener.....	M. Chambers.....	423,217	Mar. 11	1297	338	50	1391
Sash-fastener.....	C. J. Clarke.....	437,852	Oct. 7	273	82	53	54
Sash-fastener.....	A. V. Cook.....	440,138	Nov. 11	773	203	53	769
Sash-fastener.....	G. W. Cook.....	421,350	Feb. 11	1362	353	50	830
Sash-fastener.....	G. W. Cook.....	426,986	Apr. 29	3859	1009	51	787
Sash-fastener.....	W. Coulter.....	433,327	July 29	3563	919	52	720
Sash-fastener.....	G. W. Countryman.....	420,144	Jan. 28	2263	599	50	478
Sash-fastener.....	J. J. Cowell.....	423,741	Mar. 18	2081	548	50	1546
Sash-fastener.....	R. D. Curtiss.....	429,167	June 3	94	22	51	1490
Sash-fastener.....	W. Dieffenderfer.....	437,982	Oct. 7	471	133	53	90
Sash-fastener.....	W. E. Dixon.....	440,142	Nov. 11	777	204	53	770
Sash-fastener.....	J. Dowd.....	435,737	Sept. 2	549	145	52	1481
Sash-fastener.....	F. E. Drake.....	437,103	Sept. 23	2747	718	52	1923
Sash-fastener.....	G. H. Fassett.....	432,390	July 15	2107	541	52	422
Sash-fastener.....	J. D. Ferree.....	418,914	Jan. 7	419	103	50	87
Sash-fastener.....	E. R. Ferry.....	442,576	Dec. 9	1482	381	53	1560
Sash-fastener.....	J. H. Foote.....	426,794	Apr. 29	3602	939	51	736
Sash-fastener.....	F. Fowler and A. M. Ulmer.....	423,751	Mar. 18	2092	553	50	1548
Sash-fastener.....	A. C. Gandee.....	429,901	June 10	1203	298	51	1713
Sash-fastener.....	J. H. Garrett.....	437,190	Sept. 30	2915	759	52	1960
Sash-fastener.....	G. F. Gminder.....	420,298	Jan. 28	2510	665	50	522
Sash-fastener.....	H. M. Goodman.....	429,091	May 27	3134	808	51	1458
Sash-fastener.....	J. C. Gould.....	442,178	Dec. 9	864	231	53	1439
Sash-fastener.....	S. E. Harrington.....	436,707	Sept. 16	2078	547	52	1785
Sash-fastener.....	H. Harrison.....	427,233	May 6	325	83	51	875
Sash-fastener.....	G. Hasenpflug.....	423,761	Mar. 18	2105	555	50	1551
Sash-fastener.....	H. B. Hebert.....	441,159	Nov. 25	2467	639	53	1109
Sash-fastener.....	W. N. Hunter.....	421,077	Feb. 11	975	250	50	757
Sash-fastener.....	H. D. Jones.....	424,064	Mar. 25	2569	687	50	1647
Sash-fastener.....	I. G. Jenkins and J. H. Bishop.....	428,306	May 20	1943	488	51	1209
Sash-fastener.....	C. D. Kelsey.....	434,086	Aug. 12	960	252	52	955
Sash-fastener.....	G. H. King.....	426,388	Apr. 22	2979	780	51	608
Sash-fastener.....	J. E. Kreidler.....	422,597	Mar. 4	342	85	50	1201
Sash-fastener.....	A. L. Linn.....	440,600	Nov. 11	1540	397	53	913
Sash-fastener.....	D. O. Livermore.....	419,692	Jan. 21	1561	418	50	330
Sash-fastener.....	D. O. Livermore.....	422,953	Mar. 11	903	237	50	1316

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Sash-fastener	F. J. Main	424,990	Apr. 8	862	229	51	176
Sash-fastener	B. Marshall	433,600	Aug. 5	239	62	52	802
Sash-fastener	F. P. McGovern	426,303	Apr. 22	2843	749	51	580
Sash-fastener	S. McLean	434,520	Aug. 19	1644	430	52	1097
Sash-fastener	T. Newton	432,639	July 22	2482	638	52	504
Sash-fastener	Z. Pinard	436,841	Sept. 23	2328	612 613	52	1841
Sash-fastener	D. R. Proctor	419,881	Jan. 21	1857	488	50	390
Sash-fastener	A. B. Richardson	423,082	Mar. 11	1101	288	50	1352
Sash-fastener	A. B. Richardson	436,926	Sept. 23	2505	656	52	1874
Sash-fastener	J. Schade and F. B. Case	419,891	Jan. 21	1868	491	50	392
Sash-fastener	A. O. Shatsick	425,462	Apr. 15	1577	422	51	323
Sash-fastener	H. T. Smith	425,191	Apr. 8	1174	311	51	238
Sash-fastener	M. C. Tully	425,528	Apr. 15	1670	445	51	342
Sash-fastener	R. I. Turk	432,004	July 8	1513	384	52	304
Sash-fastener	J. S. Turner	423,001	Mar. 11	974	257	50	1329
Sash-fastener	E. Walter	437,536	Sept. 30	3472	906	52	2069
Sash-fastener	P. F. White	424,238	Mar. 25	2808	750	50	1694
Sash-fastener	A. Wintermute and F. Hearnshaw	426,404	Apr. 22	3005	788	51	612
Sash-fastener	C. Wolcott	438,337	Oct. 14	1018	276	53	200
Sash-fastener	J. Wood	440,800	Nov. 18	1871	481	53	985
Sash for windows. Adjustable	F. W. Neumann	436,184	Sept. 9	1250	325	52	1618
Sash-holder	J. A. Baldwin	419,134	Jan. 7	721	189	50	151
Sash-holder	J. A. Baldwin	421,849	Feb. 18	2079	547	50	973
Sash-holder	W. H. Bennett	428,547	May 20	2288	581	51	1277
Sash-holder	W. V. Bléha	426,905	Apr. 29	3751	980	51	766
Sash-holder	C. W. Brewer	431,870	July 8	1824	332	52	267
Sash-holder	P. J. Chassagne	429,503	June 3	611	150	51	1588
Sash-holder	A. T. Church	433,672	Aug. 5	343	88	52	823
Sash-holder	F. Frank	435,966	Sept. 9	911	240	52	1556
Sash-holder	F. Harmer	433,239	July 29	3438	888	52	696
Sash-holder	G. Haupt	421,706	Feb. 18	1879	493	50	938
Sash-holder	J. D. Hopkins	421,714	Feb. 18	1890	496	50	940
Sash-holder	G. Kendall	428,397	May 20	2095	526	51	1240
Sash-holder	W. H. McClure	440,186	Nov. 11	850	219	53	788
Sash-holder	J. Schofield	429,364	June 3	400	95	51	1547
Sash-holder	G. H. Spring	441,596	Nov. 25	3179	819	53	1241
Sash-holder	J. M. Stukes	429,974	June 10	1318	326	51	1736
Sash-holder	J. M. Stukes	436,549	Sept. 16	1836	484	52	1738
Sash-holder	J. Weathers	443,884	Dec. 30	3656	942	53	2008
Sash-holder	E. G. Whitehead	429,669	June 10	859	208	51	1647
Sash-holder	A. Wollenweber	420,324	Jan. 28	2541	674	50	528
Sash lift and lock	A. W. Thompson	427,713	May 13	1038	260	51	1026
Sash or blind holder	W. S. Holland	432,799	July 22	2759	706	52	556
Sash. Reversible window.	E. L. Reguin and T. J. Kingston	425,146	Apr. 8	1101	293	51	221
Sash-stop	L. B. Jordan	433,945	Aug. 12	752	196	52	913
Sash stop. Window.	E. T. Early	440,947	Nov. 18	2116	549	53	1031
Sash. Storm.	F. Straub	421,782	Feb. 18	1976	520	50	955
Sash. Ventilating.	J. P. Rieffel	429,796	June 10	1037	254 255	51	1681
Sash-weight attacher.	N. Zogg	429,403	June 3	462	109	51	1559
Sash-weight mold	S. L. Halsey and W. McGhie	433,079	July 29	3199	822	52	646
Sash. Window.	D. Cresser	437,980	Oct. 7	469	133	53	90
Sash. Window.	J. H. Foote	426,791	Apr. 29	3596	939	51	735
Sash. Window.	J. H. Foote	426,792	Apr. 29	3598	939	51	736
Sash. Window.	J. H. Foote	426,793	Apr. 29	3600	939	51	736
Sash. Window.	O. Wagner	431,629	July 8	916	231	52	190
Sash. Window.	F. E. Watton	438,042	Oct. 7	572	156	53	109
Sashes. Device for swinging sliding	S. R. Deacon	420,227	Jan. 28	2400	639	50	502
Satchel.	O. Zimmer	423,464	Mar. 18	1666	440	50	1469
Satchel and frame therefor	W. Roemer	427,796	May 13	1177	295	51	1052
Satchel-frame	L. Hummel	441,957	Dec. 2	508	136	53	1364
Satchel-frame	A. H. Peterson	437,366	Sept. 30	3202	834	52	2014
Satchel-frame attachment	E. C. Goepel	443,138	Dec. 23	2460	629	53	1765
Sausage-machine	R. Schwahn	442,242	Dec. 9	955	253	53	1457
Sausage-meat cutter	J. M. Briggs	423,899	Mar. 25	2318	611 612	50	1600
Sausage-meat cutter	J. M. Briggs and A. F. Schwahn	438,056	Oct. 7	592	161 162	53	112
Sausage-stuffing machines. Device for drawing sausage-casings upon the nozzles of	F. W. Wilder	432,173	July 15	1785	459	52	363
Sausage-stuffing machines. Tying attachment for.	W. B. Allyn	429,875	June 10	1167	289	51	1706
Saw	W. A. Bartholomew	431,316	July 1	428	106	52	88
Saw	C. H. Douglas	431,510	July 1	736	183	52	147
Saw	J. Guedel	424,194	Mar. 25	2751	733	50	1682
Saw	W. F. Hurd	422,788	Mar. 4	613	177	50	1254
Saw	G. C. Iles	424,301	Mar. 25	2903	775	50	1712
Saw	A. Krieger	432,534	July 22	2326	601	52	474
Saw	H. E. Poore	428,411	May 20	2114	530	51	1243
Saw	S. Taylor	443,553	Dec. 30	3147	809	53	1909
Saw. Amputating.	C. H. Truax	437,576	Oct. 7	310	92	53	60
Saw. Band.	C. W. and A. S. Gage	441,655	Dec. 2	38	11	53	1269
Saw-bit holder	S. H. Chase	435,556	Sept. 2	270	75	52	1427
Saw-buck lock	J. W. Bowen	437,850	Oct. 7	270	81	53	53
Saw. Circular	R. J. Bole	424,263	Mar. 25	2836	758	50	1699
Saw. Circular	W. A. Miller	437,128	Sept. 23	2794	728	52	1931
Saw clamp. Drag.	M. O. Smith	420,115	Jan. 28	2213	566	50	469
Saw-cleaning device. Gin.	L. H. Shuford and W. F. Fowler	433,049	July 29	3154	811	52	638
Saw. Crosscut.	W. A. Miller	434,352	Aug. 12	1370	358	52	1035
Saw. Crosscut.	C. Prouty	440,253	Nov. 11	955	245	53	806
Saw. Cotton-gin	J. T. Turner	438,035	Oct. 7	564	154	53	107
Saw. Cutting-off	J. B. Roberts	420,103	Jan. 28	2198	522	50	465
Saw. Drag.	W. Turner	437,532	Sept. 30	3462	903	52	2067
Saw filing and setting machine	W. H. Parry	427,898	May 13	1333	336	51	1081

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Saw filing and setting machine	W. A. Timberman	432,455	July 15	2196	{ 566 567 568 }	52	440
Saw-filing bench	M. Y. Lewis	425,332	Apr. 8	1373	367	51	276
Saw-filing machine	J. S. Moseley	431,070	July 1	62	15, 16	52	14
Saw-filing machine	W. H. Penrose	424,724	Apr. 1	440	117	51	87
Saw-filing machine	T. Powell	434,071	Aug. 12	336	246	52	949
Saw for cotton-gins. Sectional	H. V. Scattergood	420,666	Feb. 4	337	88	50	630
Saw-frame. Adjustable	S. Hale	424,927	Apr. 1	760	{ 202 203 }	51	147
Saw frame. Extension back	W. C. Marston	440,174	Nov. 11	833	215	53	781
Saw-gage	A. Harman	433,465	Aug. 5	43	14	52	765
Saw-gage	B. S. Loveland	434,284	Aug. 12	1277	331	52	1015
Saw. Gang rotary	H. S. Perkins	435,380	Aug. 26	3019	799	52	1366
Saw-gin	W. M. Brown	438,676	Oct. 21	1515	409	53	303
Saw-gin	W. Deering	440,918	Nov. 18	2068	535	53	1032
Saw-gin	J. D. McAnulty	439,601	Oct. 23	3001	796	53	590
Saw-greaser	G. B. Lum	429,040	May 27	3057	788	51	1443
Saw-guide	J. E. Bill	434,756	Aug. 19	2028	530	52	1171
Saw-guide	J. Harley	427,316	May 6	437	113	51	898
Saw-guide	J. A. Mayer	420,950	Feb. 11	786	{ 204 205 }	50	722
Saw-guide	T. Robert	425,075	Apr. 8	1003	268	51	202
Saw guide. Band	R. McChesney	425,105	Apr. 8	1028	275	51	207
Saw guide. Band	J. H. Mead	436,143	Sept. 9	1189	311	52	1607
Saw guide. Band	C. E. Wright	434,010	Aug. 12	839	{ 220 221 }	52	929
Saw guide. Circular	W. G. Tuten	440,075	Nov. 4	672	179	53	759
Saw-guide for band-saw mills	D. C. Prescott	426,684	Apr. 29	3423	898	51	702
Saw-gummer	W. H. Bennett	429,165	June 3	92	32	51	1489
Saw-gummer	W. H. Southworth and N. W. Calcutt	439,698	Nov. 4	106	28	53	629
Saw gummer and setter	G. S. Strom	438,654	Oct. 21	1484	402	53	238
Saw gummer. Gin	J. E. Booker and J. O. Phillips	430,333	June 17	1926	{ 471 472 }	51	1863
Saw gummer. Gin	J. G. Falls	419,989	Jan. 21	2013	531	50	420
Saw gummer. Gin	R. F. Mobley	419,276	Jan. 14	939	248	50	199
Saw-gumming machine	T. S. Disston	429,019	May 27	3017	{ 774 775 }	51	1436
Saw-gumming machine. Gin	J. W. Smith	437,628	Sept. 30	3593	939	52	2093
Saw-handle	R. W. Clemson	434,767	Aug. 19	2048	535	52	1176
Saw-handle	J. A. Corey	442,361	Dec. 9	1142	297	53	1491
Saw-handle	E. England	426,528	Apr. 29	3192	838	51	657
Saw-handle	M. E. True	422,468	Mar. 4	157	42	50	1166
Saw handle. Crosscut	M. E. True	420,479	Feb. 4	80	19	50	579
Saw handle. Crosscut	M. E. True	420,480	Feb. 4	81	19	50	579
Saw-hanging	H. L. Beach	429,838	June 10	1109	274	51	1695
Saw hook and stirrup. Gang	C. P. Rose	432,567	July 22	2376	612	52	484
Saw-jointer	D. W. Karshner	440,163	Nov. 11	815	211	53	779
Saw-jointer	R. E. Poindexter	442,688	Dec. 16	1654	425	53	1603
Saw-jointer	J. E. Randall	420,547	Feb. 4	166	41	50	596
Saw jointer and gage	N. H. Roberts	422,316	Feb. 25	2775	730	50	1113
Saw jointer and gage	N. H. Roberts	424,998	Apr. 8	879	232	51	178
Saw jointing and dressing device	W. S. Ralya	438,181	Oct. 14	780	212	53	157
Saw jointing and dressing device	N. H. Roberts	438,184	Oct. 14	784	213	53	157
Saw-knockdown device	C. H. Weston	423,503	Mar. 18	1723	454	50	1480
Saw-level	J. H. Miner	429,144	June 3	57	15	51	1483
Saw machine. Band	N. Coan	442,420	Dec. 9	1232	{ 318 319 }	53	1509
Saw-mill	E. Beard	440,388	Nov. 11	1168	{ 301 302 }	53	843
Saw-mill	A. A. De Loach	434,770	Aug. 19	2052	536	52	1177
Saw-mill	M. E. Griswold	442,665	Dec. 16	1616	417	53	1596
Saw-mill	T. S. Wilkin	436,468	Sept. 16	1702	{ 447 448 }	52	1715
Saw-mill attachment	E. P. Armstrong	426,357	Apr. 22	2916	{ 767 768 }	51	595
Saw mill. Band	A. Cunningham	427,404	May 6	568	142	51	924
Saw mill. Band	D. B. Hanson	437,490	Sept. 30	3396	889	52	2055
Saw mill. Band	A. Rodgers	428,785	May 27	2673	678	51	1368
Saw mill. Band	J. C. Slocum	434,731	Aug. 19	1992	{ 519 520 }	52	1164
Saw mill. Band	S. R. Smith	442,645	Dec. 16	1583	{ 409 410 }	53	1589
Saw mill. Band	T. S. Wilkin	432,682	July 22	2562	656	52	519
Saw mill. Band	T. S. Wilkin	432,683	July 22	2563	657	52	520
Saw-mill carriage	J. G. Emery, Jr	440,144	Nov. 11	779	204	53	770
Saw-mill carriage	E. J. Muller	424,017	Mar. 25	2508	668	50	1635
Saw-mill carriage	T. S. Wilkin	436,621	Sept. 16	1934	508	52	1757
Saw-mill carriage	T. S. Wilkin	437,957	Oct. 7	432	121	53	82
Saw-mill carriage. Offsetting	G. M. Hinkley and R. Schofield	433,681	Aug. 5	356	91	52	825
Saw-mill carriages. Automatic offsetting device for	A. E. Smith	443,336	Dec. 23	2804	{ 720 721 }	53	1834
Saw-mill carriages. Reversing-gear for	W. J. Henderson	440,152	Nov. 11	788	207	53	772
Saw-mill dog	J. P. Batchelor	425,158	Apr. 8	1121	297	51	225
Saw-mill dog	W. H. Bennett	426,520	Apr. 29	3177	834	51	654
Saw-mill dog	M. E. Benson	436,203	Sept. 9	1284	{ 334 335 }	52	1625
Saw-mill dog	N. C. Buch	441,743	Dec. 2	177	47	53	1297
Saw-mill dog	C. E. Denison and J. C. Parnell	441,944	Dec. 2	488	131	53	1360
Saw-mill dog	G. M. Hinkley	419,046	Jan. 7	596	153	50	126
Saw-mill dog	A. K. Miller	427,342	May 6	481	123	51	906
Saw-mill dog	P. Payette	424,347	Mar. 25	2990	795	50	1728

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Saw-mill dog.	P. Payette.	428,518	May 20	2254	{ 571 572 }	{ 51	1269
Saw-mill dog.	D. C. Prescott.	424,727	Apr. 1	450	120	51	89
Saw-mill feed.	A. A. De Loach.	434,626	Aug. 19	1813	474	52	1132
Saw-mill feed.	H. Segur.	432,444	July 15	2176	560	52	435
Saw-mill knee and head-block.	G. F. Willis and J. F. Keith.	426,895	Apr. 29	3741	977	51	764
Saw-mill set-works.	E. T. Davies.	438,062	Oct. 7	605	{ 165 166 }	{ 53	116
Saw-mill set-works.	R. E. Nevin.	425,386	Apr. 8	1453	389	51	291
Saw-mill set-works, &c. Intermittent grip for.	W. S. Beeman.	425,398	Apr. 15	1473	395	51	303
Saw-mills. Direct-acting steam-feed works for.	A. Cunningham.	434,657	Aug. 19	1881	491	52	1143
Saw-mills. Gage-roller for.	S. Bartley.	440,387	Nov. 11	1167	301	53	843
Saw-mills. Log-turner for.	J. A. McLaughlin.	439,822	Nov. 4	286	73	53	664
Saw-mills. Sawyer's gage for.	H. A. Duncan.	425,373	Apr. 8	1434	354	51	287
Saw-mills. Variable feed for.	M. I. Welch.	424,663	Apr. 1	351	93	51	68
Saw-plates. Manufacture of.	G. Nimmo.	443,785	Dec. 30	3512	901	53	1978
Saw. Portable.	W. F. Stanley.	432,337	July 15	2028	522	52	406
Saw. Pruning.	H. M. Addison.	437,764	Oct. 7	144	45	53	30
Saw-set.	W. H. Bowman.	438,093	Oct. 7	652	178	53	126
Saw-set.	H. R. Braunsdorf.	425,742	Apr. 15	1998	533	51	406
Saw-set.	C. Huntsman.	441,100	Nov. 18	2361	612	53	1079
Saw-set.	J. Johnstone.	438,927	Oct. 21	1939	{ 516 517 }	{ 53	381
Saw-set.	C. F. Leopold.	433,947	Aug. 12	755	197	52	914
Saw-set.	C. Morrill.	441,962	Dec. 2	516	138	53	1365
Saw-set.	C. Morrill.	441,963	Dec. 2	517	138	53	1365
Saw setting and jointing device.	S. Toles.	422,467	Mar. 4	156	42	50	1166
Saw setting device.	A. B. Fisher.	419,192	Jan. 14	823	217	50	176
Saw-setting machine.	B. McIntire.	418,874	Jan. 7	342	83	50	71
Saw sharpener. Cotton-gin.	D. McSweeney.	421,422	Feb. 18	1462	737	50	857
Saw-sharpening device.	C. W. Dudley.	428,832	May 27	2743	697	51	1382
Saw-sharpening machine.	L. P. Halladay.	418,790	Jan. 7	198	49	50	43
Saw-sharpening machine.	F. M. King.	437,929	Oct. 7	391	111	53	75
Saw-sharpening machine.	J. and H. Knecht.	433,866	Aug. 5	636	165	52	881
Saw-sharpening machine.	O. Pierson.	435,121	Aug. 26	2610	691	52	1290
Saw-shifting device.	G. H. Patillo.	428,940	May 27	2897	741	51	1414
Saw-smithing machine. Circular.	N. W. Mortorff.	437,321	Sept. 30	2958	773	52	1968
Saw-stretching machine.	N. W. Mortorff.	419,699	Jan. 21	1572	420	50	332
Saw-swage.	L. P. Halladay.	418,715	Jan. 7	91	21	50	20
Saw-swage.	W. A. Milford.	425,895	Apr. 15	2218	569	51	447
Saw-swaging machine.	N. W. Mortorff.	419,342	Jan. 14	1050	{ 277 278 }	{ 50	222
Saw-swaging machine.	H. P. O'Connor and A. Leduc.	418,958	Jan. 7	482	120	50	101
Saw-swaging machine.	E. B. Rich.	438,861	Oct. 21	1848	{ 490 491 }	{ 53	363
Saw. Swing.	C. Seymour.	427,196	May 6	262	68	51	863
Saw. Swinging.	B. Bronson.	422,332	Feb. 25	2803	379	50	1118
Saw-table clamping device.	J. Balsley.	418,936	Jan. 7	452	{ 110 111 }	{ 50	94
Saw-table gage.	A. Capron.	425,297	Apr. 8	1330	355	51	267
Saw-teeth. Device for side-dressing.	J. B. Rhodes.	441,701	Dec. 2	113	30	53	1244
Saw-teeth. Device for side-dressing.	C. H. Weston.	426,889	Apr. 29	3733	975	51	762
Saw-teeth. Device for swaging insertible.	N. H. Wheeler and N. M. Newhouse.	425,196	Apr. 8	1180	312	51	239
Saw-teeth. Machine for holding and sharpening insertible.	H. Bergstrom.	421,896	Feb. 25	2150	564	50	997
Saw-teeth. Tool for manipulating insertible.	R. P. Smith.	433,913	Aug. 5	698	181	52	893
Saw-tooth.	W. S. Ralya.	438,180	Oct. 14	779	212	53	156
Saw-tooth.	A. B. Palmer.	422,969	Mar. 11	933	245	50	1321
Saw-tooth.	H. W. Wheeler.	429,400	June 3	458	108	51	1559
Saw-tooth. Adjustable.	A. W. Walter.	435,657	Sept. 2	440	117	52	1458
Saw-tooth. Insertible.	R. J. Bole.	420,857	Feb. 4	632	163	50	683
Saw-turning device.	J. M. Snidow.	438,119	Oct. 7	687	166	53	132
Saw. Wabble.	L. B. Rogers.	425,700	Apr. 15	1940	515	51	395
Saw wheels. Means for cleaning band.	H. C. Lindsay.	423,063	Mar. 11	1070	278	50	1346
Saws. Adjustable base for grooving.	W. Millard.	429,142	June 3	55	14	51	1482
Saws. Apparatus for truing the periphery of circular.	J. W. Strouse.	422,323	Feb. 25	2785	733	50	1115
Saws. Appliance for circular.	E. Benjamin.	437,277	Sept. 30	3051	799	52	1986
Saws. Back-guard for circular.	C. A. French.	421,561	Feb. 18	2100	551	50	977
Saws. Detachable handle for crosscut.	C. Pronty.	437,620	Sept. 30	3581	936	52	2090
Saws. Device for brazing.	E. B. Rich.	433,656	Aug. 5	320	82	52	818
Saws. Device for rounding up circular.	W. E. Jordan and F. A. Maribew.	436,059	Sept. 9	1052	273	52	1584
Saws. Feed device for.	J. Harley.	425,223	Apr. 8	1217	323	51	247
Saws. Gang of circular.	G. E. Elliott.	429,514	June 3	623	153	51	1591
Saws. Machine for sharpening gin.	J. Q. Smith.	431,197	July 1	245	62, 63	52	51
Saws. Mitering attachment for circular.	E. Schmitz.	420,739	Feb. 4	431	114	50	649
Sawdust-burner.	F. W. Cook.	421,535	Feb. 18	1665	431	50	895
Sawdust-burner.	S. L. Miller.	421,744	Feb. 18	1924	505	50	946
Sawdust-burner.	R. H. Nogar.	426,847	Apr. 29	3677	958	51	751
Sawing and drilling metal or other substances. Machine for.	W. B. Hammond.	421,027	Feb. 11	902	233	50	744
Sawing-machine.	D. S. Abbott.	443,231	Dec. 23	2633	676	53	1801
Sawing-machine.	H. A. Axtell.	431,714	July 8	1080	{ 269 270 272 273 }	{ 52	220
Sawing-machine.	H. L. Beach.	429,836	June 10	1103	{ 273 274 275 }	{ 51	1695
Sawing-machine.	H. L. Beach.	429,837	June 10	1107	273	51	1695
Sawing-machine.	H. C. Green.	429,902	June 10	1205	298	51	1713
Sawing-machine.	J. H. Raymond.	437,138	Sept. 23	2808	731	52	1934
Sawing-machine.	J. B. Rollins.	442,398	Dec. 9	1191	309	53	1501
Sawing-machine.	C. L. Tardent.	420,319	Jan. 28	2535	672	50	527
Sawing-machine. Circular.	M. Hodgeson.	436,420	Sept. 16	1629	429	52	1700
Sawing-machine. Compensating gang.	A. J. Wilcox.	420,849	Feb. 4	617	159	50	680

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Sawing machine. Crosscut	R. S. and R. L. Greenlee	419,848	Jan. 21	1798	{ 475 476 527	{ 50	376
Sawing-machine feeding device	J. Wurster	421,803	Feb. 18	2003	{ 528 529	{ 50	961
Sawing-machine. Horizontal	F. R. Lane	420,348	Jan. 28	2579	685	50	534
Sawing machine. Picket	J. Farnwald	430,381	June 17	1992	491	51	1876
Sawing machine. Portable	C. Curwen	431,445	July 1	636	160	52	129
Sawing machine. Self-feeding rip	J. R. Ripley	419,561	Jan. 14	1353	362	50	284
Sawing machine. Slab	W. E. Hill	428,722	May 27	2582	654	51	1350
Sawing machine. Wood	S. S. Mohu	436,669	Sept. 16	2025	529	52	1774
Scaffold	G. Belucke and L. J. Frank	435,620	Sept. 2	381	103	52	1447
Scaffold	R. J. Crump	423,989	Mar. 25	2460	653	50	1626
Scaffold	A. T. Sears	436,606	Sept. 23	2267	598	52	1829
Scaffold attachment	J. T. O'Brien	437,934	Oct. 7	398	113	53	77
Scaffold-bracket	O. De Haer	438,249	Oct. 14	882	239	53	174
Scaffold-bracket	C. A. Stowell	431,291	July 1	390	98	52	80
Scaffold-bracket	R. Wegg	424,236	Mar. 25	2804	749	50	1693
Scaffold-bracket	D. C. Wright	437,389	Sept. 30	3235	843	52	2020
Scaffold-bracket. Extension	T. Vassall	441,722	Dec. 2	147	39, 40	53	1290
Scaffold-fastening	O. H. Gardner	432,996	July 29	3071	787	52	622
Scaffold. Folding	C. M. Dearborn	429,427	June 3	497	{ 118 119	{ 51	1567
Scaffold. Movable	J. T. O'Brien	437,935	Oct. 7	399	113	53	77
Scaffold. Portable	M. Courtemanche	423,988	Mar. 25	2459	653	50	1626
Scaffold-securing device	G. S. MacLaurin	427,180	May 6	239	62	51	858
Scaffold. Suspended stair	J. McDermott	436,460	Sept. 16	1690	445	52	1712
Scale and calculator. Combined platform	M. Phelps	438,753	Oct. 21	1664	446	53	329
Scale. Automatic grain	H. E. Hawk	440,355	Nov. 11	1116	{ 286 287	{ 53	833
Scale. Automatic grain	M. B. Lloyd	430,867	June 24	2775	680	51	2035
Scale-beam and weight therefor	I. L. Purdy	429,477	June 3	571	140	51	1582
Scale-beam for grain-weighers	C. H. Cooley and F. H. Richards	440,740	Nov. 18	1760	453	53	966
Scale. Grain	N. G. Ross	433,422	July 29	3629	{ 952 953	{ 52	746
Scale. Measuring	H. Esser	431,568	July 8	828	206	52	173
Scale. Platform	J. P. Cowan	441,827	Dec. 2	313	84	53	1325
Scale. Price-indicating weighing	C. A. Fairand	442,873	Dec. 16	1993	511	53	1669
Scale-regulator. Grain	F. H. Richards	442,640	Dec. 16	1577	408	53	1588
Scale regulator. Grain	F. H. Richards	442,711	Dec. 16	1700	{ 436 437	{ 53	1611
Scale. Vernier	S. Darling	442,020	Dec. 2	613	165	53	1383
Scale. Weighing and price	R. A. Daniels	442,218	Dec. 9	925	245	53	1451
Scales and desk-ruler combined. Paper-weighing	P. A. O'Marra	440,959	Nov. 18	2137	553	53	1035
Scales. Automatic grain	C. Dominy	421,912	Feb. 25	2172	570	50	1001
Scales. Automatic grain	H. Earle	422,747	Mar. 4	557	142	50	1342
Scales. Automatic grain	J. H. Forsyth	439,135	Oct. 28	2263	609	53	450
Scales. Automatic grain	T. F. Gray	441,658	Dec. 2	41	11, 12	53	1270
Scales. Automatic grain	O. M. Morse	431,703	July 8	1066	267	52	217
Scales. Automatic grain-weighing	J. H. Gunder and W. H. Pierce	436,854	Sept. 23	2329	623	52	1852
Scales. Automatic regulator for grain	C. H. Cooley	421,556	Feb. 18	1666	432	50	895
Scales. Automatic weighing	E. N. Bachelor and F. E. Lovejoy	423,204	Mar. 11	1278	333	50	1387
Scales. Automatic weighing	M. B. Bartlett	418,887	Jan. 7	359	86	50	75
Scales. Balance-ball for	F. A. Pearsons	440,363	Nov. 11	1128	290	53	835
Scales. Coin-controlled weighing	W. R. Smith	437,166	Sept. 23	2871	{ 746 747	{ 52	1944
Scales. Coin-controlled weighing	W. R. Smith	441,711	Dec. 2	130	34	53	1287
Scales. Coin-controlled weighing	W. R. Smith and A. L. Washburn	418,822	Jan. 7	247	60	50	52
Scales. Coin-lock for weighing	J. M. O'Kelly	419,544	Jan. 14	1333	356	50	280
Scales. Computing spring	C. M. Babcock	421,805	Feb. 18	2005	529	50	961
Scales. Drug	R. E. Glover	421,695	Feb. 18	1863	488	50	935
Scales. Grain	P. R. Grabill	440,613	Nov. 11	1558	{ 400 401	{ 53	916
Scales. Liquid	W. Buschmann and C. C. E. Van Alstine	437,899	Oct. 7	343	100	53	67
Scales or other coin-actuated mechanism. Coin-released weighing	A. H. Fancher	424,770	Apr. 1	518	{ 140 141	{ 51	101
Scales. Pendulum	J. B. Martin	436,835	Sept. 23	2318	610	52	1839
Scales. Portable frame for stock	A. Charles and J. W. Garrison	433,516	Aug. 5	110	32	52	778
Scales. Postal weighing	J. C. Bittschofsky	421,026	Feb. 11	900	232	50	743
Scales. Prescription	C. H. Fitch	418,708	Jan. 7	84	19	50	19
Scales. Railway	J. W. Ballard and H. L. Fisher	434,056	Aug. 12	898	{ 236 237	{ 52	941
Scales. Sliding calculating	W. Hart	426,444	Apr. 29	3070	805	51	634
Scales. Spring	E. N. Gillilan	431,205	July 1	261	65, 66	52	54
Scales. Spring	C. G. Lundborg	422,238	Feb. 25	2656	701	50	1091
Scales. Weighing	J. G. Schmidt	423,183	Mar. 11	1253	326	50	13-2
Scales. Weighing	G. A. Skinner	440,579	Nov. 11	1496	386	53	905
Scales. Weighing	W. H. Stewart	438,218	Oct. 14	881	239	53	174
Scales. Weighing	C. B. Wanausaker	439,216	Oct. 28	2394	644	53	475
Scales. Weighing and computing	J. H. Freeman, Jr	431,456	July 1	652	163	52	131
Scales. Weighing and price	J. T. Bright	427,829	May 13	1216	307	51	1060
Scales. Weighing and price	H. C. Hart	428,560	May 20	2309	{ 586 587	{ 51	1280
Scalping and bolting machine	J. M. Smith	430,789	June 24	2649	650	51	2011
Scalping and grading device	A. Hunter	420,723	Feb. 4	410	{ 109 110	{ 50	645
Scalping and grading device	A. Hunter	420,802	Feb. 4	536	139	50	666
Scalping and grading device	A. Hunter	420,803	Feb. 4	539	139	50	666
Scalping-reel and flour-bolt	P. B. Sprengle	433,188	July 29	3366	871	52	680
Scarf-fastener	G. E. Surgi	437,060	Sept. 23	2680	700	52	1910
Scarf-holder	H. V. Mann-Tiechler	430,191	June 17	1653	411	51	1810
Scarf-retaining pin	J. C. Gaither and W. H. Hart, Jr	420,050	Jan. 28	2107	556	50	447
Scarf-retaining pin	W. H. Hart, Jr	420,063	Jan. 28	2131	563	50	451

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 'g.	Vol.	Page.
Scholar's companion	A. Overholt	421,012	Feb. 11	884	228	50	740
School-seat	J. R. Johnson	424,713	Apr. 1	427	113	51	84
School seat and desk	J. Duncan	432,662	July 22	2528	648 649	52	512
School seat and desk	S. W. Peregrine	436,258	Sept. 9	1361	334 355	52	1641
Schooner	E. F. Small	419,225	Jan. 14	872	229	50	186
Scissors	J. Badger	429,000	May 27	2985	765	51	1430
Scissors	J. V. Chamberlin	422,915	Mar. 11	841	218	50	1305
Scissors and tracing-wheel. Combined	A. Pauls	438,017	Oct. 7	530	149	53	101
Scissors-holder	C. J. Ross	438,087	Oct. 7	642	175	53	124
Scissors. Pocket	J. Badger	425,560	Apr. 15	1714	458	51	351
Scissors. Reversible	J. T. Jefferson	439,323	Oct. 28	2583	689	53	509
Scoop	W. C. Quigley	440,059	Nov. 4	655	175	53	736
Scoop	C. N. Shaw	431,921	July 8	1385	351	52	279
Scoop or shovel	W. D. Rowland	420,106	Jan. 28	2201	582	50	466
Scoop. Potato	J. Vowles	421,021	Feb. 11	895	231	50	742
Scoop. Wire	W. D. Rowland	420,608	Feb. 4	255	69	50	614
Scourer:							
See Cutlery-scourer. Grain-scourer.							
Scouring and washing apparatus	F. E. Anderson	430,817	June 24	2702	662	51	2021
Scouring-machine	E. Tymeson and L. Dueros	441,205	Nov. 25	2551	659 660	53	1123
Scouring or dyeing	S. Hodgson	419,331	Jan. 14	1030	272 273	50	218
Scraper	W. B. Pngsley	435,712	Sept. 2	521	137 138	52	1476
Scraper	C. Rath	420,960	Feb. 11	804	209	50	725
Scraper	F. B. Smith	422,906	Mar. 11	956	252	50	1326
Scraper. Boot or shoe	A. A. Hyde	435,500	Sept. 2	183	51	52	1410
Scraper. Ditching and grading	L. E. Ashly	433,116	July 29	3260	839	52	658
Scraper. Earth	S. W. Hall	424,058	Mar. 25	2561	684	50	1645
Scraper. Mud	G. A. Mangum	429,217	June 3	170	41	51	1503
Scraper. Road	M. G. Bunnell	427,738	May 13	1073	269 270	51	1032
Scraper. Road	M. G. Bunnell	427,739	May 13	1076	270 271	51	1033
Scraper. Road	H. L. Jacobs and T. H. Stagg	432,942	July 22	2956	758	52	595
Scraper. Road	C. Mendenhall	428,506	May 20	2234	565	51	1266
Scraper. Road	E. Morel and F. T. Lomont	433,482	Aug. 5	62	19	52	768
Scraper. Road	H. O'Hare	435,365	Aug. 26	2988	792	52	1360
Scraper. Road	M. S. Rexford	424,823	Apr. 1	608	159	51	117
Scraper. Shoe	C. A. Sparrow	419,801	Jan. 21	1717	456	50	361
Scraper. Wheeled	F. A. Rathbun	429,387	June 3	437	103	51	1554
Scraper. Wheeled earth	W. E. Kilborn	422,531	Mar. 4	239	62	50	1181
Scraper. Wood	J. W. Stayman	439,699	Nov. 4	107	28	53	629
Scrapping and ditching machine. Road	F. M. Pennock	422,621	Mar. 4	389	97	50	1211
Scrapping-machine. Track or road	S. Griffin	420,342	Jan. 28	2566	681 682	50	532
Screen:							
See Adjustable screen. Folding screen.							
Assorting-screen. Grain-separating screen.							
Bed-screen. Heat-screen.							
Bird-cage screen. Sand-screen.							
Car-window screen. Table-screen.							
Coal-screen. Window-screen.							
Extension-screen. Window and door screen.							
Fire-screen.							
Screen	G. W. Armstrong and W. A. Rankin	419,907	Jan. 21	1890	497	50	396
Screen	J. W. Boughton	425,290	Apr. 8	1318	353	51	265
Screen	J. W. Boughton	426,232	Apr. 22	2747	720	51	559
Screen	R. H. Krall	426,585	Apr. 29	3291	863	51	677
Screen-boards. Opening and closing	G. Williams	420,135	Jan. 28	2246	595	50	474
Screen for windows, doors, &c	A. T. Way	435,782	Sept. 2	623	164	52	1494
Screen holder. Wire	P. W. Zeigler	438,974	Oct. 21	2014	533	53	396
Screen-shaking mechanism	E. G. Bailey	420,711	Feb. 4	392	104	50	641
Screen-wire-stretching machine	J. L. Ulsh	437,951	Oct. 7	421	118	53	80
Screening device	R. R. Watters	436,049	Sept. 9	1040	270	52	1581
Screw	J. Ericson	429,651	June 10	1124	278	51	1698
Screw	W. H. Julian and J. B. Guillaume	429,241	June 3	202	50	51	1511
Screw and clamp. Box	P. N. Bailey	436,202	Sept. 9	1203	334	52	1624
Screw and nut for the same. Feed	A. Holmquist	439,660	Nov. 4	51	14	53	616
Screw-blanks, &c. Machinery for reducing the diameter and for tapering	J. Sheldon	441,073	Nov. 18	2317	600 601	53	1071
Screw-blanks. Manufacture of	H. Nettlefold and J. Sheldon	438,938	Oct. 21	1954	521	53	384
Screw-cutting attachment	W. Evans	436,078	Sept. 9	1086	281	52	1589
Screw-cutting device	H. Westbrook and R. Burns	430,358	June 17	1963	422	51	1870
Screw-cutting die	G. L. Enggren	433,334	July 29	3571	921	52	722
Screw-cutting die	F. N. Gardner	420,904	Feb. 4	713	184	50	698
Screw-cutting die	F. N. Gardner	422,340	Feb. 25	2820	744	50	1121
Screw-cutting die	C. P. Russell	442,827	Dec. 16	1917	493	53	1654
Screw-cutting die	C. P. Russell	442,828	Dec. 16	1919	493	53	1654
Screw-cutting die	F. J. Smith	437,385	Sept. 30	3230	842	52	2019
Screw-cutting die	T. L. Smith	421,773	Feb. 18	1965	516	50	953
Screw-cutting die and stock	W. E. Canedy	425,655	Apr. 15	1870	499	51	380
Screw-cutting die. Automatic	W. Porteous	427,903	May 13	1340	338	51	1083
Screw-cutting die-head	J. A. Becher	426,228	Apr. 22	2743	715	51	558
Screw-cutting head	A. B. Landis	422,024	Feb. 25	2319	612	50	1029
Screw-cutting machine	H. C. Brill	434,913	Aug. 26	2310	610	52	1233
Screw-cutting machine	H. G. Cooke	432,262	July 15	1915	490	52	386
Screw-cutting machine	H. Crehan	431,560	July 8	815	203 204	52	170
Screw-cutting tap	W. E. Jones	439,956	Nov. 4	496	129	53	705

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Screw-cutting tool	J. Wheeler	427,386	May 6	533	135	51	917
Screw-driver	M. J. Bartlett	428,662	May 27	2476	629	51	1330
Screw-driver	F. Chantrell	419,638	Jan. 21	1474	395	50	315
Screw-driver	G. A. Colton	438,097	Oct. 7	658	179	53	127
Screw-driver	A. D. and H. E. Goodell	432,729	July 22	2636	674	52	534
Screw-driver	O. Z. Greene	422,520	Mar. 4	226	59	50	1179
Screw-driver	W. R. Johns	422,791	Mar. 4	621	158	50	1256
Screw-driver	J. Lucas	428,012	May 13	1501	381	51	1115
Screw-driver	H. H. True	430,901	June 24	2828	694	51	2045
Screw-driver and bit-holder	L. M. Marsh	442,710	Dec. 16	1698	436	53	1611
Screw-driver attachment	M. J. Bartlett	420,431	Feb. 4	5	2	50	565
Screw-driver. Ratchet	R. C. Ellrich	425,998	Apr. 22	2406	637	51	491
Screw-driver. Ratchet	G. E. Gay and J. H. Parsons	437,297	Sept. 30	3077	806	52	1991
Screw-driver wrench	M. J. Bartlett	432,928	July 22	2938	753	52	592
Screw. Hand.	A. H. George	431,719	July 8	1088	271	52	221
Screw-knobs. Manufacture of	J. Berbecker	439,830	Nov. 4	300	75	53	667
Screw-locking device	W. M. Jenne	423,772	Mar. 18	2123	560	50	1554
Screw-machine attachment. Metal	J. Hartness	431,809	July 8	1227	307	52	248
Screw machine. Metal	E. Rothlisberger	434,204	Aug. 12	1148	298 299	52	990
Screw machine. Metal	S. L. Worsley	424,527	Apr. 1	128	37 38 39	51	28
Screw-machine tool	J. Hartness	424,979	Apr. 8	848	225	51	173
Screw-machines. Stock-feeding device for	J. Hartness	441,411	Nov. 25	2895	746	53	1187
Screw-machines. Stock-feeding mechanism for	J. Hartness	425,377	Apr. 8	1438	385	51	288
Screw-nail	S. E. Groff	426,008	Apr. 22	2120	640	51	494
Screw-press	R. Cathélineau	433,763	Aug. 5	482	125 126	52	849
Screw. Rolled wood	C. D. Rogers	430,236	June 17	1732	430	51	1036
Screw. Rolled wood	C. D. Rogers	438,754	Oct. 21	1666	447	53	330
Screw. Rolled wood	C. D. Rogers	440,334	Nov. 11	1087	279	53	828
Screw. Roof	D. B. Corley	436,775	Sept. 23	2200	580	52	1816
Screw shank and ferrule	J. Pym	430,685	June 24	2478	605	51	1977
Screw-swaging machine	W. T. McGinnis	432,164	July 15	1772	456	52	361
Screw. Tail	H. C. Lindner and B. D. Harris	420,349	Jan. 28	2580	685	50	534
Screw-tap	F. Hoerle, Jr.	428,490	May 20	2216	560	51	1262
Screw-threading machines. Pipe-elbow holder for	F. F. Voigt	424,519	Apr. 1	117	34	51	26
Screw-threads. Cutting	J. H. Newbury and G. A. Chapman	437,713	Oct. 7	52	16	53	13
Screw-threads. Device for cutting	G. A. Chapman and J. H. Newbury	423,729	Mar. 18	2065	544	50	1543
Screw-threads. Die for cutting	C. A. Johnson	427,872	May 13	1285	325 326 327	51	1073
Screw-threads. Die for swaging	H. K. Jones	425,935	Apr. 8	936	249	51	189
Screw-threads. Machine for cutting	H. Davidson	437,590	Sept. 30	3528	921	52	2080
Screw-threads. Machine for cutting right and left	J. W. Watson and W. L. Gelston	419,981	Jan. 21	1998	526	50	418
Screw. Wire	L. W. Merriam	426,294	Apr. 22	2826	743	51	576
Screw. Wood	H. W. Libbey	422,307	Feb. 25	2763	728	50	1110
Screw. Wood	C. D. Rogers	434,809	Aug. 19	2103	551	52	1187
Screws. Die for making rolled wood	C. D. Rogers	440,330	Nov. 11	1081	278	53	827
Screws. Die for making rolled wood	C. D. Rogers	440,332	Nov. 11	1084	278	53	827
Screws. Die for making rolled wood	C. D. Rogers	440,333	Nov. 11	1085	279	53	827
Screws. Die for rolling wood	C. D. Rogers	440,329	Nov. 11	1079	278	53	827
Screws. Stock and die for cutting metal	G. Gibbs	433,201	July 29	3384	875	52	683
Scrubbing-frame	I. Watkins	437,849	Oct. 7	269	81	53	53
Scrubbing machine	H. Prud'homme	434,561	Oct. 14	1341	364	53	265
Scuttle lock and opener	A. Stamm	443,804	Dec. 30	3550	910	53	1987
Scythe	J. M. Dain	436,474	Sept. 16	1718	453	52	1718
Scythe	A. Hnck	437,346	Sept. 30	3154	825	52	2005
Scythe-handle	W. H. Dodge	436,220	Sept. 9	1304	340	52	1629
Sea and wave power	J. Beermaker	442,939	Dec. 16	2113	544	53	1692
Sea-wall or breakwater	H. Case	420,928	Feb. 11	757	196	50	716
Sea-water storage-tank	J. Farnham	443,827	Dec. 30	3591	923	53	1994
Seal	L. A. Foote	424,772	Apr. 1	528	142	51	104
Seal	S. H. Thompson and T. J. Cain	427,714	May 13	1039	260	51	1026
Seal. Envelope	M. Renshaw	443,406	Dec. 23	2907	748	53	1854
Seal for cars, &c	A. R. Gibson	421,566	Feb. 18	1677	434	50	898
Seal for vessels and means for opening the same	A. F. Fitz Gerald	439,133	Oct. 28	2259	607	53	449
Seal-lock	R. G. Baldwin	442,736	Dec. 16	1769	458	53	1623
Seal-lock	W. F. Beasley	439,623	Nov. 4	7	2	53	608
Seal-lock	W. N. Brennan	432,723	July 22	2626	672	52	531
Seal-lock	L. A. Brown	425,490	Apr. 15	1615	431	51	332
Seal-lock	E. L. Church	441,936	Dec. 2	476	127	53	1358
Seal-lock	A. Eymer and G. W. Haight, Jr.	437,920	Oct. 7	372	107	53	72
Seal-lock	R. W. Gillespie	435,821	Sept. 2	683	182	52	1507
Seal-lock	F. Greene	431,051	July 1	37	8	52	9
Seal-lock	D. F. MacCarthy	421,951	Feb. 25	2223	583	50	1010
Seal-lock	D. F. MacCarthy	441,770	Dec. 2	224	58	53	1307
Seal-lock	T. R. Roemer	426,961	Apr. 29	3292	999	51	780
Seal-lock	R. M. Sully	426,220	Apr. 22	2733	715	51	556
Seal-making machine	C. C. Hill	438,844	Oct. 21	1818	484 485	53	358
Seal-press	E. J. Brooks	438,140	Oct. 14	720	197 198	53	145
Seal-press. Roller	E. J. Brooks	431,763	July 8	1148	287	52	234
Seals. Shackle-wire for	T. Wenk	434,219	Aug. 12	1172	304	52	995
Sealing gummed paper. Apparatus for	T. H. Hathaway	424,200	Mar. 25	2759	736	50	1684
Sealing gummed paper. Apparatus for	T. H. Hathaway. (Reissue)	11,096	July 22	3011	773	52	604
Sealing-press	E. J. Bruch	440,417	Nov. 11	1244	332	53	856
Seam-compressing machine	G. W. and J. W. Crim	434,322	Aug. 12	1330	346	52	1026
Seam-pressing frame	A. J. Wood	439,286	Oct. 28	2516	674	53	497
Seam-pressing machine	L. Joncas	443,917	Dec. 30	3709	949	53	2017
Seams. Stopping	M. Garvey	442,037	Dec. 2	645	174	53	1389

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Seaming and crimping machine. Can.....	W. D. Brooks.....	425,744	Apr. 15	2001	{ 533 534 534	51	407
Seaming-machine.....	M. Jensen.....	443,445	Dec. 23	2965	{ 763 764 155	53	1865
Seaming machine. Can.....	F. M. Leavitt.....	419,050	Jan. 7	601	{ 156 314 315	50	127
Seaming machine. Can.....	R. Steegmüller.....	440,411	Nov. 11	1217	{ 316 389 390	53	854
Seaming machine. Sheet-metal.....	J. A. Hensel.....	430,124	June 17	1566	{ 389 390 291	51	1794
Seaming tool. Double-roof.....	P. S. Myers.....	421,187	Feb. 11	1133	{ 291	50	789
Seat:							
<i>See</i> Agricultural-ma- Folding seat.							
chine seat.	Hinged seat.						
Bath-tub seat.	Privy-seat.						
Bicycle-seat.	School-seat.						
Boat-seat.	Valve seat.						
Buggy-seat.	Vehicle-seat.						
Car-seat.	Velocipede-seat.						
Carriage-seat.	Wagon-seat.						
Chair-seat.	Water-closet seat.						
Counter-seat.							
Seat.....	G. W. Pepple.....	438,941	Oct. 21	1958	522	53	385
Seat and desk.....	F. A. Holbrook.....	423,055	Mar. 11	1061	275	50	1345
Seat and seat-back.....	G. and E. Woods.....	434,495	Aug. 19	1610	420	52	1091
Seat-back. Adjustable.....	S. C. Houghton.....	439,403	Oct. 28	2703	720	53	532
Seat-lock.....	H. W. Blethen.....	435,726	Sept. 2	537	142	52	1479
Seat-lock.....	L. S. Lindsley.....	440,171	Nov. 11	830	214	53	781
Seat-spring. Detachable.....	J. H. White.....	420,483	Feb. 4	85	20	50	580
Secondary battery.....	G. W. Cochran.....	434,376	Aug. 12	1411	371	52	1043
Secondary battery.....	S. C. C. Currie.....	422,504	Mar. 4	203	55	50	1175
Secondary battery.....	S. C. C. Currie.....	422,505	Mar. 4	204	55	50	1175
Secondary battery.....	H. E. Dey.....	418,700	Jan. 7	76	17	50	17
Secondary battery.....	T. S. E. Dixon.....	431,447	July 1	639	160	52	129
Secondary battery.....	T. M. Foote.....	431,341	July 1	464	115	52	95
Secondary battery.....	G. E. Hatch.....	441,413	Nov. 25	2898	747	53	1187
Secondary battery.....	C. Hering.....	429,273	June 3	237	59	51	1517
Secondary battery.....	C. Hering.....	429,912	June 10	1213	302	51	1716
Secondary battery.....	C. Hering.....	429,913	June 10	1230	302	51	1717
Secondary battery.....	C. Hering.....	429,914	June 10	1321	302	51	1717
Secondary battery.....	T. H. Hicks.....	434,444	Aug. 19	1532	400	52	1074
Secondary battery.....	W. B. Hollingshead.....	422,216	Feb. 25	2614	692	50	1043
Secondary battery.....	W. B. Hollingshead.....	439,594	Oct. 28	2983	792	53	546
Secondary battery.....	W. A. Johnson and J. N. Smith.....	423,324	Mar. 11	1467	384	50	1422
Secondary battery.....	C. W. Kennedy and H. Groswith.....	441,958	Dec. 2	510	{ 136 137	53	1364
Secondary battery.....	I. Kitsee.....	443,456	Dec. 23	2988	768	53	1870
Secondary battery.....	I. Kitsee.....	443,457	Dec. 23	2990	768	53	1870
Secondary battery.....	H. Lampert, Jr.....	437,848	Oct. 7	267	81	53	53
Secondary battery.....	F. Marx.....	440,175	Nov. 11	834	215	53	782
Secondary battery.....	E. J. Mason.....	439,324	Oct. 28	2584	689	53	510
Secondary battery.....	J. F. McLaughlin.....	425,818	Apr. 15	2104	562	51	427
Secondary battery.....	J. F. Mehren.....	419,862	Jan. 21	1818	{ 480 481	50	380
Secondary battery.....	T. F. Nevins.....	427,789	May 13	1161	291	51	1049
Secondary battery.....	G. Philippart.....	425,902	Apr. 15	2325	591	51	449
Secondary battery.....	G. Philippart.....	425,957	Apr. 15	2329	618	51	468
Secondary battery.....	J. K. Pumpelly.....	442,390	Dec. 9	1181	307	53	1439
Secondary battery.....	J. K. Pumpelly.....	442,391	Dec. 9	1182	307	53	1499
Secondary battery.....	E. N. Reynier.....	438,827	Oct. 21	1786	477	53	353
Secondary battery.....	P. Schoop.....	434,093	Aug. 12	971	254	52	956
Secondary battery.....	H. H. Wardwell.....	424,152	Mar. 25	2694	716	50	1671
Secondary battery.....	H. H. Wardwell.....	443,556	Dec. 30	3150	810	53	1910
Secondary battery.....	H. Woodward.....	434,224	Aug. 12	1180	307	52	996
Secondary electric battery.....	J. F. Mehren.....	439,301	Oct. 28	2551	682	53	504
Section-press.....	G. K. Hubbard.....	430,475	June 17	2128	523	51	1902
Sectional boiler.....	A. H. Fowler.....	425,415	Apr. 15	1500	403	51	309
Sectional boiler.....	J. J. Hogan.....	425,426	Apr. 15	1517	{ 406 407	51	313
Sectional boiler.....	R. Wallace.....	436,680	Sept. 16	2042	534	52	1778
Sector-shaped box.....	C. L. Lockwood.....	421,504	Feb. 18	15-6	409	50	840
Securing device.....	A. T. Wentworth.....	425,719	Apr. 15	1966	523	51	400
Securing or fastening device.....	T. A. Bristol.....	419,029	Jan. 7	575	145	50	122
Seed and fertilizer distributor.....	G. F. Strawson.....	441,810	Dec. 2	288	78	53	1320
Seed and making. Meal from cotton.....	E. L. Johnson.....	421,575	Feb. 18	1692	438	50	900
Seed delinter. Cotton.....	R. F. Spangenberg.....	427,925	May 13	1374	347	51	1088
Seed. Delinting cotton.....	R. S. Baxter and G. D. Macdougald.....	439,464	Oct. 28	2794	745	53	549
Seed-delinting machine. Cotton.....	C. K. Marshall.....	431,665	July 8	993	248	52	204
Seed-distributing apparatus.....	A. J. Martin and E. J. Corser.....	430,135	June 17	1580	393	51	1797
Seed-distributing disk.....	G. W. Schaefer and F. Mehnert.....	439,025	Oct. 21	2085	558	53	411
Seed-dropper.....	J. S. Hickman.....	435,829	Sept. 2	693	185	52	1509
Seed-feeding machine.....	D. A. Tompkins.....	440,935	Nov. 18	2097	544	53	1028
Seed huller. Cotton.....	S. S. Williams.....	435,636	Sept. 2	406	109	52	1451
Seed hulls. Apparatus for treating cotton.....	E. Bohn.....	438,984	Oct. 21	2029	{ 541 542	53	400
Seed hulls. Treating cotton.....	E. Bohn.....	437,084	Sept. 23	2719	710	52	1917
Seed linter. Cotton.....	E. J. O'Brien.....	433,874	Aug. 5	648	168	52	883
Seed. Machine for delinting cotton.....	J. J. Faulkner.....	430,843	June 24	2736	670	51	2027
Seed. Machine for delinting cotton.....	J. W. Watkins and J. S. Cochran.....	430,496	June 17	2157	531	51	1908
Seed. Machine for removing lint from cotton.....	C. K. Marshall.....	431,949	July 8	1426	362	52	287
Seed. Machine for separating lint from cotton.....	C. A. Chandler.....	432,916	Mar. 11	842	{ 218 219	50	1305

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Seed-meal heater. Cotton.....	J. S. Price.....	428,134	May 20	1683	{ 426 427 }	51	1159
Seed meal into cakes. Machine for forming cotton.....	J. S. Price.....	425,251	Apr. 8	1254	{ 334 335 }	51	254
Seed meal into cakes. Machine for forming cotton.....	J. S. Price.....	429,544	June 3	670	{ 163 164 }	51	1600
Seed or fertilizer distributor.....	F. E. Goldsmith.....	426,993	Apr. 29	3877	1013	51	790
Seed stripper. Broom-corn.....	H. Poole.....	434,069	Aug. 12	928	244	52	948
Seeds. Compound for treating.....	J. M. Young.....	424,843	Apr. 1	636		51	123
Seeds or the hulls. Apparatus for delinting cotton.....	W. H. Burnet, J. Sears, and O. G. Burnham.	440,259	Nov. 11	963	246	53	808
Seeds or the hulls. Apparatus for delinting cotton.....	J. Sears and O. G. Burnham.....	440,282	Nov. 11	1009	{ 259 260 }	53	814
Seeder.....	J. H. Smith.....	422,987	Mar. 11	957	252	50	1326
Seeder and fertilizer-distributor. Combined.....	G. D. Burdine.....	435,032	Aug. 26	2477	655	52	1265
Seeder and planter.....	J. S. Davis.....	431,842	July 8	1281	322	52	259
Seeder and planter. Broadcast.....	D. F. Lehman.....	435,757	Sept. 2	582	155	52	1487
Seeder and rake.....	W. M. Brinkerhoff, A. W. Stevens, and L. D. Swart.	442,795	Dec. 16	1856	{ 479 480 }	53	1642
Seeder. Broadcast.....	J. A. Callaway.....	429,229	June 3	181	44	51	1506
Seeder. Broadcast.....	M. Freeman.....	435,691	Sept. 2	492	130	52	1470
Seeder. Broadcast.....	F. J. Henriksen.....	423,997	Mar. 25	2474	657	50	1629
Seeder. Broadcast.....	V. Swanfeldt.....	432,648	July 22	2497	642	52	506
Seeder. Broadcast hand.....	B. F. Keeney.....	429,454	June 3	530	127	51	1574
Seeder. Grain.....	S. H. Purdy.....	429,954	June 10	1273	315	51	1727
Seeders. Drill attachment for broadcast.....	N. J. Johnson.....	421,501	Feb. 18	1583	403	50	879
Seeders, &c. Spring-tooth for.....	J. P. Thrasher.....	434,100	Aug. 12	984	257	52	959
Seeding-machine.....	J. C. Fuller and W. A. Lee.....	443,643	Dec. 30	3290	{ 848 849 }	53	1936
Seeding-machine.....	H. S. Howard.....	427,420	May 6	599	149	51	930
Seeding-machine.....	J. H. Jones.....	429,572	June 3	700	172	51	1608
Seeding-machine.....	J. Noxon.....	437,234	Sept. 30	2977	778	52	1972
Seeding-machine.....	T. H. Noxon.....	434,292	Aug. 12	1288	{ 334 335 }	52	1018
Seeding-machine.....	A. Stansel.....	438,501	Oct. 14	1251	339	53	246
Seeding-machine.....	W. A. Van Brunt.....	425,274	Apr. 8	1288	{ 344 345 }	51	260
Seeding-machine attachment. Grain.....	R. Galloway.....	432,664	July 22	2531	649	52	512
Selling-machine. Automatic.....	H. D. Hinckley.....	433,004	July 29	3081	{ 790 791 }	52	624
Seeding-machine wheel.....	H. J. Phelps.....	425,956	Apr. 15	2329	617	51	468
Seesaw and roundabout. Combined.....	A. B. Clarke.....	420,716	Feb. 4	402	107	50	643
Semaphore.....	J. M. Kirby.....	421,005	Feb. 11	876	226	50	739
Semaphore.....	I. Randolph.....	421,085	Feb. 11	986	253	50	760
Semaphore apparatus. Electric.....	F. Stitzel and C. Weinedel.....	428,576	May 20	2335	{ 592 593 }	51	1285
Semaphore or gate.....	J. W. Steele.....	443,732	Dec. 30	3436	{ 881 882 }	53	1964
Semaphore-signal device.....	G. H. Johnson.....	434,084	Aug. 12	957	251	52	954
Semaphores. Device for actuating.....	J. W. Steele.....	443,731	Dec. 30	3434	881	53	1963
Semaphores. System of circuits for electric.....	F. Stitzel.....	428,970	May 27	2944	755	51	1423
Separating apparatus.....	W. Rady.....	419,067	Jan. 7	631	164	50	133
Separating-machine.....	A. Heine and N. B. Trask.....	429,909	June 10	1215	301	51	1716
Separating-machine.....	N. W. Holt.....	422,785	Mar. 4	606	{ 155 156 }	50	1253
Separating-machine.....	N. W. Holt.....	422,941	Mar. 11	880	230	50	1312
Separating-machine.....	N. W. Holt.....	422,942	Mar. 11	881	{ 231 232 }	50	1312
Separating-machine.....	N. W. Holt.....	422,943	Mar. 11	887	{ 232 233 }	50	1313
Separating-machine.....	O. M. Morse.....	441,372	Nov. 25	2828	{ 729 730 }	53	1173
See Battery-separator. Grain and seed separator.							
Centrifugal separator. Liquid separator.							
Coal-separator. Magnetic separator.							
Cockle-separator. Middlings-separator.							
Cream-separator. Ore-separator.							
Dental separator. Pneumatic separator.							
Flour-separator. Rotary separator.							
Flour and middlings separator. Steam-separator.							
Flour and middlings separator. Teeth-separator.							
Grain-separator. Tooth-separator.							
Wheat-separator.							
Separator.....	D. Cochrane.....	420,718	Feb. 4	404	{ 107 108 }	50	644
Separator.....	E. Leslie.....	431,269	July 1	358	89	52	73
Separator.....	F. T. Mueller.....	425,448	Apr. 15	1555	416	51	320
Separator-machine.....	N. W. Holt.....	440,634	Nov. 18	1591	{ 409 410 }	53	932
Separator-bowls. Making.....	C. G. P. de Laval.....	441,368	Nov. 25	2818	727	53	1171
Settee or seat. Folding.....	J. Peard.....	431,389	July 1	550	137	52	111
Sewage. Sieve-belt for.....	A. F. Black.....	443,743	Dec. 30	3448	855	53	1967
Sewer.....	D. Knowles.....	436,736	Sept. 16	2119	557	52	1794
Sewer.....	J. Lynch.....	429,041	May 27	3058	788	51	1444
Sewer-cleaning apparatus.....	J. H. Medcraft.....	438,254	Oct. 14	889	{ 241 242 }	53	176
Sewer construction.....	G. E. Waring, Jr.....	437,739	Oct. 7	94	30	53	21
Sewer-flushing device. Automatic.....	W. D. Van Duzee.....	426,481	Apr. 29	3125	821	51	645
Sewer-gas traps and waste-piping. Convertible fitting for.....	P. A. Berton.....	441,775	Dec. 2	231	60	53	1309
Sewer or other trap.....	H. M. Browne.....	426,429	Apr. 29	3051	799	51	630
Sewer or sewer-pipe.....	R. B. Fithian and J. A. Wyman.....	439,644	Nov. 4	34	10	53	613
Sewer-pipe cap.....	G. J. Johnson.....	443,680	Dec. 30	3353	862	53	1948
Sewer-plug.....	G. E. Waring, Jr.....	433,155	July 29	3319	558	52	670

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Sewer-sheathing driver	N. E. Green	424,708	Apr. 1	418	110	51	83
Sewer-siphon	G. E. Waring, Jr.	437,738	Oct. 7	93	30	53	21
Sewer-trap	A. C. Bowerman	427,546	May 13	728	196	51	977
Sewer-trap	J. A. I. Claudon	428,457	May 20	2173	547	51	1254
Sewer-trap	H. A. Palmer	418,816	Jan. 7	234	57	50	51
Sewers or conduits. Construction of	P. W. St. George	434,845	Aug. 19	2152	563	52	1196
Sewers. Ventilation for	A. H. Ford and E. G. Wright	419,764	Jan. 21	1659	{ 440 441 }	50	349
Sewerage apparatus	W. S. West	428,736	May 27	2602	660	51	1353
Sewing hooks	J. R. Reynolds and A. I. Jacobs	435,612	Sept. 2	355	98	52	1443
Sewing clamp. Bag-	G. T. Haring	424,109	Mar. 25	2637	702	50	1660
Sewing looped fabrics. Machine for	N. H. Bruce	437,142	Sept. 23	2840	738	52	1938
Sewing looped fabrics. Machine for	A. F. Champlin	421,549	Feb. 18	1655	429	50	893
Sewing looped fabrics. Machine for	G. Cooper	433,766	Aug. 5	487	127	52	850
Sewing looped fabrics. Machine for	A. L. Traver	433,880	Aug. 5	655	170	52	885
Sewing looped fabrics. Stitch-breaking and raveling attachment for machines for	A. L. Traver	431,957	July 8	1442	365	52	290
Sewing looped fabrics. Trimming attachment for machines for	E. H. Brown	420,926	Feb. 11	754	195	50	715
Sewing looped fabrics. Trimming attachment for machines for	A. F. Champlin	421,550	Feb. 18	1658	{ 429 430 }	50	894
Sewing-machine	W. F. Beardslee	438,794	Oct. 21	1720	{ 461 462 }	53	340
Sewing-machine	J. Boppel	439,234	Oct. 28	2426	{ 650 651 }	53	480
Sewing-machine	J. Boppel	439,379	Oct. 28	2666	{ 709 710 }	53	524
Sewing-machine	D. H. Coles	420,333	Jan. 28	2555	{ 677 678 }	50	530
Sewing-machine	D. H. Coles	421,816	Feb. 18	2017	534	50	963
Sewing-machine	D. H. Coles	423,856	Mar. 18	2245	593	50	1578
Sewing-machine	P. A. Darraq	425,539	Apr. 15	1683	{ 449 450 }	51	345
Sewing-machine	J. W. Dewees	432,746	July 22	2664	681	52	538
Sewing-machine	G. H. Dimond and A. Steward	418,890	Jan. 7	374	90, 91	50	78
Sewing-machine	H. H. Fefel	426,256	Apr. 22	2778	729	51	566
Sewing-machine	J. H. Fletcher	443,756	Dec. 30	3474	{ 891 892 }	53	1971
Sewing-machine	Z. T. French and F. J. Freese	427,068	May 6	54	15, 16	51	820
Sewing-machine	H. Gansert	438,074	Oct. 7	624	170	53	119
Sewing-machine	E. Hall	424,290	Mar. 25	2883	769	50	1708
Sewing-machine	C. F. Harlow	418,716	Jan. 7	93	21	50	20
Sewing-machine	P. Harlow	443,941	Dec. 30	3750	959	53	2024
Sewing-machine	C. Harman	443,395	Dec. 23	2893	{ 743 744 }	53	1851
Sewing-machine	M. Lachman	438,690	Oct. 21	1550	{ 417 418 }	53	308
Sewing-machine	H. Lefebvre	433,946	Aug. 12	752	196	52	914
Sewing-machine	L. Marcy	433,900	Aug. 5	682	177	52	890
Sewing-machine	L. L. Miller	424,330	Mar. 25	2953	{ 787 788 }	50	1721
Sewing-machine	L. L. Miller	424,490	Apr. 1	78	22, 23	51	18
Sewing-machine	E. B. Moore and G. Rehfuß	439,168	Oct. 28	2309	620	53	458
Sewing-machine	F. W. Ostrom	439,680	Nov. 4	23	22, 23	53	624
Sewing-machine	T. C. Robinson	423,817	Mar. 18	2185	577	50	1567
Sewing-machine	A. H. Sawtell	434,996	Aug. 26	2423	641	52	1255
Sewing-machine	J. W. L. Scott	443,009	Dec. 16	2211	569	53	1713
Sewing-machine	E. H. Smith	418,820	Jan. 7	240	59	50	52
Sewing-machine	C. R. Squire	432,955	July 22	2993	769	52	600
Sewing-machine	C. R. Squire	432,957	July 22	2997	770	52	601
Sewing-machine	J. Stewart, Jr.	432,449	July 15	2182	{ 562 563 }	52	437
Sewing-machine	G. A. Stiles	443,655	Dec. 30	3307	853	53	1939
Sewing-machine	A. O. Very	434,851	Aug. 19	2158	{ 565 566 }	52	1198
Sewing-machine	G. F. Wachtershauser	431,238	July 1	316	78	52	64
Sewing-machine	W. Weber	425,277	Apr. 8	1293	{ 346 347 348 }	51	261
Sewing-machine	C. W. Weiss	442,083	Dec. 2	714	192	53	1403
Sewing-machine	N. Wheeler	424,237	Mar. 25	2805	749	50	1694
Sewing-machine	C. H. Wilcox and J. E. A. Gibbs	429,206	June 3	151	37	51	1500
Sewing-machine	E. Woodward	426,159	Apr. 22	2639	{ 693 694 }	51	538
Sewing-machine and guide therefor. Two-needle	A. L. Coombs	419,584	Jan. 14	1384	371	50	291
Sewing-machine and plaiting attachment therefor	W. T. Hose	438,811	Oct. 21	1746	469	53	346
Sewing-machine attachment	B. Lindauer	419,781	Jan. 21	1629	448	50	355
Sewing-machine attachment	M. E. Tynes	440,855	Nov. 18	1967	506	53	1002
Sewing-machine attachment-holder	J. M. Griest	421,927	Feb. 25	2195	575	50	1005
Sewing-machine attachment-holder	E. J. Toof	422,554	Mar. 4	276	70	50	1189
Sewing-machine belt-shifting and brake mechanism	J. H. Rohme	428,859	May 27	2781	707	51	1390
Sewing-machine binding attachment	H. E. Barnett	425,285	Apr. 8	1313	351	51	264
Sewing-machine binding attachment	G. Wissler	438,212	Oct. 14	825	223	53	165
Sewing-machine blind-stitch hemmer	E. S. Yentzer	427,944	May 13	1401	354	51	1094
Sewing-machine blower attachment	J. F. Elliott	423,916	Mar. 25	2349	618	50	1606
Sewing-machine bobbin-retaining device	F. Kern	436,002	Sept. 9	962	252	52	1567
Sewing machine. Book-	A. I. Jacobs	435,605	Sept. 2	342	95	52	1441
Sewing machine. Book-	J. R. Reynolds and A. I. Jacobs	435,611	Sept. 2	353	97	52	1442
Sewing machine. Book-	J. R. Reynolds and A. I. Jacobs	435,613	Sept. 2	357	98, 99	52	1443
Sewing machine. Book-	D. M. Smyth	435,616	Sept. 2	377	{ 101 102 }	52	1446
Sewing-machine braiding device	A. H. Kinder	437,816	Oct. 7	222	67	53	44
Sewing-machine. Button-hole	C. Chabot, G. Rehfuß, and E. B. Moore	439,109	Oct. 28	2220	{ 596 597 }	53	443

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Sewing-machine. Button-hole	T. E. Colby	441,058	Nov. 18	2288	593 594 470	53	1065
Sewing-machine. Button-hole	J. Q. A. Houghton	438,812	Oct. 21	1748	471 472 276	53	346
Sewing-machine. Button-hole	F. T. Leilich	434,155	Aug. 12	1075	277 794 795	52	976
Sewing-machine. Button-hole	W. Mills and E. B. Moore	439,599	Oct. 28	2990	794 795 833	53	588
Sewing-machine. Button-hole	W. and C. D. Randel	424,432	Mar. 25	3145	834 834	50	1759
Sewing-machine button-hole attachment	D. Mills	424,804	Apr. 1	575	153	51	112
Sewing-machine button-hole attachment	G. M. Morris	440,179	Nov. 11	838	216	53	783
Sewing-machine button-hole attachment	T. Powell	442,695	Dec. 16	1664	427 428	53	1605
Sewing-machine button-hole attachment	H. J. Williams	421,463	Feb. 18	1518	394	50	868
Sewing-machine button-hole-cutting mechanism	W. Rauehle	440,760	Nov. 18	1803	466	53	972
Sewing-machine cabinet	A. S. Wass	443,061	Dec. 16	2290	587	53	1728
Sewing-machine clamp. Button-hole	E. B. Allen	439,087	Oct. 28	2186	587	53	437
Sewing-machine cover	E. H. Craigie	437,145	Sept. 23	2844	739	52	1939
Sewing-machine. Double-thread	C. F. Littlejohn	421,590	Feb. 18	1715	446 447	50	905
Sewing-machine drop-cabinet	G. L. Gray	431,207	July 1	263	66	52	54
Sewing-machine embroidering attachment	H. B. Brower	428,884	May 27	2816	716	51	1397
Sewing-machine embroidering attachment	J. A. House	435,062	Aug. 26	2523	666	52	1273
Sewing-machine embroidering attachment	J. T. Whitmore	422,558	Mar. 4	281	71	50	1189
Sewing-machine feed mechanism	R. Stephenson	430,897	June 24	2522	692	51	2044
Sewing-machine feeding device	G. Meischner	437,784	Oct. 7	172	53	53	35
Sewing-machine feeding mechanism	J. A. Adams	443,888	Dec. 30	3662	944	53	2009
Sewing-machine feeding mechanism	G. W. Baker	423,111	Mar. 11	1145	297	50	1360
Sewing-machine feeding mechanism	J. M. Brosius	421,234	Feb. 11	1197	307 308	50	799
Sewing-machine feeding mechanism	E. D. Cummings	427,556	May 13	802	201 202	51	921
Sewing-machine feeding mechanism	W. F. Dial	436,053	Sept. 9	1045	271	52	1582
Sewing-machine feeding mechanism	W. F. Dial and F. W. Ostrom	436,054	Sept. 9	1046	272	52	1583
Sewing-machine feeding mechanism	P. Diehl	440,622	Nov. 18	1573	405	53	929
Sewing-machine feeding mechanism	J. Forbes	420,595	Feb. 4	239	63, 64	50	611
Sewing-machine feeding mechanism	J. T. Jones	420,073	Jan. 28	2144	567 568	50	454
Sewing-machine feeding mechanism	M. C. Lisle	428,171	May 20	1725	437	51	1167
Sewing-machine feeding mechanism	T. C. Robinson	423,816	Mar. 18	2184	577	50	1567
Sewing-machine feeding mechanism	C. R. Squire	432,956	July 22	2995	769	52	601
Sewing-machine feeding mechanism	A. O. Very	423,358	Mar. 11	1505	395	50	1430
Sewing-machine for barring button-holes	H. H. Cummings	435,686	Sept. 2	482	127 128 129	52	1468
Sewing-machine for barring button-holes	J. Reece	441,700	Dec. 2	110	29, 30	53	1284
Sewing-machine for basting	C. F. Harlow and E. E. Bartlett	423,996	Mar. 25	2471	657	50	1628
Sewing-machine for bordering the edges of fabrics	J. D. Morley	432,739	July 22	2651	677	52	536
Sewing-machine frame	J. M. Brosius	424,854	Apr. 1	651	172	51	126
Sewing-machine grinding attachment	W. E. Ginn and T. A. Forsyth	443,760	Dec. 30	3481	893	53	1972
Sewing-machine guide	F. A. Brackett	440,302	Nov. 11	1043	268	53	820
Sewing-machine guide	A. L. Mayo	423,173	Mar. 11	1242	323	50	1386
Sewing-machine hand driving mechanism	G. T. Reed	431,994	July 8	1497	378	52	301
Sewing-machine hem-stitching attachment	E. J. Toof	422,553	Mar. 4	275	69, 70	50	1188
Sewing-machine hemming and tucking attachment	D. Snyder	423,452	Mar. 18	1646	434	50	1465
Sewing-machine hemming attachment	H. B. Brower	428,885	May 27	2818	716 717	51	1398
Sewing-machine hemming attachment	I. Schner	420,251	Jan. 28	2442	649	50	509
Sewing-machine loop-taker cast-off	F. T. Leilich	418,896	Jan. 7	385	94	50	80
Sewing-machine loop-taking apparatus	W. A. Neely	419,541	Jan. 14	1329	355	50	279
Sewing-machine looping device	W. E. Bennett	437,083	Sept. 23	2717	710	52	1917
Sewing-machine. Mattress	E. N. Stephenson	439,205	Oct. 28	2378	639 640	53	471
Sewing-machine motor	G. R. Smith, B. F. Collins, and J. W. Shook	435,328	Aug. 26	2921	776	52	1347
Sewing-machine-needle clamp	G. W. Baker	423,113	Mar. 11	1146	297	50	1361
Sewing-machine needle-clamp	E. Stein	437,944	Oct. 7	412	116	53	79
Sewing-machine needle clamping and looping device	W. F. Beardslee and J. Chauvet	419,403	Jan. 14	1144	304 305 618	50	241
Sewing-machine. Overseaming	H. H. Fefel	420,191	Jan. 28	2340	619	50	491
Sewing-machine presser-foot	F. B. Almy	419,303	Jan. 14	987	261	50	209
Sewing-machine presser-foot	L. A. Harrison	438,623	Oct. 21	1443	388	53	230
Sewing-machine presser-foot	C. Timm. (Reissue)	11,081	June 3	742	178	51	1615
Sewing-machine presser-foot-actuating mechanism	E. M. Staples	434,003	Aug. 12	831	219	52	927
Sewing-machine presser-foot-lifting device	J. A. Locke	434,010	Mar. 25	2499	664	50	1633
Sewing-machine quilting-frame	J. C. Touchstone and J. M. Worthington	436,508	Sept. 16	1757	464	52	1725
Sewing-machine quilting frame	J. Urban and W. W. King	436,662	Oct. 21	1498	404 405	53	300
Sewing-machine ripping attachment	N. T. Quevedo	421,054	Feb. 11	947	243	50	752
Sewing-machine rotary looper	E. Hall	420,449	Feb. 4	35	7	50	570
Sewing-machine. Rotary-shuttle	F. T. Leilich	418,895	Jan. 7	383	93	50	80
Sewing-machine. Rotary-shuttle	F. T. Leilich	423,061	Mar. 11	1067	276 277	50	1346
Sewing-machine ruffler	J. H. Townbridge	423,399	Mar. 11	1566	412	50	1442
Sewing-machine ruffling attachment	T. L. Melone	419,339	Jan. 14	1045	276 277	50	221
Sewing-machine ruffling device	M. G. Turner	440,668	Nov. 18	1645	424 425	53	943
Sewing-machine shuttle	J. E. Bertrand	432,010	July 15	1526	388	52	314
Sewing-machine shuttle	W. Blakey	443,744	Dec. 30	3449	885	53	1967

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Sewing-machine shuttle.....	P. Diehl and W. Brandt.....	435,924	Sept. 9	853	224	52	1546
Sewing-machine shuttle.....	Z. T. French and W. C. Meyer.....	424,966	Apr. 8	826	220	51	168
Sewing-machine shuttle.....	L. A. Miller.....	436,837	Sept. 23	2322	611	52	1840
Sewing-machine shuttle and shuttle-carrier.....	P. Diehl.....	437,023	Sept. 23	2634	688	52	1900
Sewing-machine shuttle-operating mechanism.....	J. E. Bertrand.....	421,808	Feb. 18	2008	530	50	962
Sewing-machine slide.....	G. W. Baker.....	423,112	Mar. 11	1146	531		
Sewing machine. Sole.....	J. E. Bertrand.....	421,541	Feb. 18	1642	425	50	891
					426		
Sewing machine. Sole.....	J. E. Bertrand.....	432,011	July 15	1527	388	52	314
					389		
Sewing-machine spool-holder.....	J. H. Fletcher.....	424,874	Apr. 1	685	181	51	132
Sewing-machine spool-holder.....	L. A. Miller.....	438,854	Oct. 21	1836	488	53	361
Sewing-machine spring presser-foot.....	C. Leak.....	433,130	July 29	3284	245	52	663
Sewing-machine table.....	W. C. Donn and W. M. Cuthbert.....	428,382	May 20	2066	520	51	1236
					521		
Sewing-machine take-up.....	J. Bolton.....	420,034	Jan. 28	2086	551	50	442
Sewing-machine take-up device.....	G. A. Stiles.....	423,457	Mar. 18	1657	437	50	1467
Sewing-machine tension device.....	J. Doppel.....	439,378	Oct. 28	2664	709	53	524
Sewing-machine tension device.....	A. A. Voed.....	428,990	May 27	2969	762	51	1427
Sewing-machine tension mechanism.....	W. J. Stewart.....	433,661	Aug. 5	327	84	52	820
Sewing-machine tension-releasing device.....	N. Wheeler.....	433,971	Aug. 12	796	208	52	920
Sewing-machine thread-controlling device.....	R. G. Woodward.....	427,026	Apr. 29	3926	1023	51	800
Sewing-machine thread-feeding mechanism.....	C. T. Warren.....	421,876	Feb. 18	2118	556	50	581
Sewing-machine thread-feeding mechanism.....	E. B. Welch.....	434,009	Aug. 12	838	220	52	928
Sewing-machine thread holder and cutter. Button-hole.....	F. W. Roberts.....	434,118	Aug. 12	1919	265	52	965
Sewing-machine thread-measuring attachment.....	M. Lowenthal.....	423,786	Mar. 18	2145	566	50	1559
Sewing-machine thread-tension device.....	J. E. Bertrand.....	432,012	July 15	1534	390	52	315
Sewing-machine thread-tension device.....	G. H. Fountain.....	437,430	Sept. 30	3303	862	52	2034
Sewing-machine thread-tension mechanism.....	J. Angermann.....	422,691	Mar. 4	485	123	50	1229
					124		
Sewing-machine thread-tension releaser.....	N. Wheeler.....	434,037	Aug. 12	876	230	52	936
					231		
Sewing-machine thread-tension-releasing device.....	E. M. Staples.....	434,002	Aug. 12	830	218	52	927
Sewing-machine thread-waxing device.....	E. P. Richardson.....	440,327	Nov. 11	1076	277	53	826
Sewing-machine trimmer.....	E. D. Ludlow.....	430,134	June 17	1579	393	51	1796
Sewing-machine trimming attachment.....	W. F. Beardslee, C. Kaiser, and C. Russell.....	431,136	July 1	149	39	52	32
Sewing-machine trimming mechanism.....	W. F. Beardslee.....	438,796	Oct. 21	1725	462	53	341
Sewing-machine tuck-marking attachment.....	A. Johnston.....	427,999	May 13	1476	375	51	1110
Sewing-machine tuck-marking attachment.....	E. Seitz.....	425,960	Apr. 15	2333	618	51	469
Sewing-machine tucking-guide.....	D. M. Pickett.....	435,517	Sept. 2	205	56	52	1414
Sewing-machine. Wax-thread.....	G. Ambern, Jr.....	425,722	Apr. 15	1974	524	51	402
					525		
Sewing-machine. Wax-thread.....	P. Harlow.....	422,210	Feb. 25	2601	688	50	1081
					689		
Sewing-machine. Wax-thread.....	E. J. Peirce, Jr.....	431,192	July 1	235	59, 60	52	49
Sewing-machine. Wax-thread.....	G. A. Stiles.....	423,456	Mar. 18	1654	436	50	1467
					437		
Sewing-machine welt-gage.....	W. F. Beardslee.....	431,137	July 1	151	39	52	32
Sewing-machine welt-guide.....	G. A. Bates.....	419,239	Jan. 14	892	234	50	191
Sewing-machine welt-guide.....	L. Muther.....	427,352	May 6	492	126	51	909
Sewing-machine work-clamping guide.....	E. Schwabach, Jr.....	421,978	Feb. 25	2257	594	50	1017
Sewing-machines. Auxiliary pedal mechanism and brake for.....	T. J. Sawyer.....	421,056	Feb. 11	949	244	50	752
Sewing machines. Button-holder for button.....	J. Mathison.....	426,293	Apr. 22	2824	742	51	576
Sewing machines. Combined crimping-wheel and turn-down folding attachment for.....	G. Boxley.....	433,930	Aug. 12	732	190	52	910
Sewing machines. Combined tension and take-up device for.....	G. P. Hill.....	432,617	July 22	2436	628	52	496
Sewing-machines. Cutting mechanism for button-hole.....	F. W. Ostrom.....	430,786	June 24	2646	649	51	2011
Sewing-machines. Cutting mechanism for button-hole.....	F. W. Ostrom.....	430,679	Nov. 4	79	21, 22	53	623
Sewing-machines for sewing loops to fabrics. Attachment for.....	W. C. Trask.....	426,026	Sept. 9	994	260	52	1572
Sewing-machines. Grinding attachment for.....	J. S. Pyper.....	432,898	July 22	2891	741	52	583
Sewing machines. Guide for straw-braid.....	J. E. Reynolds.....	432,283	July 15	1952	499	52	393
Sewing-machines. Mechanism for automatically cutting button-holes on.....	A. C. Tebbetts and H. E. Doggett.....	438,635	Oct. 21	1465	402	53	298
Sewing machines. Needle and cast-off for book.....	C. H. Otis.....	435,609	Sept. 2	349	97	52	1442
Sewing machines. Presser-foot for two-needle.....	J. F. Elliott.....	427,511	May 13	811	203	51	982
Sewing machines. Reversible feed mechanism for.....	A. Pettenkofer.....	426,737	Apr. 29	3516	919	51	720
Sewing machines. Revolving hook for.....	N. Wheeler.....	420,847	Feb. 4	614	158	50	679
Sewing-machines. Slack-thread-controlling device for.....	E. Murphy.....	436,486	Sept. 16	1731	457	52	1721
Sewing-machines. Stitch-setting-up device for.....	W. S. Cobb.....	421,095	Feb. 11	1005	257	50	763
Sewing-machines. Thread - controlling device for wax-thread.....	E. P. Arnold.....	421,889	Feb. 25	2139	561	50	995
Sewing-machines. Trimming attachment for looped fabric.....	G. Cooper.....	426,244	Apr. 22	2763	724	51	563
Sewing-machines. Tube-support for box-loop.....	L. L. Miller.....	433,690	Aug. 5	369	94	52	828
Sewing-machines. Wax-pot for.....	J. H. Stevens.....	420,120	Jan. 28	2219	588	50	470
Sewing on buttons. Machine for.....	W. E. Bennett.....	428,548	May 20	2290	582	51	1277
					583		
Sewing on buttons. Machine for.....	J. P. Hallenbeck.....	425,422	Apr. 15	1507	404	51	311
					405		
Sewing on buttons. Machine for.....	J. Mathison.....	431,473	July 1	676	169	52	136
Sewing on buttons. Machine for.....	J. D. Stirckler.....	436,321	Sept. 9	1456	379	52	1660
					380		
Sewing on buttons. Machine for.....	L. C. Wing.....	431,832	July 8	1264	317	52	256
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Invention.	Name.	No.	Date.	Mouthly volume.		Official Gazette.	
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Sewing or embroidering machines. Cutting and grinding device for	E. Cornely	418,909	Jan. 7	406	100	50	85
Sewing parallel seams	W. F. Beardslee	438,795	Oct. 21	1723	462	53	341
Sewing-tool	P. A. Peterson	419,216	Jan. 14	857	225	50	184
Sewing up the mouths of filled bags. Machine for	T. J. Daniels	427,750	May 13	1106	277	51	1039
Shade and curtain-pole. Window	R. A. Bat-te	440,990	Nov. 18	2177	563	53	1044
Shade fixture. Window	C. H. Close	436,121	Sept. 9	1154	301	52	1601
Shade fixture. Window	A. B. Dunkle	428,332	May 20	1986	500	51	1218
Shade-holder	R. J. Ashworth	442,410	Dec. 9	1219	314	53	1506
Shade-holder	C. H. Herrick	438,235	Oct. 14	862	233	53	171
Shade-holder. Adjustable	J. E. Bohner	439,769	Nov. 4	208	54	53	649
Shade holder. Adjustable window	J. A. Durnbaugh	443,173	Dec. 23	2519	644	53	1777
Shade holder. Window	A. C. Spicer	441,594	Nov. 25	3174	818	53	1240
Shade holder. Window	A. C. Spicer	441,595	Nov. 25	3177	819	53	1240
Shade or canopy	C. E. Giebel	437,336	Sept. 30	3133	819	52	2000
Shade or reflector	E. Blackman	428,369	May 20	2040	{ 513 514 }	51	1230
Shade-roller	A. W. Gayhart	431,886	July 8	1344	339	52	271
Shade-roller	S. Hartshorn	422,938	Mar. 11	875	229	50	1311
Shade-roller	S. Hartshorn	424,198	Mar. 25	2755	735	50	1683
Shade-roller	S. Hartshorn	425,787	Apr. 15	2056	543	51	418
Shade-roller fixture	H. W. Simms	420,417	Jan. 28	2671	708	50	552
Shade-roller fixture	H. W. Simms	420,418	Jan. 28	2674	709	50	552
Shade-support	N. Jenkins	443,525	Dec. 30	3095	798	53	1900
Shade-support	W. F. Russell	434,161	Aug. 12	1087	280	52	978
Shades, &c. Device for supporting.	W. McCormack	438,857	Oct. 21	1842	490	53	362
Shaft	R. L. Mitchell	440,121	Nov. 4	742	196	53	754
Shaft and wheel coupling	H. Unzicker	433,968	Aug. 12	792	207	52	919
Shaft attachment. Vehicle	D. S. Field	436,945	Sept. 23	2528	662	52	1879
Shaft-bearing	H. Schneider	424,360	Mar. 25	3012	799	50	1731
Shaft-bearing	H. Schneider	428,526	May 20	2262	574	51	1271
Shaft-box fastening	W. Monk and D. T. Shaw	441,850	Dec. 2	351	93	53	1333
Shaft-casing. Flexible	F. Schoff	428,023	May 13	1514	384	51	1117
Shaft-collar	J. Macdonald	422,025	Feb. 25	2321	613	50	1029
Shaft-controller. Electric	A. W. Hart	423,245	Mar. 11	1336	348	50	1398
Shaft-coupling	D. Boorman	432,364	July 15	2061	530	52	413
Shaft-coupling	G. E. Burt	443,895	Dec. 30	3673	946	53	2010
Shaft-coupling	E. P. H. Capron	422,720	Mar. 4	521	133	50	1236
Shaft-coupling	F. O. Landou	420,808	Feb. 4	552	141	50	669
Shaft-coupling	W. H. Nicholson	443,627	Dec. 30	3263	840	53	1931
Shaft-coupling	H. Schneider	435,325	Aug. 26	2918	775	52	1347
Shaft-coupling	F. Shaw	441,445	Nov. 25	2948	{ 759 760 }	53	1197
Shaft-coupling	J. Q. Stewart	439,981	Nov. 4	546	144	53	714
Shaft-coupling	J. J. Valentine	432,916	July 22	2917	748	52	588
Shaft-coupling. Flexible	F. W. Bitley	419,241	Jan. 14	896	235	50	191
Shaft-coupling. Universal	L. N. Westover	430,597	June 17	2312	568	51	1937
Shaft-coupling. Vehicle	W. G. Himrod	429,275	June 3	239	59	51	1518
Shaft. Crank	H. and G. E. Fownes	440,555	Nov. 11	1460	376	53	898
Shaft. Crank	M. A. Green	441,551	Nov. 25	3111	798	53	1228
Shaft-detacher	F. S. Pollitt	421,140	Feb. 11	1064	273	50	775
Shaft-gear. Vehicle	C. E. Wnuck	430,410	June 17	2031	501	51	1884
Shaft-hanger	A. D. Cox	432,137	July 15	1762	452	52	358
Shaft-hanger	J. W. Fisher and W. A. Kinney	433,779	Aug. 5	509	132	52	855
Shaft-hanger	C. Jacquin	422,020	Feb. 25	2314	611	50	1028
Shaft-hanger and engine-case	J. T. Case	421,856	Feb. 18	2093	549	50	976
Shaft holder. Vehicle	A. H. Davis and O. E. Byrd	433,773	Aug. 5	493	128	52	851
Shaft-lighter	H. Stevenson	424,144	Mar. 25	2681	713	50	1668
Shaft-lubricator	E. Dawson	459,123	Oct. 28	2241	602	53	446
Shaft protector. Vehicle	W. W. Chambers	422,183	Feb. 25	2558	676	50	1072
Shaft. Rotating	C. G. P. de Laval	431,749	July 8	1133	282	52	230
Shaft. Rotating	C. G. P. de Laval	431,750	July 8	1134	2-3	52	231
Shaft-sinking apparatus	R. P. Rothwell	428,021	May 13	1511	384	51	1117
Shaft-support	W. A. Fegeley	426,991	Apr. 29	3873	1012	51	789
Shaft-support	W. H. Heald	422,408	Mar. 4	63	17	50	1149
Shaft-support	A. Lotstrom and C. M. Biorseth	427,586	May 13	852	214	51	989
Shaft-support. Adjustable	E. E. Devoll	420,593	Feb. 4	235	61.62	50	610
Shaft support. Vehicle	E. L. Buckingham	430,510	June 17	2179	536	51	1913
Shaft. Vehicle	W. Hollaway	426,726	Apr. 29	3498	915	51	716
Shaft. Vehicle	A. G. Johnson	429,810	June 10	1059	261	51	1685
Shafts. Apparatus for leveling and marking	E. H. Taylor	423,094	Mar. 11	1116	292	50	1355
Shafts. Device for mounting counter	J. W. Riglander	441,977	Dec. 2	539	145	53	1368
Shafts. Device for securing rings or annular pieces on	G. F. Simonds	434,478	Aug. 19	1584	414	52	1085
Shafts in soft earth. Means for sinking	T. J. Phillips	424,819	Apr. 1	598	157	51	116
Shafts in soft earth. Sinking	T. J. Phillips	424,820	Apr. 1	601	158	51	116
Shafts. Means for translating power and motion of drive	A. E. Brown	428,886	May 27	2820	717	51	1398
Shafts. Vehicle	R. Gracey	427,507	May 6	724	181	51	955
Shafting. Compound tubular	G. H. Ogilvy	429,175	June 3	103	24	51	1492
Shafting. Coupling	W. Lewis	419,589	Jan. 14	1391	373	50	292
Shafting-hanger	E. W. Cooke	442,355	Dec. 9	1134	295	53	1489
Shafting-hanger	M. D. Hemenway	429,723	June 10	933	329	51	1662
Shafting. Hollow	W. G. Howell	425,324	Apr. 8	1365	364	51	274
Shafting-key	J. Roemmele	423,701	Mar. 18	2027	535	50	1536
Shafting-lubricator	G. Leverich	435,434	Sept. 2	81	25	52	1391
Shafting. Machine for polishing	W. J. Muncester	432,144	July 15	1742	{ 447 448 }	52	355
Shafting. Reversing mechanism for counter	W. T. Carroll	443,821	Dec. 30	3584	921	53	1992
Shaking and revolving bolt. Combined	J. T. Lee	423,783	Mar. 18	2138	565	50	1557
Shaking apparatus	S. T. Juill	432,241	July 15	1881	484	52	380
Shaking-bolt	M. G. Mosher	429,147	June 3	60	16	51	1484
Shaking-bolt	H. W. Stone, Jr	422,043	Feb. 25	2349	620	50	1034
Shank-stiffener	G. H. Stevens	434,121	Aug. 12	1025	266	52	966

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Shaping and slotting machine.....	C. A. Jnengst.....	436,139	Sept. 9	1183	309	52	1606
Shaping irregular forms. Self-feeding machine for ..	W. Reid.....	431,954	July 8	1435	{ 364 365 }	52	289
Shaping-machine.....	U. Eberhardt.....	433,613	Oct. 21	1423	386	53	277
Shaping-machine.....	J. M. Riley.....	428,416	May 20	2119	532	51	1244
Shaping-machine.....	J. M. Wright.....	434,039	Aug. 12	879	{ 231 232 }	52	937
Shaping-machines. Tool-feeding device for.....	O. S. Sturtevant and J. F. Clark.....	420,746	Feb. 4	441	117	50	650
Shaving and dressing stand.....	M. E. Green.....	423,147	Mar. 11	1203	314	50	1372
Shawl-strap.....	H. von Mann-Tiechler.....	435,101	Aug. 26	2579	681	52	1984
Sheaf-carrier.....	W. R. Baker.....	419,623	Jan. 21	1452	{ 389 390 }	50	311
Sheaf-carrier.....	W. R. Baker.....	431,312	July 1	423	105	52	87
Sheaf-carrier.....	R. Brown.....	432,931	July 22	2942	753	52	592
Sheaf-carrier.....	C. F. Hiebert.....	433,924	Aug. 5	712	185	52	896
Sheaf-carrier.....	E. M. Kellogg.....	420,274	Jan. 28	2475	{ 657 658 }	50	515
Sheaf-carrier.....	C. M. Peterson.....	436,188	Sept. 9	1257	{ 327 328 }	52	1619
Sheaf-carrier.....	C. B. Withington.....	435,534	Sept. 2	234	65	52	1420
Shear-table.....	H. Aiken.....	426,487	Apr. 29	3134	{ 823 824 }	51	646
Shears:							
See Animal-shears. Paper-hanger's shears.							
Dehorning-shears. Tinner's shears.							
Metal-shears.							
Shears.....	R. E. Gamble.....	434,145	Aug. 12	1060	273	52	973
Shears.....	P. B. Hand.....	428,601	May 27	2384	606	51	1314
Shears.....	W. G. Koelsch and P. Shafer.....	434,345	Aug. 12	1362	356	52	1033
Shears.....	J. D. Parkinson.....	437,660	Sept. 30	3638	950	52	2102
Shears.....	R. S. Pearshall.....	430,677	June 24	2465	601	51	1974
Shears.....	R. S. Pearshall.....	440,436	Nov. 11	1272	329	53	862
Shears.....	W. Richard.....	437,621	Sept. 30	3532	{ 936 937 }	52	2091
Shears.....	A. H. Wallace.....	422,670	Mar. 4	459	116	50	1224
Shears.....	E. F. Watson and M. L. Tolbert.....	423,008	Mar. 11	983	259	50	1331
Shears, &c. Counter-balance for metal.....	H. Aiken.....	421,537	Feb. 18	1638	{ 422 423 }	50	890
Shears, &c. Device for sharpening.....	W. E. Woodruff.....	440,925	Nov. 18	2172	562	53	1043
Shears for dehorning animals.....	J. D. Green.....	441,065	Nov. 18	2298	596	53	1067
Shears for metal.....	C. Pettigrew.....	420,095	Jan. 28	2180	574	50	461
Shearing and punching machine.....	J. Schofield.....	423,960	Mar. 25	2422	643	50	1619
Shearing-machine.....	C. A. Bertsch.....	420,986	Feb. 11	842	218	50	732
Shearing-machine.....	C. A. Bertsch.....	438,222	Oct. 14	839	228	53	167
Shearing-machine.....	R. L. Renz.....	437,515	Sept. 30	3434	898	52	2962
Shearing machine. Sheep.....	W. Ryley.....	442,239	Dec. 9	951	{ 251 252 }	53	1456
Shearing or cropping machines. Bed for.....	E. Martin, T. F. Drake, and J. W. Johnson.....	421,743	Feb. 18	1922	505	50	946
Sheathing and lath machine. Combined.....	T. H. Brown.....	422,333	Feb. 25	2804	738	50	1119
Sheathing. Corner-tile for.....	G. H. Babcock.....	430,371	June 17	1977	{ 487 488 }	51	1874
Sheave.....	W. H. Birch.....	425,734	Apr. 15	1988	530	51	404
Sheave.....	C. W. Thomas.....	427,810	May 13	1197	300	51	1055
Sheave.....	F. B. Torrey.....	427,530	Sept. 30	3457	903	52	2066
Sheet-delivery mechanism. Sealing attachment for.....	L. C. Crowell.....	419,823	Jan. 21	1769	469	50	371
Sheet-metal articles. Utilizing electricity in the formation of.....	M. W. Dewey.....	438,406	Oct. 14	1124	304	53	221
Sheet-metal bending and embossing machine.....	B. J. Baldwin, Jr.....	422,109	Feb. 25	2453	648	50	1052
Sheet-metal-bending machine.....	J. C. Barnes and G. R. Green.....	422,063	Feb. 25	2376	628	50	1039
Sheet-metal box.....	C. J. Hauck, Jr.....	426,378	Apr. 22	2951	775	51	602
Sheet-metal box.....	C. J. Hauck, Jr.....	434,269	Aug. 12	1257	326	52	1011
Sheet-metal box and die therefor.....	C. A. Morningstar.....	420,912	Feb. 4	729	{ 187 188 }	50	701
Sheet-metal can.....	T. B. Hidden.....	424,932	Apr. 8	852	226	51	174
Sheet metal. Crate for.....	F. G. Caldwell.....	440,009	Nov. 4	584	154	53	722
Sheet-metal-coating apparatus.....	D. T. Lewis.....	431,663	July 8	991	247	52	204
Sheet-metal-crimping machine.....	F. M. Leavitt.....	420,602	Feb. 4	248	66, 67	50	613
Sheet-metal-cutting machines. Guide attachment for.....	F. H. Burnham.....	441,921	Dec. 2	467	125	53	1356
Sheet-metal-edging machines. Scrap-cutter for.....	A. P. Hine.....	438,845	Oct. 21	1322	485	53	358
Sheet metal electrically. Apparatus for forming or shaping.....	M. W. Dewey.....	438,407	Oct. 14	1127	304	53	221
Sheet metal electrically. Apparatus for forming or shaping.....	M. W. Dewey.....	438,408	Oct. 14	1129	305	53	222
Sheet metal. Embossing.....	A. Langerfeld.....	436,132	Apr. 22	2598	.....	51	530
Sheet-metal folder.....	F. A. Juergens.....	431,732	Feb. 18	1901	499	50	841
Sheet-metal-folding machine.....	W. Dixon.....	422,744	Mar. 4	553	142	50	1242
Sheet-metal-folding machine.....	S. F. Woodworth.....	426,352	Apr. 22	2911	765	51	594
Sheet metal. Manufacture of.....	W. Garrett.....	443,137	Dec. 23	2453	629	53	1765
Sheet-metal notcher.....	J. H. Eller.....	436,826	Sept. 23	2301	606	52	1336
Sheet-metal pipe.....	C. L. Hart and T. S. Crane.....	434,927	Aug. 26	2330	615	52	1237
Sheet-metal pipe.....	J. White.....	421,366	Feb. 11	1382	358	50	833
Sheet-metal plates. Device for folding.....	W. G. Hyndman.....	422,944	Mar. 11	890	233	50	1314
Sheet-metal rolls. Bridle attachment for.....	A. P. Hine.....	438,846	Oct. 21	1824	426	53	359
Sheet-metal-shaping machine.....	G. Nauman.....	419,344	Jan. 14	1053	278	50	223
Sheet-metal-shearing machine.....	L. K. and C. A. Williams.....	430,718	June 24	2531	619	51	1988
Sheet-metal spheroids. Manufacture of spirally-corrugated.....	E. Gothberg.....	425,099	Apr. 8	1021	273	51	206
Sheet metal. Uniting the edges of.....	W. H. and W. J. Clark.....	430,000	June 10	1352	335	51	1743
Sheet-metal vessel.....	E. M. Peacock.....	429,893	Nov. 4	399	105	53	685
Sheet-metal vessel.....	F. A. Walsh.....	421,213	Feb. 11	1171	300	50	795
Sheet-metal vessel.....	F. A. Walsh.....	421,335	Feb. 11	1343	348	50	827
Sheet-metal vessel.....	F. A. Walsh.....	423,887	Mar. 18	2294	605	50	1587
Sheet-metal vessels. Flanging.....	F. A. Walsh.....	421,212	Feb. 11	1170	300	50	794

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Sheet-metal vessels. Manufacturing	F. A. Walsh	423,295	Mar. 11	1425	370	50	1413
Sheet-metal ware. Enameled	A. Niedringhaus	439,573	June 3	720	174	51	1610
Sheet-metal working-tool	T. J. Hickey	428,811	May 27	2706	656	51	1374
Shelf	W. W. McAlpine	424,333	Mar. 25	2967	791	50	1724
Shelf attachment	H. D. Forbes	435,173	Aug. 26	2656	709	52	1304
Shelf-bracket	J. Crider	427,462	May 6	661	166	51	943
Shelf-bracket	M. R. Jewell	425,326	Apr. 8	1366	365	51	274
Shelf. Library	F. C. Van Doren	425,117	Apr. 8	1043	278	51	211
Shelf or bracket. Adjustable	C. E. Buck	439,636	Nov. 4	24	7	53	611
Shelf. Portable	F. H. Dodge	441,829	Dec. 2	317	85	53	1326
Shelf. Revolving	F. C. Van Doren	425,354	Apr. 8	1402	373	51	282
Shelf. Self-supporting	G. M. Khineline	439,731	Nov. 4	153	40	53	637
Shelf-support	W. D. Haven	431,745	July 8	1128	281	52	229
Shelf-support	O. F. Wegener	442,468	Dec. 9	1301	336	53	1523
Shelving	W. C. Peckham	438,638	Oct. 21	1464	395	53	294
Shelving. Adjustable	J. W. Hine	433,622	Aug. 5	266	71	52	809
Shelving for stoves. Movable	O. P. Thomas	432,096	July 15	1659	426	52	339
Shelving. Knockdown adjustable	A. F. C. Garben	438,741	Oct. 21	1649	442	53	326
Shelving-support	J. Campbell	443,355	Dec. 23	2835	729	53	1840
Shell. Dynamite	E. Stern	424,736	Apr. 1	462	123	51	91
Shell-fish. Desiccating	S. G. Van Gilder	440,519	Nov. 11	1401	33	53	887
Shell for high explosives	J. G. Justin	424,482	Apr. 1	60	18	51	14
Shell for high explosives	H. P. Merriam	431,374	July 1	523	130	52	105
Shell for high explosives	H. P. Merriam	431,375	July 1	526	131	52	106
Shell for high explosives	H. P. Merriam	431,379	July 1	533	133	52	108
Shell for high explosives	A. W. von Schmidt	422,636	Mar. 4	411	102	50	1215
Shell-making machine	C. D. Kennedy	439,820	Nov. 4	282	71	52	663
Shells. Detonating mechanism for explosive	H. P. Merriam	431,376	July 1	528	132	52	106
Shells. Detonating mechanism for explosive	H. P. Merriam	431,377	July 1	530	132	52	107
Shells. Detonating mechanism for explosive	H. P. Merriam	431,378	July 1	532	133	52	107
Shells. Machine for drawing	F. B. Manville	427,435	May 6	624	156	51	935
Sheller:					157		
See Corn-sheller.							
Shingle	C. B. Cooper	422,571	Mar. 4	298	76	50	1193
Shingle cutter and dresser	H. O. Strand	431,198	July 1	247	63	52	52
Shingle-edging machine	A. T. Stearns	427,128	May 6	160	43	51	843
Shingle-fastening	A. Sherman	443,058	Dec. 16	2387	586	53	1727
Shingle-machines. Stealer-carriage for	F. A. Simonds	437,724	Oct. 7	73	24	53	17
Shingle. Metallic	T. Toner and J. E. Carroll	420,708	Feb. 4	388	103	50	641
Shingle. Metallic	T. Toner and J. E. Carroll	424,149	Mar. 25	2687	715	50	1669
Shingle-sawing machine	E. Anderson	437,342	Sept. 30	3145	523	52	2003
Shingle-sawing machine	F. Challoner	430,564	June 17	2254	553	51	1926
Shingle-sawing machine	F. Challoner	442,170	Dec. 9	852	229	53	1436
Shingle-sawing machine	J. B. Putrow	423,953	Mar. 25	2406	639	50	1616
Shingle-sawing machines. Feeding mechanism for	P. Pierson	432,071	July 15	1624	616	52	332
Shingle-sawing machines. Spalt-dropping mechanism for	F. Challoner	442,171	Dec. 9	854	229	53	1437
Shingle-shaping machine	D. W. Williams	439,224	Oct. 28	2411	647	53	473
Shingle-trimming machine	G. McBean	436,145	Sept. 9	1192	311	52	1607
Shingle-tying machine	J. W. Jones and D. J. Noonan	443,255	Dec. 23	2666	684	53	1807
Shingles automatically. Machine for packing	H. L. Fellberg	424,673	Apr. 1	363	96	51	70
Shingling-bracket	T. Levi and J. W. Murchison	434,343	Aug. 12	1366	357	52	1034
Shingling-bracket	T. T. Templin	443,467	Dec. 23	3005	772	53	1873
Ship	A. J. Purdy	441,193	Nov. 23	2516	650	53	1118
Ship propulsion	S. B. Goff	429,438	June 3	510	122	51	1570
Ship side scuttle	E. J. Preston, E. W. De Russett, W. Mullan, and J. McKirdy	428,227	May 20	1820	456	51	1186
Ships. Adjustable and removable armor for	I. B. Abraham	419,301	Jan. 14	983	260	50	208
Ship's binnacle	S. W. B. Diehl and J. Gibson	432,962	July 22	3006	772	52	603
Ship's boat	A. T. Dewar	433,854	Aug. 5	615	160	52	877
Ships' boats. Apparatus for hoisting and lowering	G. Peirce	425,955	Apr. 15	2327	617	51	468
Ships' boats from their supporting-tackles. Apparatus for disengaging	A. F. Betham and H. B. Woolnough	425,018	Apr. 8	910	241	51	184
Ships' boats. Releasing, lowering, and detaching	G. M. Bird	437,881	Oct. 7	316	93	53	62
Ships. Construction of	S. Stuart	429,289	June 3	276	66	51	1523
Ship's course and position indicator	T. Tanner and E. Lutz	442,925	Dec. 16	2094	539	53	1687
Ship's davit	J. A. Hargan	443,318	Dec. 23	2779	712	53	1828
Ships. Deck-seat for	J. M. Lovold	429,928	June 10	1341	308	51	1721
Ships. Device for loading	W. F. Mills	423,070	Mar. 11	1079	281	50	1348
Ships' galleys. Draft-regulator for	A. Malekh	427,336	May 6	469	121	51	904
Ship's hank	A. Conover	437,573	Sept. 30	3519	913	52	2079
Ship's log	F. S. Pett	442,257	Dec. 9	978	257	53	1461
Ship's log. Self-registering	J. O'Neil	441,578	Nov. 25	3151	810	53	1235
Ships or other vessels. Construction of	S. Stuart	429,290	June 3	277	66	51	1523
Ships or other vessels. Construction of	S. Stuart	429,291	June 3	278	67	51	1523
Ships or vessels. Apparatus for raising sunken	M. Garland	426,259	Apr. 22	2782	730	51	567
Ships. Patch for breaches in	J. H. Smith	438,196	Oct. 14	798	218	53	160
Ship's rigging	J. Parker	422,619	Mar. 4	386	96	50	1210
Ship's rigging. Thimble for	J. J. Walton	438,904	Oct. 21	1909	507	53	375
Ships. Wall for	C. W. M. F. Bising	431,329	July 1	446	110	52	91
Shipping-box. Knockdown	M. E. Campany	419,109	Jan. 7	687	181	50	145
Shipping-can	C. D. Chase	437,094	Sept. 23	2734	714	52	1920
Shipping-can	J. T. Harland	422,525	Mar. 4	232	61	50	1180
Shipping-can	O. Kitchell	424,066	Mar. 25	2572	687	50	1647
Shipping-package	W. H. Cadwell	435,203	Aug. 26	2730	720	52	1312

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Shirt.....	T. W. Aikenhead.....	419,812	Jan. 21	1735	459	50	364
Shirt.....	C. L. Christmann.....	425,921	Apr. 22	2378	629	51	486
Shirt.....	L. Cohen.....	424,959	Apr. 8	516	218	51	186
Shirt.....	K. H. Hutchinson.....	423,099	May 20	1629	413	51	1150
Shirt.....	S. Miller.....	440,407	Nov. 11	1213	313	53	853
Shirt.....	M. Penkert.....	423,409	May 20	2112	530	51	1243
Shirt.....	M. Rosenstock.....	421,520	Feb. 13	1610	415	50	885
Shirt.....	D. R. Sillesky.....	433,103	July 29	3243	834 835	52	655
Shirt.....	I. P. Turner.....	436,446	Sept. 16	1671	439 440	52	1708
Shirt.....	M. O. West.....	422,271	Feb. 25	2702	712	50	1099
Shirt.....	M. O. West.....	424,391	Mar. 25	3071	815	50	1745
Shirt and supporter. Combined.....	T. J. Little.....	436,607	Sept. 16	1916	504	52	1753
Shirt and suspenders. Combined.....	H. Peiter.....	443,376	Dec. 23	2866	737	53	1846
Shirt-bosom.....	S. Deutsch.....	435,288	Aug. 26	2849	754	52	1336
Shirt-bosom.....	F. E. Mistrot.....	442,986	Dec. 16	2180	561	53	1705
Shirt-bosoms. Machine for turning and pressing the edges of.....	M. Price.....	422,625	Mar. 4	396	99	50	1212
Shirt-iron.....	H. Myers.....	429,940	June 10	1256	311	51	1724
Shirt-neck-marking machine.....	N. H. Bruce.....	441,531	Nov. 25	3079	791	53	1222
Shirt or vest and suspenders. Combined.....	J. T. Brodnax.....	423,374	May 20	2052	517	51	1233
Shirt-pocket.....	J. M. Campbell.....	425,750	Apr. 15	2010	535 536	51	408
Shirt-waist.....	W. E. Pullen.....	432,557	July 22	2363	609	52	481
Shirts. Apparatus for folding.....	J. McKay.....	437,787	Oct. 7	180	54	53	36
Shirts. Machine for creasing the fold-lines into.....	J. McKay.....	437,786	Oct. 7	175	55 56	53	36
Shock-compressor.....	J. F. and M. C. McMillan.....	422,963	Mar. 11	916	239	50	1318
Shock-compressor.....	S. Saucerman.....	427,190	May 6	252	65	51	861
Shock compressor and binder.....	W. T. Parks.....	423,178	May 20	1737	440	51	1169
Shoddy-pickers. Tooth for.....	W. H. Bagshaw.....	420,182	Jan. 28	2328	615	50	488
Shoe.....	W. P. Alden.....	421,470	Feb. 18	1528	395	50	870
Shoe.....	A. M. Bollinger.....	423,212	Mar. 11	1290	337	50	1389
Shoe.....	C. H. Des Lauries.....	425,598	Apr. 15	1774	475	51	362
Shoe.....	L. Eckhart.....	429,429	June 3	500	119	51	1568
Shoe.....	J. C. French.....	429,267	June 3	230	58	51	1516
Shoe.....	G. F. Rapp.....	436,544	Sept. 16	1829	482	52	1737
Shoe.....	E. Rau.....	425,254	Apr. 8	1260	336	51	255
Shoe.....	C. Siegenthaler, Sr.....	437,316	Sept. 30	3107	814	52	1995
Shoe.....	S. J. Stough.....	428,157	May 20	1710	433	51	1164
Shoe.....	J. J. Turner.....	433,154	July 29	3318	857	52	670
Shoe attachment.....	T. F. Byrnes.....	442,798	Dec. 16	1861	481	53	1643
Shoe-burnishing machine.....	E. M. Parkhurst.....	443,330	Dec. 23	2794	718 719	53	1832
Shoe-fastener.....	A. S. French.....	423,601	Mar. 18	1858	490	50	1504
Shoe-fastener.....	R. and M. Rothschild.....	438,186	Oct. 14	786	214	53	158
Shoe-fastener.....	B. A. Smith.....	437,255	Sept. 30	3014	790	52	1979
Shoe-fastener.....	C. R. Stuart.....	427,203	May 6	272	70	51	865
Shoe-fastener.....	C. F. Ziegler.....	430,982	June 24	2945	723	51	2066
Shoe-fastening.....	G. E. Bertrand.....	431,737	July 8	1118	278	52	227
Shoe-fastening.....	J. E. Bissell.....	439,996	Nov. 4	565	149	53	718
Shoe-fastening.....	A. Chappelaime.....	425,301	Apr. 8	1338	357	51	269
Shoe-fastening.....	A. B. Drautz.....	425,567	Apr. 15	1723	462	51	353
Shoe-fastening.....	A. B. Drautz.....	440,806	Nov. 18	1880	483	53	986
Shoe-fastening.....	J. D. Griffen.....	440,807	Nov. 18	1881	483	53	986
Shoe-fastening.....	J. D. Griffen.....	439,661	Nov. 4	52	345	53	616
Shoe-fastening.....	C. B. Horton.....	421,321	Feb. 11	1325	681	50	823
Shoe-fastening.....	J. Schoonmaker.....	421,321	Feb. 11	1325	681	50	823
Shoe-files. Machine for cutting out.....	G. Valiant.....	441,362	Nov. 25	2660	692 692	53	1142
Shoe-heel.....	G. Castle.....	419,499	Jan. 14	1272	339	50	267
Shoe-holder.....	J. B. Cornwall.....	434,583	Aug. 19	1739	456	52	1117
Shoe-knife.....	I. P. Hyde.....	430,651	June 24	2422	590	51	1966
Shoe-knife.....	A. E. Johnson.....	430,186	June 17	1647	410	51	1809
Shoe-knife.....	W. Webster.....	431,424	July 1	601	150	52	121
Shoe-last.....	B. Thorner.....	432,454	July 15	2194	565 566	52	440
Shoe-makers' tools. Device for heating.....	D. A. Brown, C. V. Klippert, and L. J. Vogt.....	428,069	May 20	1582	401	51	1139
Shoe-nailing machine.....	E. D. Childs.....	443,357	Dec. 23	2837	730	53	1841
Shoe-nicking machine.....	O. E. Seymour.....	434,360	Aug. 12	1386	364	52	1038
Shoe or glove fastener.....	J. C. Murray.....	424,683	Apr. 1	377	99	51	73
Shoe-pattern.....	A. L. Coombs.....	423,987	Mar. 25	2458	653	50	1625
Shoe-polishing machine.....	A. D. Major.....	438,079	Oct. 7	633	172	53	121
Shoe-protector.....	L. M. Donglass.....	419,506	Jan. 14	1283	342	50	269
Shoe-shanks. Machine for making.....	W. N. Sprague and W. H. Fowler.....	426,397	Apr. 22	2989	783	51	610
Shoe-sole-cutting machine.....	M. E. Knight.....	436,359	Sept. 16	1521	397 398 399 400	52	1681
Shoe-spring.....	J. S. Walker.....	427,136	May 6	173	45	51	845
Shoe-stamping machine.....	S. Ross, Jr.....	437,664	Sept. 30	3643	951	52	2103
Shoe-string fastener.....	W. J. Vitt.....	421,638	Feb. 18	1789	468	50	920
Shoe-tie fastener.....	J. B. Craig.....	426,663	Apr. 29	3391	890	51	696
Shoe-tie fastener.....	B. F. Seymour.....	438,245	Oct. 14	878	238	53	174
Shoe-tie holder.....	J. O. Byrnes.....	435,392	Sept. 2	17	5	52	1378
Shoe-turning machine.....	J. H. Edgerly.....	442,770	Dec. 16	1816	470	53	1634
Shoe-upper.....	V. F. Lake.....	441,173	Nov. 25	2490	643	53	1113
Shoe-upper.....	R. W. Smith.....	419,479	Jan. 14	1249	331	50	263
Shoe-upper turning and beading machine.....	S. Ross, Jr.....	432,902	July 22	2897	742	52	584
Shoe-upper-turning machine.....	F. D. Walden.....	433,916	Aug. 5	702	182	52	894
Shoe-uppers. Construction of.....	F. S. McKenney.....	438,705	Oct. 21	1571	422	53	312
Shoe. Ventilated.....	H. Falkener.....	426,495	Apr. 29	3145	826	51	649

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Shoe. Voltaic	C. H. Ayer	422,107	Feb. 25	2450	647	50	1052
Shoes during treeing. Device for protecting the fair-stitching on	C. Shoettle	425,088	Apr. 8	1006	269	51	203
Shoes. Manufacture of	F. J. Blum	434,975	Aug. 26	2393	634	52	1250
Shoes. Manufacture of	G. W. Day	440,994	Nov. 18	2183	565	53	1045
Shooting-gallery. Coin-operated	A. M. Coyle	441,613	Nov. 25	3208	826	53	1248
Shot-canister. Measuring	B. F. Wofford and L. W. Blackwell	424,156	Mar. 25	2700	718 719	50	1672
Shot or balls. Apparatus for manufacturing lead	W. Coop	426,923	Apr. 29	3773	985	51	771
Shotgun-wad	J. W. Scanland	419,220	Jan. 14	865	227	50	185
Shoulder-brace and slide therefor	D. Carpenter	426,523	Apr. 29	3184	836	51	656
Shoulder-rest and pillow	A. E. Stace	428,819	May 27	2726	691	51	1378
Shovel:							
See Cultivator-shovel. Sifting-shovel.							
Shovel	J. Telfer, Jr	440,933	Nov. 18	2095	543	53	1027
Shovel and sieve. Combined	E. Fleming	426,719	Apr. 29	3490	913	51	714
Shovels. Making	L. Rowland	432,331	July 15	2022	520	52	405
Shovels. Manufacture of	P. W. Groom	430,014	June 10	1381	343	51	1748
Shoveling-board	G. G. Geiger	423,425	Mar. 18	1610	422	50	1458
Show and sale case	E. A. Angell	428,877	May 27	2807	714	51	1395
Show-box	H. A. Robinson	435,022	Aug. 26	2465	652 653	52	1262
Show-box	H. A. Robinson	435,023	Aug. 26	2465	653	52	1262
Show-case	H. Hoffmann	436,135	Sept. 9	1175	307	52	1605
Show-case	R. E. Sherlock and M. Freeman	433,828	Aug. 5	583	152	52	870
Show-case	S. Tanzer	442,836	Dec. 16	1931	496	53	1656
Show-case	R. H. Van Schaack	429,488	June 3	593	144	51	1585
Show-case corner	J. Hofman	424,554	Apr. 1	184	51	51	38
Show-case covers. Automatic lift for	J. Lehnbeuter	425,891	Apr. 15	2210	587	51	446
Show-rack	B. G. Casler	421,907	Feb. 25	2164	568	50	1000
Show-rack	L. D. Freeman	440,629	Nov. 18	1586	408	53	931
Show-rack	T. F. McGann	437,035	Sept. 23	2651	693	52	1903
Show-rack	T. F. McGann	437,036	Sept. 23	2653	693	52	1904
Show-rack	N. Scholl	419,222	Jan. 14	868	228 229	50	186
Show-stand	S. T. Culp	434,414	Aug. 12	1485	387	52	1058
Show-stand	W. C. McTyre	431,190	July 1	234	59	52	49
Show stand and rack	E. G. Hering	440,031	Nov. 4	613	162	53	728
Shower bath, &c	H. Schaffstädt	425,702	Apr. 15	1943	516	51	395
Shower bath	G. Taylor	432,712	July 22	2611	668	52	528
Shower-bath. Portable	D. Grove	426,798	Apr. 29	3607	941	51	737
Shutter-bower	A. D. Goodwin	439,000	Oct. 21	2052	549	53	404
Shutter-bower	R. Hudson	432,801	July 22	2761	707	52	556
Shutter-bower	G. F. S. and H. Zimmerman	420,180	Jan. 28	2325	614	50	488
Shutter-fastener	M. L. Brewer	431,325	July 1	438	109	52	90
Shutter-fastener	D. Chamberlain	429,259	June 3	920	35	51	1515
Shutter-fastener	R. Conner and R. Wallbillich	435,799	Sept. 2	650	171	52	1500
Shutter-fastener	H. F. Edwards	422,338	Feb. 25	2817	743	50	1120
Shutter-fastener	J. Jouet	425,884	Apr. 13	2203	585	51	445
Shutter-fastener	F. H. Langson	425,330	Apr. 8	1371	366	51	276
Shutter-fastener	L. Markey	433,688	Aug. 5	367	93, 94	52	828
Shutter-fastener	L. W. Merriam	420,461	Feb. 4	61	13	50	576
Shutter-fastener	J. W. Morris	427,345	May 6	484	124	51	907
Shutter-fastener	F. Taylor	423,463	Mar. 4	151	41	50	1165
Shutter-fastener	W. O. Whitney	431,301	July 1	404	101	52	82
Shutter fastener and bower	L. H. Flory	429,024	May 27	3023	776	51	1438
Shutter fastener and bower	W. J. Scott	426,334	Apr. 22	2883	759	51	589
Shutter-fastener and slat-operator. Combined	A. Pranke	438,425	Oct. 14	1148	310	53	226
Shutter-opening apparatus	J. E. Tryon	422,665	Mar. 4	452	115	50	1223
Shutter-opening device	J. V. V. Booraem	433,884	Aug. 5	665	172 173	52	887
Shutter or blind. Rolling	G. A. Ohl	433,694	Aug. 5	374	95	52	829
Shutter or door. Fire-proof	C. St. John	438,652	Oct. 21	1481	401	53	297
Shutter. Self-closing	J. V. V. Booraem	424,088	Mar. 25	2604	694	50	1654
Shutter. Window	H. Hawley	424,061	Mar. 25	2565	685 686	50	1646
Shutter-worker	G. W. Bingham	424,261	Mar. 25	2832	758	50	1698
Shutter-worker	H. D. Deschler and E. H. Fretz	443,709	Dec. 30	3397	872	53	1955
Shutter-worker	A. H. Dodd	441,471	Nov. 25	2994	771	53	1205
Shutter-worker	C. B. Eastman	423,037	Mar. 11	1033	269	50	1340
Shutter-worker	G. S. Elliott	438,616	Oct. 21	1432	387	53	288
Shutter-worker	E. T. Keener	437,603	Sept. 30	3560	929	52	2086
Shutter-worker	J. K. McGukin	419,789	Jan. 21	1701	451	50	358
Shutter-worker	J. F. Newhall	429,793	June 10	1033	253 254	51	1681
Shutter-worker	J. F. Newhall. (Reissue)	11,131	Dec. 9	1519	390	53	1567
Shutter-worker	L. F. Norris	425,450	Apr. 15	1557	417	51	320
Shutter-worker	E. M. Peterson	438,240	Oct. 14	873	236	53	173
Shutter-worker	A. Pranke	438,426	Oct. 14	1149	310	53	226
Shutter-worker	A. Pugsley	433,819	Aug. 5	572	149	52	868
Shutter-worker	A. F. Ward	439,912	Nov. 4	429	110 111	53	691
Shutter worker and fastener	G. W. Rhyneanson	426,960	Apr. 29	3892	999	51	780
Shutters. Slat for rolling	A. Böckel and E. Lochmann	422,707	Mar. 4	505	129	50	1233
Sick-room appliance	J. G. Thrower	427,281	May 6	395	102	51	888
Sickle-adjuster	R. J. Robinson and C. F. Collins	430,754	June 24	2601	636	51	2001
Sickle-bars. Device for displacing and replacing knives in	H. G. Schmitt	441,776	Dec. 2	232	60	53	1309
Sickle-driving mechanism	P. C. Gibbons and G. R. Heaberlin	428,088	May 20	1608	409	51	1144
Sickles. Die for making	C. H. Marks	443,777	Dec. 30	3502	898	53	1976
Siding. Device for laying	D. W. Connell	429,604	June 10	764	184	51	1629
Siding-strip	H. D. Kendall	430,187	June 17	1648	410	51	1810
Sieve	W. Hahn	428,719	May 27	2578	653	51	1349
Sieve	T. and G. M. Parkinson	437,718	Oct. 7	61	19, 20	53	15

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sieve or sifter	A. F. Ahlum	423,019	Mar. 11	997	262	50	1333
Sifter	G. H. Fountain	439,937	Nov. 4	468	122	53	700
Sifter, and safe. Ash	I. D. Crispell	419,114	Jan. 7	694	183	50	146
Sifter and spice-bin. Flour	W. McKinley	443,400	Dec. 23	2900	746	53	1853
Sifter. Ash	J. W. Dickinson	419,643	Jan. 21	1491	399	50	318
Sifter. Ash	E. H. Gove	436,351	Sept. 16	1511	394	52	1679
Sifter. Ash	E. H. Gove	436,352	Sept. 16	1512	394	52	1679
Sifter. Ash	T. W. McKeever	432,165	July 15	1774	456	52	361
Sifter. Ash	M. E. Moore and A. F. Hill	423,485	Mar. 18	1695	447	50	1475
Sifter. Ash	J. Orr	420,414	Jan. 28	2668	707	50	551
Sifter. Ash	A. M. Payson	423,270	Mar. 11	1385	361	50	1406
Sifter. Ash	J. R. Russell	440,966	Nov. 18	2145	556	53	1036
Sifter. Coal or ash	C. W. Clark	423,373	Mar. 11	1530	402	50	1435
Sifter. Rotary	B. H. Cook	419,751	Jan. 21	1642	436	50	346
Sifters. Cleaning attachment for bone-flour	A. Lister	427,774	May 13	1141	286	51	1046
					287		
					726		
					727		
Sifting and sorting meal, flour, &c. Apparatus for	C. Haggemacher	428,907	May 27	2853	728	51	1405
					729		
					730		
					731		
Sifting apparatus. Driving	C. H. Stubbley	424,232	Mar. 25	2800	747	50	1693
Sifting-machine	C. Haggemacher	428,909	May 27	2861	731	51	1406
Sifting-shovel	M. J. Cushing	427,055	May 6	32	10	51	817
Sight	J. J. Scholfield	426,333	Apr. 22	2882	759	51	589
Sight-feed lubricator	W. H. Craig	421,389	Feb. 18	1423	368	50	849
Sight-feed lubricator	W. F. Van Guysling	425,590	Apr. 15	1760	472	51	360
Sights. Pendulum-indicator for	M. Nelson	412,908	Dec. 16	2064	529	53	1681
Sign	C. H. Bayley	432,968	July 29	3023	776	52	612
Sign	H. A. Bierley	443,930	Dec. 30	3732	954	53	2021
Sign	H. Britten	443,955	Dec. 30	3771	963	53	2028
Sign	C. Schwartz	418,755	Jan. 7	139	34	50	31
Sign and plate. Metal-bordered glass	H. Tollner	433,107	July 29	3249	836	52	656
Sign-board. Flexible and transparent	C. Galle	428,086	May 20	1606	409	51	1144
Sign for lamps. Street	T. Cocheu	420,675	Feb. 4	347	91,92	50	632
Sign for lamps. Street	T. Cocheu. (Reissue)	11,092	July 1	788	196	52	156
Sign-frame	C. Schwartz	418,756	Jan. 7	140	34	50	31
Sign. Illuminated	E. F. Gavin	433,677	Aug. 5	351	90	52	821
Sign-stretcher	E. H. Hoffman	435,696	Sept. 2	498	132	52	1471
Signs. Letter for	A. J. Parker	420,813	June 10	1068	263	51	1687
Signal	J. J. Detwiller	419,840	Jan. 21	1786	473	50	373
Signal	W. E. Dyre	439,492	Oct. 28	2835	755	53	557
Signal	W. A. Kay	425,613	Apr. 15	1801	483	51	368
Signal	W. C. Paul and O. D. Kleinstaub	433,959	Aug. 12	775	203	52	917
Signal and switch controlling apparatus and verifying mechanism. Automatic	E. R. Gill, Jr	430,637	June 24	2392	583	51	1900
Signal apparatus. Interlocking	J. Hill, W. Smith, and J. P. O'Donnell	419,170	Jan. 7	781	206	50	162
					207		
Signal apparatus. Municipal	J. C. Wilson and B. J. Noyes	433,504	Aug. 5	92	26	52	775
Signal-box	M. Martin	425,576	Apr. 15	1737	466	51	355
Signal-box. Non-interfering	W. E. Decrow	434,922	Aug. 26	2323	613	52	1235
Signal-box. Police-patrol	C. Plumb	438,361	Oct. 14	1056	288	53	208
Signal-holder	W. B. Tallman	421,784	Feb. 18	1978	520	50	956
Signal-light for vessels	C. H. Koyl and F. A. D. Hancock	434,280	Aug. 12	1271	330	52	1014
Signal-lock	E. S. Piper	425,549	Apr. 15	1699	453	51	348
					454		
Signal-operating apparatus	S. L. Powell	437,348	Sept. 30	3156	826	52	2006
Signal operating device. Electrical	C. A. and J. F. Cox	418,910	Jan. 7	408	101	50	85
					102		
Signal-rods. Anti-friction guide for	H. Johnson	442,810	Dec. 16	1884	485	53	1647
Signal-station. Ocean	A. F. Paine	427,480	May 6	682	171	51	946
Signal system. Block	M. S. Conly	435,482	Sept. 2	151	43,44	52	1404
Signal system. Electrical	C. E. Ongley	443,726	Dec. 30	3424	879	53	1961
Signal system. Light	J. C. Wilson	433,505	Aug. 5	95	27	52	775
Signal system. Municipal	B. J. Noyes	433,485	Aug. 5	70	21	52	770
Signal system. Municipal	B. J. Noyes	433,486	Aug. 5	71	21	52	771
Signals. Apparatus for electrically recording	F. B. Wood	420,852	Feb. 4	623	160	50	681
Signals, &c. Automatic system for operating	J. Wayland and J. S. Baldwin	428,579	May 20	2343	594	51	1287
					595		
Signals. Electrically recording	F. B. Wood	420,851	Feb. 4	621	160	50	681
Signals. Interlocking apparatus for operating	G. Koening and S. H. Stupakoff	424,485	Apr. 1	65	19,30	51	16
Signaling and line-throwing device	J. Speits	440,207	Nov. 11	884	227	53	792
Signaling apparatus	G. B. Lehy	431,598	July 8	872	216	52	182
Signaling apparatus	J. H. McCartney	431,671	July 8	1004	250	52	206
Signaling apparatus. Automatic	J. H. Crosby and F. Mossberg	428,667	May 27	2481	631	51	1331
Signaling apparatus. Electric	T. A. Edison	433,304	Oct. 14	973	264	53	191
Signaling apparatus. Electric	G. B. Lehy	431,597	July 8	870	216	52	182
Signaling apparatus. Electrical	J. U. Mackenzie	426,621	Apr. 29	3331	874	51	685
Signaling apparatus. Electrical	A. A. Hatch	435,293	Sept. 2	801	214	52	1529
Signaling apparatus. Electrical	A. A. Hatch	435,294	Sept. 2	805	214	52	1530
Signaling apparatus. Electrical	A. B. Wyckoff	443,157	Dec. 23	2495	638	53	1772

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Signaling apparatus for hotels. Electric	J. J. Miller	426,134	Apr. 22	2601	684	51	530
Signaling apparatus. Municipal	J. W. Stover	436,747	Sept. 16	2151	566	52	1798
Signaling apparatus. Pneumatic	J. T. Pennycook	421,429	Feb. 18	1473	382	50	859
Signaling apparatus. Pneumatic	J. T. Pennycook	436,434	Sept. 16	1649	{ 433 434 }	{ 52 52 }	1704
Signaling apparatus. Semaphore	N. J. Smith	442,340	Dec. 9	1108	289	53	1484
Signaling apparatus. Switch	A. Barnes	419,135	Jan. 7	722	190	50	151
Signaling-box, Municipal	F. Pearce	424,431	Mar. 25	3139	833	50	1758
Signaling device for moving vehicles. Electric.	O. J. Depp and S. J. Munn	443,074	Dec. 16	2322	593	53	1733
Signaling device. Portable electric.	P. Pearson	434,835	Aug. 19	2136	{ 559 560 }	{ 52 52 }	1193
Signaling system. Electric.	J. W. Riggs	441,703	Dec. 2	117	31, 32	53	1285
Signaling system. Non-interfering	C. E. Ongley	443,725	Dec. 30	3421	{ 878 879 }	{ 53 53 }	1960
Signaling system. Recording	W. J. Fraser	439,295	Oct. 28	2539	{ 679 680 }	{ 53 53 }	500
Signaling system. Call-box for electrical	A. G. Holcombe	432,619	July 22	2440	629	52	496
Signature-gathering machine	A. I. Jacobs	433,569	Aug. 5	190	50, 51	52	793
Signature-gathering machine	D. M. Smyth	431,215	July 1	279	70	52	57
Silk-cocoons. Machinery for beating	E. W. Serrell, Jr., and E. Fougereol	427,243	May 6	341	87, 88	51	877
Silk or beam	G. W. Dithridge	426,562	Apr. 29	3232	849	51	667
Silver from copper ores, mattes, and other copper products. Extracting	R. Pearce	421,031	Feb. 11	910		50	745
Silver-ware boxes. Clamp for	C. Leise	424,216	Mar. 25	2780	741	50	1688
Silver-ware-case clip	H. and W. Siebert	425,190	Apr. 8	1174	310	51	238
Silver-ware. Etching and oxidizing gold-plated	G. Myrick and W. Roller	421,009	Feb. 11	881	227	50	740
Silver-ware. Etching gold-plated	G. Myrick and W. Roller	421,010	Feb. 11	882	228	50	740
Single-acting engine	J. P. Tidwell	426,421	Apr. 22	3042	796	51	619
Single or double tree	W. Bing	430,765	June 24	2615	641	51	2004
Singletree	P. Fisher	424,873	Apr. 1	684	180	51	132
Singletree	J. V. Worthington and J. Gehr	441,916	Dec. 2	443	118	53	1352
Singletree-hook	A. Scott	428,531	May 20	2268	376	51	1272
Singletree-support	R. C. Allen	440,987	Nov. 18	2175	562	53	1043
Singletree. Vehicle	T. F. Jones	432,532	July 22	2324	600	52	474
Sink	E. Hamman and T. Susemihl	431,808	July 8	1226	306	52	248
Sink. Kitchen	R. L. Fairchild	433,650	Aug. 5	314	81	52	817
Sink-strainer	H. Pfotenhauer	442,999	Dec. 16	2202	566	53	1710
Sink strainer and trap	W. Bechtold	423,658	Mar. 18	1965	577	50	1525
Sink-trap	J. J. Van De Walle	425,641	Apr. 15	1851	494	51	377
Sink trap. Kitchen	J. W. Regan and C. A. Neuert	434,680	Aug. 19	1918	500	52	1150
Sinker, float, and handle	J. Vasseur	419,574	Jan. 14	1372	367	50	288
Siphon	J. M. Clark	423,129	Mar. 11	1173	305	50	1366
Siphon	M. T. Schuberth	421,057	Feb. 11	950	244	50	752
Siphon closet-bowl	H. C. Weeden	441,268	Nov. 25	2673	694	53	1144
Siphon for cans	J. F. Thompson	442,696	Dec. 16	1669	428	53	1605
Siphon. Portable	S. F. and A. Bowser	443,496	Dec. 30	3060	787	53	1893
Siphon-tank	R. M. Reilly	427,364	May 6	506	129	51	911
Siphons. Attachment for	W. H. Carley	422,721	Mar. 4	522	133	50	1236
Sirup-jar	E. Haas	424,675	Apr. 1	366	97	51	71
Sirup jar or bottle	J. W. Sutton	427,635	May 13	915	230	51	1002
Size-marks. Device for distributing	C. R. Hoag	435,999	Sept. 9	958	251	52	1566
Skate	E. H. Barney	434,235	Aug. 12	1201	312	52	1000
Skate	G. C. Bateman	440,529	Nov. 11	1420	366	53	890
Skate	A. E. Fiedler	429,266	June 3	229	57	51	1516
Skate	B. Hatschek	441,841	Dec. 2	334	89	53	1329
Skate	H. Heinze	433,467	Aug. 5	45	15	52	765
Skate	R. E. Krause	439,161	Oct. 28	2296	616	53	456
Skate	C. G. Lamont	437,653	Sept. 30	3624	947	52	2100
Skate	W. L. Parmalee	419,550	Jan. 14	1340	358	50	282
Skate. Road	E. S. Dorr	430,006	June 10	1364	337	51	1746
Skate-sharpener	I. J. Merrill	438,699	Oct. 21	1564	420	53	311
Sketching apparatus	D. M. Hartsangh	424,111	Mar. 25	2639	703	50	1660
Skillet	M. T. Durgy	429,169	June 3	96	23	51	1490
Skin-cleaning apparatus	J. Stratton	425,112	Apr. 8	1036	276	51	209
Skins. Machine for coloring	A. Travis	441,991	Dec. 2	561	{ 151 152 }	{ 53 53 }	1373
Skinning-knife	J. E. Miller	431,233	July 1	308	76	52	62
Skipping-rope handle. Musical	J. N. Pringle	438,489	Oct. 14	1234	335	53	243
Skirt-elevator	E. J. Colby	437,678	Oct. 7	7	2	53	4
Skirt-elevator	E. L. Shapley	428,964	May 27	2937	{ 753 754 }	{ 51 51 }	1421
Skirt-lifter and bustle. Combined	P. P. Weinhold	436,748	Sept. 16	2154	566	52	1799
Skirt-lifter and bustle. Combined	P. P. Weinhold	436,749	Sept. 16	2156	566	52	1800
Skirt-protector	A. E. McQuiston	419,968	Jan. 21	1976	519	50	414
Skirt-protector	M. H. Smith	423,186	Mar. 11	1257	327	50	1383
Skiving-machine	J. R. Scott	439,433	Oct. 28	2750	733	53	541
Skiving-machine	J. R. Scott	443,409	Dec. 23	2911	749	53	1854
Skiving machine. Upper	G. F. Dunn	426,251	Apr. 22	2772	{ 726 727 }	{ 51 51 }	564
Skylight	N. Campbell	424,176	Mar. 25	2725	{ 726 727 }	{ 50 50 }	1677
Skylights. Glazing-bar for	T. W. Hellwell. (Reissne)	11,099	July 29	3705	956	52	750
Slag. Apparatus for treating	O. B. Peck	433,138	July 29	3294	848	52	665
Slag. Centrifugal plant for treating	O. B. Peck	433,137	July 29	3293	848	52	665
Slag. Disintegrating	J. Colquhoun	443,898	Dec. 30	3677	947	53	2011
Slag. Handling and delivering	O. B. Peck	433,136	July 29	3292	847	52	664
Slag-pots. Vehicle for conveying	S. E. Bretherton and F. C. Mason	441,788	Dec. 2	251	67	53	1313
Slag. Treating	S. T. C. Bryan	429,225	June 3	177		51	1505
Slag. Treating	S. T. C. Bryan	429,226	June 3	178	43	51	1505
Slate	T. K. Ewing	433,725	Aug. 5	418	107	52	837
Slate and satchel. Combined	I. Murdock	433,536	Aug. 5	133	38	52	783
Slate. Draw-leaf	S. Marks	424,931	Apr. 1	767	204	51	149
Slate-frame	S. Marks	439,534	Oct. 28	2892	769	53	568
Slate-frame	D. Scrymgeour	426,145	Apr. 22	2623	688	51	534

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Slate-jig	J. N. Boone and S. D. Taylor	440,460	Nov. 11	1303	337	53	868
Slate-ruling machine	L. O. Broadwell	435,390	Sept. 2	14	4	52	1377
Slate-washer	W. F. MacLachlan	435,069	Aug. 26	2534	669	52	1276
Slaughtering device. Electric animal-	J. D. Miller and J. A. Dofflemeyer	431,777	July 8	1174	292	52	238
Slaughtering. Suspending apparatus for.	J. L. Humaston	431,358	July 1	494	123	52	100
Slaw or kraut cutter	L. W. and H. W. Fox	429,612	June 10	772	186	51	1631
Sled	C. E. and J. D. Cronk	432,514	July 22	2393	593	52	467
Sled	C. J. Fendel	429,265	June 3	227	57	51	1516
Sled	J. O. Nordenström	435,944	Sept. 9	880	231	52	1550
Sled	J. C. Robertson	419,562	Jan. 14	1354	362	50	285
Sled. Bob.	S. Legreid	428,845	May 27	2760	701	51	1386
Sled. Bob.	A. Newstrom	433,742	Aug. 5	448	116	52	843
Sled. Bob.	J. Yenne	435,341	Aug. 26	2950	783	52	1373
Sled bolster-bearing	J. J. McMann and A. Rippon	438,706	Oct. 21	1572	423	53	312
Sled-brake	C. E. Jones	441,167	Nov. 25	2478	641	53	1111
Sled-brake	E. Kramer	430,033	June 10	1413	351	51	1754
Sled-brake	W. H. Lee	436,312	Sept. 9	1437	374	52	1657
Sled-brake	C. C. Skinner	436,464	Sept. 16	1694	446	52	1713
Sled. Coasting.	C. H. Dickson	424,469	Apr. 1	40	11	51	10
Sled. Hay-	P. Gregg	435,417	Sept. 2	57	19	52	1385
Sled-knee	J. Ammon	428,876	May 27	2807	713	51	1395
Sled. Motor.	C. Jackson	423,161	Mar. 11	1223	318	50	1376
Sled-propeller	T. F. Hennesy	421,933	Feb. 25	2203	577	50	1007
Sled-propeller	F. J. Noechel	438,819	Oct. 21	1772	474	53	350
Sled-propeller	J. Stanford	433,829	Aug. 5	584	152	52	871
Sled. Roller.	J. W. Bankson	424,164	Mar. 25	2711	721	50	1674
Sledges, picks, and other tools. Portable rack for	C. A. and J. H. Miller	438,735	Oct. 21	1629	437	53	323
Sleeve-drafting apparatus. Adjustable	E. E. Buddington	440,692	Nov. 18	1684	434	53	950
Sleeve-holder	D. G. Butts	419,635	Jan. 21	1471	395	50	315
Sleeve-holder	A. W. Sawyer	431,125	July 1	137	36	52	29
Sleeve-pattern. Adjustable	J. H. Moriarty	441,684	Dec. 2	80	21, 22	53	1278
Sleeves in position. Holder for retaining.	R. Walker	442,263	Dec. 9	987	260	53	1462
Sleigh	A. Berry	432,721	July 22	2624	671	52	531
Sleigh	E. J. Churchill	437,979	Oct. 7	468	132	53	89
Sleigh	L. R. Dexter	428,593	May 27	2375	604	51	1313
Sleigh	J. Kingsbury	422,022	Feb. 25	2317	612	50	1029
Sleigh	F. C. Klipstein	438,164	Oct. 14	756	207	53	152
Sleigh	W. F. Mathews	422,958	Mar. 11	909	238	50	1317
Sleigh	M. L. Wilcox	441,729	Dec. 2	157	42	53	1292
Sleigh and carriage. Combined	H. Grice	423,241	Mar. 11	1331	345	50	1397
Sleigh. Bob.	C. Nichols	436,257	Sept. 9	1360	354	52	1641
Sleigh-bob	H. J. Simon	441,200	Nov. 25	2544	657	53	1122
Sleigh-brake	E. H. Hinton	431,352	July 1	486	120	52	99
Sleigh-knee	J. Applebaker	439,370	Oct. 28	2654	706	53	522
Sleigh-knee	S. C. Doane	420,407	Jan. 28	2661	705	50	550
Sleigh-knee	N. P. Peterson	431,194	July 1	240	61	52	50
Sleigh-knee	J. H. Rempis	435,666	Sept. 2	454	120	52	1462
Sleigh-runner	G. W. Mercer	437,707	Oct. 7	39	12	53	10
Sleigh-runner	J. Willig	431,501	July 1	725	181	52	145
Sleigh-runner for chairs	W. Müller	433,535	Aug. 5	132	38	52	783
Sleigh-runner for wheeled vehicles	G. L. Hurd	426,450	Apr. 29	3078	808	51	636
Sleigh-runner for wheeled vehicles	T. T. Rogers	432,083	July 15	1642	421	52	335
Sleighs. Hand-rail for	G. S. Caldwell	422,372	Mar. 4	16	5	50	1139
Slicer	M. J. Page	441,440	Nov. 25	2942	757	53	1196
Slicer	J. Spillinger	436,507	Sept. 16	1756	463	52	1725
Slicer. Apple-	C. M. Heffron	429,624	June 10	790	192	51	1634
Slicer. Fruit-	F. B. Smith	427,373	May 6	516	132	51	913
Slicing-machine	M. E. Lasher	433,292	July 29	3512	906	52	710
Slicing-machine	D. G. Stone	429,973	June 10	1316	325	51	1736
Slicing or chopping machine	J. Vrátil	441,081	Nov. 18	2332	604	53	1073
Sliding and swinging gate	C. C. Alexander	428,160	May 20	1713	434	51	1165
Sliding gate.	G. F. Sherwood	440,283	Nov. 11	1013	260	53	814
Sliding gate. Automatic	I. W. Eikenbary	426,787	Apr. 29	3589	937	51	734
Sliding gate. Automatic	I. W. Eikenbary	438,914	Oct. 21	1921	511	53	377
Slop-jar and commode	J. Shepherd	427,627	May 13	905	227	51	1000
Slot-brake	A. Du Bois	422,923	Mar. 11	855	222	50	1307
Slotting-machines. Tool-holder for	S. Benson	421,345	Feb. 11	1354	351	50	829
Slug-strips. Machine for making	A. Eppler, Jr.	431,339	July 1	461	114	52	94
Sluiceway and flood-gate	T. Parker	418,576	Jan. 7	347	84	50	72
Sluiceway gate or dam. Adjustable	T. Parker	426,953	Apr. 29	3812	996	51	778
Slugging-machine jack	C. O. Parker	429,862	June 10	1144	283	51	1702
Small-arms. Mechanism for breech-loading	T. Southgate	443,635	Dec. 30	3278	845	53	1934
Smocking. Making	W. C. von Buchwald	422,268	Feb. 25	2699	711	50	1099
Smoke and dry house for meats	N. Murphy	441,576	Nov. 25	3148	809	53	1235
Smoke and spark conductor	I. J. Hartford	442,886	Dec. 16	2029	521	53	1674
Smoke-box	G. S. Strong	425,267	Apr. 8	1277	342	51	258
Smoke-burning furnace	O. B. Martin	437,219	Sept. 30	2956	773	52	1967
Smoke-consumer	J. Conrad	432,018	July 15	1540	392	52	316
Smoke-consumer	R. Knobelspies	429,765	June 10	996	244	51	1675
Smoke-consumer	J. Mueller	438,704	Oct. 21	1570	422	53	312
Smoke-consumer. Automatic	G. Langer	438,005	Oct. 7	509	143	53	97
Smoke consumer or burner	J. W. Fry	442,677	Dec. 16	1634	421	53	1599
Smoke-consuming attachment	E. H. Ryan	426,863	Apr. 29	3698	964	51	755
Smoke-consuming furnace	G. F. N. Bergen and I. Doerfler	425,730	Apr. 15	1985	529	51	403
Smoke-consuming furnace	W. L. Drake	420,534	Feb. 4	152	37, 38	50	593
Smoke-consuming furnace and ventilator	L. J. Treacy	441,605	Nov. 25	3195	822	53	1214

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Smoke-house	H. Levy	434,716	Aug. 19	1975	514	52	1160
Smoke-house and meat-safe. Combined	J. M. Badgley	426,226	Apr. 22	2741	718	51	558
Smoke-preventing furnace	H. R. Walker	435,532	Sept. 2	231	64	52	1419
Smoke-purifying apparatus	S. Elliott	442,112	Dec. 9	764	{ 205 206 }	{ 53	1419
Smoke-stack, feed-water heater, and filter. Combined.	J. W. Brown	423,983	Mar. 25	2453	652	50	1624
Smoking-pipe	I. Pfortner	419,348	Jan. 14	1062	280	50	225
Smoothing curved surfaces. Machine for	J. M. Nash	430,398	June 17	2018	{ 497 498 }	{ 51	1882
Smoothing-iron	C. Silberstein and J. Amos	433,545	Aug. 5	145	41	52	785
Snap-hook	D. B. Adams	443,630	Dec. 30	3273	843	53	1932
Snap-hook	J. P. Anderson	424,637	Apr. 1	309	79	51	61
Snap-hook	R. A. Breul	428,799	May 27	2690	683	51	1371
Snap-hook	O. C. Gilmore	419,011	Jan. 7	546	136	50	115
Snap-hook	L. E. Hale	426,498	Apr. 29	3149	828	51	649
Snap-hook	G. M. Hubbard	437,991	Oct. 7	490	139	53	93
Snap-hook	G. M. Hubbard	438,375	Oct. 14	1074	293	53	212
Snap-hook	A. M. Hyde	430,384	June 17	1996	494	51	1877
Snap-hook	H. E. Kelley	430,857	June 24	2756	675	51	2031
Snap-hook	J. Kennedy	422,801	Mar. 4	634	163	50	1259
Snap-hook	C. G. Lundborg	437,380	Sept. 30	3222	940	52	2018
Snap-hook	N. Nelson	429,362	June 3	398	94	51	1546
Snap-hook	J. A. Park	435,247	Aug. 26	2789	739	52	1824
Snap-hook	I. Pennington	440,056	Nov. 4	652	174	53	735
Snap-hook	C. H. Smith	421,200	Feb. 11	1156	296	50	792
Snap-hook. Safety	E. P. Ford	431,042	July 1	24	6	52	7
Snap-switch. Double-pole	H. H. Crowell	436,122	Sept. 9	1155	302	52	1601
Snap-switch. Electric	W. Hochhausen	437,359	Sept. 30	3187	831	52	2010
Snap-switch. Reciprocating	J. S. Gibbs and C. G. Perkins	436,080	Sept. 9	1090	282	52	1590
Snatch and tackle block	H. V. Hartz	442,679	Dec. 16	1637	422	53	1600
Snatch-block	T. R. Ferrall	430,518	June 17	2193	539	51	1915
Snatch-block	T. R. Ferrall	430,519	June 17	2193	539	51	1915
Snatch-block	J. S. Jackson, Jr.	430,028	June 10	1404	349	51	1753
Snow and ice flanger	W. McIntosh	434,195	Aug. 12	1130	294	52	987
Snow and ice melter	J. B. Archer	422,278	Feb. 25	2716	715	50	1101
Snow-excavator	D. P. Bier	425,365	Apr. 8	1421	378	51	285
Snow from railway-tracks. Apparatus for removing	H. H. Kryger	426,130	Apr. 22	2595	683	51	529
Snow from railways and tramways. Machine for removing	C. and W. Paulitschky	441,442	Nov. 25	2945	{ 758 759 }	{ 53	1196
Snow-guard	L. T. Houghton and A. A. Barker	432,408	July 15	2127	546	52	426
Snow-melting apparatus	F. J. Ferrell	428,670	May 27	2490	634	51	1332
Snow-plow	L. J. Bergendahl	436,204	Sept. 9	1286	335	52	1625
Snow-plow	J. M. Bouck	437,416	Sept. 30	3283	{ 856 857 }	{ 52	2030
Snow-plow	O. A. Clark	426,435	Apr. 29	3058	801	51	632
Snow-plow	W. C. Hart	439,274	Oct. 28	2493	668	53	492
Snow-plow	W. H. Lennox	421,731	Feb. 18	1910	502	50	944
Snow-plow	I. Osgood	424,616	Apr. 1	277	72	51	56
Snow-plow	J. H. Pielert	436,636	Sept. 16	1962	515	52	1762
Snow-plow	J. H. Russell	420,467	Feb. 4	67	15	50	577
Snow-plow	T. Scheffler	421,768	Feb. 18	1959	515	50	952
Snow-plow	T. Scheffler	421,841	Feb. 18	2060	{ 543 544 }	{ 50	970
Snow-plow. Rotary	J. W. Haughwout	419,140	Jan. 7	745	{ 197 198 }	{ 50	156
Snow-plow. Rotary	E. Leshe	438,008	Oct. 7	514	144	53	98
Snow-road machine	W. F. Pleas	419,351	Jan. 14	1065	281	50	225
Snow-road machine	J. Turnbull and E. W. Farwell	434,963	Aug. 26	2378	630	52	1247
Snow-scraper for railway-tracks	C. J. Malone	419,532	Jan. 14	1318	{ 351 352 }	{ 50	276
Snow-scraping machine	O. S. Wheeler	422,674	Mar. 4	464	118	50	1225
Soap	J. A. Gunn	423,866	Mar. 18	2261	501	50	1581
Soap and carbonic acid. Apparatus for making	E. D. Mellen	422,141	Feb. 25	2495	659	50	1061
Soap and carbonic acid. Simultaneous manufacture of	E. D. Mellen	424,991	Apr. 8	863	229	51	176
Soap. Apparatus for making	M. J. Palmer	437,448	Sept. 30	3336	870	52	2041
Soap around an anchor. Die for compressing	F. W. Ostrom	434,031	Aug. 12	867	228	52	935
Soap-bubble pipe	R. S. Thain	430,095	June 10	1518	377	51	1774
Soap-cake	A. S. Miles	437,818	Oct. 7	224	68	53	44
Soap-cakes. Anchor attachment for	F. W. Ostrom	436,490	Sept. 16	1735	458	52	1721
Soap cakes to chains. Device for attaching	F. W. Ostrom	439,175	Oct. 28	2321	623	53	461
Soap. Clamp or holder and box for	W. A. Weed	423,296	Mar. 11	1425	370	50	1414
Soap-cutter	G. W. Sample	428,195	Sept. 9	1274	332	52	1622
Soap-lye. Apparatus for concentrating spent	A. Domeier and O. C. Hagemann	436,469	May 20	2189	552	51	1257
Soap-lye. Apparatus for the distillation of concentrated	A. Domeier and O. C. Hagemann	428,470	May 20	2191	553	51	1257
Soap-lyes. Purifying spent	O. C. Hagemann	443,761	Dec. 30	3482	.....	53	1972
Soap. Making	J. B. N. Berry	433,066	July 29	3178	.....	52	642
Soap. Making potash	H. Enrich	433,119	July 29	3265	.....	52	659
Soap-powder	H. Hayward	423,927	Mar. 25	2368	.....	50	1609
Soap-press	F. S. Rutschman	430,888	June 24	2804	{ 687 688 }	{ 51	2040
Soap. Securing anchors within cakes of	F. W. Ostrom	435,946	Sept. 9	882	231	52	1551
Soap-shaker	W. T. Russell	428,144	May 20	1695	430	51	1161
Soap-stamping machine	C. Manning	435,442	Sept. 2	94	27	52	1393
Socket	C. P. Button	428,889	May 27	2829	719	51	1400
Sod-cutter	C. Johnson	420,071	Jan. 28	2143	567	50	454
Sod-cutter	M. T. White	433,224	July 29	3416	882	52	690
Soda-alum. Crystallizing	E. Augé	435,129	Aug. 26	3621	.....	52	1292
Soda-alum. Making	E. Augé	420,468	Feb. 4	90	.....	50	581
Soda. Apparatus for recovering	L. D. Armstrong	440,124	Nov. 11	748	197	53	764
Soda. Process of and apparatus for decomposing bicarbonate of	L. A. Stamb	439,330	Oct. 28	2590	691	53	511
Soda. Recovering	H. Blackman	424,756	Apr. 1	497	135	51	97
Soda-recovering apparatus	H. Burgess	429,417	June 3	477	113	51	1562

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Soda-recovering furnace	H. Blackman	424,755	Apr. 1	493	134	51	97
Soda-water-draft apparatus	A. D. Puffer	422,834	Mar. 4	691	176	50	1269
Soda-water-draft apparatus	A. D. Puffer	435,188	Aug. 26	2710	716	52	1309
Soda-water-dispensing apparatus	C. Adami	439,923	Nov. 4	444	{ 115 116 }	53	695
Soda-water-dispensing apparatus	J. W. Tufts and J. Ramsey	431,491	July 1	705	177	52	141
Soda-water fountain	W. H. Marshall	443,683	Dec. 30	3359	863	53	1949
Sofa and bed combined	H. Plohr	439,184	Oct. 28	2333	{ 627 628 }	53	463
Sofa and conversation-chair. Combination	J. Stienen	443,301	Dec. 23	2746	704	53	1822
Sofa or settee. Folding	C. H. Arnold	425,483	Apr. 15	1606	429	51	329
Solder from tinned iron. Separating	W. E. Harris	419,195	Jan. 14	827	218	50	177
Solder to can-caps. Machine for applying	W. D. Brooks	431,933	July 8	1403	356	52	283
Soldering and cementing. Apparatus for electric	E. Thomson	423,967	Mar. 25	2432	{ 645 646 }	50	1621
Soldering and cementing cans. Apparatus for electric	M. W. Dewey	443,749	Dec. 30	3459	886	53	1969
Soldering and cementing cans. Electric	M. W. Dewey	443,748	Dec. 30	3455	886	53	1968
Soldering apparatus	G. W. Melotte	420,459	Feb. 4	59	12	50	575
Soldering apparatus	J. H. Michener, Jr	419,785	Jan. 21	1694	449	50	356
Soldering apparatus. Can	D. D. Ranney	430,751	June 24	2598	{ 635 636 }	51	2000
Soldering can-bodies	M. Jensen	435,840	Sept. 2	711	{ 190 191 }	52	1512
Soldering, cementing, &c. Electric	E. Thomson	423,966	Mar. 25	2430	645	50	1621
Soldering device. Can	R. T. Smith	426,078	Apr. 22	2515	664	51	512
Soldering-iron	F. Barr	435,274	Aug. 26	2833	749	52	1332
Soldering-iron	C. W. Shedd	428,532	May 20	2269	576	51	1273
Soldering-iron. Electric	C. E. Carpenter	429,561	June 3	694	169	51	1605
Soldering-iron. Electric	C. E. Carpenter	433,671	Aug. 5	342	87	52	822
Soldering-iron. Electric	C. E. Carpenter	436,119	Sept. 9	1152	301	52	1600
Soldering-iron. Electric	C. L. Coffin	431,439	July 1	629	157	52	127
Soldering-iron. Electric	W. M. Miner	421,185	Feb. 11	1133	229	50	788
Soldering-iron for capping cans	N. G. Numsen	425,691	Apr. 15	1926	512	51	392
Soldering-iron heater	W. Nehring	419,058	Jan. 7	618	160	50	130
Soldering-iron heater	E. Wildi	438,967	Oct. 21	1998	534	53	393
Soldering-iron. Reversible	J. D. Wilson	438,458	Oct. 14	1199	325	53	235
Soldering-iron. Self-heating	A. Sundeen and S. B. Molander	428,236	May 20	1832	459	51	1189
Soldering-machine	J. G. Hodgson	422,412	Mar. 4	67	18, 19	50	1150
Soldering-machine	M. Jensen	438,926	Oct. 21	1935	{ 515 516 }	53	380
Soldering-machine	W. J. Phelps	439,762	Nov. 4	199	51, 52	53	647
Soldering machine. Can	W. D. Brooks	421,043	Feb. 11	929	240	50	749
Soldering machine. Can	W. D. Brooks	425,296	Apr. 8	1326	355	51	267
Soldering machine. Can	G. E. Lockwood	443,289	Dec. 23	2721	{ 698 699 }	53	1817
Soldering machine. Can	D. D. Ranney	437,453	Sept. 30	3343	{ 874 875 }	52	2043
Soldering machine. Can	F. Trullender	421,331	Feb. 11	1339	{ 346 347 }	50	826
Soldering machine. Can-cap	E. Norton and J. G. Hodgson	422,434	Mar. 4	101	28	50	1156
Soldering or brazing torch	F. W. Quitman	433,631	Aug. 5	278	74	52	810
Soldering. Refractory bed for	G. W. Melotte	433,252	July 29	3459	{ 892 893 }	52	699
Soldering-tool	C. L. Wagandt	418,934	Jan. 7	449	110	50	94
Soldering-tweezers	M. Greer, Jr	420,874	Feb. 4	660	172	50	689
Soldering vent-holes in can-caps. Machine for	J. G. Hodgson	436,785	Sept. 23	2217	{ 584 585 }	52	1819
Sole and heel trimming machine	J. M., J., A. J., and S. A. Gimson	433,782	Aug. 5	514	{ 133 134 }	52	856
Sole-brushing machine	J. F. Thompson	423,968	Mar. 25	2434	646	50	1621
Sole-cutting machine	M. E. Knight	436,358	Sept. 16	1519	{ 396 397 }	52	1681
Sole-cutting machine	J. Smith	426,870	Apr. 29	3707	{ 967 968 969 }	51	757
Sole-cutting machine	A. M. Stickney	443,123	Dec. 23	2427	{ 619 620 }	53	1760
Sole-edge-burnishing machine	W. Gordon	425,217	Apr. 8	1209	320	51	245
Sole-edge-burnishing machine	W. J. Lavey	438,318	Oct. 14	993	{ 268 269 }	53	196
Sole. Inner	J. C. Blum	439,377	Oct. 28	2664	709	53	524
Sole-leveling machine	A. K. Washburn	435,882	Sept. 2	785	{ 208 209 }	52	1526
Sole-leveling machine	A. K. Washburn	435,883	Sept. 2	786	209	52	1526
Sole-linings. Machine for applying	W. H. Ryan and M. W. Bent	432,839	July 22	2807	719	52	566
Sole-pressing machine	F. W. Coy and A. C. Paul	436,034	Sept. 9	1011	{ 263 264 }	52	1576
Sole-pressing machine	W. Gordon	425,218	Apr. 8	1210	321	51	245
Sole-trimmer	J. and C. H. Keats	437,857	Oct. 7	279	84	53	55
Sole-trimming machine	J. R. Scott	434,359	Aug. 12	1384	364	52	1038
Sole-trimming tool	S. Keats	437,858	Oct. 7	281	84	53	55
Soles. Machine for slashing inner	F. D. Rich	438,643	Oct. 21	1471	397	53	295
Soles or like forms. Machine for cutting	D. F. Hartford	424,477	Apr. 1	49	{ 14 15 16 }	51	12
Solid material. Artificial	J. F. Gesner	419,657	Jan. 21	1511	.....	50	321
Solutions and extracting solids therefrom. Apparatus for concentrating	J. A. Morrell	441,621	Nov. 25	3224	832	53	1251
Solutions. Concentrating	J. A. Morrell	441,317	Nov. 25	2750	711	53	1158
Sonnette	G. W. Sherman	427,274	May 6	384	100	51	886
Soot-catcher	M. A. Muse	429,047	May 27	3070	792	51	1446
Sorghum and sugar-cane. Apparatus for roasting and treating	A. J. Adamson	428,439	May 20	2148	540	51	1250
Sounder. Electric deep-sea	A. J. Cooper and E. E. Wigzell	418,889	Jan. 7	370	90	50	77

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Sower. Broadcast seed.....	E. C. Tecktonius	421,634	Feb. 18	1785	467	50	919
Sower. Broadcast seed.....	E. C. Tecktonius	443,926	Dec. 30	3726	953	53	2020
Sower. Seed.....	J. J. Hamilton and J. W. Hull.....	420,450	Feb. 4	36	7	50	570
Sowing-machine.....	J. Melander.....	426,035	Apr. 22	2456	648	51	500
Spacing-instrument.....	H. R. Gale.....	425,168	Apr. 8	1144	301	51	231
Spade.....	J. Ballard.....	432,472	July 15	2227	576	52	447
Sparger.....	M. Byrne.....	434,538	Aug. 19	1671	437	52	1103
Spark-arrester.....	J. S. Bell.....	427,955	May 13	1419	358	51	1097
Spark-arrester.....	E. B. Gibbs.....	432,586	Mar. 4	323	81	50	1197
Spark-arrester.....	A. M. Harris.....	435,177	Aug. 26	2690	710	52	1305
Spark-arrester.....	L. O. Mabie.....	429,138	June 3	49	12	51	1481
Spark-arrester.....	E. Martin.....	432,957	Mar. 11	908	238	50	1317
Spark-arrester.....	C. Potticary.....	430,298	June 17	1862	458	51	1850
Spark-arrester.....	G. H. Shoemaker.....	421,872	Feb. 18	2113	554	50	980
Spark-arrester.....	A. Thomson.....	425,555	Apr. 15	1707	457	51	350
Spark-arrester and extinguisher.....	A. P. Amaker.....	427,532	May 13	767	191	51	973
Spark-catcher.....	J. O. Pattee.....	439,892	Nov. 4	398	104	53	685
Sparrow-trap.....	W. B. Hawkins, Jr.....	433,241	July 29	3440	889	52	696
Speaking-tube.....	E. F. Mersick.....	434,672	Aug. 19	1905	497	52	1147
Speaking-tube.....	E. T. Orne.....	425,046	Apr. 8	949	253	51	191
Speaking-tube whistle.....	J. F. Wollensak.....	427,720	May 13	1048	262	51	1027
Speaking-tubes. Mouth-piece for.....	W. H. Ross.....	440,886	Nov. 18	2011	517	53	1011
Spectacle-case.....	L. L. Eyre.....	441,651	Dec. 2	33	10	53	1269
Spectacle-case.....	F. Shailer.....	421,438	Feb. 18	1485	385	50	862
Spectacle-frame.....	H. F. Bode.....	435,961	Sept. 9	904	238	52	1555
Spectacle-frame.....	P. J. Schreiber.....	440,064	Nov. 4	660	176	53	737
Spectacle-frame.....	W. X. Stevens.....	421,779	Feb. 18	1972	519	50	955
Spectacle-frame joint.....	B. I. Price.....	426,422	Apr. 22	3043	796	51	620
Spectacle-frame shield.....	H. M. Wilson.....	422,001	Feb. 25	2291	603	50	1024
Spectacle-frame. Sight-testing.....	J. K. Underwood.....	430,763	June 24	2613	640	51	2004
Spectacle-gage.....	M. J. Hinden.....	437,030	Sept. 23	2646	692	52	1903
Spectacle-temple and making the same.....	F. Buchhop and A. J. Allibone.....	440,220	Nov. 11	910	234	53	798
Spectacle-temple. Skin-protector for.....	J. L. Borsch.....	427,252	May 6	353	91	51	880
Spectacles.....	J. E. Briggs.....	443,160	Dec. 23	2498	639	53	1773
Spectacles. Miners'.....	F. G. McConihay.....	427,438	May 6	630	158	51	936
Spectacles. Prismatic magnifying.....	P. J. Edmunds.....	439,130	Oct. 28	2253	606	53	448
Speculum.....	R. P. and C. H. McCully.....	430,350	June 17	1947	{ 477 478 }	51	1867
Speculum. Anal.....	Q. A. Shuford.....	424,140	Mar. 25	2677	712	50	1667
Speculum. Electrical.....	S. H. Linn.....	438,891	Oct. 21	1892	502	53	372
Speculum-holder.....	J. N. Washington.....	439,028	Oct. 21	2069	559	53	412
Speed-changing mechanism.....	G. H. Chappell.....	441,281	Nov. 25	2694	699	53	1148
Speed-governor.....	J. Hoyle and J. Harrison.....	439,513	Oct. 28	2665	762	53	563
Speed-governor attachment.....	A. Kinney.....	419,202	Jan. 14	835	220	50	179
Speed-governor for gas-engines.....	W. S. Sharpneck.....	441,024	Nov. 18	2227	{ 575 576 577 }	53	1052
Speed-indicator.....	R. A. Jones.....	427,875	May 13	1292	{ 326 327 }	51	1074
Speed-indicator.....	G. Leverich.....	435,433	Sept. 2	79	24	52	1390
Speed-indicator and ship's log.....	J. Thorne and E. B. Burr.....	439,442	Oct. 28	2761	{ 735 736 }	53	543
Speed-indicator for rotating shafts.....	J. I. Thornycroft.....	442,554	Dec. 9	1450	371	53	1553
Speed-indicator for vehicles.....	F. N. Scofield.....	441,334	Nov. 25	2771	{ 716 717 }	53	1162
Speed-regulating device.....	M. Maginn.....	433,529	Aug. 5	126	36	52	781
Speed-varying mechanism.....	J. F. Ott.....	434,682	Aug. 19	2229	585	52	1210
Spice-mill.....	G. F. Schenkel and J. G. Rees.....	424,226	Mar. 25	2791	744	50	1691
Spice-mill.....	H. N. Watrous.....	426,484	Apr. 29	3130	822	51	646
Spigot for refrigerators or water-coolers.....	N. Engquist.....	429,121	June 3	24	6	51	1476
Spike.....	J. Churchward.....	421,386	Feb. 18	1417	367	50	848
Spike.....	M. Hanprecht.....	440,237	Nov. 11	918	236	53	799
Spike.....	G. W. Smith.....	424,081	Mar. 25	2594	692	50	1651
Spike.....	J. W. Vaughn.....	442,560	Dec. 9	1460	374	53	1555
Spike-driving machine.....	M. Sorenson.....	434,329	Aug. 19	1659	435	52	1100
Spike-extractor.....	L. Martin.....	420,603	Feb. 4	250	67	50	613
Spike-machine.....	A. Welsh, B. S. Richardson, and E. Welsh.....	424,586	Apr. 1	230	62	51	47
Spike-making machine.....	L. W. Estes.....	430,603	June 17	2320	570	51	1939
Spike-making mechanism.....	S. Uren.....	428,733	May 27	2597	{ 658 659 }	51	1352
Spike-making machine.....	W. H. Wyland.....	440,095	Nov. 4	699	186	53	745
Spike-puller.....	C. E. Seymour.....	425,526	Apr. 15	1669	445	51	342
Spike. Safety.....	A. D. Kittle.....	439,525	Oct. 28	2882	767	53	566
Spikes, &c. Machine for making.....	J. S. Pessenger.....	422,151	Feb. 25	2513	664	50	1064
Spiles. Apparatus for cutting and trimming.....	P. Trost.....	418,993	Jan. 7	524	131	50	110
Spinal curvature. Appliance for correcting.....	J. B. Hilliard.....	443,764	Dec. 30	3485	894	53	1973
Spindle and flier.....	J. Good.....	433,122	July 29	3269	842	52	660
Spindle-bearing.....	W. F. Draper.....	428,557	May 20	2306	585	51	1279
Spinning and twisting machines and machine therefor. Manufacturing bands for.....	H. G. Hall.....	440,476	Nov. 11	1328	343	53	873
Spinning and twisting machines. Flier and drag device therefor.....	J. Boelsterli.....	432,856	July 22	2830	725	52	571
Spinning and twisting machines. Thread cut-off for.....	W. E. Walsh.....	431,177	July 1	216	54	52	45
Spinning-bobbin.....	J. H. Wells.....	426,346	Apr. 22	2898	763	51	592
Spinning-frame.....	J. A., and M. Porritt and W. H. Fenton.....	436,326	Sept. 9	1467	382	52	1663
Spinning-frame.....	J. Scott and J. A. McAvoy.....	440,200	Nov. 11	870	224	53	789
Spinning-frames. Fulcrum for the weight-levers for the rolls of.....	J. F. McGrath.....	419,611	Jan. 14	1428	382	50	300
Spinning frames or mules. Device for controlling the tension of belts of.....	E. P. Gleason.....	426,440	Apr. 29	3065	803	51	633
Spinning-frames. Ring-rail for.....	A. S. and R. C. P. Lang.....	424,215	Mar. 25	2779	741	50	1688
Spinning-frames. Ring-rail for.....	C. McCarty.....	419,538	Jan. 14	1325	354	50	278
Spinning irregular forms. Machine for.....	J. Browning.....	426,235	Apr. 22	2752	721	51	560

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Spinning-machine.....	F. B. Drees and H. R. Swan.....	419,649	Jan. 21	1492	399	50	319
Spinning-machine.....	J. H. Potter, Jr.....	436,317	Sept. 9	1445	376	52	1658
Spinning machine. Ring.....	G. Perkins, G. Wimpenny, and J. H. Evans.....	421,359	Feb. 11	1375	356	50	832
Spinning-machine spindle-driving mechanism.....	C. W. Jones.....	418,797	Jan. 7	208	51	50	45
Spinning-machine stop-motion.....	E. Haigh and E. Hargreaves.....	437,194	Sept. 30	2921	{ 760 761 }	52	1961
Spinning-machine thread-guide.....	C. B. Burt and A. D. Davol.....	421,237	Feb. 11	1200	309	50	800
Spinning-machine yarn-guide.....	J. S. Richardson.....	433,037	July 29	3140	807	52	635
Spinning-machine yarn-nipper.....	L. Wimmer.....	423,013	Mar. 11	988	260	50	1332
Spinning-machines. Condensing-trumpet for.....	F. P. Baldner.....	420,506	Feb. 4	112	28	50	585
Spinning-machines. Device for operating yarn-separators in.....	J. Judge and J. Sullivan.....	432,201	July 15	1825	469	52	370
Spinning-machines. Drawing mechanism for.....	B. L. Bailey.....	439,339	Oct. 28	2607	695	53	514
Spinning-machines. Spindle-driving band tension-regulating device for.....	C. W. Jones.....	427,425	May 6	605	151	51	931
Spinning-machines. Spindle-support for cap.....	G. A. Draper.....	443,659	Dec. 30	3312	854	53	1940
Spinning-machines. Take-up device for spindle-bands of.....	T. Walker.....	434,852	Aug. 19	2159	566	52	1198
Spinning-machines. Tensioning device for endless bands of.....	S. Booth.....	434,820	Aug. 19	2118	555	52	1190
Spinning-machines. Tension-regulator for spindle-driving bands for.....	C. R. Pollard.....	428,630	May 27	2424	616	51	1321
Spinning-machines. Yarn-separator for.....	G. W. Knight.....	426,282	Apr. 22	2813	739	51	574
Spinning-machines. Yarn-separator for.....	J. E. Prest.....	435,122	Aug. 26	2612	691	52	1290
Spinning-mules. Mechanism for operating the twist-slides of.....	J. Bond.....	432,013	July 15	1535	390	52	315
Spinning or other frames. Lubricating device for the top and bottom roller for.....	J. A. McDowell-Guajardo.....	431,779	July 8	1176	293	52	238
Spinning or twisting machine.....	E. Dawes.....	437,022	Sept. 23	2632	687	52	1900
Spinning or twisting machines. Yarn-separator for.....	F. Cranska.....	440,841	Nov. 18	1945	499	53	998
Spinning-ring.....	C. E. Trowbridge.....	438,660	Oct. 21	1496	404	53	300
Spinning-rings. Machine for repairing.....	F. M. Marcy.....	439,883	Nov. 4	382	100	53	682
Spinning-spindle.....	G. O. Wickers.....	422,273	Feb. 25	2704	712	50	1099
Spinning-spindle and its support.....	R. White.....	442,655	Dec. 16	1596	413	53	1591
Spinning-spindle and support therefor.....	H. A. Burlingame.....	425,930	Apr. 15	2278	603	51	457
Spinning-spindle, &c. Bearing for.....	C. H. Fisher.....	434,924	Aug. 26	2326	614	52	1236
Spinning-spindle support.....	C. G. Buttrick and T. B. Flanders.....	438,879	Oct. 21	1873	497	53	368
Spinning-spindle support.....	G. O. Draper.....	431,511	July 1	737	183	52	147
Spinning-spindle support.....	G. O. Draper.....	434,981	Aug. 26	2401	636	52	1251
Spinning-spindle support.....	G. O. Draper.....	436,754	Sept. 16	2164	568	52	1801
Spinning-spindle support.....	W. F. Draper.....	428,556	May 20	2305	585	51	1279
Spinning-spindle support.....	W. F. Draper.....	428,897	May 27	2837	721	51	1401
Spinning-spindle support.....	W. F. Draper.....	441,144	Nov. 25	2444	633	53	1104
Spinning-spindle support.....	W. F. Draper.....	442,427	Dec. 9	1243	321	53	1512
Spinning-spindle support.....	J. R. Gray.....	437,923	Oct. 7	382	109	53	73
Spinning-spindle support.....	W. Hinchliffe.....	433,897	Aug. 5	679	176	52	889
Spinning-spindle support.....	C. D. McDuffin.....	418,740	Jan. 7	120	29	50	27
Spinning-spindle support.....	J. H. McMullan.....	420,084	Jan. 28	2157	570	50	457
Spinning-spindle support.....	J. H. McMullan.....	420,085	Jan. 28	2159	570	50	457
Spinning-spindle support.....	J. H. McMullan.....	420,086	Jan. 28	2162	571	50	458
Spinning-spindle support.....	J. H. McMullan.....	420,087	Jan. 28	2164	571	50	458
Spinning-spindle support.....	J. H. McMullan.....	420,088	Jan. 28	2167	571	50	459
Spinning-spindle support.....	C. D. Robinson.....	420,565	Feb. 4	194	50	50	602
Spinning-spindle support.....	J. W. Wattles.....	431,731	July 8	1106	275	52	225
Spinning-spindle whirl.....	C. L. L. Emery.....	436,756	Sept. 16	2166	569	52	1602
Spinning-spindle winder.....	E. Gessner.....	441,000	Nov. 18	2193	{ 566 567 }	53	1046
Spinning wool. Separable spindle for.....	G. Bailey.....	434,752	Aug. 19	2022	528	52	1170
Spinning, &c., yarns. Machine for.....	H. Priestman.....	422,155	Feb. 25	2519	665	50	1066
Spiral spring. Graduated.....	E. Clift.....	431,250	July 1	330	82	52	66
Spirally-crimped hoop.....	L. L. Frost.....	426,258	Apr. 22	2781	730	51	567
Spirit-burner.....	E. Otto.....	431,395	July 1	556	139	52	113
Spirits, alcohol, &c. Apparatus for and process of continuous rectification of.....	E. A. Barbet.....	436,684	Sept. 16	2048	535	52	1779
Spirometer. Coin-released.....	C. F. Gillet.....	419,938	Jan. 21	1931	509	50	405
Spittoon.....	F. Haberman.....	421,273	Feb. 11	1255	324	50	811
Spittoon.....	R. Hertzberg.....	443,595	Dec. 30	3213	826	53	1922
Spittoon-lifter.....	G. S. Trumbore.....	443,706	Dec. 30	3393	871	53	1955
Spittoon. Stationary.....	A. F. Brown.....	419,919	Jan. 21	1908	502	50	400
Splash-back and towel-rack. Combined.....	W. W. O'Hara.....	439,846	Nov. 4	326	83	53	671
Splasher-holder.....	H. E. Parks.....	433,907	Aug. 5	690	179	52	891
Splasher-holder.....	E. J. Rawlings.....	433,032	July 29	3131	804	52	633
Split ring for cylindrical bodies.....	R. King.....	436,357	Sept. 16	1518	396	52	1680
Splitting-machine.....	C. S. Fifield.....	420,152	Jan. 28	2272	{ 602 603 }	50	479
Spoke-driver.....	C. Seymour.....	426,147	Apr. 22	2625	689	51	534
Spoke-facer.....	C. Seymour.....	423,961	Mar. 25	2423	643	50	1619
Spoke-facing machine.....	C. W. Cotton, W. C. Margedant, J. T. Gardner, and A. W. G. Margedant.....	439,053	Oct. 21	2125	571	53	418
Spoke-socket.....	S. D. Forbes.....	432,699	July 22	2596	664	52	525
Spoke-socket.....	U. M. Haskins.....	423,474	Mar. 18	1682	444	50	1472
Spoke-socket.....	F. E. Kaufmann.....	422,797	Mar. 4	620	161	50	1257
Spoke-socket.....	L. H. Miller.....	425,141	Apr. 8	1096	291	51	220
Spoke-socket.....	J. Watson.....	436,681	Sept. 16	2043	534	52	1778
Spoke-socket for vehicle-wheels.....	J. F. Fuss.....	428,302	May 20	1939	487	51	1208
Spokes. Machine for jointing and facing carriage and wagon.....	C. Seymour.....	437,251	Sept. 30	3010	{ 788 789 }	52	1978
Spokes. Machine for preparing.....	C. W. Cotton, W. C. Margedant, J. T. Gardner, and A. W. G. Margedant.....	439,386	Oct. 28	2680	713	53	527
Spokes. Preparing.....	C. W. Cotton.....	441,286	Nov. 25	2699	700	53	1149
Sponge-holder.....	N. Morris.....	436,838	Sept. 23	2324	611	52	1840

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Sponge-holder	D. F. W. Quayle	430,434	June 17	3064	509	51	1890
Sponge-holder	B. H. A. Siefken	427,200	May 6	270	69	51	864
Sponge. Slate	E. C. Hudson	433,787	Aug. 5	522	136	52	858
Spool	L. C. Bass	428,035	May 13	1531	388	51	1121
Spool	J. N. Kelsea	427,329	May 6	459	118	51	902
Spool-box	T. A. Bastin	439,622	Nov. 4	6	2	53	607
Spool-box	P. Good	437,688	Oct. 7	18	6	53	6
Spool-case	C. M. Imbrie	421,280	Feb. 11	1262	326	50	812
Spool-holder	J. T. Foster	439,136	Oct. 28	2265	609	53	450
Spool-holder	F. E. Gore	431,347	July 1	477	118	52	97
Spool-holder	S. G. Knight	431,773	July 8	1170	291	52	237
Spool-making machine	J. H. Ansell	440,734	Nov. 18	1753	451	53	964
Spooler bobbin	G. O. Boynton	433,885	Aug. 5	666	173	52	887
Spools or bobbins. Machine for molding	A. Hackett	432,037	July 15	1569	402	52	321
Spools. Thread-protecting attachment for	D. C. Boley	421,478	Feb. 18	1543	399	50	872
Spooling-machine	S. M. Hamblin and W. H. Goldsmith.	421,400	Feb. 18	1435	372	50	852
Spooling-machines. Spool-holder for	S. M. Hamblin and W. H. Goldsmith.	421,399	Feb. 18	1434	372	50	852
Spooling-machines. Yarn-guide for	H. L. Gardner and B. F. Adams	431,188	July 1	231	58	52	48
Spoon	O. Levinger	438,379	Oct. 14	1079	295	53	212
Spoon	I. N. Plotts	431,914	July 8	1377	349	52	277
Spoon	M. L. Schoch	439,432	Oct. 28	2749	733	53	540
Spoon. Medicine	M. Young	423,018	Mar. 11	996	262	50	1333
Spoons and forks. Making	W. Rogers	424,503	Apr. 1	98	25	51	22
Sporting-trap	W. T. Hill	428,489	May 20	2214	560	51	1262
Spout and can-opener. Detachable	D. W. Green	438,475	Oct. 14	1218	330	53	240
Spout for cans. Drop	G. W. Banker	430,820	June 24	2706	663	51	2022
Spout. Sap	H. Blake	436,557	Sept. 16	1845	486	52	1740
Spray-diffuser	E. W. Mackenzie-Hughes	434,066	Aug. 12	925	243	52	947
Spray-bath	G. Taylor	439,793	Nov. 4	216	63	53	656
Spraying apparatus	J. A. Parsons	426,954	Apr. 20	3814	907	51	778
Spraying device or atomizer for liquids	C. D. Stanford	429,658	June 10	842	204	51	1644
Spread-brake	L. P. Lawrence	434,874	Aug. 19	2202	576	52	1206
Spreader attachment	P. Keene	440,637	Nov. 18	1597	411	53	934
Spring:							
See Bed-spring.	Shoe-spring.						
Bed-bottom spring.	Spiral spring.						
Bolster-spring.	Torsion-spring.						
Carriage-spring.	Vehicle-spring.						
Coiled steel spring.	Vehicle side spring.						
Cultivator-spring.	Wagon-spring.						
Door-spring.	Wagon-bolster spring.						
Hammer-spring.	Watch-case spring.						
Seat-spring.							
Spring	J. W. Cloud	442,721	Dec. 16	1733	448	53	1617
Spring-bending machine	S. L. Bond	425,736	Apr. 15	1990	{ 530 531 }	51	405
Spring-board	R. Reach	436,462	Sept. 16	1692	446	52	1713
Spring-bolt	A. T. Waters	429,748	June 10	970	238	51	1670
Spring-clamp and fastener	C. McPike	437,037	Sept. 23	2654	694	52	1904
Spring-clasp	W. S. Gibbons	439,652	Nov. 4	43	12	53	615
Spring-clasp	J. Nase	418,924	Jan. 7	435	106	50	91
Spring-clasp	J. Nase	421,750	Feb. 18	1933	508	50	948
Spring-clip	W. M. Peck	427,357	May 6	497	128	51	909
Spring for beds, &c	J. S. Biery	421,330	Feb. 11	1190	306	50	798
Spring for spring-beds and furniture	F. H. Holmes	419,253	Jan. 14	912	241	50	195
Spring-holder	C. H. Eccleston and G. H. Hebbard	425,997	Apr. 22	2405	637	51	491
Spring-making machine. Furniture	H. Spühl	432,741	July 22	2654	{ 678 679 }	52	537
Spring-motor	N. Anderson	440,123	Nov. 11	747	197	53	763
Spring-motor	W. H. Bagley and A. C. Neall	421,650	Feb. 18	1805	471	50	923
Spring-motor	F. Briggs	440,873	Nov. 18	1990	513	53	1007
Spring-motor	F. Briggs	443,313	Dec. 23	2771	711	53	1826
Spring-motor	C. E. Conrad	422,071	Feb. 25	2386	631	50	1041
Spring-motor	W. H. Dillon	422,336	Feb. 25	2815	{ 742 743 }	50	1120
Spring-motor	R. B. Forbes and S. S. Holly	433,076	July 29	3195	821	52	645
Spring-motor	J. Isele	434,064	Aug. 12	916	240	52	944
Spring-motor	J. A. Lee, Sr., and E. S. Reed	440,482	Nov. 11	1338	346	53	875
Spring-motor	J. G. E. Reichard	424,220	Mar. 25	2784	{ 742 743 }	50	1689
Spring-motor	J. T. Wallace and W. D. Holleman	421,334	Feb. 11	1342	347	50	827
Spring-motor	A. Wirth	433,668	Aug. 5	338	86	52	821
Spring-motor	A. A. Wood	428,326	May 20	1977	{ 497 498 }	51	1216
Spring-motor for vehicles	F. J. Niswonger	419,060	Jan. 7	622	161	50	131
Spring-roller	L. F. Griswold	440,428	Nov. 11	1260	326	53	860
Spring-washer	J. F. Lewis	436,737	Sept. 16	2122	558	52	1794
Spring-washer	S. W. Wales	425,476	Apr. 15	1596	426	51	327
Springs. Machine for making upholsterers'	C. R. James	439,518	Oct. 28	2870	{ 763 764 }	53	564
Springs. Method and machine for making flat coiled.	G. Kelly	426,366	Apr. 22	2977	779	51	607
Springs to straight bars. Converting helical.	M. D. Loomis	437,702	Oct. 7	32	10	53	9
Springs to straight bars. Converting helical.	M. D. Loomis	437,703	Oct. 7	33	10	53	9
Sprinkler:							
See Automatic sprinkler.	Hand-sprinkler.						
ler.	Lawn-sprinkler.						
Fire-sprinkler.	Street-sprinkler.						
Force-sprinkler.	Water-sprinkler.						
Sprinkler	J. Oswald	425,340	Apr. 8	1383	368	51	278
Sprinkler	C. W. and C. D. Parks	425,626	Apr. 15	1825	488	51	372
Sprinkler	J. R. Steitz	427,376	May 6	519	132	51	914
Sprinkling-machine	A. F. Dunton	435,878	Sept. 2	779	207	52	1525

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Sprinkling vines and plants. Apparatus for.....	H. W. Cain.....	440,247	Nov. 11	945	{ 243 244 }	{ 53 }	805
Sprocket-and-chain elevator.....	D. Marchant and G. W. Patnoe.....	425,037	Apr. 8	939	251	51	190
Sprocket-wheel.....	D. M. Maxon.....	439,535	Oct. 28	2893	769	53	568
Spur.....	F. Monier.....	424,719	Apr. 1	434	115	51	86
Square.....	C. L. Bronk.....	435,086	Aug. 26	2558	675	52	1280
Square.....	C. L. Norwood.....	443,459	Dec. 23	2993	769	53	1870
Square.....	C. W. Reeves.....	427,113	May 6	143	37	51	840
Square. Adjustable bevel.....	C. Stilwell.....	419,615	Jan. 14	1433	384	50	300
Square and protractor. Combined try.....	F. E. Roberts.....	425,698	Apr. 15	1937	515	51	394
Square. Beveling.....	J. T. Delancett.....	420,443	Feb. 4	24	5	50	569
Square. Folding T.....	H. W. Oliver.....	430,809	June 24	2693	{ 659 660 }	{ 51 }	2019
Square, level, and surface-gage. Combined.....	H. W. Evans.....	426,001	Apr. 22	2409	638	51	492
Square, plumb, and level. Combined.....	F. F. Smith.....	423,090	Mar. 11	1111	291	50	1354
Square. T.....	F. Benzinger and H. E. Grabau.....	418,969	Jan. 7	493	123	50	104
Squares. Manufacture of carpenters'.....	H. K. Jones.....	436,759	Sept. 16	2169	570	52	1802
Squeezer and strainer. Combined.....	G. Gamlen.....	434,128	Aug. 12	1037	268	52	968
Stable-cleaning device.....	H. L. Locke.....	442,064	Dec. 2	689	{ 185 186 }	{ 53 }	1397
Stable. Cow.....	P. Bidwell.....	425,649	Apr. 15	1859	496	51	379
Stable-floor.....	W. H. Brewer.....	427,547	May 13	789	196	51	978
Stack-cover.....	J. Broughton.....	424,955	Apr. 8	807	217	51	165
Stacker.....	W. H. Ronse.....	435,950	Sept. 9	888	{ 233 234 }	{ 52 }	1552
Stage apparatus.....	N. Burgess.....	442,796	Dec. 16	1858	480	53	1642
Stage apparatus.....	N. Burgess.....	442,797	Dec. 16	1860	481	53	1643
Stage-scene apparatus.....	H. Williams.....	430,259	June 17	1771	440	51	1833
Stage-scenery.....	J. F. Byrnes.....	421,815	Feb. 18	2016	533	50	963
Stage-scenery.....	J. F. Byrnes.....	437,016	Sept. 23	2622	685	52	1897
Stage-scenery. Mechanical horse for.....	J. F. Byrnes.....	437,015	Sept. 23	2622	685	52	1897
Staging.....	C. A. Dodge.....	428,769	May 27	2647	671	51	1363
Stair-chair. Folding.....	G. A. M. Liljencrantz.....	435,701	Sept. 2	505	133	52	1473
Stair-pad.....	J. A. Rudkin.....	421,839	Feb. 18	2059	543	50	970
Stair-pad.....	T. S. Sperry.....	443,803	Dec. 30	3549	909	53	1987
Stair-rod.....	G. Meisenbach, Jr.....	428,505	May 20	2233	565	51	1266
Stair-rod securer.....	D. Walker and W. G. Collins.....	418,996	Jan. 7	527	132	50	111
Stair-treads. Flexible covering for.....	G. Nash.....	442,256	Dec. 9	976	257	53	1461
Stairway. Spiral.....	R. O. Belles.....	424,533	Apr. 1	146	42	51	31
Stairway. Spiral.....	C. Clarke.....	432,599	July 22	2413	622	52	491
Stairways. Tool for laying out.....	J. McDiarmid.....	437,313	Sept. 30	3103	813	52	1995
Stake-holder. Adjustable.....	T. M. Hackett.....	421,701	Feb. 18	1872	490	50	937
Stake-pocket.....	J. H. Evans.....	436,076	Sept. 9	1084	280	52	1589
Stake-pocket.....	P. A. Winholtz and J. J. Weinmann.....	430,454	June 17	2096	517	51	1895
Stalk-chopper.....	R. H. Tisdale.....	440,973	Nov. 18	2156	{ 558 559 }	{ 53 }	1039
Stalk-cutter.....	M. B. Banowetz.....	443,349	Dec. 23	2825	726	53	1837
Stalk-cutter.....	P. E. Erickson.....	434,773	Aug. 19	2057	537	52	1177
Stalk-cutter.....	O. C. Murphy and P. J. Mitchell.....	420,581	Feb. 4	217	56	50	607
Stalk-cutter machine.....	J. P. Black.....	435,535	Sept. 2	235	65	52	1420
Stalk-cutting attachment.....	J. Morrison.....	439,169	Oct. 28	2310	621	53	459
Stall. Cattle.....	J. Ligon.....	426,456	Apr. 29	3086	810	51	637
Stall-floor.....	A. Goodyear.....	436,778	Sept. 23	2203	581	52	1817
Stall-floor.....	L. Hellner.....	419,670	Jan. 21	1532	408	50	325
Stall-floor.....	M. J. Williams.....	440,236	Nov. 11	932	240	53	802
Stall. Portable.....	J. W. Evers.....	434,329	Aug. 12	1341	349	52	1029
Stamp-affixing machine.....	J. M. Mast.....	426,729	Apr. 29	3501	{ 915 916 }	{ 51 }	717
Stamp and file. Combined canceling.....	C. M. Powers.....	443,405	Dec. 23	2906	747	53	1853
Stamp-batteries. Hanging-up attachment for.....	I. K. Cleaver.....	434,555	Aug. 19	1701	445	52	1109
Stamp-canceler.....	O. Alberti.....	436,111	Sept. 9	1142	298	52	1599
Stamp-canceler.....	S. A. Miles.....	420,580	Feb. 4	216	56	50	606
Stamp canceling and dating machine.....	S. B. Whiteside.....	440,675	Nov. 18	1655	427	53	945
Stamp-canceling machine.....	H. J. Latsbaw, Jr.....	434,935	Aug. 26	2340	618	52	1239
Stamp. Date and time.....	E. R. Malmberg.....	438,166	Oct. 14	758	207	53	152
Stamp-delivery machine. Coin-controlled.....	S. M. and C. O. Dowst.....	440,698	Nov. 18	1696	{ 436 437 }	{ 53 }	953
Stamp. Electro-mechanical time.....	C. A. Randall.....	419,068	Jan. 7	632	{ 164 165 }	{ 50 }	133
Stamp. Hand.....	W. T. Cressler.....	430,625	June 24	2369	579	51	1957
Stamp. Hand.....	W. James.....	422,220	Feb. 25	2618	693	50	1084
Stamp. Hand.....	G. H. Jones and W. A. Sanders.....	443,831	Dec. 30	3595	924	53	1995
Stamp. Hand.....	L. K. Scotford.....	427,916	May 13	1359	342	51	1086
Stamp. Hand.....	F. B. Swisher.....	427,638	May 13	919	231	51	1002
Stamp. Hand printing.....	R. H. Smith.....	435,159	Aug. 26	2663	704	52	1300
Stamp holder. Rubber.....	C. W. Martin.....	422,056	Feb. 25	2369	626	50	1038
Stamp. Laundry-mark.....	P. Evans and L. A. Waters.....	438,578	Oct. 14	1364	370	53	269
Stamp machine. Coin-controlled postage.....	D. Olmsted.....	427,005	Apr. 29	3892	1016	51	792
Stamp-mill guide.....	O. S. Lee and W. Viggers.....	420,946	Feb. 11	781	203	50	721
Stamp-mills. Feed-rod for ore.....	J. R. Brett.....	424,264	Mar. 25	2836	758	50	1699
Stamp-package.....	J. T. Whilden.....	438,770	Oct. 21	1686	453	53	334
Stamp. Perforating.....	C. C. Hill.....	433,003	July 29	3079	790	52	623
Stamp. Pocket time.....	O. P. Lochmann.....	433,354	July 29	3594	927	52	727
Stamp rack. Rubber.....	W. C. Thomson.....	442,553	Dec. 9	1449	371	53	1553
Stamp-safe.....	L. Briggs.....	439,380	Oct. 28	2668	710	53	525
Stamp. Self-inking hand.....	W. W. Sawyer and W. A. Force.....	420,967	Feb. 11	815	211	50	727
Stamp. Self-registering canceling.....	A. C. Sherman.....	421,624	Feb. 18	1771	463	50	915
Stamp. Steam ore.....	C. W. Tremain.....	430,027	Sept. 9	996	261	52	1572
Stamp. Time.....	J. D. Mallonee.....	434,346	Aug. 12	1446	377	52	1050
Stamp. Time.....	J. D. Mallonee.....	441,430	Nov. 25	2423	754	53	1193
Stamp. Time.....	C. H. Shaw.....	421,623	Feb. 18	1769	463	50	915
Stamp. Time.....	C. Stahlberg.....	424,369	Mar. 25	3027	803	50	1735
Stamp. Time.....	C. Stahlberg.....	429,101	May 27	3152	813	51	1462

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Co.	Vol.	Page.
Stamps. Device for carrying and affixing.....	B. F. Lantz.....	433,734	Aug. 5	431	110	52	840
Stamps or labels. Device for holding, dampening, and affixing.....	E. Stowell.....	427,527	May 6	753	187	51	961
Stamps or labels. Device for holding, dampening, and affixing.....	E. Stowell.....	427,528	May 6	755	187	51	961
Stamping and punching machine.....	E. B. Stimpson.....	438,329	Oct. 14	1008	{ 273 274 }	{ 53 53 }	199
Stamping machine.....	J. J. Anderson.....	435,384	Sept. 2	3	1	52	1375
Stamping mechanism. Hand or other.....	E. H. Rogers, Jr.....	424,502	Apr. 1	97	28	51	22
Stamping metal bars. Apparatus for.....	E. E. Slick.....	443,119	Dec. 23	2421	618	53	1759
Stamping or printing machines. Inking and cleaning device for.....	M. Kennedy.....	443,529	Dec. 30	3103	799	53	1901
Stanchion.....	L. Alvord.....	434,012	Aug. 12	842	{ 221 222 }	{ 52 52 }	929
Stanchion.....	W. J. Bogard.....	427,145	May 6	189	49	51	848
Stanchion.....	M. W. Taylor.....	419,296	Jan. 14	974	258	50	206
Stand:							
See Album-stand. Heating-coil stand.							
Barrel-stand. Ironing-stand.							
Basket-stand. Music-stand.							
Bicycle-stand. Oil-can stand.							
Blacking-stand. Photographic stand.							
Book-stand. Railway-switch stand.							
Camera-stand. Sanitary stand.							
Chart, reading, and number stand. Shaving and dressing stand.							
Display-stand. Show-stand.							
Embroidery-stand. Stenographer's stand.							
Exhibiting-stand. Switch-stand.							
Filtering and percolating stand. Switch and signal stand.							
Fire-set stand. Tablet or calendar stand.							
Flower-stand. Trolley-stand.							
Fruit-stand. Tub-stand.							
Fruit-picking stand. Type-case stand.							
Hat and bonnet stand. Wash-stand.							
Window-stand.							
Work-stand.							
Stand-boiler.....	W. B. Bruce.....	429,335	June 3	357	85	51	1538
Stand-pipe.....	T. S. Wiles and F. W. Brown.....	424,395	Mar. 25	3078	{ 817 818 819 820 }	{ 50 50 50 50 }	1746
Stand-pipe for supplying water to railway-engines.....	H. F. Probert.....	420,889	Feb. 4	692	178	50	694
Staple.....	D. E. Eckert.....	434,436	Aug. 19	1523	397	52	1072
Staple-driver.....	T. V. Jones.....	420,074	Jan. 28	2146	568	50	455
Staple-driving machine.....	P. A. Coupal.....	438,100	Oct. 7	660	{ 179 180 181 }	{ 53 53 53 }	128
Staple-fastener.....	J. F. Thayer.....	427,280	May 6	394	102	51	888
Staple-making machine.....	W. I. Ludlow.....	439,077	Oct. 21	2165	581	53	426
Staple-stitching machine.....	F. S. Bradley and J. P. Lavigne.....	438,399	Oct. 14	1106	{ 301 302 }	{ 53 53 }	218
Stapling machine. Wire.....	C. L. Lasch.....	421,939	Feb. 25	2208	{ 578 579 }	{ 50 50 }	1008
Star-fish-catching machine.....	J. O'Connor.....	436,541	Sept. 16	1826	481	52	1736
Starch refuse, &c. Apparatus for drying.....	P. H. Grimm.....	440,262	Nov. 11	968	{ 247 248 }	{ 53 53 }	809
Starching-machine.....	T. J. Blake. (Reissue).....	11,109	Sept. 2	833	220	52	1536
Starching-machine.....	J. W. Morgan.....	423,940	Mar. 25	2384	634	50	1612
Station-indicator.....	M. Byrne.....	420,989	Feb. 11	849	219	50	733
Station-indicator.....	L. Casper.....	442,610	Dec. 16	1539	{ 397 398 }	{ 53 53 }	1579
Station-indicator.....	S. B. Crane.....	430,117	June 17	1556	387	51	1792
Station-indicator.....	P. P. I. Fyfe.....	438,232	Oct. 14	855	232	53	170
Station-indicator.....	G. A. Gulowen and A. A. Ugland.....	427,684	May 13	986	249	51	1016
Station-indicator.....	W. C. Heegn.....	440,406	Nov. 11	1211	312	53	852
Station-indicator.....	F. C. Hellmuth.....	421,709	Feb. 18	1882	494	50	939
Station-indicator.....	H. E. Jenks.....	439,009	Oct. 21	2063	552	53	406
Station-indicator.....	G. C. Jordan.....	443,856	Dec. 30	3619	{ 932 933 934 }	{ 53 53 53 }	2000
Station-indicator.....	C. S. Kelsey.....	435,427	Sept. 2	72	23	52	1389
Station-indicator.....	F. Rochow.....	437,001	Sept. 23	2601	{ 680 681 682 }	{ 52 52 52 }	1893
Station-indicator.....	W. J. Smith.....	420,974	Feb. 11	823	{ 213 214 }	{ 50 50 }	729
Station-indicator.....	F. W. Sperry.....	438,957	Oct. 21	1983	529	53	389
Station-indicator.....	S. G. Travis.....	441,719	Dec. 2	144	39	53	1290
Station-indicator.....	J. N. Winn.....	443,692	Dec. 30	3370	866	53	1951
Station-indicator. Automatic.....	C. W. May.....	425,685	Apr. 15	1916	{ 510 511 }	{ 51 51 }	390
Station-indicator. Electric.....	G. H. Kirwan.....	439,015	Oct. 21	2070	{ 554 555 556 }	{ 53 53 53 }	408
Station or street indicator. Automatic.....	J. A. and J. B. Wright.....	436,730	Sept. 16	2107	{ 555 556 }	{ 52 52 }	1792
Stave-cutting machine.....	G. A. Oneken.....	423,626	Mar. 18	1903	502	50	1512
Stave-heating apparatus. Cask.....	A. Dunbar.....	442,219	Dec. 9	927	245	53	1451
Stave-jointer.....	O. P. Sowers.....	423,498	Mar. 18	1717	452	50	1479
Stave planing and jointing machine. Barrel.....	J. Anthon.....	439,029	Oct. 28	2196	589	53	438
Stave trimming, jointing, and planing machine.....	W. J. Wright.....	438,045	Oct. 7	574	{ 157 158 }	{ 53 53 }	109
Staves. Producing barrel.....	J. J. Philbrick.....	432,640	July 22	2483	639	52	504
Staves. Sanding-machine for continuous barrel.....	H. Mattullath.....	421,953	Feb. 25	2226	584	50	1011
Stay casing. Garment.....	R. B. Wheeler.....	431,299	July 1	399	100	52	82
Stay. Dress.....	M. P. Bray.....	440,246	Nov. 11	945	243	53	804

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Stay. Dress.....	A. Dacus.....	440,140	Nov. 11	775	203	53	769
Stay. Dress.....	E. B. Stimpson.....	431,219	July 1	288	71	52	59
Stays. Machine for making garment.....	B. B. Morgan.....	438,855	Oct. 21	1836	{ 488 489 }	53	361
Steak-tenderer.....	H. C. Burk.....	421,855	Feb. 18	2092	549	50	976
Steam and gas generator.....	L. E. Fish.....	429,900	June 10	1202	298	51	1713
Steam and hot-air heater. Combined.....	W. Earley.....	430,993	June 24	2962	727	51	2070
Steam and hot-water generator.....	D. A. Dickinson.....	431,037	July 1	13	4	52	5
Steam and hot-water generator.....	W. C. Higgins.....	434,928	Aug. 26	2331	616	52	1237
Steam and hot-water generator.....	R. J. Young.....	432,811	July 22	2775	710	52	559
Steam and hot water generator. Electric.....	E. Abshagen.....	442,933	Dec. 16	2107	542	53	1690
Steam-boiler.....	J. Baird.....	434,973	Aug. 26	2391	633	52	1249
Steam-boiler.....	J. Baird.....	435,386	Sept. 2	6	2, 3	52	1376
Steam-boiler.....	J. Baird.....	437,745	Oct. 7	102	32, 33	53	22
Steam-boiler.....	B. F. Binnix.....	443,217	Dec. 23	2610	{ 671 672 }	53	1797
Steam-boiler.....	T. E. Button.....	442,608	Dec. 16	1536	396	53	1579
Steam-boiler.....	J. A. Caldwell.....	439,105	Oct. 28	2213	594	53	442
Steam-boiler.....	N. B. Clark and F. B. King.....	421,387	Feb. 18	1418	367	50	848
Steam-boiler.....	G. A. Colby.....	436,033	Sept. 9	1007	263	52	1575
Steam-boiler.....	D. Conekin.....	435,798	Sept. 2	648	171	52	1499
Steam-boiler.....	C. J. Cronin.....	423,858	Mar. 18	2248	594	50	1579
Steam-boiler.....	A. Cunningham.....	434,656	Aug. 19	1879	491	52	1143
Steam-boiler.....	J. G. Dalie.....	436,123	Sept. 9	1156	302	52	1601
Steam-boiler.....	A. S. Emery.....	425,766	Apr. 15	2032	541	51	413
Steam-boiler.....	E. Fales.....	442,967	Dec. 16	2148	{ 552 553 }	53	1699
Steam-boiler.....	E. Gillet.....	426,586	Apr. 29	3278	860	51	675
Steam-boiler.....	J. F. Gray.....	433,405	July 29	3661	946	52	740
Steam-boiler.....	J. A. Groshon.....	427,074	May 6	77	19, 20	51	826
Steam-boiler.....	J. L. Heald.....	424,646	Apr. 1	323	84	51	63
Steam-boiler.....	W. J. Kennedy.....	423,692	Mar. 18	2016	532	50	1534
Steam-boiler.....	J. I. Kinsey.....	430,527	June 17	2208	542	51	1917
Steam-boiler.....	D. P. McQueen.....	442,080	Dec. 2	711	191	53	1402
Steam-boiler.....	J. Mills.....	423,791	Mar. 18	2152	{ 568 569 }	50	1560
Steam-boiler.....	J. Mills.....	423,792	Mar. 18	2153	569	50	1560
Steam-boiler.....	M. J. O'Leary.....	443,786	Dec. 30	3513	901	53	1978
Steam-boiler.....	C. Otis.....	437,040	Sept. 23	2658	695	52	1905
Steam-boiler.....	J. and W. Paterson.....	441,852	Dec. 2	354	83, 84	53	1333
Steam-boiler.....	H. Patterson, J. MacCormack, and H. L. Van Zile.....	421,509	Feb. 18	1593	411	50	882
Steam-boiler.....	C. Schaefer.....	437,384	Sept. 30	3228	{ 841 842 }	52	2019
Steam-boiler.....	W. H. Smith.....	424,735	Apr. 1	461	123	51	91
Steam-boiler.....	G. R. A. Steares.....	430,296	June 24	2820	692	51	2043
Steam-boiler.....	G. E. Tregurtha.....	429,252	June 3	212	53	51	1513
Steam-boiler.....	A. C. Walworth and C. W. Nason.....	439,261	Oct. 28	2471	663	53	488
Steam-boiler.....	A. Worthington.....	424,528	Apr. 1	137	39, 40	51	29
Steam-boiler.....	A. Worthington.....	429,164	June 3	91	21, 22	51	1489
Steam-boiler.....	R. R. Zell.....	437,274	Sept. 30	3044	798	52	1985
Steam-boiler and its furnace.....	E. J. Duff.....	439,814	Nov. 4	273	69	53	661
Steam-boiler. Sectional.....	W. H. Page.....	430,589	June 17	2298	565	51	1934
Steam-boiler. Sectional.....	N. W. Pratt.....	431,480	July 1	688	172	52	138
Steam-boiler. Sectional.....	N. W. Pratt.....	439,684	Nov. 4	89	34	53	625
Steam-boiler. Sectional.....	G. E. Tregurtha.....	425,013	Apr. 8	901	238	51	183
Steam-boiler. Upright tubular.....	M. Carman.....	441,280	Nov. 25	2693	{ 698 699 }	53	1147
Steam-boiler. Water-tube.....	H. H. Lindemuth.....	433,415	July 29	3677	{ 949 950 }	52	744
Steam-boiler. Water-tube.....	J. Mills.....	423,790	Mar. 18	2151	{ 567 568 }	50	1560
Steam-drier. Rotary.....	H. D. Winton.....	443,201	Dec. 23	2586	665	53	1793
Steam-engine.....	G. H. Adam.....	424,446	Apr. 1	2	1	51	3
Steam-engine.....	R. Addy.....	425,361	Apr. 8	1409	{ 375 376 }	51	283
Steam-engine.....	A. C. Ahlström.....	429,328	Feb. 25	2798	736	50	1117
Steam-engine.....	J. Baird.....	434,497	Aug. 19	1612	{ 421 422 }	52	1091
Steam-engine.....	A. Ball.....	426,612	Apr. 29	3318	{ 870 871 }	51	683
Steam-engine.....	C. Brown.....	437,353	Sept. 30	3164	828	52	2007
Steam-engine.....	S. T. Bruce.....	439,634	Nov. 4	21	6	53	610
Steam-engine.....	F. Carey.....	441,932	Dec. 2	469	{ 125 126 }	53	1357
Steam-engine.....	J. H. Carriger.....	442,572	Dec. 9	1476	379	53	1558
Steam-engine.....	J. T. Case.....	443,476	Dec. 23	3025	{ 777 778 }	53	1877
Steam-engine.....	O. H. Castle.....	424,093	Mar. 25	2611	696	50	1655
Steam-engine.....	P. T. Coffield.....	437,097	Sept. 23	2737	715	52	1921
Steam-engine.....	H. F. Colvin.....	428,892	May 27	2832	720	51	1400
Steam-engine.....	L. D. Copeland.....	420,930	Feb. 11	759	196	50	716
Steam-engine.....	D. E. Crosby.....	434,143	Aug. 12	1056	273	52	972
Steam-engine.....	J. H. Dales.....	423,742	Mar. 18	2082	{ 549 550 }	50	1546
Steam-engine.....	J. Ellis.....	425,764	Apr. 15	2029	540	51	412
Steam-engine.....	D. Evans.....	442,313	Dec. 9	1065	279	53	1477
Steam-engine.....	R. A. Gove.....	438,843	Oct. 21	1816	{ 483 484 }	53	357
Steam-engine.....	H. Grafton.....	427,231	May 6	320	83	51	874
Steam-engine.....	D. D. Hardy.....	434,561	Aug. 19	1708	447	52	1110
Steam-engine.....	C. O. Heggem.....	441,160	Nov. 25	2468	{ 639 640 }	53	1109
Steam-engine.....	A. Hjelte.....	435,970	Sept. 9	914	241	52	1557

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				Spec.	Dr. g.	Vol.	Page.
Steam-engine	A. L. Ide	441,364	Nov. 25	2809	{ 726 727	{ 53	1169
Steam-engine	E. H. Johnson	428,106	May 20	1643	{ 416 417	{ 51	1152
Steam-engine	D. E. Kempster	436,068	Sept. 9	1065	{ 276 277	{ 52	1586
Steam-engine	L. A. Le Mieux	441,177	Nov. 25	2494	{ 644	{ 53	1114
Steam-engine	J. A. Lidback	419,053	Jan. 7	610	{ 157 158	{ 50	128
Steam-engine	F. M. Metcalf	442,905	Dec. 16	2060	{ 529	{ 53	1680
Steam-engine	J. H. Moore	439,750	Nov. 4	180	{ 46	{ 53	643
Steam-engine	W. B. Osborn	428,729	May 27	2592	{ 657	{ 51	1352
Steam-engine	L. B. Phillips	422,622	Mar. 4	392	{ 93	{ 50	1211
Steam-engine	R. Phillips	430,681	June 24	2471	{ 603 604	{ 51	1976
Steam-engine	N. Ratheford and C. Harper	432,677	July 22	2555	{ 655	{ 52	518
Steam-engine	J. G. Robey	431,996	July 8	1500	{ 379 380	{ 52	302
Steam-engine	E. Scott	422,980	Mar. 11	948	{ 249	{ 50	1324
Steam-engine	F. A. Shoemaker	437,941	Oct. 7	407	{ 115	{ 53	78
Steam-engine	E. G. Shortt	437,460	Sept. 30	3353	{ 877	{ 52	2045
Steam-engine	J. B. Stanwood	423,963	Mar. 25	2425	{ 644	{ 50	1620
Steam-engine	G. F. and C. L. Swain and W. O. and J. D. Worth.	419,378	Jan. 14	1098	{ 290 291	{ 50	232
Steam-engine	J. H. Taylor	423,834	Mar. 18	2210	{ 583	{ 50	1572
Steam-engine	H. E. Trumble	424,439	Mar. 25	3159	{ 838	{ 50	1762
Steam-engine	N. J. Tubbs	428,656	May 27	2468	{ 628	{ 51	1329
Steam-engine	C. W. Vanderheyden	439,704	Nov. 4	116	{ 31, 32	{ 53	630
Steam-engine and valve mechanism therefor	P. Zimmer	440,527	Nov. 11	1415	{ 365 366	{ 53	890
Steam-engine. Compound	R. M. Beck	422,110	Feb. 25	2454	{ 648 649	{ 50	1053
Steam-engine. Compound	R. M. Beck	422,111	Feb. 25	2456	{ 649 650	{ 50	1053
Steam-engine. Double-cylinder	W. D. Hooker	436,710	Sept. 16	2080	{ 547 548	{ 52	1786
Steam-engine indicator	A. B. Calkins	427,044	May 6	18	{ 6	{ 51	814
Steam-engine. Oscillating	F. J. Hutchings	428,776	May 27	2658	{ 674	{ 51	1365
Steam-engine. Oscillating	C. C. Wilson	430,555	June 17	2244	{ 550 551	{ 51	1924
Steam-engine. Portable	E. Howland	443,481	Dec. 23	3032	{ 779	{ 53	1878
Steam-engine. Rotary reversible	J. J. E. H. Payne	420,094	Jan. 28	2178	{ 573 574	{ 50	461
Steam-engine. Rotating	P. Kirchhoff	421,728	Feb. 18	1906	{ 501	{ 50	983
Steam-engine. Single-acting	N. Chandler	420,862	Feb. 4	641	{ 165	{ 50	645
Steam-engine. Vibrating-piston	P. F. Holmgren	440,569	Nov. 11	1482	{ 382	{ 53	902
Steam-generating device	E. Fales	442,966	Dec. 16	2147	{ 552	{ 53	1699
Steam-generator	D. Almy	434,226	Aug. 12	1183	{ 307 308	{ 52	997
Steam-generator	D. Almy	434,227	Aug. 12	1185	{ 308	{ 52	997
Steam-generator	J. E. T. Bartlett	426,614	Apr. 29	3321	{ 871	{ 51	683
Steam-generator	M. B. Bessey	432,854	July 22	2827	{ 724 725	{ 52	570
Steam-generator	J. B. Bossler and S. D. Stauffer	433,442	Aug. 5	12	{ 4	{ 52	759
Steam-generator	W. M. Brown	423,664	Mar. 18	1975	{ 521	{ 50	1527
Steam-generator	J. J. Burwell	443,354	Dec. 23	2834	{ 729	{ 53	1840
Steam-generator	J. J. Bush	419,634	Jan. 21	1469	{ 394	{ 50	314
Steam-generator	A. Cameron and H. H. Schumaker	443,067	Dec. 16	2301	{ 589	{ 53	1730
Steam-generator	L. D. Copeland	425,986	Apr. 22	2384	{ 631 632 633	{ 51	487
Steam-generator	J. A. Eno	424,103	Mar. 25	2628	{ 700	{ 50	1658
Steam-generator	C. H. Farwell	422,754	Mar. 4	566	{ 144 145	{ 50	1244
Steam-generator	D. Hurst	439,663	Nov. 4	59	{ 15	{ 53	618
Steam-generator	O. W. Ketchum	424,311	Mar. 25	2925	{ 779	{ 50	1716
Steam-generator	T. W. McFarland	431,475	July 1	679	{ 170	{ 52	136
Steam-generator	H. McPhail, E. and C. H. Simpson	442,197	Dec. 9	892	{ 237 238	{ 53	1444
Steam-generator	J. J. and T. F. Meldrum	422,816	Mar. 4	655	{ 167 168 689	{ 50	1262
Steam-generator	C. D. Mosher	432,760	July 22	2697	{ 690 691	{ 52	545
Steam-generator	F. W. Parsons	429,771	June 10	1001	{ 246	{ 51	1676
Steam-generator	N. W. Pratt	428,631	May 27	2425	{ 616 617	{ 51	1322
Steam-generator	N. W. Pratt	428,632	May 27	2426	{ 617	{ 51	1322
Steam-generator	T. Pressard	432,075	July 15	1631	{ 418	{ 52	333
Steam-generator	W. Snee	423,827	Mar. 18	2199	{ 581	{ 50	1570
Steam-generator	E. S. Staples and R. H. Arnold	440,285	Nov. 11	1016	{ 261	{ 53	815
Steam-generator	L. and C. Steinmüller	418,825	Jan. 7	257	{ 63	{ 50	55
Steam-generator	L. and C. Steinmüller	418,826	Jan. 7	259	{ 63	{ 50	55
Steam-generator	T. L. Sturtevant	430,445	June 17	2077	{ 513	{ 51	1893
Steam-generator	G. H. Taylor	429,976	June 10	1322	{ 327	{ 51	1737
Steam-generator	N. H. Tenney	424,629	Apr. 1	294	{ 76	{ 51	59
Steam-generator	N. P. Towne	424,514	Apr. 1	113	{ 32	{ 51	25
Steam-generator and feed-water heater	J. S. Lewis	429,574	June 3	712	{ 173	{ 51	1609
Steam generator and furnace	D. Hurst	423,518	Mar. 18	1744	{ 460	{ 50	1484
Steam-generator and hot-water heater	H. N. Hewingway	427,079	May 6	83	{ 22	{ 51	827
Steam-generator and water-heater. Electric	H. R. Butterfield	437,771	Oct. 7	152	{ 47	{ 53	31
Steam-generator. Electric	J. O'Meara	419,282	Jan. 14	951	{ 251	{ 50	201
Steam-generator for submarine vessels	G. Poore and W. C. Storey	432,555	July 22	2360	{ 609	{ 52	480
Steam-generator furnace	F. A. Fazio	430,471	June 17	2125	{ 522	{ 51	1901

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Steam generator or evaporator	G. W. Baird	434,972	Aug. 26	2389	633	52	1249
Steam, heat, and light by electricity. Apparatus for producing	T. D. Farrall	423,421	Mar. 18	1602	420	50	1457.
Steam-heater	F. J. Furman	421,261	Feb. 11	1232	319	50	807
Steam-heater	F. J. Furman	421,262	Feb. 11	1234	319	50	807
Steam-heater	P. Thielen	421,785	Feb. 18	1979	520	50	956
Steam-joint. Universal.	H. T. Knight	440,864	Nov. 18	1977	521	50	1004
Steam-launches. Weed-cutter for	A. C. and J. K. Bower	425,019	Apr. 8	912	242	51	165
Steam-motor	J. H. Fedeler	432,391	July 15	2108	542	52	422
Steam-muffler	E. A. Leland	428,307	May 20	1945	489	51	1209
Steam-muffler	E. A. Leland	428,308	May 20	1947	489	51	1210
Steam or other engine	H. Grafton	427,171	May 6	228	58	51	856
Steam. Precipitator for impurities in exhaust	C. A. MacDonald	440,715	Nov. 18	1728	443	53	958
Steam purifier. Live	R. B. Day	434,324	Aug. 12	1333	347	52	1027
Steam receiver. Exhaust	T. Foulds	432,797	July 22	2758	705	52	556
Steam-separator	J. L. Cook	422,733	Mar. 4	536	137	50	1239
Steam-separator	C. J. Mellin	424,013	Mar. 25	2503	665	50	1634
Steam-separator	J. L. Robertson	428,954	May 27	2914	747	51	1417
Steam-separator	W. A. Taylor	426,880	Apr. 29	3722	972	51	760
Steam-separator	H. C. White	435,990	Sept. 9	947	248	52	1563
Steam-trap	D. L. Barnes	434,373	Aug. 12	1406	369	52	1042
Steam-trap	A. Bollinckx and B. J. Springuel	424,032	Mar. 25	2525	672	50	1638
Steam-trap	R. W. Clark	423,220	Mar. 11	1300	339	50	1391
Steam-trap	F. J. Ferrell	420,993	Feb. 11	853	220	50	734
Steam-trap	E. E. Gold	424,779	Apr. 1	537	144	51	106
Steam-trap	W. E. Hall	432,269	July 15	1926	493	52	388
Steam-trap	J. Morehead	420,822	Feb. 4	575	147	50	673
Steam-trap	J. O. Richardson	425,108	Apr. 8	1032	275	51	208
Steam-trap	R. H. Soule	421,775	Feb. 18	1968	518	50	954
Steam-trap	E. D. Stockton	436,294	Sept. 9	1413	368	52	1652
Steam-trap	J. M. Stuart	430,594	June 17	2309	567	51	1937
Steam-trap and separator	J. S. McDaniel	434,675	Aug. 19	1911	498	52	1149
Steam-trap for radiators	F. G. Procnunier	438,825	Oct. 21	1781	477	53	352
Steamboat-chimneys. Apparatus for raising and lowering	J. Christy	431,875	July 8	1331	334	52	268
Steamer and drier for mills. Grain	G. L. Jarrett	430,652	June 24	2423	590	51	1966
Steamer. Food	E. H. Warner	442,264	Dec. 9	988	260	53	1463
Steaming and heating machine. Wheat	G. McAllister	424,808	Apr. 1	581	154	51	113
Steaming apparatus. Fabric	C. A. G. Schmidt	422,321	Feb. 25	2783	732	50	1114
Steaming woolen fabrics or yarns. Apparatus for	P. Heilmann-Dncommun	439,149	Oct. 28	2280	612	53	453
Steel balls. Machine for making	W. H. Wright	439,713	Nov. 4	128	34, 35	53	633
Steel by cementation. Compound for converting iron into	F. G. Bates	428,445	May 20	2155	51	1251	
Steel. Carbonizing	C. Jones	420,539	Feb. 4	158	50	594	
Steel. Composition of fluids for tempering	B. M. Pickett	437,795	Oct. 7	191	53	38	
Steel containing carbon, manganese, and aluminium. Making	R. A. Hadfield	422,403	Mar. 4	58	50	1148	
Steel. Hardening	B. M. Pickett	437,793	Oct. 7	189	53	38	
Steel. Making planished sheet	G. Atkins	440,298	Nov. 11	1036	53	819	
Steel. Manufacturing	F. G. Bates	428,446	May 20	2155	51	1251	
Steel. Manufacturing and tempering	M. F. Coomes and A. W. Hyde	440,139	Nov. 11	774	53	709	
Steel. Recarbonizing	A. Spangnagel and F. Springorum	430,199	June 17	1662	414	51	1812
Steel rods. Die and die-holder for drawing	S. and W. Moltrup	423,334	Mar. 11	1478	387	50	1424
Steel. Shaping cast	J. A. Potter	434,294	Aug. 12	1291	335	52	1019
Steerer for inclined rudder-posts	W. McBride	423,486	Mar. 18	1696	447	50	1475
Steering and propelling mechanism for floating batteries, &c.	J. E. Hallett	419,941	Jan. 21	1940	510	50	407
Steering apparatus	E. F. Barnes	426,754	Apr. 29	3543	924	51	725
Steering apparatus	E. F. Barnes	428,366	May 20	2036	512	51	1229
Steering apparatus	J. B. Purvis	439,763	Nov. 4	201	52	53	648
Steering apparatus for vessels. Hydraulic	J. Atkins	439,716	Nov. 4	132	35, 36	53	633
Steering apparatus. Hydraulic	P. Small	437,523	Sept. 30	3446	901	52	2064
Steering apparatus. Power	F. C. Lang	426,538	Apr. 29	3206	840	51	660
Steering apparatus. Ship	C. J. Bousfield	441,638	Dec. 2	15	5	53	1265
Steering apparatus. Steam	F. C. Lang	425,036	Apr. 8	937	250	51	189
Steering apparatus. Steam and hand	W. Miller	418,921	Jan. 7	429	105	50	89
Steering apparatus. Vessel	J. E. Garcia-Sanchez	427,845	May 13	1238	313	51	1064
Steering-engine	J. B. Lowell	420,162	Jan. 23	2288	606	50	482
Steering-gear for ships or boats	W. H. Harfield	428,249	May 20	1849	464	51	1192
Steering-wheel carriage	D. Best	421,884	Feb. 18	2128	558	50	983
Stem winding and setting mechanism	C. V. Woerd	430,099	June 10	1526	378	51	1775
Stencil	T. J. Mullaley	429,734	June 10	948	233	51	1665
Stencil	J. Robinson	422,060	Feb. 25	2373	627	50	1039
Stencil and stencil-plate	G. H. Cunningham	433,769	Aug. 5	489	127	52	851
Stencil-cutter	J. F. Wickman	440,835	Nov. 18	1933	497	53	996
Stencil-drum	J. Parish	432,869	Mar. 4	791	203	50	1287
Stencil-plate	B. Baugh	438,221	Oct. 14	838	228	53	167
Stencils. Plate for preparing printing	J. Brodrick	424,090	Mar. 25	2607	694	50	1654
Stenographer's stand	G. C. Logan	430,805	June 24	2682	656	51	2017
Step, shaft-clip, and spring holder. Combined	I. Rigdon	437,367	Sept. 30	3203	835	52	2013
Steps or staircase	W. C. Spelman	419,228	Jan. 14	881	231	50	188
Stereo-mount	R. P. Tickle	434,812	Aug. 19	2106	552	52	1188
Stereopticon	L. D. McIntosh	439,420	Oct. 28	2723	726	53	536
Stereoscopic views. Apparatus for displaying	C. C. Bishop	427,727	May 13	1055	264	51	1029
Stereotype-block	M. Joyce	435,753	Sept. 2	575	265	52	1486

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Stereotype plate and base	G. W. Weaver	439,334	Oct. 28	2599	603	53	513
Stereotype-plate and device for locking the same	J. R. Cummings	442,364	Dec. 9	1145	299	53	1491
Stereotype-plate holder	L. S. Mack and B. Woodward	423,332	Mar. 11	1476	357	50	1424
Stereotype-plate holder	S. D. Tucker	436,028	Sept. 9	996	261	52	1573
Stereotype-plate-locking device	J. T. Denvir	430,630	June 24	2375	580	51	1958
Stereotype-plates. Forming matrices for	G. A. Goodson, A. S. Capehart, and C. L. Travis	427,682	May 13	983	248	51	1015
Stereotype-plates. Key for securing	D. Reid	418,985	Jan. 7	515	128	50	108
Stereotype-plates. Machine for sawing	C. E. Hopkins	432,407	July 15	2125	546	52	425
Stereotype-plates. Means for inserting movable type in	E. White	424,085	Mar. 25	2601	693	50	1653
Stereotype-shaving machine	G. E. Lloyd	418,799	Jan. 7	211	52	50	46
Stereotypes. Adjustable drying-frame for matrices or molds for	C. Ostermann	436,925	Sept. 23	2504	655	52	1874
Stereotyping apparatus	C. T. Murray	436,372	Sept. 16	1557	408	52	1688
Stereotyping-matrix	F. Schreiner and A. Schott	427,803	May 13	1183	297	51	1053
Stereotyping purposes. Making matrices for	L. Quanchi	436,379	Sept. 16	1565	411	52	1690
Stethoscope	B. S. Boydston	438,521	Oct. 14	1281	346	53	252
Still	P. R. Gray, Jr.	437,193	Sept. 30	2920	760	52	1961
Still	W. W. Grier	434,708	Aug. 19	1968	511	52	1159
Still. Walking-	N. E. Pitman	433,365	July 29	3612	931	52	729
Stirrup	F. A. Goodridge	437,108	Sept. 23	2754	720	52	1924
Stirrup	P. Hise	435,932	Sept. 9	862	226	52	1547
Stirrup	G. Valentine	420,585	Feb. 4	222	58	50	608
Stirrup-leather stay	J. D. Padgett	425,184	Apr. 8	1165	307	51	236
Stirrup-leather stay	J. D. Padgett	438,485	Oct. 14	1230	334	53	242
Stirrup-leathers. Safety saddle-bar or suspender for	G. Biebuyck	440,459	Nov. 11	1302	337	53	868
Stirrup. Safety-	W. Lerchen	435,432	Sept. 2	78	24	52	1390
Stitch-seam connecting leather or equivalent stock	W. Carey	422,182	Feb. 25	2557	676	50	1072
Stitching and cutting button-holes. Mechanism for	F. W. Ostrom	431,527	July 1	762	190	52	152
Stitching-machines. Clutch mechanism for staple	F. S. Bradley and J. P. Lavigne	442,477	Dec. 9	1315	340	53	1526
Stitching-machines. Clutch mechanism for staple	J. P. Lavigne	442,360	Dec. 9	1166	304	53	1496
Stock-feeding device for machines	W. S. Reed	431,173	July 1	211	53	52	44
Stock-trap	J. V. Hawkins	436,757	Sept. 16	2167	569	52	1802
Stocking	F. W. Berger	422,702	Mar. 4	500	128	50	1232
Stocking	R. W. Scott and L. N. D. Williams	430,695	June 24	2493	609	51	1980
Stocking	J. Whittle	420,754	Feb. 4	450	119	50	652
Stocking	F. Wilcomb	422,868	Mar. 4	748	191	50	1280
Stocking-supporter	E. S. Smith	438,867	Oct. 21	1856	492	53	365
Stockings. Board for finishing	W. H. Howard	425,796	Apr. 15	2068	552	51	421
Stockings. Manufacturing	E. E. Kilbourn	422,886	Mar. 4	788	201	50	1286
Stoker. Automatic	N. W. Pratt	443,110	Dec. 23	2406	{ 614 615 }	53	1757
Stone. Apparatus for hoisting and manipulating blocks of	N. E. Austin	433,669	Aug. 5	339	87	52	822
Stone. Artificial	G. Buchner	443,250	Dec. 23	2659	.....	53	1806
Stone. Artificial building-	A. von Solemacher-Antweiler	437,525	Sept. 30	3450	.....	52	2065
Stone. Artificial paving-	W. W. Booth	428,037	May 13	1535	388	51	1121
Stone-boat	W. Kimble	423,933	Mar. 25	2376	632	50	1610
Stone composition. Artificial-	A. M. Blackmon	420,326	Jan. 28	2543	.....	50	528
Stone. Composition of matter for artificial	J. Elliott	435,485	Sept. 2	159	.....	52	1405
Stone. Composition of matter for treating artificial.	T. H. Mooney	424,805	Apr. 1	577	.....	51	112
Stone-crusher	G. Lowry	431,069	July 1	59	14, 15	52	13
Stone-crusher	A. H. Smith	423,282	Mar. 11	1409	366	50	1410
Stone-cutters' tools. Machine for cutting teeth of	J. O'Brien	421,962	Feb. 25	2236	588	50	1013
Stone. Cutting	A. Foerster	419,194	Jan. 14	826	218	50	177
Stone-cutting machinery	E. Foerster	419,193	Jan. 14	824	217	50	177
Stone-grinding and polishing machine	J. McEnroe	429,860	June 10	1141	282	51	1701
Stone-grinding wheel	G. B. Eckhardt	442,801	Dec. 16	1865	482	53	1643
Stone lifting and carrying machine	J. W. Peterson	422,826	Mar. 4	670	{ 171 172 }	50	1266
Stone. Manufacture of artificial	J. F. Gesner	419,655	Jan. 21	1503	.....	50	320
Stone-polishing machine	W. A. Lane	420,203	Jan. 28	2362	627	50	495
Stone-polishing machine	G. B. McLean and O. W. Lewis	438,635	Oct. 21	1460	394	53	293
Stone-polishing mechanism	W. H. B. Perry	425,628	Apr. 15	1830	{ 489 490 }	51	373
Stone-polishing wheel	H. W. Whitcomb	441,524	Nov. 25	3066	788	53	1219
Stone post. Artificial-	W. H. Kimball and A. Storms	421,582	Feb. 18	1702	442	50	902
Stone. Producing artificial	L. Preussner	424,353	Mar. 25	2998	.....	50	1729
Stone-saw	E. G. Kemper	439,247	Oct. 28	2447	656	53	484
Stone-saw clamp	W. and E. H. Ulrich	421,846	Feb. 18	2075	546	50	973
Stone-sawing machine	D. D. Drummond	423,378	Mar. 11	1537	{ 403 404 }	50	1436
Stone-sawing machine	J. H. Fremier	432,183	July 15	1796	462	52	364
Stone-sawing machine	W. A. Spring and H. H. Scoville	422,988	Mar. 11	958	252	50	1292
Stone-sawing machine	G. N. Williams, Jr.	429,874	June 10	1165	{ 288 289 }	51	1706
Stone-sawing machines. Saw-blade for	J. H. Jacobs	428,395	May 20	2093	525	51	1240
Stone-work. Marker, cutter, and polisher for plastic	E. K. Smith	425,110	Apr. 8	1033	276	51	209
Stool	H. E. C. Daniels and T. Kane	425,305	Apr. 8	1343	358	51	269
Stool and salt-box. Combined milking	H. H. James	435,585	Sept. 2	317	88	52	1436
Stool. Boot or shoe fitter's	W. C. Wetherell	436,092	Sept. 9	1105	286	52	1593
Stool. Cotton-picker's	R. Ray	432,560	July 22	2366	610	52	482
Stool. Milk-	E. E. Kinney	422,023	Feb. 25	2319	612	50	1029
Stool. Piano-	C. E. Cunningham and W. D. Warnick	431,803	July 8	1220	305	52	247
Stool. Piano-	F. Kraemer	429,458	June 3	536	129	51	1576
Stool. Piano-	F. Neppert	441,964	Dec. 2	518	139	53	1365
Stool. Piano-	J. V. Smith and J. Smythe	433,310	July 29	3539	914	52	716
Stool. Self-operating lady's	J. E. Blanc	443,202	Dec. 23	2588	665	53	793
Stop-motion	S. L. Foster	423,917	Mar. 25	2350	618	50	1606
Stop-motion	E. Wilder	419,390	Jan. 14	1116	295	50	235

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Stopper:							
<i>See</i> Bottle-stopper.							
Pipe-stopper.							
Flue-stopper.							
Safety-stopper.							
Stopping machines. System for	W. H. Kilbourn	422,948	Mar. 11	897	235	50	1315
Storage-battery	W. B. Hollingshead	436,602	Sept. 16	1911	502	52	1752
Storage-battery	C. Sorley	420,975	Feb. 11	826	214	50	729
Storage-case for books, &c.	H. J. Hoffman	437,833	Oct. 7	246	75	53	49
Store-service apparatus	W. F. Bailey	437,275	Sept. 30	3046	798	52	1985
Store-service apparatus	S. W. Barr	432,852	July 22	2825	724	52	570
Store-service apparatus	L. G. Bostedo	426,406	Apr. 22	3015	790	51	614
Store-service apparatus	M. I. Butzel and J. L. Jacobs	433,324	July 29	3559	918	52	719
Store-service apparatus	W. R. Cole	425,023	Apr. 8	916	243	51	185
Store-service apparatus	J. T. Cowley	440,765	Nov. 18	1808	468	53	974
Store-service apparatus	W. H. H. Cram	439,387	Oct. 28	2682	714	53	527
Store-service apparatus	H. E. Crandall	442,265	Dec. 9	988	261	53	1463
Store-service apparatus	F. M. Dunn and J. F. Walters	442,869	Dec. 16	1988	510	53	1668
Store-service apparatus	H. P. During	425,026	Apr. 8	920	244	51	186
Store-service apparatus	G. R. Elliott	439,726	Nov. 4	146	245		
Store-service apparatus	C. E. Foster	425,028	Apr. 8	923	245	51	187
Store-service apparatus	O. A. Howland	425,430	Apr. 15	1524	246		
Store-service apparatus	C. W. McCormick	431,003	June 24	2978	731	51	2073
Store-service apparatus	C. W. McCormick	437,931	Oct. 7	395	732		
Store-service apparatus	C. A. McKiernan	433,741	Aug. 5	439	113	52	841
Store-service apparatus	W. Mendenhall	424,327	Mar. 25	2949	114		
Store-service apparatus	W. Mendenhall	424,426	Mar. 25	3130	115		
Store-service apparatus	A. B. Park	418,926	Jan. 7	437	786		
Store-service apparatus	C. St. Onge	438,201	Oct. 14	805	831	50	1756
Store-service apparatus	H. E. Woodworth	428,362	May 20	2030	107	50	91
Store-service apparatus. Buffer for	E. A. Rorke	426,543	Apr. 29	3220	510	51	1228
Store-service apparatus elevator	E. A. Rorke	431,783	July 3	1181	244	51	663
Store-service apparatus. Track-curve for	F. S. Church	437,566	Sept. 30	3511	296	52	239
Store-service car-brake	J. J. Busenbenz	433,886	Aug. 5	667	916	52	2077
Store-service ladder	E. M. Murray	442,531	Dec. 9	1408	173	52	887
Store-service railway switch	E. A. Rorke	429,646	June 10	823	360	53	1544
Storm-house. Portable	C. H. Leonard	436,668	Sept. 16	2024	201	51	1640
Stove	W. H. Clark and F. W. Collins	430,923	June 24	2856	528	52	1774
Stove	L. P. Converse	419,417	Jan. 14	1162	701	51	2051
Stove	W. T. Finney	441,147	Nov. 25	2447	309	50	245
Stove	P. Glass	430,185	June 17	1646	634	53	1105
Stove	G. F. Higgins	419,122	Jan. 7	704	410	51	1809
Stove	G. F. Higgins	437,692	Oct. 7	22	185	50	148
Stove	G. Marlow	422,026	Feb. 25	2322	22	7	53
Stove	A. S. Newby	439,677	Nov. 4	77	613	50	1029
Stove	R. D. Soper	443,337	Dec. 23	2507	21	53	622
Stove	C. F. Walther	435,781	Sept. 2	622	721	53	1835
Stove	N. J. Weil	427,940	May 13	1394	164	52	1494
Stove. Alcohol cooking	B. Hammer	426,802	Apr. 29	3612	353	51	1092
Stove and range attachment	E. S. Brown	438,141	Oct. 14	723	942	51	739
Stove attachment	C. A. Petterson	426,316	Apr. 22	2859	198	53	146
Stove attachment. Gasoline	R. Andlaner	435,272	Aug. 26	2831	551	51	584
Stove-back. Adjustable	T. Buckley	437,282	Sept. 30	3059	749	52	1332
Stove-back. Adjustable	J. Shaw	430,699	June 24	2500	801	52	1988
Stove. Base-burning	A. H. Pegg	436,801	Sept. 23	2258	611	51	1981
Stove burner. Gas or vapor	C. J. Edmonds	434,258	Aug. 12	1239	595	52	1828
Stove burner. Oil	C. H. Boeck	442,567	Dec. 9	1468	321	52	1007
Stove-center	W. C. Metzner	443,166	Dec. 23	2507	377	53	1557
Stove-center	R. H. Warneford	420,368	Jan. 28	2607	611	53	1774
Stove. Cooking	J. Black	434,126	Aug. 12	1033	693	50	540
Stove. Cooking	I. De Haven	431,255	July 1	335	267	52	968
Stove. Cooking	C. A. Frost	426,496	Apr. 29	3146	83	52	68
Stove. Cooking	J. S. Harkins	425,320	Apr. 8	1360	826	51	649
Stove. Cooking	J. A. Price	418,851	Jan. 7	303	363	51	273
Stove. Cooking	J. A. Price	433,093	July 29	3224	303	50	63
Stove. Cooking	W. H. Woolridge	431,158	July 1	185	830	52	651
Stove door and shelf	W. J. Turpin	426,083	Apr. 22	2523	185	52	39
Stove-door latch	A. O. Bement	424,594	Apr. 1	243	665	51	513
Stove-doors. Pin for the hinges of	H. E. Russell, Jr.	431,078	July 1	75	65	51	49
Stove. Electrical cooking	J. V. Capek	424,922	Apr. 1	751	18	52	17
Stove for burning trash	J. M. Millholland	420,279	Jan. 28	2485	200	51	146
Stove for consuming straw, hay, &c.	J. Ashworth	430,912	June 24	2842	201		
Stove for heating soldering-irons, &c.	J. Davis	423,377	Mar. 11	1535	459	50	516
Stove frame. Gas cooking	O. M. Shannon	430,091	June 10	1514	697	51	2047
Stove. Gas	H. M. Bissell	426,101	Apr. 22	2557	403	50	1436
Stove. Gas	W. C. Bucklin	427,666	May 13	954	376	51	1774
Stove. Gas	J. H. Carrington	419,827	Jan. 21	1757	673	51	520
Stove. Gas	J. H. Carrington	420,225	Jan. 28	2397	240	51	1009
Stove. Gas	J. W. Danforth	443,088	Dec. 23	2368	241		
Stove. Gas	J. B. Foley	421,258	Feb. 11	1227	604	53	1749
Stove. Gas	J. A. Frey	424,967	Apr. 8	827	605		
Stove. Gas	J. Gibbons	426,656	Sept. 16	1999	318	50	806
Stove. Gas	L. Ketchum	439,729	Nov. 4	150	220	51	168
Stove. Gas	L. W. Leeds	421,941	Feb. 25	2212	524	52	1769
Stove. Gas	W. C. Perkins	430,402	June 17	2024	39	53	637
Stove. Gas	S. Stewart	427,129	May 6	162	580	50	1008

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.'t.	Vol.	Page.
Stove. Gas heating.	A. F. Zimmerling.	442,300	Dec. 9	1043	274	53	1473
Stove. Gas or oil heating.	C. W. Jenks	428,104	May 20	1640	416	51	1151
Stove. Gasoline.	C. and E. Weisbrod	426,973	Apr. 29	3842	1004	51	783
Stove-grate	C. L. Beers	423,721	Mar. 18	2051	541	50	1546
Stove-grate	C. L. Beers	437,553	Sept. 30	3496	913	52	2074
Stove-grate	J. J. Graves	419,012	Jan. 7	547	137	50	115
Stove-grate	W. C. Metzner	418,848	Jan. 7	297	72	50	62
Stove-grate	W. C. Metzner	418,849	Jan. 7	298	72	50	63
Stove-grate and fire-box	J. Lawyer	430,658	June 24	2432	592	51	1968
Stove. Heating.	S. C. Fancher	423,142	Mar. 11	1194	312	50	1370
Stove. Heating.	G. Hay	442,481	Dec. 9	1320	341	53	1527
Stove. Heating.	J. Keidel	423,931	Mar. 25	2372	631	50	1610
Stove. Heating.	J. J. Moore and J. T. McKim	440,716	Nov. 18	1729	443	53	959
Stove. Heating.	A. C. Mott and T. I. Rankin	432,835	July 22	2802	717	52	565
Stove. Heating.	C. A. Richardson	419,796	Jan. 21	1710	454	50	359
Stove. Heating and cooking	A. J. Dox and E. S. Lorimer	442,111	Dec. 9	762	205	53	1419
Stove-hood	E. J. Smith	437,052	Sept. 23	2670	698	52	1907
Stove. Hot-blast	C. H. Foote	429,342	June 3	368	87	51	1541
Stove. Hot-blast	H. Kennedy	429,725	June 10	936	230	51	1663
Stove. Hot-water.	C. Siegener	425,711	Apr. 15	1957	520	51	398
Stove. Hydrocarbon.	W. C. Hulett	436,240	Sept. 9	1335	349	52	1635
Stove. Lamp.	J. Meuge	427,181	May 6	240	62	51	858
Stove, lamp, and lantern. Combined	R. F. Danforth	428,043	May 13	1543	390	51	1122
Stove-lid	A. B. Lipsey	426,190	Apr. 22	2686	705	51	546
Stove-lid and center-piece and lifter therefor	P. Wilhelm	434,617	Aug. 19	1801	470	52	1129
Stove. Mantel.	G. L. Morrison and G. D. Sanford	426,393	Apr. 22	2984	781	51	609
Stove. Oil.	E. B. Finch	422,757	Mar. 4	570	146	50	1245
Stove. Oil.	E. B. Finch	422,758	Mar. 4	571	146	50	1245
Stove. Oil.	J. Goldstein and I. Block	419,040	Jan. 7	587	149	50	124
Stove. Oil.	D. L. Whittingham	436,620	Sept. 16	1932	507	52	1756
Stove. Oil or gas.	J. A. Field	428,334	May 20	1958	500	51	1218
Stove or furnace. Portable.	F. Adams and U. J. Virgin	422,899	Mar. 11	821	213	50	1301
Stove or lamp. Oil	W. W. Batchelder	420,321	Jan. 28	2391	636	50	500
Stove or range	W. Doyle	423,137	Mar. 11	1189	310	50	1369
Stove or range.	J. F. MacKee	423,613	Mar. 18	1879	495	50	1508
Stove or range. Cooking	G. O. Bergstrom and H. N. Hansen	434,173	Aug. 12	1104	286	52	982
Stove or range. Cooking	F. Marquart	422,310	Feb. 25	2765	729	50	1111
Stove or range door opening and closing mechanism	C. H. Miller	440,848	Nov. 18	1955	501	53	1000
Stove-oven	P. Hoogerzeil, Jr., and G. F. Hinkley.	418,721	Jan. 7	99	23	50	22
Stove-oven	J. Jewett	436,788	Sept. 23	2222	585	52	1820
Stove-oven. Cooking.	R. MacKellar	433,480	Aug. 5	60	18	52	768
Stove-oven. Cooking.	J. A. Price	418,817	Jan. 7	235	57	50	51
Stove-ovens. Rotary slide for	P. M. Russell	420,891	Feb. 4	696	179	50	695
Stove. Petroleum.	O. Proust	432,438	July 15	2166	558	52	434
Stove-pipe	C. J. Stuart	441,450	Nov. 25	2957	762	53	1199
Stove-pipe cleaner.	E. B. Van Vorce	425,057	Apr. 8	962	257	51	194
Stove-pipe collar, clamp, and cover.	E. B. Jones	424,304	Mar. 25	2906	777	50	1712
Stove-pipe coupling	L. P. Westcott	438,589	Oct. 14	1380	374	53	272
Stove-pipe cowl attachment	W. Eulich	439,494	Oct. 28	2837	756	53	557
Stove-pipe-elbow machine.	A. J. and A. Lindemaun	441,426	Nov. 25	2913	751	53	1191
Stove-pipe fastener	H. P. Kohlmyer	420,076	Jan. 28	2148	568	50	455
Stove-pipe fender	J. Johnson and E. H. Packer	420,999	Feb. 11	862	223	50	736
Stove-pipe flange	W. H. Oplinger	431,754	July 8	1139	284	52	232
Stove-pipe guard and register	R. L. Newman and B. L. Ozmann	423,439	Mar. 18	1631	429	50	1462
Stove-pipe joint. Extensible.	J. P. Warren	428,359	May 20	2026	509	51	1227
Stove-pipe or other sheet-metal cylinder	T. Davidson	437,981	Oct. 7	470	133	53	90
Stove-pipe shelf	E. M. Longyear	423,611	Mar. 18	1875	494	50	1507
Stove-pipe shelf.	T. B. Ward	438,664	Oct. 21	1500	405	53	300
Stove-pipe thimble	A. Fairgrieve	442,965	Dec. 16	2147	552	53	1698
Stove-pipe thimble	M. McGuire	437,381	Sept. 30	3223	840	52	2018
Stove-pipe thimble	W. Saulter	431,853	July 8	1300	326	52	263
Stove-pipe thimble and ventilator. Combined	E. J. Colby	418,783	Jan. 7	188	46	50	42
Stove-pipe thimble, collar, and cover	S. C. Harlan	422,209	Feb. 25	2600	688	50	1051
Stove-plate castings. Sand-blast apparatus for cleaning	J. H. Goodfellow	437,922	Oct. 7	374	108	53	72
Stove-plate for cooking utensils.	W. T. Hain	443,518	Dec. 30	3086	796	53	1898
Stove-polish	B. C. Frobisher	421,564	Feb. 18	1675	50	50	897
Stove-polish	S. A. Kingsland	434,790	Aug. 19	2074	52	52	1181
Stove-polish.	A. J. Miller	419,533	Jan. 14	1320	50	50	277
Stove-radiator.	T. Thatcher	424,037	Mar. 25	2534	674	50	1640
Stove, range, &c.	E. Bergen	425,487	Apr. 15	1611	430	51	330
Stove range. Oil.	W. H. Wilder	432,847	July 22	2819	722	52	568
Stove, range, or furnace.	A. Berthe	421,228	Feb. 11	1188	305	50	798
Stove. Regenerative hot-blast.	M. Boecker	422,905	Mar. 11	827	214	50	1302
Stove. Smoke-burning	E. R. Weston	420,503	Feb. 4	109	27	50	585
Stove. Straw-burning.	J. R. Tacey and J. Sharkey	425,713	Apr. 15	1958	521	51	398
Stove. Straw-burning cook-	G. Laube. (Reissue)	11,063	Mar. 4	809	206	50	1290
Stove. Straw-burning cook-	G. Laube	422,951	Mar. 11	901	236	50	1316
Stove. Vapor.	A. Gateau	435,693	Sept. 2	494	131	52	1470
Stove. Vapor.	G. B. McClelland and H. Ruppel	424,654	Apr. 1	334	87	51	65
Stove. Vapor.	A. H. Russell	419,564	Jan. 14	1357	363	50	265
Stoves. Adjustable fire-box for	J. P. Neeley	424,896	Apr. 1	717	191	51	138
Stoves. Automatic ash-sifter for coal.	E. W. Poole	438,176	Oct. 14	775	211	53	156
Stoves. Burner for gas.	H. C. Weiskittel	440,452	Nov. 11	1292	334	53	866

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Stoves. Cap for	J. W. Strickle and C. J. Mastin	442,648	Dec. 16	1588	410	53	1590
Stoves. Cold and hot air flue of	W. Rube	434,403	Aug. 12	1459	{ 380 381 }	52	1053
Stoves. Combined evaporator, baker, and ventilator for cooking	J. W. Allen	439,990	Nov. 4	555	146	53	716
Stoves. Device for discharging ashes and cinders from coal	C. T. Benedict	422,904	Mar. 11	825	214	50	1302
Stoves. Flame-extinguisher for oil	H. H. Ashenden	424,948	Apr. 8	796	214	51	162
Stoves. Gas-saving attachment for gas	W. H. Ford	436,562	Sept. 16	1850	487	52	1741
Stoves. Gas-valve for hot-blast	B. Beisel	439,926	Nov. 4	451	{ 117 118 }	53	696
Stoves. Hay and straw burner or attachment for	A. E. West and M. O. Sampson	435,873	Sept. 2	755	202	52	1521
Stoves. Hot-water attachment for	G. T. Brewer	422,496	Mar. 4	191	52	50	1172
Stoves. Oil-feeding device for vapor	C. M. Hollingsworth	443,765	Dec. 30	3486	894	53	1973
Stoves or furnaces. Fire-parting fork for	O. P. Elterich	429,120	June 3	23	6	51	1476
Stoves or grates. Deflecting-plate for open	S. Boal	425,289	Apr. 8	1317	352	51	265
Stoves. Oven-door for cooking	W. H. Scott	434,893	Aug. 19	2243	588	52	1213
Stoves. Petroleum-burner for	A. H. Russell	422,317	Feb. 25	2776	730	50	1113
Stoves. Removable tank for vapor	G. W. Billings and B. P. Kenyon	423,117	Mar. 11	1149	299	50	1362
Stoves. Steam attachment for cook	W. S. Laney	422,598	Mar. 4	342	85	50	1202
Stoves. Vapor-burner for	H. Ruppel	423,085	Mar. 11	1106	289	50	1353
Stoves. Water-back for gas	W. H. Wiester	439,917	Nov. 4	436	113	53	693
Stoves. Water-heater for	C. S. Quimby and R. S. Macnamee	436,671	Sept. 16	2030	530	52	1775
Stoves. Wick-tube for oil	C. P. Goss	438,842	Oct. 21	1814	483	53	357
Strainer	C. J. Hanck, Jr.	419,520	Jan. 14	1300	347	50	273
Strainer	J. W. Hyatt	429,688	June 10	882	214	51	1652
Strainer	O. H. and W. M. Jewell	441,667	Dec. 2	57	16	53	1273
Strainer and drip-retainer. Tea-pot	J. O. Draper	440,842	Nov. 18	1946	499	53	998
Strainer and funnel. Combined	O. E. Lake	436,666	Sept. 16	2021	528	52	1774
Strainer. Coffee or tea	N. F. Whipple	421,460	Feb. 18	1515	393	50	867
Strainer for fluid-pipes	G. P. Gates	435,140	Aug. 26	2637	698	52	1295
Strainer for tea or coffee pot	C. Bean and G. W. Watson	435,007	Aug. 26	2442	646	52	1258
Strainer for wells	H. F. Cook	426,921	Apr. 29	3772	985	51	770
Strainer. Fruit	M. J. Delmage	423,597	Mar. 18	1852	488	50	1502
Strainer. Fruit	J. Stoppelkamp	424,907	Apr. 1	731	195	51	141
Strainer. Milk	C. M. Schermerhorn	433,659	Aug. 5	326	83	52	819
Strainer. Milk-pail	F. A. Polka	439,185	Oct. 28	2335	628	53	463
Strainer. Revolving bucket	J. T. Doré	421,253	Feb. 11	1222	316	50	805
Strainer. Water	J. F. Willis	420,136	Jan. 28	2248	595	50	475
Strainer. Water-conductor	J. Wock	428,581	May 20	2349	596	51	1288
Straining-pot	G. C. Stanton	421,777	Feb. 18	1970	518	50	954
Strap:							
See Box-strap. Holdback-strap.							
Breast-strap. Shawl-strap.							
Hitching-strap.							
Strap-beveling machine	S. Hainkel	443,519	Dec. 30	3087	796	53	1898
Strap-clamp	W. S. Sherd	430,891	June 24	2810	689	51	2042
Strap-coupling	J. M. Harper	438,809	Oct. 21	1743	468	53	345
Strap coupling. Breast	W. B. Thome and E. E. Risser	436,442	Sept. 16	1664	437	52	1707
Strap-cutter	H. G. Starr	421,778	Feb. 18	1971	519	50	954
Straw, &c. Apparatus for moving	N. G. Ross	424,433	Mar. 25	3148	{ 834 835 }	50	1760
Straw-burner	G. Laube. (Reissue)	11,085	June 10	1538	382	51	1779
Straw-carrier	J. C. Good	443,089	Dec. 23	2369	605	53	1750
Straw-conveyer. Endless	J. S. Baker	430,372	June 17	1978	488	51	1874
Straw-cutter	H. H. Kendrick	419,455	Jan. 14	1214	322	50	255
Straw-cutter	H. H. Kendrick	435,972	Sept. 9	918	242	52	1558
Straw-stacker	I. Adams	427,945	May 13	1405	355	51	1094
Straw-stacker	E. C. and B. C. Beardsley	434,754	Aug. 19	2024	529	52	1170
Straw-stacker	S. Bufkin	427,736	May 13	1068	268	51	1031
Straw-stacker	M. Heineke	442,748	Dec. 16	1783	461	53	1626
Straw-stacker	H. T. Kruse	433,175	July 29	3346	{ 865 866 }	52	676
Straw-stacker	A. Lammedee	430,863	June 24	2769	679	51	2034
Straw-stacker	Q. A. Poston	432,953	July 22	2989	768	52	600
Straw-stacker	M. Sattley and M. Heinecke	442,750	Dec. 16	1785	462	53	1627
Straw-stacker	J. L. Senteney	436,674	Sept. 16	2034	{ 531 532 }	52	1776
Straw-stacker	H. Stephan	442,751	Dec. 16	1786	{ 462 463 }	53	1627
Straw-stacker. Automatic swinging	H. R. Nagle	420,952	Feb. 11	789	205	50	722
Straw-stacker. Automatic swinging	H. R. Nagle	431,724	July 8	1097	273	52	224
Straw-stacker. Swinging	J. Hovey	420,301	Jan. 28	2512	{ 666 667 }	50	522
Straw-twisting machine	H. A. J. Rieckert	425,187	Apr. 8	1168	{ 308 309 }	51	236
Streams for motive power. Device for utilizing elevated running	H. T. Hey	425,791	Apr. 15	2062	550	51	419
Street-cleaning bag and shovel. Combined	M. G. Byers	440,618	Nov. 18	1569	404	53	928
Street-indicator	R. P. Alley	428,582	May 20	2350	597	51	1288
Street-motor	W. Simpkin	428,573	May 20	2332	591	51	1284
Street or station indicator	C. W. Bradford	441,787	Dec. 2	250	66.67	53	1313
Street or station indicator	L. Goldstone	439,941	Nov. 4	473	{ 123 124 }	53	701
Street or station indicator	A. Jones and W. Seaver	433,205	July 29	3391	876	52	685
Street or station indicator	J. C. Murphy	439,674	Nov. 4	73	20	53	621
Street-sprinkler	H. G. Stiebel and W. S. Kisinger	442,834	Dec. 16	1925	495	53	1656
Street-sweeper	W. H. Burrows	423,718	Mar. 18	2047	540	50	1540
Street-sweeper	J. Newlove	433,538	Aug. 5	135	39	52	783
Street-sweeper	H. E. Paine	433,958	Aug. 12	771	{ 200 201 202 }	52	917
Street-sweeper	W. A. Sawyer	426,073	Apr. 22	2504	{ 661 662 }	51	510

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Street-sweeper	A. B. Smith	435,103	Aug. 26	2581	{ 681 682	52	1284
Street-sweeper	J. A. Wilt	443,558	Dec. 30	3155	811		1910
Street-sweeping machine	E. C. Fisher	436,520	Sept. 16	1771	{ 467 468	52	1728
Street-sweeping machine	P. Jones and J. E. Burlingham	436,499	Sept. 16	1745	460		1723
Street-sweeping machine	S. F. McDill	427,185	May 6	244	63, 64	51	859
Street-sweeping machine	M. C. Robichau	427,795	May 13	1174	{ 294 295	51	1052
Street-sweeping machine	T. J. Smith	436,746	Sept. 16	2149	{ 565 566		1798
Street sweeping or cleaning machine	M. V. B. Ethridge	434,178	Aug. 12	1110	{ 287 288	52	984
Strength-tester. Coin-controlled	G. Soeding	431,013	June 24	2993	735	51	2076
Strength-testing and advertising machine. Coin-controlled	L. A. Watson	428,821	May 27	2727	{ 692 693	51	1378
Strength-testing machine. Coin-controlled	A. W. and A. H. Roovers	434,608	Aug. 19	1783	465		1125
Striking-machine. Coin-controlled indicating	E. C. Phillips	427,011	Apr. 29	3899	1018	51	794
Striking or hammering mechanism	E. Moreau	440,744	Nov. 18	1766	{ 454 455 456	53	967
Stripping-tool	H. W. Fisher	435,414	Sept. 2	54	18		1385
Stub-clip	W. M. Houser	421,278	Feb. 11	1259	325	50	811
Stub-holder	G. C. Hill	427,511	May 6	729	183	51	956
Stud. Separable	G. Esser	429,089	May 27	3133	807	51	1458
Studs, &c. Fastening device for	F. I. Sherman	434,138	Aug. 12	1051	271	52	971
Stuff chests. Agitator for	M. D. Currier	438,606	Oct. 21	1418	383	53	285
Stuff chests. Agitator for	M. D. Currier and R. A. Brendel	436,015	Sept. 9	978	256	52	1569
Stuffing-box	E. Rund	433,824	Aug. 5	579	151	52	870
Stuffing-box for piston-rods	J. F. Snyder	429,656	June 10	841	204	51	1643
Stuffing-box for sliding rods. Adjustable	G. H. Hitchcock	442,047	Dec. 2	660	178	53	1392
Stump-extractor	H. S. Clark	429,504	June 3	612	150	51	1589
Stump-extractor	W. V. Hoag	429,761	June 10	991	243	51	1674
Stump-extractor	J. Krueger	426,522	Apr. 29	3643	950	51	744
Stump-extractor	J. Manson	427,588	May 13	854	214	51	990
Stump-extractor	J. D. McElya	438,634	Oct. 21	1459	394	53	292
Stump-extractor	J. F. Smith	432,094	July 15	1657	426	52	338
Stump-puller	A. Arons	431,929	July 8	1395	354	52	261
Stump-puller	S. W. Baker	432,851	July 22	2824	723	52	569
Stump-puller	P. Cuddington	430,422	June 17	2047	505	51	1888
Stump-puller	H. B. Doelittle	424,281	Mar. 25	2867	766	50	1705
Stump-puller	G. Harvey	425,671	Apr. 15	1895	506	51	386
Stump-pullers, &c. Cable or wire rope guard for	C. L. Kleitz	435,754	Sept. 2	577	154	52	1486
Stump-pulling machine	J. I. Perkins	442,329	Dec. 9	1093	286	53	1482
Stylographic manifolding. Book for	J. L. Wortman	434,370	Aug. 12	1401	368	52	1041
Submarine-channel protection	A. J. Mauermann	423,172	Mar. 11	1240	323	50	1360
Submarine exploration. Apparatus for	C. Brown	427,149	May 6	196	50, 51	51	850
Submarine vessel	F. W. Pool	435,857	Sept. 2	734	{ 196 197	52	1517
Subsoiler and bush-puller	T. J. Rogers	425,460	Apr. 15	1574	421	51	323
Sucker-rod	J. O. Tefft	420,748	Feb. 4	444	117	50	651
Sucker-rod and tubing elevator	C. M. Maxson	425,183	Apr. 8	1164	307	51	236
Sucker-rod elevator	H. Bickel	442,942	Dec. 16	2117	545	53	1692
Sucker-rod elevator	S. Pottorf	432,193	July 15	1814	467	52	368
Suction supporting device	C. H. Ingersoll	435,752	Sept. 2	574	153	52	1486
Sugar. Apparatus for producing white	C. Steffen	441,076	Nov. 18	2323	601	53	1071
Sugar-cutter	P. H. Grimm	438,412	Oct. 14	1135	306	53	223
Sugar in molds. Apparatus for refining leaf	C. Steffen	443,549	Dec. 30	3136	807	53	1907
Sugar-packing machine	O. Pimentia	427,107	May 6	134	35	51	838
Sugar-packing machine	O. Pimentia	427,108	May 6	136	35	51	838
Sugar-refineries. Process of and apparatus for using heat in	S. M. Lillie	428,217	May 20	1792	452	51	1181
Sugar-refining	L. Sternberg	434,074	Aug. 12	940	.....	52	950
Sugar-refining apparatus	A. Baumgarth	420,141	Jan. 28	2258	{ 597 598	50	477
Sulky	N. H. Davis	432,819	July 22	5785	712		561
Sulky	S. L. and H. H. Fuller	441,480	Nov. 25	3006	774	53	1207
Sulky	H. C. Hill	429,348	June 3	376	89	51	1543
Sulky	D. N. Kratzer	441,769	Dec. 2	223	58	53	1307
Sulky	T. J. McMurray and W. B. Fisher	425,239	Apr. 8	1236	329	51	250
Sulky	T. J. McMurray and W. B. Fisher	443,401	Dec. 23	2902	746	53	1853
Sulpho compound	E. A. Baumann	442,094	Dec. 9	737	.....	53	1414
Sulphochlorinated organic compounds. Neutralizing	A. Sumner	419,726	Jan. 21	1603	.....	50	339
Sulphur. Apparatus for subliming	C. Dubois	420,719	Feb. 4	405	108	50	644
Sulphur. Apparatus for washing the fumes of	T. W. Montgomery and J. Waruke	433,534	Aug. 5	131	37, 38	52	782
Sulphur-burner	S. Smith	421,201	Feb. 11	1157	297	50	792
Sulphur. Manufacture of flowers of	E. F. White	443,629	Dec. 30	3270	{ 841 842 843	58	1932
Sun-print frame support	A. J. Dawdy	433,323	July 29	3571	921		722
Supporter.							
See Abdominal sup- porter.	Napkin and towel sup- porter.						
Boot-leg supporter.	Quill and bobbin sup- porter.						
Electric-wire sup- porter.	Rail-supporter.						
Garment-supporter.	Rein-supporter.						
Instep-supporter.	Stocking-supporter.						
Kettle-supporter.	Thill-supporter.						
King-bolt supporter.	Umbrella-supporter.						
Napkin-supporter.	Uterine supporter.						
Supporting wheel or pulley	T. J. Davis	424,279	Mar. 25	2864	765	50	1704
Strangle	W. G. Grimes	433,000	July 29	3076	789	52	623
Surface-gage	E. R. Markham	437,308	Sept. 30	3094	811	52	1993

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Surface-gage	E. Upton	441,812	Dec. 2	293	79	53	1321
Surgeon's case	C. H. Truax	435,108	Aug. 26	2591	684	52	1286
Surgical apparatus	W. L. Hendrick	432,614	July 22	2432	627	52	494
Surgical applicator	C. C. Harris	421,072	Feb. 11	968	249	50	756
Surgical bandage winder	W. Gillilan	449,314	Dec. 9	1068	279	53	1477
Surgical bandages. Manufacture of	R. W. Johnson	426,590	Apr. 29	3286	.....	51	676
Surgical brace	L. Blattmach'r	431,797	July 8	1210	302	52	245
Surgical case. Pocket	F. A. Reichardt	439,187	Oct. 28	2337	629	53	464
Surgical cradle-splint	E. S. Bishop	429,716	June 10	927	227 228	51	1661
Surgical forceps	F. W. Groth	430,849	June 24	2747	673	51	2029
Surgical instrument	L. Olivier	442,386	Dec. 9	1175	305	53	1497
Surgical-instrument clasp	F. A. Reichardt	426,959	Apr. 29	3321	998	51	779
Surgical knife	G. Dittert	432,517	July 22	2299	594	52	468
Surgical knife	M. Schott	431,153	July 1	176	45	52	37
Surgical-ligature receptacle	O. P. Barber	443,812	Dec. 30	3563	913	53	1989
Surgical mirrors. Head-band for	J. L. Sardy	428,761	May 27	2637	668	51	1361
Surgical-needle holder	J. Fergen	421,919	Feb. 25	2182	572	50	1003
Surgical-needle holder	C. H. Truax	439,910	Nov. 4	427	110	53	691
Surgical pump	E. Lee	419,461	Jan. 14	1224	325	50	258
Surgical safety appliance	H. W. Woolsey	423,976	Mar. 25	2444	648	50	1623
Surgical splint	G. Beacock	433,227	July 29	3421	883	52	691
Surgical splint	L. Reenstierna	432,899	July 22	2893	741	52	583
Surgical tent or dilator	T. G. Knight	438,929	Oct. 21	1942	517	53	382
Surveying and grading ditches. Instrument for	E. Reichenbach	433,697	Aug. 5	378	96	52	829
Surveying-instrument. Solar	E. W. Arms	423,894	Mar. 25	2305	609	50	1597
Surveyor's instrument	J. R. Hanlon	430,015	June 10	1383	343	51	1748
Surveys of land. Metallic land-mark for evidencing	J. P. Brown	427,394	May 6	543	138	51	919
Suspended adjustable chair	H. S. Peck	425,248	Apr. 8	1251	333	51	253
Suspender attachment	A. J. Stafford	428,820	May 27	2727	692	51	1378
Suspender-back	E. D. Bliss	424,087	Mar. 25	2603	693	50	1654
Suspender-catch	J. O. Folsom	436,653	Sept. 16	1997	522	52	1768
Suspender-clasp	A. Bernstein	438,051	Oct. 7	588	160	53	112
Suspender-clasp	C. R. Harris	431,694	July 8	1049	263	52	214
Suspender-securing pin	H. L. Shaver	443,118	Dec. 23	2420	618	53	1759
Suspender-trimming	T. W. Fish	421,354	Feb. 11	1367	354	50	831
Suspenders	I. Brucks	433,717	Aug. 5	408	104	52	835
Suspenders	T. D. Day	436,095	Sept. 9	1108	287	52	1593
Suspenders	E. Gutmann	425,173	Apr. 8	1151	304	51	233
Suspenders	J. Katzenberg	422,132	Feb. 25	2484	657	50	1059
Suspenders	J. Katzenberg	441,491	Nov. 25	3023	779	53	1210
Suspenders	W. A. Laverty	440,430	Nov. 11	1264	327	53	860
Suspenders	H. Lieberthal	438,693	Oct. 21	1556	419	53	309
Suspenders	M. Rosenstock	421,519	Feb. 18	1608	415	50	885
Suspenders	A. Schieffer	423,958	Mar. 25	2417	642	50	1618
Suspenders	L. Sternberg	421,326	Feb. 11	1332	344	50	825
Suspension device	M. Kamak	423,326	Mar. 11	1468	384	50	1422
Suspension device	F. Rhind	421,192	Feb. 11	1144	292 293	50	790
Swage	J. W. Brown	431,031	July 1	7	2	52	4
Swaging-machine	T. C. Hendey	439,951	Nov. 4	491	128	53	704
Swaging-machine	T. C. Hendey	439,952	Nov. 4	492	128 129	53	704
Swaging-machine. Rotary	R. G. Collins	440,304	Nov. 11	1046	269	53	820
Sweat-pad fastener	R. Hoop	442,117	Dec. 9	771	208	53	1421
Sweeper	J. O. Boggs	436,689	Sept. 16	2052	536	52	1780
Sweeping-machine	J. H. Le Tellier	431,146	July 1	166	42	52	35
Swimming apparatus	C. R. Daellenbach	424,277	Mar. 25	2861	765	50	1704
Swing	J. P. Auvil	439,265	Oct. 28	2478	665	53	489
Swing	T. W. Bowen	437,014	Sept. 23	2619	684	52	1897
Swing	S. K. Burger	431,552	July 8	805	201	52	168
Swing	A. Greaves	433,783	Aug. 5	517	134	52	856
Swing	J. Hannen	431,260	July 1	341	85	52	69
Swing	S. T. Jull	437,694	Oct. 7	24	8	53	7
Swing	J. O. Partridge	428,515	May 20	2250	570	51	1268
Swing. Adjustable	W. K. Miller	442,489	Dec. 9	1339	345	53	1531
Swinging and sliding gate	J. Jennings	434,510	Aug. 19	1632	428	52	1095
Swinging-chair	C. A. Jones and C. L. Bothwell	419,152	Jan. 7	751	199	50	157
Swinging gate	C. C. Boyer	427,148	May 6	195	50	51	850
Swinging gate	C. M. Clark	440,619	Nov. 18	1570	404	53	928
Swinging gate	W. A. and H. F. Deems	434,043	Aug. 12	884	233	52	938
Swinging gate	C. L. Hudler	436,421	Sept. 16	1630	429	52	1701
Swinging gate	M. B. Wible	423,504	Mar. 18	1724	454	50	1480
Switch							
See Car-switch. Lamp-socket switch.							
Derailing-switch. Lock-switch.							
Double-pole switch. Locomotive-switch.							
Electric switch. Railway-switch.							
Electric - apparatus. Railway-track switch.							
switch. Rheostat-switch.							
Electric-circuit. Snap-switch.							
switch. Store-service-railway							
Electric hand-switch. switch.							
Electric snap-switch. Telephone-switch.							
Electrical switch. Three-way switch.							
Frog-switch. Trolley-switch.							
Grooved switch. Trolley-line switch.							
Switch	S. Bergmann	433,883	Aug. 5	663	172	52	886
Switch	A. Berrenberg and J. Umbehend	422,705	Mar. 4	502	128	50	1232
Switch	A. R. Bush	425,205	Apr. 8	1192	316	51	241
Switch	C. H. Hobson	437,156	Sept. 23	2858	742 743	52	1942
Switch	E. H. Johnson	443,606	Dec. 30	3231	831	53	1925
Switch and signal apparatus. Test-lock for	J. T. Hambay	429,193	June 3	133	32	51	1496

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Switch and signal mechanisms. Charging apparatus for	J. G. Schreuder	442,339	Dec. 9	1106	289	53	1483
Switch and signal stand	W. J. Morden	436,503	Sept. 16	1752	462	52	1724
Switch apparatus	M. M. Davis	426,583	Apr. 29	3272	{ 858 859 }	51	674
Switch-board	J. M. Andersen	430,054	June 10	1449	360	51	1760
Switch-board	E. A. Owen	424,995	Apr. 8	874	231	51	177
Switch-board	C. E. Scribner	427,622	May 13	896	225	51	998
Switch-board	W. M. Stewart	421,114	Feb. 11	1028	{ 263 264 }	50	768
Switch-box	M. R. Muckle, Jr., and T. C. Smith	422,244	Feb. 25	2663	703	50	1093
Switch-lock	J. A. McNight	425,952	Apr. 15	2322	616	51	467
Switch mechanism. Safety	J. Westcott	425,557	Apr. 15	1711	458	51	350
Switch-operating mechanism	R. M. Blackmer	440,390	Nov. 11	11-7	306	53	847
Switch-operating mechanism	J. Hahn	423,556	Mar. 18	1801	{ 474 475 }	50	1493
Switch-operating mechanism	C. W. Stetson	422,990	Mar. 11	960	253	50	1326
Switch or signal setting apparatus	J. Hahn	423,554	Mar. 18	1799	{ 473 474 }	50	1493
Switch-signal	W. R. Thomas	424,148	Mar. 25	2686	715	50	1669
Switch-signal stand	A. A. Strom	430,407	June 17	2029	500	51	1884
Switch-stand	A. A. Ackerly	431,834	July 8	1267	318	52	256
Switch-stand	W. A. Bock	437,966	Oct. 7	448	126	53	85
Switch-stand	N. O. Goldsmith	440,560	Nov. 11	1466	378	53	899
Switch-stand	A. A. Strom	441,601	Nov. 25	3169	821	53	1243
Switch-stand. Automatic	N. W. Boyd	435,728	Sept. 2	540	143	52	1479
Switch-stand. Automatic	F. C. Weir and N. O. Goldsmith	428,029	May 13	1522	386	51	1118
Switch-tie-bar clamps. Making	L. H. Evans	424,052	Mar. 25	2556	682	50	1644
Switch-worker	H. G. Heitmeyer	439,506	Oct. 28	2855	759	53	561
Swivel	R. A. Breul	439,860	Nov. 4	344	89	53	674
Swivel	F. P. Ellis	422,194	Feb. 25	2580	683	50	1077
Swivels. Machine for manufacturing wrought-metal	G. Van Wagenen	443,807	Dec. 30	3553	{ 911 912 }	53	1987
Syringe	H. C. Barker	438,980	Oct. 21	2022	540	53	398
Syringe	E. Bartsch	443,083	Dec. 16	2340	597	53	1736
Syringe	H. Basler	432,293	July 15	1970	503	52	396
Syringe	A. H. and M. G. Collins	437,481	Sept. 30	3382	886	52	2052
Syringe	W. W. Guptill	441,238	Nov. 25	2621	680	53	1134
Syringe	W. W. Guptill	441,239	Nov. 25	2622	680	53	1134
Syringe	G. Otto	422,437	Mar. 4	106	29	50	1157
Syringe	H. Read	427,111	May 6	141	37	51	839
Syringe attachment	A. E. Charlesworth	429,374	June 3	415	98	51	1550
Syringe. Electrical	J. H. Woodward	433,384	July 29	3633	938	52	734
Syringe. Embalming	T. Holmes	425,134	Apr. 8	1076	286	51	217
Syringe. Fountain	C. A. Tatum	431,084	July 1	82	20	52	18
Syringe. Hypodermic	J. Fergen and J. T. Macwhinnie	437,149	Sept. 23	2849	740	52	1940
Syringe. Hypodermic	W. W. Hitchcock	426,017	Apr. 22	2431	643	51	496
Syringe. Hypodermic	G. B. Ross	422,450	Mar. 4	128	35	50	1161
Syringe. Hypodermic	G. Otto	422,436	Mar. 4	105	29	50	1157
Syringe or water-bottle. Fountain	A. C. Eggers	427,256	May 6	357	92	51	880
Syringe. Reservoir	S. E. Cook	430,514	June 17	2187	538	51	1914
Syringe. Vaginal	J. P. McClellan and A. W. Hitt	426,047	Apr. 22	2470	653	51	503
Syringe. Vaginal	J. R. Trott	442,558	Dec. 9	1457	{ 373 374 }	53	1555
T-bolt	E. Huber	438,161	Oct. 14	753	206	53	151
Table:							
See Adjustable table. Pool-table.							
Car-table. Portable table.							
Copying-table. Railway transfer-table.							
Embalming-table. Revolving table.							
Embalming or lay- Rolling-mill feed-table.							
ing-out table. Shear-table.							
Extension-table. Tailor's table.							
Folding table. Tile-cutting table.							
Form-table. Time-table.							
Game-table. Transfer-table.							
Ironing-table. Turn-table.							
Kindergarten table. Veterinary operating-							
Knockdown table. table.							
Laundry-table. Work-table.							
Percolating-table. Zither-table.							
Table	G. Beck	432,356	July 15	2050	528	52	411
Table	J. B. Bigelow	424,639	Apr. 1	315	81	51	62
Table	H. Burrell	427,668	May 13	958	{ 241 242 }	51	1010
Table	J. H. Eyles	441,792	Dec. 2	257	65	53	1314
Table	W. Hassett	429,443	June 3	517	124	51	1572
Table	W. C. Jones and J. G. D. Mack	439,159	Oct. 28	2293	616	53	456
Table	E. A. Reed	438,947	Oct. 21	1972	526	53	387
Table	J. B. Sweetland	436,272	Sept. 9	1379	359	52	1645
Table	J. H. Taylor	419,978	Jan. 21	1985	525	50	417
Table	H. Warner	437,539	Sept. 30	3475	906	52	2069
Table and ironing-board	A. M. Trimble	437,264	Sept. 30	3027	794	52	1981
Table and quilting-frame. Combination	J. Hofmann, Jr.	443,079	Dec. 16	2334	596	53	1735
Table, easel, and writing-desk. Combined	W. Reams	439,186	Oct. 28	2336	629	53	404
Table for berths of vessels	A. G. E. Hope	427,573	May 13	833	208	51	926
Table for use at sea	H. Burrell	427,669	May 13	961	242	51	1011
Table, ironing-board, and step-ladder. Combined	M. Gabrielli	440,351	Nov. 11	1111	255	53	832
Table-knife	F. W. Brittin	424,954	Apr. 8	806	216	51	165
Table-leaf	T. M. Wassenius	435,337	Aug. 26	2943	721	52	1351
Table-leaf support	F. L. Casper	421,384	Feb. 18	1414	366	50	847
Table-leg connection	P. Herbert	425,948	Apr. 15	2315	614	51	465
Table or other legged article	W. B. Pellett	434,456	Aug. 19	1550	404	52	1078
Table-screen	L. Spikes	438,958	Oct. 21	1985	530	55	390

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Table slide. Extension.....	J. D. Heckman.....	434,271	Aug. 12	1259	326	52	1011
Table-ware for ships.....	F. Ezell.....	425,768	Apr. 15	2034	541	51	413
Tablet. Autographic manifolding.....	A. A. McCann.....	439,887	Nov. 4	388	101	53	683
Tablet for rapid writing.....	U. Smith.....	418,991	Jan. 7	522	130	50	110
Tablet for roll-paper. Writing.....	C. J. Weinman and E. E. Euchenhofer.	438,871	Oct. 21	1861	494	53	366
Tablet for telephones and clamp attachment for the same.	J. B. Morris.....	426,462	Apr. 29	3093	811	51	639
Tablet or book holder.....	W. H. Pardee.....	428,857	May 27	2779	706	51	1390
Tablet or calendar stand.....	F. M. Turek.....	433,635	Aug. 5	982	76	52	811
Tablet or indicator. Information.....	J. B. Barnet.....	420,712	Feb. 4	393	{ 104 } 105	50	641
Tablet. Stenographer's.....	A. R. Birchard.....	424,534	Apr. 1	148	42	51	31
Tablet. Stock-memoranda.....	J. Dick.....	424,164	Mar. 25	2737	730	50	1679
Tablet. Telephone.....	J. B. Morris.....	424,493	Apr. 1	83	23, 24	51	19
Tablet. Writing.....	J. T. F. MacDonnell.....	437,399	Sept. 30	3246	846	52	2023
Tablets. Machine for compressing.....	F. W. Jordan.....	438,763	Oct. 21	1677	{ 450 } 451	53	332
Tachygraphy and type-writing machine.....	G. K. Anderson.....	440,341	Nov. 11	1098	282	53	830
Tack-driving machine.....	E. Woodward.....	426,160	Apr. 22	2641	694	51	538
Tack-driving tool.....	M. A. Sheldon.....	438,865	Oct. 21	1852	492	53	364
Tack extractor and hammer.....	E. B. Crane.....	429,508	June 3	616	151	51	1589
Tack-feeding tube.....	H. W. Dean.....	418,695	Jan. 7	58	14	50	14
Tack-feeding tube.....	H. W. Dean.....	418,696	Jan. 7	60	14	50	14
Tack-puller.....	C. H. Slocum.....	436,157	Sept. 9	1210	315	52	1611
Tack separating and distributing mechanism.....	J. E. Matzeliger.....	423,937	Mar. 25	2381	633	50	1611
Tack-strip.....	W. Forster.....	422,198	Feb. 25	2585	684	50	1078
Tack-strip-setting machine.....	M. Brock.....	431,549	July 8	799	200	52	167
Tack-strips. Machine for making.....	J. A. Crosbie.....	431,561	July 8	818	204	52	171
Tack. Thumb.....	A. J. Schindler and K. Schneider.....	420,702	Feb. 4	383	102	50	639
Tacker or nailer.....	J. C. Luchterhand.....	422,815	Mar. 4	652	167	50	1262
Tacking-machine.....	H. W. Dean.....	418,697	Jan. 7	61	{ 14 } 15 16	50	14
Tag.....	S. Dancyger.....	435,406	Sept. 2	45	15	52	1383
Tag.....	C. F. Moseley.....	428,314	May 20	1956	491	51	1212
Tag.....	J. F. Ordner.....	423,177	Mar. 11	1246	324	50	1381
Tag. Animal.....	H. H. Haaff.....	427,075	May 6	78	20	51	897
Tag-fastener.....	W. M. Lambert.....	419,267	Jan. 14	929	246	50	198
Tag-fastener.....	J. H. Martin.....	428,926	May 27	2881	737	51	1411
Tag-holder.....	W. R. Dean and W. H. Barnett.....	431,562	July 8	820	205	52	171
Tag-holder.....	R. Stewart.....	438,769	Oct. 21	1686	452	53	334
Tag. Laundry.....	P. Evans and L. A. Waters.....	435,741	Sept. 2	554	147	52	1482
Tag-making machine.....	C. A. Squier.....	443,548	Dec. 30	3134	806	53	1907
Tag or clip. Name.....	T. W. Bartholomew.....	436,593	Sept. 16	1901	499	52	1750
Tail-guard and line-rest.....	D. Hand.....	428,337	May 20	1992	501	51	1219
Tailor's-goose attachment.....	A. W. Barbier and P. P. Coady.....	423,368	Mar. 11	1524	400	50	1434
Tailor's table.....	I. Reens.....	420,212	Jan. 28	2375	631	50	497
Tailor's table-clamp.....	C. E. Erickson.....	430,573	June 17	2272	558	51	1929
Tally and register. Grain.....	S. B. Wheeler.....	441,912	Dec. 2	439	117	53	1351
Tambourine.....	G. Van Zandt.....	436,091	Sept. 9	1104	286	52	1592
Tampon. Vaginal.....	C. C. Fredigke.....	435,491	Sept. 2	168	47	52	1407
Tank:							
See Flush-tank. Refrigerating tank.							
Flushing-tank. Salt-evaporating tank.							
Gasoline-tank. Sea-water storage-tank.							
Jig-tank. Siphon-tank.							
Locomotive-tank. Vinegar-tank.							
Locomotive feeding-tank. Water-tank.							
Oil-tank. Water-closet tank.							
Oil-tank. Water-closet flushing-tank.							
Oil-transporting tank. Water-pipe feed-tank.							
Tank.....	R. A. L. Blondel.....	429,899	June 10	1173	{ 291 } 292	51	1707
Tank closing device. Water.....	J. D. Abraham.....	424,158	Mar. 25	2703	719	50	1672
Tank-heater.....	K. McLennan.....	418,744	Jan. 7	125	31	50	28
Tank-heater.....	S. Wilks.....	430,717	June 24	2530	619	51	1988
Tanner's tool.....	P. S. Connor.....	427,555	May 13	801	201	51	980
Tanner's tool.....	R. H. Houk.....	440,240	Nov. 11	937	241	53	803
Tanning by electricity.....	L. A. Groth.....	442,115	Dec. 9	769	207	53	1420
Tanning hides.....	T. L. Crafton.....	435,922	Sept. 9	849	.....	52	1545
Tanning process.....	A. F. Krueger.....	442,684	Dec. 16	1648	.....	53	1602
Tap.....	P. T. Coffield.....	428,803	May 27	2694	684	51	1372
Tap. Adjustable.....	H. C. Bradford.....	423,409	Mar. 18	1587	417	50	1454
Tap and die.....	W. S. F. Dillon.....	425,372	Apr. 8	1433	383	51	287
Tap. Champagne or mineral-water.....	A. C. Monfort.....	426,510	Apr. 29	3162	831	51	652
Tap or valve.....	J. Rigg and T. Meacock.....	430,689	June 24	2483	606	51	1978
Taps. Apparatus for opening and closing stuff.....	H. Schofield.....	422,979	Mar. 11	947	248	50	1324
Tapping and connecting mains. Apparatus for.....	D. C. Smiley, Jr., and G. Batty.....	435,548	Sept. 2	256	71, 72	52	1424
Tapping bars. Mechanism for operating.....	H. Aiken.....	439,924	Nov. 4	447	116	53	695
Tapping-machine.....	H. W. Honeyman.....	437,157	Sept. 23	2859	743	52	1942
Tapping-machine.....	H. Mueller.....	436,609	Sept. 16	1918	504	52	1753
Tapping-machine for stay-bolt holes.....	F. Barnhart.....	441,737	Dec. 2	168	44	53	1295
Tapping machine. Nut.....	W. R. Anderson.....	429,878	June 10	1172	{ 290 } 291	51	1707
Tapping mains. Machine for.....	E. J. Wischaupt.....	440,856	Nov. 18	1968	{ 506 } 507	53	1002
Tapping or connecting branches to pipes. Method of and machine for.....	P. Eley.....	438,740	Oct. 21	1647	441	53	326
Tapping sheet-metal vessels. Device for.....	C. H. James.....	423,429	Mar. 18	1617	425	50	1460
Tapping stay-bolt holes. Device for.....	J. T. Connelly.....	443,234	Dec. 23	2639	677	53	1802
Tape-measure.....	T. W. Grierson.....	421,133	Feb. 11	1056	270	50	773
Tape-reel.....	F. C. Kendrick.....	421,835	Feb. 18	2045	541	50	968

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Tar residuums. Utilizing acid.....	C. Rave	425,905	Apr. 15	2229	.....	51	449
Target.....	O. Pederson	434,522	Aug. 19	1649	432	52	1098
Target.....	H. M. Quackenbush	426,063	Apr. 22	2492	658	51	508
Target and toy gun. Combined	J. Kley	429,457	June 3	535	{ 128 129 }	51	1576
Target. Flying	W. T. Best	425,732	Apr. 15	1986	529	51	404
Target. Flying	H. C. Warren	429,491	June 3	597	146	51	1586
Target. Folding	C. O. McBride	429,942	June 10	1255	311	51	1724
Target. Glazed	F. W. Pratt	429,953	June 10	1272	315	51	1727
Target-making machine. Bird	F. C. Damm	434,107	Aug. 12	995	259	52	961
Target-pigeons. Machine for molding	C. Swan	422,655	Mar. 4	438	{ 109 110 }	50	1220
Target-throwing trap	W. T. Best	440,532	Nov. 11	1423	367	53	891
Target-trap	W. P. Brett	434,077	Aug. 12	943	248	52	951
Target-trap	W. P. Brett	434,078	Aug. 12	945	248	52	951
Target-trap	C. Swan	424,834	Apr. 1	626	164	51	121
Target-trap. Electrical	J. Wolstencroft and W. H. Soley	428,030	May 13	1524	387	51	1119
Target-traps. Apparatus for springing	C. Swan	424,835	Apr. 1	628	165	51	121
Target-traps. Electric release for	L. L. True	433,554	Aug. 5	168	45	52	789
Tassels, upholsterers' tufts, &c. Machine for manu- facturing	H. A. Cables	427,741	May 13	1083	273	51	1035
Tea extract and making the same	G. Christopher and R. W. Leftwich	425,982	Apr. 22	2379	.....	51	486
Tea-kettle	E. E. Boles	425,400	Apr. 15	1477	396	51	304
Tea or coffee pot handle	G. W. Knapp	442,900	Dec. 16	2054	527	53	1679
Teaching music. Device for use in	A. O. Baldwin	435,131	Aug. 26	2624	694	52	1292
Teaching numbers to children. Device for	V. Anderson	431,102	July 1	108	28	52	23
Teaching reading and numbers. Educational appli- ance for	R. Webus	419,393	Jan. 14	1120	296	50	236
Teaching the art of boxing. Apparatus for	J. Lovatt	426,944	Apr. 29	3800	992	51	775
Tedder and hay-rake. Combined	S. L. Denney	430,566	June 17	2258	{ 554 555 }	51	1926
Teeth. Apparatus for molding caoutchouc palate- plates for artificial	L. Pritzius	443,378	Dec. 23	2863	{ 737 738 }	53	1847
Teeth. Manufacture of pads for cleaning and polish- ing the	G. F. Horsey	419,675	Jan. 21	1539	410	50	326
Teeth-separator	J. W. Ivory and A. Wayne	436,603	Sept. 16	1912	502	52	1752
Teeth-separator	F. Sawhill	440,509	Nov. 11	1390	359	53	885
Telegraph alarm-box. District	C. G. Armstrong	418,778	Jan. 7	181	44	50	40
Telegraph and gas-lighting device. Combined fire- alarm	C. H. Crockett and C. C. Allen	430,175	June 17	1629	407	51	1806
Telegraph apparatus	E. B. Shafer	420,393	Jan. 28	2643	701	50	547
Telegraph. Autographic	H. Etheridge	435,292	Aug. 26	2854	755	52	1337
Telegraph. Autographic	J. H. Robertson	420,533	Feb. 4	569	151	50	676
Telegraph. Automatic	F. Anderson	426,749	Apr. 29	3534	922	51	723
Telegraph. Automatic	F. Anderson	431,794	July 8	1203	{ 300 301 }	52	243
Telegraph-blank	J. O. Donnell	443,505	Dec. 30	3072	{ 791 792 }	53	1895
Telegraph-cable conduit	W. R. Patterson	433,025	July 29	3119	800	52	631
Telegraph-cables. Manufacture of	W. R. Patterson	428,055	May 13	1563	395	51	1127
Telegraph. Car	W. F. Stevens	425,466	Apr. 15	1583	423	51	324
Telegraph-circuit	F. W. Jones	441,247	Dec. 2	347	91, 92	53	1332
Telegraph-circuit	D. H. Keeley	440,164	Nov. 11	816	212	53	779
Telegraph. District police and fire	C. C. Drake	430,992	June 24	2961	727	51	2070
Telegraph. Duplex and quadruplex	F. W. Jones	426,819	Apr. 29	3638	949	51	743
Telegraph. Electric railway	B. Cade	419,313	Jan. 14	1003	265	50	212
Telegraph. Fire or police	G. C. McCullough	423,487	Mar. 18	1698	448	50	1476
Telegraph. Induced-current	A. M. Rosebrugh	440,199	Nov. 11	867	{ 223 224 }	53	789
Telegraph-instrument	J. Geary	438,233	Oct. 14	858	233	53	171
Telegraph-key	C. H. Crockett and L. C. Dedrick	438,530	Oct. 14	1297	351	53	256
Telegraph-key	J. S. Kaylor	427,876	May 13	1293	337	51	1074
Telegraph-key	O. Kleber	426,941	Apr. 29	3795	992	51	775
Telegraph-key	W. A. J. Kohn	439,959	Nov. 4	501	131	53	705
Telegraph-key	A. F. Purdy	437,510	Sept. 30	3427	897	52	2062
Telegraph-key	J. B. Van Deusen	433,835	Aug. 5	594	{ 153 154 }	52	872
Telegraph-instrument. Mechanical	E. R. Waterhouse	429,982	June 10	1329	330	51	1738
Telegraph-lines. Automatic adjuster for	C. P. Carr	432,724	July 22	2026	672	52	531
Telegraph. Multiplex	F. J. Patten	428,222	May 20	1812	{ 453 454 }	51	1184
Telegraph. Multiplex synchronous	R. G. Brown	423,901	Mar. 25	2324	613	50	1601
Telegraph. Multiplex synchronous	R. G. Brown	423,902	Mar. 25	2326	{ 613 614 }	50	1601
Telegraph or telephone. Multiple	A. M. Rosebrugh	442,139	Dec. 9	806	217	53	1427
Telegraph-pins. Machine for turning	W. W. McNeal	421,654	Feb. 18	1809	473	50	924
Telegraph-pole	C. M. Brush	432,858	July 22	2833	726	52	572
Telegraph. Printing	J. Bury	429,115	June 3	10	4, 5	51	1475
Telegraph. Printing	S. V. Essick	443,134	Dec. 23	2441	{ 624 625 626 }	53	1763
Telegraph. Printing	S. V. Essick	443,135	Dec. 23	2448	{ 626 627 }	53	1763
Telegraph. Printing	S. V. Essick	443,136	Dec. 23	2452	{ 627 628 }	53	1764
Telegraph. Printing	T. M. Foote	434,261	Aug. 12	1242	{ 321 322 }	52	1008
Telegraph. Printing	A. T. McCoy	429,576	June 3	715	{ 173 174 }	51	1610
Telegraph. Printing	A. T. McCoy	429,577	June 3	718	174	51	1610
Telegraph. Printing	A. T. McCoy	431,987	July 8	1490	315	52	300
Telegraph. Printing	J. F. McLaughlin	420,240	Jan. 28	2419	{ 644 645 }	50	505

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Telegraph. Printing.....	J. B. Odell.....	434,551	Aug. 19	2224	583 584 585 559 560 561	52	1210
Telegraph. Printing.....	J. B. Odell.....	436,740	Sept. 16	2126	560 561	52	1795
Telegraph. Printing.....	F. B. Rae.....	443,111	Dec. 23	2409	615	53	1758
Telegraph. Printing.....	G. B. Scott.....	431,784	July 8	1183	296	52	239
Telegraph. Printing.....	W. W. Taylor.....	432,453	July 15	2190	564 565	52	439
Telegraph. Printing.....	W. W. Taylor.....	442,497	Dec. 9	1351	347 348	53	1534
Telegraph. Quadruplex.....	T. A. Edison.....	420,594	Feb. 4	236	62, 63	50	611
Telegraph. Railway.....	J. S. Foley.....	421,394	Feb. 18	1428	370	50	850
Telegraph. Railway-car.....	C. R. Arnold.....	442,347	Dec. 9	1120	292	53	1456
Telegraph receiver. Printing.....	H. Mahnken.....	422,604	Mar. 4	357	88, 89 578 579 580 581 582 583	50	1204
Telegraph. Recording.....	J. B. Odell.....	434,880	Aug. 19	2209	580 581 582 583	52	1208
Telegraph-relay.....	T. A. Edison.....	434,585	Aug. 19	1745	457	52	1118
Telegraph. Synchronous multiplex.....	R. G. Brown.....	423,903	Mar. 25	2329	614	50	1602
Telegraph system. Fire-alarm.....	J. Speicher and F. T. Fearey.....	426,691	Apr. 29	3439	901 902	51	705
Telegraph-transmitter.....	F. W. Jones.....	425,511	Apr. 15	1642	437	51	337
Telegraph-transmitter.....	S. W. Smith.....	443,381	Dec. 23	2873	739	53	1847
Telegraphs. Balanced pen for autographic.....	H. Etheridge.....	425,066	Apr. 8	976	262	51	187
Telegraphs. Balanced pen for autographic.....	H. Etheridge.....	425,413	Apr. 15	1498	402	51	309
Telegraphs. Central-office system for autographic.....	J. H. Robertson.....	425,086	Apr. 8	1004	268 457	51	202
Telegraphic and telephonic exchange. System of.....	J. R. Smith and W. Childs.....	442,734	Dec. 16	1763	457	53	1622
Telegraphic circuit.....	A. C. Robbins.....	433,421	July 29	3687	952	52	746
Telegraphic relay.....	J. M. Treber.....	432,098	July 15	1662	427	52	339
Telegraphic repeater.....	S. S. Emery.....	423,229	Mar. 11	1314	342	50	1394
Telegraphic sounder.....	G. W. White.....	421,214	Feb. 11	1173	301	50	795
Telegraphic transmission of index movements.....	F. Richard.....	420,102	Jan. 28	2193	579 580 581	50	464
Telegraphing. Perforator for automatic.....	F. D. Mack.....	439,164	Oct. 28	2302	618	53	457
Telegraphy.....	P. B. Delany.....	440,766	Nov. 18	1810	468	53	974
Telegraphy.....	T. A. Edison.....	422,072	Feb. 25	2388	631 632	50	1041
Telegraphy.....	T. A. Edison.....	422,073	Feb. 25	2389	632	50	1041
Telegraphy.....	T. A. Edison.....	422,074	Feb. 25	2391	632	50	1042
Telegraphy.....	T. A. Edison.....	435,689	Sept. 2	489	129 130	52	1469
Telegraphy.....	T. A. Edison.....	437,422	Sept. 30	3292	859 860	52	2032
Telegraphy.....	S. M. English.....	429,377	June 3	425	100	51	1552
Telegraphy.....	A. G. Hummel and F. A. Graham.....	442,808	Dec. 16	1881	485	53	1646
Telegraphy.....	E. B. Ives.....	442,267	Dec. 9	991	261 262	53	1464
Telegraphy.....	C. Langdon-Davies.....	424,006	Mar. 25	2489	662	50	1631
Telegraphy.....	A. Muirhead.....	435,851	Sept. 2	724	194	52	1515
Telegraphy. Automatic.....	F. Anderson.....	431,793	July 8	1202	300	52	243
Telegraphy. Automatic.....	D. Kunhardt.....	437,307	Sept. 30	3090	809 810 811	52	1993
Telegraphy. Dynamo.....	F. W. Jones.....	433,082	July 29	3204	823 824	52	647
Telegraphy. Multiple.....	E. N. Dickerson, Jr.....	429,233	June 3	187	45, 46	51	1507
Telegraphy. Multiple.....	E. J. P. Mercadier.....	420,884	Feb. 4	678	175	50	692
Telegraphy. Multiplex.....	P. B. Delany.....	440,768	Nov. 18	1819	469 470	53	975
Telegraphy. Multiplex.....	D. H. Keeley.....	440,165	Nov. 11	820	212 213	53	780
Telegraphy. Multiplex.....	F. J. Patten.....	428,223	May 20	1815	454 455	51	1185
Telegraphy. Multiplex.....	F. J. Patten.....	429,735	June 10	949	233	51	1665
Telegraphy. Private-line.....	P. B. Delany.....	431,651	July 8	965	241	52	199
Telegraphy. Quadruplex.....	F. W. Jones.....	426,591	Apr. 29	3257	862	51	676
Telegraphy. Receiving apparatus for cable.....	P. B. Delany.....	425,597	Apr. 15	1772	475	51	362
Telegraphy. Receiving instrument for.....	W. M. Miner.....	437,930	Oct. 7	394	111	53	76
Telegraphy. Synchronous.....	P. B. Delany.....	440,767	Nov. 18	1814	469	53	975
Telegraphy. Synchronous multiplex.....	F. J. Patten.....	428,221	May 20	1803	452 453	51	1182
Telegraphy. Synchronous multiplex.....	F. J. Patten.....	428,224	May 20	1817	455	51	1185
Telegraphy. Synchronous multiplex.....	F. J. Patten.....	428,225	May 20	1818	455	51	1186
Telegraphy. Synchronous multiplex.....	F. J. Patten.....	428,226	May 20	1819	456	51	1186
Telephone.....	S. Bergmann.....	440,096	Nov. 4	700	186 187 188	53	745
Telephone.....	S. Bergmann.....	443,493	Dec. 30	3057	756 757	53	1892
Telephone.....	S. Bergmann.....	443,494	Dec. 30	3059	757	53	1892
Telephone.....	W. Burnley.....	436,334	Sept. 16	1478	356	52	1673
Telephone.....	W. Burnley.....	436,335	Sept. 16	1479	356	52	1673
Telephone.....	E. L. Capps.....	441,396	Nov. 25	2868	740	53	1181
Telephone.....	E. Davis.....	433,981	Aug. 12	807	211	52	922
Telephone.....	T. A. Edison and E. T. Gilliland.....	438,306	Oct. 14	975	264	53	192
Telephone.....	S. D. Field.....	433,120	July 29	3265	840 841	52	659

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Telephone	J. H. Irwin	430,128	June 17	1572	391	51	1795
Telephone	E. H. Johnson	443,526	Dec. 30	3096	798	53	1900
Telephone	J. C. Ludwig	428,174	May 20	1732	438	51	1168
Telephone	A. J. MacDonald	438,632	Oct. 21	1455	393	53	291
Telephone	J. W. McDonough	438,818	Oct. 21	1769	{ 473 474 }	53	350
Telephone	W. L. Richards	438,828	Oct. 21	1790	478	53	353
Telephone	J. C. H. Stut	427,204	May 6	273	70	51	865
Telephone	J. C. H. Stut	438,784	Oct. 21	1705	458	53	338
Telephone	W. Vogel	429,801	June 10	1045	257	51	1683
Telephone	S. L. Wiegand	436,512	Sept. 16	1762	465	52	1726
Telephone	S. L. Wiegand	436,513	Sept. 16	1762	465	52	1727
Telephone and telegraph. Combined system of fire-alarm and police-patrol	G. C. Hale and A. Barrett	440,563	Nov. 11	1469	{ 379 380 }	53	900
Telephone attachment	G. F. Newland	421,011	Feb. 11	884	228	50	740
Telephone attachment. Coin-operated	H. F. Dugan	437,293	Sept. 30	3073	805	52	1990
Telephone bell and connection	D. H. Rice	425,631	Apr. 15	1837	491	51	375
Telephone-call. Automatic	H. L. Carpenter	422,722	Mar. 4	523	134	50	1236
Telephone-call. Individual	J. Sack	423,575	Mar. 18	1822	480	50	1498
Telephone-call register	W. E. Robinson	433,307	July 29	3535	{ 912 913 }	52	715
Telephone-circuit and apparatus	J. N. Culbertson	419,645	Jan. 21	1482	{ 397 398 }	50	317
Telephone circuit and apparatus	J. L. McQuarrie	443,145	Dec. 23	2469	632	53	1767
Telephone-circuits. Means for reducing inductive disturbances in	J. J. Carty	442,856	Dec. 16	1968	505	53	1664
Telephone-connection. Automatic	W. H. Ford	435,295	Aug. 26	2360	{ 756 757 758 759 760 761 762 763 }	52	1338
Telephone-desk attachment	B. Schram	428,818	May 27	2725	691	51	1378
Telephone-exchange	J. A. McCoy	432,547	July 22	2344	{ 605 606 }	52	478
Telephone-exchange apparatus	F. G. Beach	438,982	Oct. 21	2025	541	53	399
Telephone-exchange apparatus	F. G. Beach and F. B. Cook	420,183	Jan. 28	2329	{ 615 616 }	50	489
Telephone-exchange apparatus	J. J. Carty	427,156	May 6	210	53, 54	51	852
Telephone-exchange apparatus	J. J. Carty	427,742	May 13	1086	274	51	1035
Telephone-exchange apparatus	J. J. O'Connell	430,747	June 24	2582	{ 632 633 }	51	1997
Telephone-exchange apparatus	C. E. Scribner	442,144	Dec. 9	815	219	53	1429
Telephone-exchange apparatus	C. E. Scribner	442,146	Dec. 9	821	220	53	1430
Telephone-exchange key-board apparatus	J. J. O'Connell	430,748	June 24	2589	{ 633 634 }	51	1999
Telephone-exchangeswitches. Testing apparatus for	J. J. O'Connell	420,091	Jan. 28	2170	572	50	460
Telephone-exchange system	E. M. Bentley	437,010	Sept. 23	2615	683	52	1895
Telephone-exchange system	E. M. Bentley	437,012	Sept. 23	2617	604	52	1896
Telephone-exchange systems. Calling apparatus for metallic circuit	C. E. Scribner	427,194	May 6	259	67	51	862
Telephone-exchanges. Multiple switch-board for	M. G. Kellogg	427,087	May 6	91	25, 26	51	829
Telephone-exchanges. Registering system for	J. C. Clark	433,445	Aug. 5	14	4	52	760
Telephone-guard. Coin-controlled	S. M. Dowst and F. H. Hosmer	430,569	June 17	2266	557	51	1928
Telephone hearing-trumpets. Support for	S. Leberberg	432,883	July 22	2872	736	52	580
Telephone-key. Combination	C. E. Scribner	433,424	July 29	3693	953	52	747
Telephone-line vibrator	H. W. Ladd	422,682	Feb. 25	2404	655	50	1044
Telephone-lines. Calling device for clock	J. A. McManman	440,898	Nov. 18	2033	{ 523 524 }	53	1016
Telephone-lock. Coin-released	H. L. Cassard	428,828	May 27	2738	695	51	1380
Telephone. Magneto	N. B. Ginochio	429,129	June 3	34	8	51	1479
Telephone. Mechanical	R. C. M. Bowles	419,966	Jan. 21	2005	528	50	419
Telephone. Mechanical	H. M. Chamblin	439,475	Oct. 28	2809	748	53	551
Telephone. Mechanical	J. M. Russell	437,624	Sept. 30	3586	{ 937 938 }	52	2091
Telephone month-piece	R. W. Whitney and B. K. Cowles	421,800	Feb. 18	1999	527	50	960
Telephone month-piece and holder	E. B. Bell	430,913	June 24	2843	698	51	2048
Telephone pay-stations. Automatic toll system for	H. C. Root	440,118	Nov. 4	734	194	53	752
Telephone. Pneumatic	J. G. Noreau	424,684	Apr. 1	379	{ 99 100 }	51	74
Telephone purposes. Electric circuit for	A. W. Berne	425,853	Apr. 15	2166	576	51	437
Telephone-receiver holder	F. T. and W. K. S. Tinning	440,091	Nov. 4	695	185	53	744
Telephone-receivers. Aural attachment for	E. C. Hess	431,810	July 8	1231	307	52	249
Telephone registering attachment	R. J. and J. T. Story, A. E. Fox, and G. J. Hill	428,427	May 20	2130	536	51	1247
Telephone-relay	S. L. Wiegand	436,514	Sept. 16	1765	466	52	1727
Telephone-repeater	T. A. Edison	422,578	Mar. 4	310	79	50	1195
Telephone-repeater	T. A. Edison	422,579	Mar. 4	311	79	50	1195
Telephone-signal apparatus	J. A. Seely	431,531	July 1	769	192	52	153
Telephone-support	F. C. Hughes	437,927	Oct. 7	329	110	53	74
Telephone-switch	E. C. Titus	421,636	Feb. 18	1788	467	50	920
Telephone-switch	E. P. Warner	425,058	Apr. 8	963	258	51	194
Telephone-switch system	C. C. Gould	422,765	Mar. 4	579	149	50	1247
Telephone system	J. J. Carty	425,863	Apr. 15	2177	579	51	440
Telephone system	A. Graham	437,986	Oct. 7	482	{ 137 138 }	53	92
Telephone system	I. Kitsée	430,960	June 24	2912	715	51	2060
Telephone systems. Means for effecting communication in	L. J. Crossley, W. Emmott, and J. F. Harrison	427,974	May 13	1443	365	51	1102
Telephone-tablet	W. S. Mendenhall	435,314	Aug. 26	2903	769	52	1344
Telephone toll-box	H. L. Cassard	425,161	Apr. 8	1125	{ 298 299 }	51	226

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Telephone toll-box and connection-register	C. E. McCluer	424,993	Apr. 8	866	230	51	176
Telephone toll-station	J. W. Vaughn	442,342	Dec. 9	1111	290	53	1444
Telephone. Train	R. S. Carr	442,799	Dec. 16	1862	481	53	1643
Telephone-transmitter	A. J. MacDonald	438,631	Oct. 21	1454	392	53	291
Telephone transmitter and receiver	H. W. Libbey	421,006	Feb. 11	877	226	50	739
Telephone transmitter. Mechanical	J. Prince	427,269	May 6	377	98	51	884
Telephones. Apparatus for speaking	T. A. Edison and E. T. Gilliland	422,577	Mar. 4	309	79	50	1195
Telephones. Coin-controlled apparatus for	W. Gray	426,266	Apr. 22	2790	733	51	569
Telephones. Ear-phonc for	J. J. Wolf	423,299	Mar. 11	1429	372	50	1414
Telephones. Individual call device for	C. H. Vincent	431,088	July 1	86	21	52	19
Telephony	T. D. Lockwood	435,438	Sept. 2	86	26	52	1392
Telephony. Multiple	J. J. Carty	425,862	Apr. 15	2174	579	51	439
Telescopic bag	C. H. G. Losere	426,829	Apr. 29	3655	952	51	747
Telescopic press. Horizontal	A. A. Diffey	424,543	Apr. 1	161	46	51	34
Telescopic sight	L. K. Scott	428,962	May 27	2931	752	51	1420
Telescoping bag	C. D. Parker	438,358	Oct. 14	1053	287	53	207
Thermometer	C. G. and R. L. Short	443,872	Dec. 30	3640	937	53	2005
Tell-tale device. Electrical	E. F. Roberts	427,014	Apr. 29	3906	1019	51	795
Tellurian	O. Dooley	423,036	Mar. 11	1031	269	50	1340
Tellurian	A. Hosking	427,868	May 13	1279	324	51	1071
Telpher system	C. J. Van Depoele	429,747	June 10	967	237	51	1669
Telpherage system	J. E. Maynadier	425,038	Apr. 8	940	251	51	190
Telpherage system	J. E. Maynadier	441,250	Nov. 25	2636	383	53	1137
Temperature. Automatic device for controlling	R. D. Kimball	422,595	Mar. 4	338	84	50	1201
Temperature-controller. Electric	E. H. Parker	425,625	Apr. 15	1822	488	51	372
Temperature-regulation. System of	R. J. Pratt	433,147	July 29	3306	854	52	668
Temperature-regulator	L. F. Easton	430,326	June 17	1720	428	51	1823
Temperature-regulator	L. F. Easton	432,666	July 22	2848	729	52	575
Temperature-regulator	J. F. McElroy	436,045	Sept. 9	1036	269	52	1581
Temperature-regulator	J. F. McElroy	442,990	Dec. 16	2188	563	53	1707
Temperature-regulator	J. F. McElroy	443,294	Dec. 23	2735	702	53	1820
Temperature-regulator. Electric	L. F. Easton	430,633	June 24	2382	581	51	1959
Temperature-regulator for liquids	F. V. Bulckens	442,011	Dec. 2	597	162	53	1380
Tempering. Process of and composition for	B. M. Pickett	437,794	Oct. 7	190	53	38	88
Tender-gate	R. J. Howard	422,527	Mar. 4	234	61	50	1180
Tennis. Parlor	E. I. Horsman, Jr	442,438	Dec. 9	1256	325	53	1514
Tenoning-machine	E. F. Barnes	439,373	Oct. 28	2657	707	53	523
Tenoning-machine	J. H. Felmlee	437,414	Sept. 30	3250	856	52	2029
Tenoning-machine	C. Seymour	430,778	June 24	2648	649	51	2011
Tension and compression rod for structure purposes	W. Lübbecke	442,488	Dec. 9	1338	345	53	1531
Tension-carriage for endless-rope transmission	T. S. Miller and J. Foster	419,208	Jan. 14	843	222	50	181
Tension device	A. E. Ellinwood	436,615	Oct. 21	1431	386	53	288
Tent	G. B. Carpenter	426,659	Apr. 29	3387	889	51	695
Tent	H. J. Kunnille	428,697	May 27	2541	645	51	1342
Tent and lawn-tennis peg	A. T. Allen	443,560	Dec. 30	3157	811	53	1911
Tent-frame. Folding	S. W. Clement	439,384	Oct. 28	2676	713	53	526
Tent. Swing	B. Forbriger	425,540	Apr. 15	1687	451	51	316
Terra-cotta construction	J. Lynch	441,013	Nov. 18	2209	571	53	1049
Terret. Harness	H. S. Cushman	420,042	Jan. 28	2096	553	50	444
Terret. Harness	A. Lobdell	439,881	Nov. 4	380	99	53	621
Test-tube	J. C. Wharton	431,132	July 1	144	38	52	31
Testing and display apparatus. Coin-controlled	J. F. Bower	438,520	Oct. 14	1277	345	53	251
Tether	C. Bailey	429,111	June 3	6	2	51	1474
Tether	B. E. Sergeant	422,642	Mar. 4	418	104	50	1216
Textile fabric	E. Andrews	433,388	July 29	3638	939	52	735
Textile machinery. Covering for rollers used in	J. Shepherd	433,493	Aug. 5	78	23	52	772
Theater-chair	H. J. Harwood	426,013	Apr. 22	2427	641	51	495
Theater-chair	H. J. Harwood	426,533	Apr. 29	3199	839	51	658
Theatrical appliance	J. Arthur	438,978	Oct. 21	2018	539	53	397
Theatrical appliance	C. Barnard	422,362	Mar. 4	2	1	50	1137
Theatrical appliance	F. M. Chapman	423,372	Mar. 11	1529	401	50	1435
Theatrical effects. Tank for producing	H. S. Taylor and C. B. Jefferson	420,126	Jan. 28	2229	590	50	472
Therapeutic galvanic apparatus	T. Schmauser	423,959	Mar. 25	2418	642	50	1618
Thermal battery	H. Mestern	434,640	Aug. 19	1847	483	52	1138
Thermal cut-out	P. Cardew	421,240	Feb. 11	1207	311	50	802
Thermal cut-out	G. Farrell	420,444	Feb. 4	25	6	50	569
Thermal cut-out	E. W. Little	421,180	Feb. 11	1122	288	50	786
Thermal protector	H. V. Hayes	441,066	Nov. 18	2299	596	53	1067
Thermic motor. Triple	W. S. Colwell	442,510	July 22	2287	592	52	465
Thermic motor. Triple	W. S. Colwell	432,511	July 22	2289	592	52	466
Thermo-cauter	W. H. Beach	420,672	Feb. 4	344	90	50	631
Thermo-dynamic motor	C. W. Weiss	419,805	Jan. 21	1721	457	50	362
Thermo-electric battery	H. B. Cox	434,427	Aug. 19	1510	394	52	1069
Thermo-electric battery	J. Edelkamp	425,568	Apr. 15	1724	462	51	353
Thermo-electric battery	T. A. Edison	434,587	Aug. 19	1748	457	52	1118
Thermo-electric element	E. N. Dickerson	433,451	Aug. 5	26	7	52	761
Thermo-electric generator	C. S. Bradley	420,764	Feb. 4	465	123	50	654
Thermo-electric generator	H. B. Cox	434,428	Aug. 19	1511	394	52	1070
Thermo-electric generator	H. B. Cox	434,429	Aug. 19	1513	395	52	1070
Thermo-electric generator	H. B. Cox	434,500	Aug. 19	1618	423	52	1092
Thermo-electric resistance-regulator	S. E. Nutting	421,053	Feb. 11	943	243	50	752
Thermo-motor. Internal combustion	J. Hargreaves	431,581	July 8	848	211	52	176
Thermo-motor. Internal combustion	J. Hargreaves	436,781	Sept. 23	2211	582	52	1818

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Thermometer	E. M. Fox	434,774	Aug. 19	2058	538	52	1178
Thermometer	M. G. Hawke	440,567	Nov. 11	1479	382	53	901
Thermometer-case	C. J. Tagliabue	426,400	Apr. 22	2993	784	51	610
Thermometer-case. Clinical	H. J. Green	432,872	July 22	2857	731	52	576
Thermometer. Clinical	J. Barry	424,165	Mar. 25	2712	722	50	1674
Thermometer. Metallic	L. Fromm	439,239	Oct. 28	2439	654	53	482
Thermometer. Metallic	H. J. Haight	442,879	Dec. 16	2000	513 514	53	1670
Thermometer. Oven	F. Allen	420,568	Feb. 4	197	51	50	603
Thermometer. Oven	M. T. Greenleaf	441,299	Nov. 25	2721	705	53	1153
Thermometric records. System for indicating	H. J. Haight	442,880	Dec. 16	2002	514 515 516 517	53	1670
Thermostat	G. F. Bulen	421,852	Feb. 18	2086	548	50	975
Thermostat	J. P. McMahon	426,304	Apr. 22	2844	749	51	580
Thermostat	W. P. Powers	424,617	Apr. 1	279	72	51	56
Thermostat	A. G. Sargent	441,855	Dec. 2	357	94	53	1334
Thermostat	A. G. Sargent	441,856	Dec. 2	359	94.95	53	1334
Thermostat	W. F. Singer	424,363	Mar. 25	3015	800	50	1732
Thermostat	W. F. Singer	425,089	Apr. 8	1007	269	51	203
Thermostat	J. Wach	423,842	Mar. 18	2221	586	50	1574
Thermostat. Electrical	C. H. Shaffer	441,622	Nov. 25	3226	832	53	1251
Thermostatic circuit-closer	W. H. Chambers	426,917	Apr. 29	3767	984	51	769
Thermostatic coil	D. W. Thompson	425,114	Apr. 8	1038	277	51	209
Thill-coupling	J. W. Alford	419,171	Jan. 14	791	209	50	171
Thill-coupling	A. Armstrong	432,174	July 15	1786	459	52	363
Thill-coupling	G. W. Atkins	435,273	Aug. 26	2833	749	52	1332
Thill-coupling	A. W. Baldwin	428,061	May 20	1572	399	51	1137
Thill-coupling	J. N. Berry	423,208	Mar. 11	1284	334	50	1389
Thill-coupling	C. Bishop and O. D. Miller	420,032	Jan. 28	2083	550	50	442
Thill-coupling	J. J. Black	437,882	Oct. 7	318	94	53	63
Thill-coupling	E. P. Burt	443,066	Dec. 16	2300	589	53	1730
Thill-coupling	F. A. Burton	437,564	Sept. 30	3510	915	52	2076
Thill-coupling	G. W. Busch and J. W. Johnston	441,131	Nov. 25	2421	627	53	1100
Thill-coupling	C. A. Carman	431,507	July 1	733	182	52	146
Thill-coupling	H. L. Cordrey	435,403	Sept. 2	42	14	52	1383
Thill-coupling	J. Cosgrove	419,319	Jan. 14	1012	267	50	214
Thill-coupling	J. Cummings	435,733	Sept. 2	546	144	52	1480
Thill-coupling	Z. B. Custer	419,421	Jan. 14	1166	310	50	246
Thill-coupling	O. A. Dahl	440,472	Nov. 11	1324	342	53	873
Thill-coupling	E. W. Doolittle and J. D. Burns	431,449	July 1	643	161	52	130
Thill-coupling	W. M. Edelin	423,675	Mar. 18	1988	524	50	1530
Thill-coupling	P. V. Egbert	423,420	Mar. 18	1601	420	50	1456
Thill-coupling	M. D. Fowler and C. H. White	420,596	Feb. 4	241	64	50	611
Thill-coupling	A. Fultz	434,081	Aug. 12	954	250	52	953
Thill-coupling	W. H. Gailor	421,565	Feb. 18	1676	434	50	897
Thill-coupling	J. Gosney and D. B. Jones	434,334	Aug. 12	1347	351	52	1030
Thill-coupling	O. L. Hall	439,505	Oct. 28	2854	759	53	561
Thill-coupling	G. E. Hamlin	420,938	Feb. 11	772	200	50	719
Thill-coupling	L. D. Haskell, Jr.	441,412	Nov. 25	2897	747	53	1187
Thill-coupling	M. G. Hawke	419,016	Jan. 7	560	140	50	118
Thill-coupling	M. G. Hawke	423,763	Mar. 18	2108	556	50	1551
Thill-coupling	A. A. Hazard	438,106	Oct. 7	672	182	53	130
Thill-coupling	J. A. Hinson	439,778	Nov. 4	220	58	53	651
Thill-coupling	J. Hoff	439,245	Oct. 28	2445	656	53	484
Thill-coupling	A. W. Hollingsworth	423,765	Mar. 18	2110	557	50	1552
Thill-coupling	E. M. Howenstein	423,592	Mar. 18	2301	607	50	1589
Thill-coupling	C. D. Huff	433,347	July 29	3586	925	52	725
Thill-coupling	A. M. Hunt and C. A. Fowler	419,773	Jan. 21	1674	444	50	352
Thill-coupling	F. Hurst	433,290	July 29	3511	906	52	710
Thill-coupling	A. Jaenicke	430,129	June 17	1573	391	51	1795
Thill-coupling	J. O. Kinsey	423,383	Mar. 11	1541	405	50	1437
Thill-coupling	J. C. Kurtz	433,351	July 29	3591	726	52	726
Thill-coupling	G. C. Lumley	420,514	Feb. 4	123	31	50	587
Thill-coupling	T. G. Mandt	429,462	June 3	541	130	51	1577
Thill-coupling	W. Mason	433,298	July 29	3521	909	52	712
Thill-coupling	J. W. McDermot	433,417	July 29	3679	950	52	745
Thill-coupling	H. F. McKnight	432,064	July 15	1611	412	52	329
Thill-coupling	G. A. McNutt	443,715	Dec. 30	3405	875	53	1957
Thill-coupling	D. B. Merrell and J. G. Rippey	430,782	June 24	2641	648	51	2010
Thill-coupling	C. R. Moore	420,015	Jan. 21	2052	541	50	427
Thill-coupling	A. Neer	443,649	Dec. 30	3302	851	53	1939
Thill-coupling	J. Pastorfield	438,559	Oct. 14	1339	363	53	264
Thill-coupling	H. M. Powers	438,018	Oct. 7	530	149	53	101
Thill-coupling	F. M. and J. H. Richardson	419,886	Jan. 21	1862	490	50	391
Thill-coupling	M. L. Schoch	423,634	Mar. 18	1924	507	50	1517
Thill-coupling	J. H. Schriver	429,485	June 3	584	142	51	1584
Thill-coupling	J. H. Senden	439,979	Nov. 4	544	143	53	713
Thill-coupling	C. Sharp and G. Consene	429,871	June 10	1156	285	51	1704
Thill-coupling	W. C. Shipherd	433,048	July 29	3153	810	52	638
Thill-coupling	B. F. Stetler	428,024	May 13	1516	384	51	1117
Thill-coupling	A. L. Stevens	429,971	June 10	1314	325	51	1735
Thill-coupling	M. D. Stocking	426,149	Apr. 22	2628	690	51	535
Thill-coupling	A. A. Story	439,609	Oct. 28	3014	799	53	593
Thill-coupling	W. B. Walker	428,734	May 27	2601	659	51	1353
Thill-coupling	T. A. Watrons	434,966	Aug. 26	2381	631	52	1247
Thill-coupling	T. A. Watrons	443,021	Dec. 16	2227	574	53	1716
Thill-coupling	S. D. Webb	434,308	Aug. 12	1308	341	52	1022
Thill-coupling	F. A. Wegner	433,502	Aug. 5	90	25	52	774
Thill-coupling	E. Westenhaber	420,846	Feb. 4	613	158	50	679
Thill-coupling	W. Wheeler	442,930	Dec. 16	2104	541	53	1689
Thill-coupling	W. Williams	437,544	Sept. 30	3484	909	52	2071
Thill-coupling	I. N. Woodle	419,579	Jan. 14	1377	369	50	289

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Thill-couplings. Anti-rattler for	C. A. Carman	443,251	Dec. 23	2660	682	53	1866
Thill-couplings. Anti-rattler for	J. A. Chapman	437,677	Oct. 7	6	2	53	4
Thill-couplings. Anti-rattler for	A. Currier	433,397	July 29	3651	942	52	738
Thill-couplings. Anti-rattler for	J. Doty	425,867	Apr. 15	2183	580	51	441
Thill-couplings. Anti-rattler for	D. Holden	421,713	Feb. 18	1889	496	50	940
Thill-couplings. Anti-rattler for	I. S. Krick	425,888	Apr. 15	2207	586	51	446
Thill-couplings. Anti-rattler for	R. J. Mitchell	431,277	July 1	373	93	52	76
Thill holder or tug	J. W. Spangler	430,093	June 10	1516	376	51	1774
Thill-jack	D. McCausland	442,040	Dec. 2	649	174	53	1389
Thill-lug	J. S. Harley and E. H. Taylor	431,467	July 1	667	167	52	134
Thill or pole for vehicles. Folding	J. D. Raffensberger	438,946	Oct. 21	1969	525	53	387
Thill-support	G. A. Billings	432,689	July 22	2578	660	52	521
Thill-support	A. Dillenback	442,866	Dec. 16	1984	509	53	1667
Thill-support	J. R. Flaunt	434,260	Aug. 12	1241	321	52	1008
Thill-support	J. A. Lemonon	435,431	Sept. 2	77	24	52	1390
Thill-support	W. Y. Watt	436,510	Sept. 16	1759	464	52	1726
Thill-supporter	L. T. Bow	441,350	Nov. 25	2792	722	53	1166
Thill-tightener	A. H. Day	442,108	Dec. 9	759	204	53	1419
Thimble	W. W. McIntosh	421,301	Feb. 11	1287	332	50	816
Thimble and rope clamp. Combined	J. J. Young	421,130	Feb. 11	1034	265	50	769
Thimble-die	J. Browning	441,822	Dec. 2	307	83	53	1324
Thio-oxydiphenylamine. Making	M. Lange	431,472	July 1	675	.....	52	136
Thistle-puller	M. Drexler	418,913	Jan. 7	419	103	50	87
Thrasher and cleaner. Traveling	G. W. Haines	440,843	Nov. 18	1946	{ 499 500 }	53	998
Thrashing and separating machine	A. Kleinstiver	429,135	June 3	42	10, 11	51	1480
Thrashing-machine	J. E. Beach	427,660	May 13	947	238	51	1008
Thrashing-machine	W. Butler	429,418	June 3	479	{ 113 114 }	51	1562
Thrashing-machine	R. L. Colby	433,764	Aug. 5	484	126	52	850
Thrashing-machine	E. W. Flagg	427,471	May 6	672	168	51	945
Thrashing-machine	B. Holt	420,512	Feb. 4	121	30	50	587
Thrashing-machine	S. King	419,959	Jan. 21	1967	517	50	412
Thrashing-machine	W. M. Koppes	419,683	Jan. 21	1550	{ 413 414 }	50	328
Thrashing-machine	B. McKillen	431,612	July 8	889	221	52	185
Thrashing-machine	J. H. Melick	425,444	Apr. 15	1545	{ 414 415 }	51	318
Thrashing-machine	T. H. Russell	421,975	Feb. 25	2253	593	50	1017
Thrashing-machine	F. G. Shepard	427,372	May 6	515	131	51	913
Thrashing-machine	J. Starkey and S. W. Vernier	418,768	Jan. 7	168	41	50	37
Thrashing-machine	A. Wemple and G. W. Smith	423,581	Mar. 18	1830	483	50	1499
Thrashing-machine and separator	J. P. Monnett	436,182	Sept. 9	1248	326	52	1618
Thrashing-machine attachment	D. Wilde	440,751	Nov. 18	1785	461	53	969
Thrashing-machine band-cutter and feeder	J. McHenry and J. O'Donnell	429,472	June 3	564	138	51	1581
Thrashing-machine band-cutter and feeder	C. Paridy and L. A. Brown	422,353	Feb. 25	2839	{ 748 749 }	50	1125
Thrashing-machine band-cutter and feeder	A. J. Scofield, C. W. Seville, G. E. Wilson, and R. H. Dixon.	427,016	Apr. 29	3908	{ 1019 1020 }	51	796
Thrashing-machine conveyer	W. Butler	424,175	Mar. 25	2724	726	50	1676
Thrashing-machine dust-collector	W. H. Davis	429,018	May 27	3017	774	51	1436
Thrashing-machine feeder	C. J. Gonlette	435,824	Sept. 2	687	183	52	1507
Thrashing-machinescreening and loading attachment	W. P. Rose	420,966	Feb. 11	814	211	50	727
Thrashing-machine set and leveller	N. Shaffer	422,992	Mar. 11	952	250	50	1325
Thrashing-machine shoe	H. Bryan	418,862	Jan. 7	318	77	50	67
Thrashing-machines. Adjustable screen for	C. M. Johnson and E. Bailey	426,589	Apr. 29	3285	862	51	676
Thrashing machines and separators. Dust-collector for	G. E. and S. T. Sterling	428,424	May 20	2127	535	51	1246
Thrashing-machines. Band-cutter and feeder for	A. A. Naylor	423,624	Mar. 18	1900	501	50	1512
Thrashing-machines. Concave for	C. Schmalz and R. N. Watts	433,044	July 29	3148	809	52	637
Thrashing-machines. Conveyer attachment for	C. J. Hartley	434,338	Aug. 12	1351	{ 352 353 }	52	1031
Thrashing-machines. Elevator for	J. Walrath	420,131	Jan. 28	2239	593	50	474
Thrashing-machines. Fan and canopy attachment for	J. W. Parker and D. R. McCay	419,129	Jan. 7	714	188	50	150
Thrashing-machines. Strip or ledge for beaters of	J. C. F. Richter	426,856	Apr. 29	3690	962	51	753
Thread	L. Briggs	421,158	Feb. 11	1096	251	50	782
Thread cabinet. Spool	C. Cobb and M. Solomon	424,272	Mar. 25	2847	762	50	1701
Thread cabinet. Spool	J. W. Hayden	427,509	May 6	726	182	51	935
Thread-case	C. Cobb	424,180	Mar. 25	2731	{ 728 729 }	50	1678
Thread-cutter	J. N. Dodge	439,458	Oct. 28	2828	753	53	536
Thread-cutting and drilling machine	E. N. Andrews	427,948	May 13	1408	356	51	1095
Thread-holder	J. Keats	440,812	Nov. 18	1892	487	53	988
Three-way switch	J. A. Johnson	431,520	July 1	750	187	52	150
Threshold-gage	A. Watson	441,522	Nov. 25	3061	767	53	1218
Throat and chest protector	O. G. Alderman	443,842	Dec. 30	3606	927	53	1958
Thumb-tack	F. G. Caldwell	440,006	Nov. 4	581	153	53	732
Ticket-case	J. K. Deming	436,052	Sept. 9	1044	271	52	1582
Ticket-case	W. H. Pilcher	422,037	Feb. 25	2334	617	50	1632
Ticket-clasp	P. McMenamin	429,148	June 3	62	16	51	1484
Ticket-holder	F. F. Chase	424,642	Apr. 1	318	82	51	62
Ticket-holder	H. G. Lathrop	423,934	Mar. 25	2376	632	50	1610
Ticket-holder for car-seats	A. E. McDonald	424,429	Mar. 25	3137	832	50	1758
Ticket-holder for marking goods	S. Bauman	423,981	Mar. 25	2451	651	50	1624
Ticket-machine	J. D. Gibbs	443,960	Dec. 30	3779	{ 965 966 }	53	2030
Ticket. Railway	W. H. O'Beirne and C. B. Fitch	426,849	Apr. 29	3681	959	51	752
Ticket. Railway	W. J. Scott and W. B. Wheeler	421,979	Feb. 25	2258	594	50	1017
Ticket. Railway	J. Wilson	439,226	Oct. 28	2413	648	53	478
Ticket. Railway	J. Wilson	439,227	Oct. 28	2416	{ 648 649 }	53	479
Ticket. Railway passenger	R. R. Methcany	436,229	Sept. 9	1403	365	52	1650
Ticket. Theater	J. Keller	426,503	Apr. 29	3155	829	51	651

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Tickets, cards, &c. Holder for	A. A. Low	439,786	Nov. 4	234	60	53	654
Tickets, &c. Device for holding and manipulating	A. A. Low	439,784	Nov. 4	230	53	53	653
Tickets, &c. Device for holding and manipulating	A. A. Low	439,785	Nov. 4	231	60	53	654
Tickets from their stubs. Device for separating railway-	W. A. Thrall	433,253	July 29	3464	894	52	700
Tidal motor	J. H. B. Rankin	421,761	Feb. 18	1946	512	50	950
Tide-power	E. S. Early	418,705	Jan. 7	81	18	50	18
Tide-power. Mechanism for utilizing	A. Mills	424,566	Apr. 1	201	55	51	42
Tide-signal	M. R. Fletcher	422,928	Mar. 11	863	225	50	1309
Tidy-holder	J. B. Sweetland	419,481	Jan. 14	1251	332	50	263
Tie:							
See Bale-tie.	Metallic cross-tie.						
Band-tie.	Package-tie.						
Bundle-tie.	Rail-tie.						
Halter-tie.	Railway-tie.						
Horse-tail tie.	Railway cross-tie.						
Tie-plate	R. Reach	437,821	Oct. 7	231	71	53	46
Tile	E. W. Ball	427,657	May 13	944	237	51	1007
Tile	E. C. Lindemann	421,734	Feb. 18	1913	503	50	944
Tile	E. C. Lindemann	426,289	Apr. 22	2821	741	51	576
Tile	J. Pajean	420,731	Feb. 4	424	112	50	647
Tile. Building	W. H. Pridge	430,810	June 24	2695	660	51	2019
Tile. Concrete illuminating	T. Sharts	432,249	July 15	1889	486	52	362
Tile-cutting table	F. E. Frey	421,692	Feb. 18	1858	487	50	933
Tile for pavements and vault-lights	J. S. Peirce	437,347	Sept. 30	3154	826	52	2005
Tile-holder	R. Marsh	421,742	Feb. 18	1921	505	50	946
Tile. Illuminating	J. Jacobs	422,218	Feb. 25	2615	692	50	1084
Tile. Illuminating	J. Jacobs	424,302	Mar. 25	2903	776	50	1712
Tile. Illuminating	J. Jacobs	428,493	May 20	2219	561	51	1262
Tile. Illuminating	J. Jacobs	431,468	July 1	668	168	52	134
Tile. Illuminating	J. Jacobs	436,083	Sept. 9	1093	282	52	1591
Tile. Illuminating	J. W. Mark	436,085	Sept. 9	1096	284	52	1591
Tile-kilo	H. Moehle	426,732	Apr. 29	3506	917	51	718
Tile laying machines. Flexible carrier for	H. M. Fisk	421,488	Feb. 18	1560	402	50	876
Tile-machines. Cut-off table for	A. Mark	419,782	Jan. 21	1690	449	50	355
Tile or brick kiln	R. W. Stewart	427,201	May 6	270	70	51	865
Tile-post	J. F. Marshall	435,443	Sept. 2	98	28	52	1394
Tile. Roofing	J. E. Donaldson	426,584	Apr. 29	3275	859	51	674
Tiles. Die for forming roofing	J. E. Donaldson	432,192	July 15	1704	437	52	347
Tiling	O. P. Elterich	438,229	Oct. 14	852	231	53	169
Tiling. Metallic crest	C. E. Gaylord	440,104	Nov. 4	713	189	53	748
Till-lock	G. J. Keller	421,286	Feb. 11	1269	323	50	813
Till-lock	G. J. Keller	421,287	Feb. 11	1271	328	50	814
Till-lock	G. J. Keller	430,525	June 17	2204	542	51	1917
Till-lock	J. Outhet	439,548	Oct. 23	2915	775	53	573
Till. Registering	J. N. Maskelyne	436,500	Sept. 16	1747	461	52	1723
Tilting-chair	T. J. Collins	418,687	Jan. 7	28	8	50	8
Tilting gate	R. Y. Kessler	437,861	Oct. 7	286	86	53	56
Tilting gate	M. S. Piper	438,560	Oct. 14	1340	363	53	265
Timbered structures. Preserving	O. Chanute	430,068	June 10	1473	366	51	1765
Time-alarm	G. H. Straight	421,539	Feb. 18	1637	420	50	888
Time-alarm and annunciator. Electric	N. H. Suren	422,654	Mar. 4	435	109	50	1219
Time-alarm and indicator. Electric	C. A. Randall	420,890	Feb. 4	694	178	50	694
Time-detector. Automatic	W. Liddell and C. J. Dillon	435,435	Sept. 2	82	25	52	1391
Time-detectors. Station-box for watchmen's electric	J. E. Richards	432,645	July 22	2492	641	52	505
Time-indicator	G. L. Barrett	422,563	Mar. 4	286	73	50	1191
Time-indicator. Geographical	E. Plechawski	434,137	Aug. 12	1048	271	52	970
Time-lock	J. W. Hard	428,393	May 20	2089	525	51	1239
Time-lock	C. F. Myers	428,852	May 27	2769	704	51	1388
Time-measuring device	W. D. Hawley	441,661	Dec. 2	48	13	53	1271
Time-piece key	M. Bock	437,965	Oct. 7	446	126	53	85
Time-piece. Self-setting	E. Müller	439,419	Oct. 23	2721	726	53	536
Time-pieces. Balance-escapement for	W. P. Hansen	443,363	Dec. 23	2846	732	53	1842
Time-recorder	H. R. Adams	438,831	Oct. 21	1794	479	53	354
Time-recorder	A. L. Jaynes	428,103	May 20	1637	415	51	1151
Time-recorder. Watchman's	C. E. Egan and H. F. Gray	426,438	Apr. 29	3061	802	51	632
Time-recorder. Watchman's	C. E. Egan and H. F. Gray	428,583	May 20	2351	597	51	1289
Time-recorder. Watchman's	I. D. Fuller	443,435	Dec. 23	2949	759	53	1862
Time-recorder. Watchman's	J. W. Lattig	427,581	May 13	844	211	51	988
Time-recorder. Watchman's	J. F. McLaughlin	429,360	June 3	392	93, 94	51	1546
Time-recorder. Watchman's	A. de Meurisse	431,723	July 8	1094	272	52	223
Time-recorder. Watchman's electric	C. E. Ongley	443,787	Dec. 30	3514	901	53	1979
Time-recorder. Watchman's electric	C. E. Ongley	443,788	Dec. 30	3518	902	53	1980
Time-recorder. Workman's	R. Bürk	433,512	Aug. 5	105	29	52	777
Time-recorder. Workman's	F. L. Fuller	435,582	Sept. 2	310	86, 87	52	1435
Time-records or pay-rolls for employés. Making	F. L. Fuller	431,344	July 1	469	116	52	96
Time-register	L. W. Tiffany	425,193	Apr. 8	1177	311	51	238
Time-register. Workman's	J. B. Rhodes	432,562	July 22	2369	611	52	482
Time-report sheet	J. M. McNamar	436,147	Sept. 9	1195	312	52	1608
Time-table. Railway or steamship	W. D. Sutherland	435,868	Sept. 2	749	201	52	1520
Time-table. Route	S. W. Ralph	425,084	Apr. 8	1002	268	51	202

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Tin and terne plates. Machinery or apparatus for cleaning	J. Abbott	428,994	May 27	2974	763 764	51	1428
Tin. Apparatus for coating metal sheets with	J. G. Thomas and G. H. White	443,879	Dec. 30	3648	940 941	53	2006
Tin. Apparatus for coating plates with	D. Edwards, R. Lewis, and P. Jones.	432,520	July 22	2304	596	52	469
Tinned articles in grease. Apparatus for immersing	J. Monto	433,300	July 29	3524	909 910	52	713
Tinners' articles in the grease-pot. Machine for immersing	J. Monto	421,599	Feb. 18	1730	451 452	50	908
Tinners' articles in the grease-pot. Machine for immersing	J. Monto	421,600	Feb. 18	1734	453	50	909
Tinners' articles in the grease-pot. Machine for immersing	J. Monto	421,601	Feb. 18	1735	453 454	50	909
Tinner's mandrel	H. E. Plaine	439,183	Oct. 28	2332	627	53	463
Tinner's shears	G. J. Learzaf and F. E. Smith	426,391	Apr. 22	2982	781	51	608
Tinning or retinning pans. Machinery for	J. Monto. (Reissue)	11,111	Sept. 23	2885	751 752	52	1947
Tinning plates. Apparatus for	D. Edwards, R. Lewis, and P. Jones.	428,080	May 20	1598	406	51	1142
Tinsmith's machine	E. E. Stow	431,960	Aug. 26	2375	629	52	1246
Tinware. Handle for	C. D. Cutts and E. E. Scates	443,039	Dec. 16	2264	581	53	1732
Tire-adjuster	G. Surratt	424,692	Apr. 1	392	103	51	77
Tire and rim. Wheel	S. Elliott	440,701	Nov. 18	1706	438	53	954
Tire and rim. Wheel	S. Elliott	440,702	Nov. 18	1707	438	53	954
Tire. Elastic wheel	G. T. Warwick	441,521	Nov. 25	3060	787	53	1218
Tire for cycle-wheels	A. H. Overman	437,447	Sept. 30	3334	870	52	2041
Tire for cycles. Wheel	J. B. Dunlop	435,995	Sept. 9	954	250	52	1565
Tire for vehicle-wheels	H. M. Du Bois	419,005	Jan. 7	539	135	50	114
Tire for vehicles. Rubber	F. E. Lyon	418,982	Jan. 7	511	127	50	108
Tire for velocipedes	W. Richwine	442,393	Dec. 9	1184	308	53	1499
Tire for wheels. Elastic	G. Singer	429,818	June 10	1075	264	51	1688
Tire for wheels. Rubber	A. Claypool	431,223	July 1	293	72	52	60
Tire-heater	S. Mansfield	441,431	Nov. 25	2927	754	53	1193
Tire-beater	W. B. Nevill	433,021	July 29	3111	797	52	629
Tire-heating apparatus	L. Simmons	426,741	Apr. 29	3522	920	51	721
Tire-setter	T. J. Baker	422,280	Feb. 25	2720	716	50	1102
Tire-setter. Hydrostatic	C. L. Grimes	442,579	Dec. 9	1485	382	53	1560
Tire-shrinker	C. M. Moss	430,872	June 24	2784	682	51	2036
Tire-sizer	W. W. Deboth	426,492	Apr. 29	3142	825	51	648
Tire sizing and upsetting machine	R. W. Taylor	422,658	Mar. 4	443	111	50	1921
Tire-tightener	C. L. Barrett	427,455	May 6	650	163	51	940
Tire-tightener	W. A. Mayo	426,730	Apr. 29	3504	916	51	717
Tire-tightener	H. T. Murtha	442,272	Dec. 9	1000	264	53	1465
Tire-tightener	J. N. Parker	434,947	Aug. 26	2357	624	52	1242
Tire-tightener	G. C. Richards	438,362	Oct. 14	1058	288	53	208
Tire-truing machine	P. Gendron	430,844	June 24	2737	671 672	51	2027
Tire. Vehicle-wheel	J. E. Bromley and A. Straus	441,820	Dec. 2	305	82	53	1323
Tire. Vehicle-wheel	H. M. Du Bois	431,512	July 1	738	184	52	147
Tire. Velocipede	A. S. Bowley	442,948	Dec. 16	2125	547	53	1694
Tire. Wagon	C. F. Skellenger	433,494	Aug. 5	78	23	52	772
Tire. Wheel	S. Elliott and H. P. Richards	442,730	Dec. 16	1758	455	53	1621
Tire. Wheel	W. Leggett	422,349	Feb. 25	2833	746	50	1123
Tires. Apparatus for inserting rubber, &c., into grooved	H. Unwin	424,084	Mar. 25	2600	692	50	1653
Tires. Making	P. Gendron	430,845	June 24	2742	672	51	2028
Tires to the rims of wheels. Securing	D. M. and T. H. Parry	429,221	June 3	174	42	51	1504
Tobacco and preparing the same. Filler	D. J. Boehm	437,328	Sept. 30	3124	817	52	1999
Tobacco-conveyer	L. J. Wright	423,505	Mar. 18	1725	454	50	1481
Tobacco-curing house	W. H. and H. A. Power	425,696	Apr. 15	1935	514	51	394
Tobacco-cutter	T. Côté	433,768	Aug. 5	488	127	52	851
Tobacco-cutter	G. H. Earnest	436,096	Sept. 9	1109	287	52	1594
Tobacco-cutter	J. B. Mitchell	434,194	Aug. 12	1128	293	52	987
Tobacco extract	H. Endemann	438,993	Oct. 21	2043	546	53	402
Tobacco-hanger	J. G. Anderson	425,284	Apr. 8	1312	351	51	264
Tobacco-hanger	A. L. Ellisou	423,315	Mar. 11	1451	379	50	1419
Tobacco-hanger	B. W. Morris	428,512	May 20	2243	567	51	1268
Tobacco-hanger	W. A. Petree	425,548	Apr. 15	1698	453	51	348
Tobacco-hanger	J. Sayers	429,965	June 10	1305	323	51	1733
Tobacco-hanger	W. G. Vernon	442,082	Dec. 2	714	192	53	1402
Tobacco-hanger	J. A. Whiteman	429,077	May 27	3117	803	51	1455
Tobacco-hanger	W. S. Wootton	422,679	Mar. 4	469	120	50	1226
Tobacco hanger or stick	B. B. Edwards	421,127	Feb. 11	1046	268	50	772
Tobacco hanger or stick	W. H. Petree	428,522	May 20	2258	573	51	1271
Tobacco-leaves. Machine for stripping and booking	J. Delamar	435,135	Aug. 26	2628	695 696	52	1294
Tobacco-leaves. Treating	C. J. Syme	435,952	Sept. 9	891	8	52	1552
Tobacco. Machine for dressing and sweetening	W. H. Dunn	433,456	Aug. 5	29	8	52	762
Tobacco. Machine for manipulating fine-cut	R. W. Coffee	436,032	Sept. 9	1004	262 263	52	1575
Tobacco. Manufacturing	P. M. Wilson	421,373	Feb. 11	1395	50	836	
Tobacco. Metallic fastener for	S. W. Reynolds	431,757	July 8	1143	255	52	232
Tobacco-moistener	P. Hamm	430,643	June 24	2403	585	51	1062
Tobacco-moistener	F. X. Strauss	435,255	Aug. 26	2798	742	52	1326
Tobacco-moistening device	A. A. Boutell	428,055	May 20	1577	400	51	1138
Tobacco-pail cover	C. S. Young and F. Lewis	437,321	Sept. 30	3114	815	52	1997
Tobacco-pipe	C. Angus	437,765	Oct. 7	145	45	53	30
Tobacco-pipe, &c	S. Backus	429,712	June 10	923	226	51	1660
Tobacco-pipe	F. W. Bender and F. L. Scheide-mann.	443,813	Dec. 30	3565	913	53	1989
Tobacco-pipe	G. C. Eastman	418,974	Jan. 7	497	124	50	105
Tobacco-pipe	C. D. Weldon	423,197	Mar. 11	1269	330	50	1385
Tobacco-pipe top and stuffer	M. L. Schoch	427,915	May 13	1358	342	51	1086
Tobacco-pouch	J. Burbridge	438,798	Oct. 21	1727	463	53	841
Tobacco product	P. M. Wilson	421,372	Feb. 11	1394	50	836	

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Tobacco-scraper-cutting machine	H. D. Spangler	438,198	Oct. 14	801	218	53	161
Tobacco-stick	R. T. Fitzgerald	439,498	Oct. 28	2843	747	53	558
Tobacco-stick	R. L. Paylor	426,467	Apr. 29	3101	813	51	640
Tobacco-stick	J. O. Renner and N. Bowers	438,445	Oct. 14	1174	317	53	231
Tobacco substitute	W. P. Rose	440,506	Nov. 11	1386		53	84
Toboggan. Coasting.	J. S. W. Mackintosh	425,138	Apr. 8	1083	247	51	218
Toboggan-slide and toboggan-car. Roller	E. F. Merrill	430,587	June 17	2295	564	51	1944
Toboggan-slide. Artificial.	A. Guerra	438,414	Oct. 14	1137	306 307	53	223
Toboggan. Trolley.	D. M. Harman	432,271	July 15	1929	493 494	52	389
Toboggan. Wheeled	O. A. Wheeler	430,098	June 10	1524	378	51	1775
Toe-nail protector. Ingrowing.	W. H. McCarty	440,434	Nov. 11	1270	328	53	861
Toe-weight	G. T. Chapman	428,243	May 20	1840	462	51	1191
Toe-weight	E. L. Gregg	418,945	Jan. 7	464	115	50	97
Toe-weight	J. V. Mitchell	443,723	Dec. 30	3417	878	53	1959
Toe-weight	N. E. Porter	427,905	May 13	1344	339	51	1084
Toe-weight	H. H. Turner	435,671	Sept. 2	458	121	52	1463
Toe-weight	C. W. Van Etten	425,474	Apr. 15	1594	426	51	327
Toe-weight for horses	J. Clark	431,802	July 8	1218	305	52	246
Toe-weight for horses	H. H. Turner	442,154	Dec. 9	832	223	53	1433
Toilet-cabinet for infants	C. Kurz	439,666	Nov. 4	64	17	53	619
Toilet-case and bath. Infant's.	R. S. Stratton	424,512	Apr. 1	111	32	51	25
Tongs	W. R. Welke	443,689	Dec. 30	3367	805	53	1950
Tongs and dray. Combined skidding	H. and J. K. Pangborn	420,733	Feb. 4	426	113	50	648
Tongs. Crane	D. O. Paige	425,452	Apr. 15	1559	417 418	51	321
Tongs or pliers	A. F. Fletcher	432,933	July 22	2945	754	52	593
Tongs or seamer. Roofing.	E. S. Meals	428,686	May 27	2527	642	51	1340
Tongs. Pipe	P. J. Bode	443,312	Dec. 23	2770	710	53	1826
Tongs. Pipe	G. W. Bufford	432,195	July 15	1816	467	52	368
Tongs. Pipe	G. W. Bufford	442,306	Dec. 9	1054	276	53	1474
Tongs. Pipe	M. Cooper	430,768	June 24	2618	641	51	2005
Tongs. Pipe	W. O. Nightengale	441,017	Nov. 18	2216	572	53	1050
Tongs. Pipe	J. M. Pray	438,177	Oct. 14	776	211	53	156
Tongs. Pipe-welding	R. Neilson	432,211	July 15	1842	473	52	373
Tongs. Rod and pipe	D. B. Whitcomb	440,214	Nov. 11	892	230	53	793
Tongs. Roofing	P. Listeman	438,012	Oct. 7	521 147	146	53	99
Tongs. Vise pipe	J. Ellis	441,145	Nov. 25	2445	634	53	1105
Tongue-depressor	C. H. Truax	438,330	Oct. 14	1010	274	53	199
Tongue-support	W. B. Davis	419,837	Jan. 21	1782	472	50	372
Tongue-support	C. D. Harrah	441,363	Nov. 25	2809	726	53	1169
Tongue-support	J. J. Hayes	430,579	June 17	2281	560	51	1930
Tongue-support	T. Herbig	442,226	Dec. 9	936	247	53	1453
Tongue-support	J. Lanth.	420,204	Jan. 28	2363	628	50	495
Tongue-support	J. A. Lemmon	421,502	Feb. 18	1524	408	50	880
Tongue-support	J. E. Smith	439,202	Oct. 28	2365	636	53	469
Tongue-support	W. S. Speer	425,708	Apr. 15	1951	519	51	397
Tongue-support	J. G. Unsold	426,480	Apr. 29	3124	821	51	644
Tongue support. Wagon	W. D. Napier	429,050	May 27	3075	794	51	1447
Tongue support. Wagon	M. Powell	434,566	Aug. 19	1716	449	52	1112
Tongue. Vehicle	D. W. Raidt	439,557	Oct. 28	2927	778	53	575
Tongue. Vehicle	C. M. Carnahan	427,499	May 6	711	178	51	953
Tonic beverage	R. Rambonsek	438,020	Oct. 7	532		53	101
Tonic beverage	W. S. Hicks	436,477	Sept. 16	1732		52	1719
Tool	H. Barnett	420,671	Feb. 4	343	90	50	631
Tool	G. B. Durell	429,118	June 3	21	5	51	1476
Tool attachment	J. H. Dixon	421,391	Feb. 18	1425	369	50	850
Tool-box	C. O. Hescox	434,780	Aug. 19	2064	539	52	1179
Tool-box	S. H. Jennings	428,396	May 20	2094	526	51	1240
Tool-chest	J. A. Franklin	425,215	Apr. 8	1206	320	51	244
Tool. Combination	A. and J. F. Clarke	423,513	Mar. 18	1738	458	50	1483
Tool. Combination	F. L. Downend	426,409	Apr. 22	3022	791	51	615
Tool. Combination	M. M. Green	427,309	May 6	430	111	51	892
Tool. Combination	F. Kortick	431,662	July 8	989	246	52	204
Tool. Combination	W. J. McFeely	418,742	Jan. 7	123	30	50	27
Tool. Combination	W. H. Musham	432,323	July 15	2014	518	52	403
Tool. Combination	T. P. Schwartz	433,098	July 29	3235	833	52	653
Tool. Combination	J. M. Wickham and J. H. Stevens	439,711	Nov. 4	126	34	53	632
Tool. Combination	G. Zitlow	439,336	Oct. 28	2603	694	53	513
Tool. Combined	C. Bramble	433,319	July 29	3553	917	52	718
Tool-fastening device	E. Shaw	428,421	May 20	2124	534	51	1245
Tool-handle	F. Chantrell	427,460	May 6	659	165	51	942
Tool-handle	E. B. Cook	428,893	May 27	2833	720	51	1401
Tool-handle	E. Hiller	419,953	Jan. 21	1959	515	50	410
Tool-handle	E. S. Robinson	420,699	Feb. 4	879	101	50	639
Tool-handle	J. F. Sullivan	432,338	July 15	2029	522	52	406
Tool-handle	J. Swan	440,795	Nov. 18	1865	480	53	983
Tool-handle	J. Swan	442,670	Dec. 16	1621	418	53	1587
Tool-handle	J. H. Wundes	429,223	June 3	176	42	51	1505
Tool-handle	A. H. Young	431,959	July 8	1445	366	52	291
Tool-handle fastening	E. L. Sill	443,011	Dec. 16	2214	570	53	1713
Tool-handles. Adjustable fastening for	J. G. Hohenstein	435,647	Sept. 2	422	112	52	1454
Tool-handles. Making	E. B. Cook	428,894	May 27	2834	720	51	1401
Tool-holder	E. F. Bengler	439,096	Oct. 28	2203	591	53	440
Tool-holder	J. F. Freeman	441,834	Dec. 2	324	86	53	1327
Tool-holder	E. S. Glover	438,150	Oct. 14	738	202 203	53	149
Tool-holder	S. G. Law	436,362	Sept. 16	1533	402	52	1683
Tool-holder	W. MacMurtrie and E. H. Homsher	427,335	May 6	469	120	51	904
Tool holder. Edge	A. W. Newcomb	441,325	Nov. 25	2760	713	53	1160
Tool. Multiple	R. H. Franklin	435,890	Sept. 2	794	212	52	1528
Tool. Pneumatic	W. M. Wood	443,029	Dec. 16	2244	578	53	1719

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Tool. Pneumatic	W. M. Wood	443,030	Dec. 16	2248	578	53	1720
Tool-rest	E. S. M. Fernald	440,146	Nov. 11	783	205	53	771
Tool-shank	M. J. Poindexter	423,951	Mar. 25	2404	638	50	1616
Tool-sharpening. Coin-and-slot-machine for	E. C. Phillips	443,001	Dec. 16	2204	567	53	1711
Tooth. Artificial	R. Brewster	440,131	Nov. 11	762	200	53	767
Tooth. Artificial	E. A. Bryant	434,317	Aug. 12	1324	345	52	1025
Tooth. Artificial	G. L. Curtis	424,050	Mar. 25	2554	681	50	1644
Tooth. Artificial	C. H. Land	432,737	July 22	2648	676	52	535
Tooth. Artificial	O. Lund	422,350	Feb. 25	2834	747	50	1124
Tooth. Artificial	A. Page and S. S. Bloom	429,225	June 3	264	64	51	1522
Tooth. Artificial	F. T. Van Woert	441,265	Nov. 25	2670	693	53	1141
Tooth-crown and mounting the same. Artificial	W. H. Gates	423,239	Mar. 11	1328	345	50	1397
Tooth-crown. Artificial	E. P. Brown	423,467	Mar. 18	1669	441	50	1470
Tooth-crown. Artificial	D. Genese	430,522	June 17	2198	540	51	1916
Tooth-pick	H. C. F. Ochlecker	435,350	Aug. 26	2967	786	52	1356
Tooth-pick machine	W. F. Hutchinson	433,788	Aug. 5	522	136	52	858
Tooth-separating mechanism	J. N. Farrar	425,067	Apr. 8	978	263	51	197
Tooth-separator	W. S. Elliott	426,253	Apr. 22	2775	728	51	565
Toothed wheel	R. Neilson	426,394	Apr. 22	2985	782	51	609
Toothpick	A. O. Corry	420,531	Feb. 4	148	36	50	593
Top-lift holder	C. W. Glidden	427,308	May 6	429	111	51	896
Top. Musical	G. Cole	425,368	Apr. 8	1426	381	51	286
Top. Musical	W. Gee	430,521	June 17	2197	540	51	1916
Top or toy. Spinning	J. J. Carr	432,476	July 15	2230	577	52	448
Top-prop.	L. Anderson	428,060	May 20	1571	399	51	1137
Top-prop.	W. E. Dillard	427,559	May 13	808	203	51	982
Top. Spinning	A. Alexandre	438,460	Oct. 14	1201	325 326	53	236
Tops, &c. Appliance for spinning	F. E. Williams	420,755	Feb. 4	451	120	50	653
Torch and hand-warming cane. Combined	J. A. Nesmith	440,849	Nov. 18	1956	502	53	1000
Torch. Colored-fire	W. H. Vosburgh, Jr.	431,827	July 8	1257	313	52	254
Torch. Flash	W. L. Heiskell and F. E. Drake	422,778	Mar. 4	598	153	50	1251
Torch. Igniting	W. F. Palmer	423,235	Mar. 11	1322	343	50	1395
Torpedo	C. M. Bennett	432,259	July 15	1905	429	52	385
Torpedo	C. Nelson	434,291	Aug. 12	1288	334	52	1018
Torpedo and gun boat	R. J. Gatling	424,288	Mar. 25	2879	768	50	1707
Torpedo and torpedo-detonator	H. A. Callahan	425,860	Apr. 15	2172	578	51	439
Torpedo-nets. Attachment for supporting	W. P. Bullivant	442,951	Dec. 16	2128	548	53	1694
Torpedo. Railway	W. A. Dunlap	441,830	Dec. 2	318	85	53	1326
Torpedo-vessel. Self-destructive	S. Barton	427,405	Mar. 11	1578	413	50	1444
Torpedoes. Auto-mobile mooring apparatus for	S. Coleridge	420,864	Feb. 4	644	166 167	50	686
Torpedoes, &c. Mechanism for controlling	G. R. Murphy	442,327	Dec. 9	1088	285	53	1481
Torpedoes. System of defending harbors by subma- rine	A. G. Donnelly	431,565	July 8	823	205 206	52	172
Torsion-spring	M. G. Hubbard	423,157	Mar. 11	1217	317	50	1375
Touch-regulator	F. S. Warren	421,149	Feb. 11	1077	277	50	778
Tow-boat	A. McDougall	429,467	June 3	554	134 135 136	51	1579
Tow-boat. Steam	A. McDougall	429,468	June 3	556	135 136	51	1579
Towel-holder	M. Siersdorfer	420,252	Jan. 28	2443	649	50	509
Towel-rack	C. A. Brickley	433,196	July 29	3378	873	52	682
Towel-rack	J. W. Campbell	420,184	Jan. 28	2333	616	50	489
Towel-rack	J. W. Campbell	435,133	Aug. 26	2626	695	52	1293
Towel-rack	S. Lightbourne, Jr.	439,019	Oct. 21	2079	556	53	409
Tower	G. Corbett	428,462	May 20	2179	549	51	1255
Tower	C. V. Phelps	422,036	Feb. 25	2333	616 617	50	1032
Towers or bridges. Construction of	F. Melber	423,067	Mar. 11	1075	280	50	1347
Toy	G. V. Anderson and C. W. Goner	434,750	Aug. 19	2020	528	52	1169
Toy	O. L. Bandy and G. B. Cole	437,082	Sept. 23	2716	709	52	1916
Toy	C. Behn and H. T. Koerner	433,065	July 29	3177	817 818	52	642
Toy	J. H. Bowen	428,450	May 20	2162	543	51	1252
Toy	G. Carette	435,796	Sept. 2	646	171	52	1499
Toy	H. Chambers	441,468	Nov. 25	2991	770	53	1204
Toy	W. H. Coltrin	434,769	Aug. 19	2051	536	52	1176
Toy	J. Contrell, Jr.	426,113	Apr. 22	2571	676	51	524
Toy	C. M. Craudall	436,455	Sept. 16	1664	444	52	1711
Toy	F. W. Dennis	419,754	Jan. 21	1647	437	50	347
Toy	J. D. Fahnestock	424,705	Apr. 1	414	109	51	82
Toy	C. W. Fishel	432,392	July 15	2109	542	52	422
Toy	J. A. Furman	426,120	Apr. 22	2580	678	51	525
Toy	C. M. Garrison	432,935	July 22	2946	755	52	593
Toy	T. A. Goodson	431,656	July 8	973	243	52	201
Toy	A. B. Heller	442,522	Dec. 9	1396	356	53	1542
Toy	H. Heyder	439,297	Oct. 28	2548	680	53	503
Toy	J. Hoffman	435,423	Sept. 2	64	20	52	1387
Toy	J. C. Hoyt	440,160	Nov. 11	811	210	53	778
Toy	J. Kerr	439,801	Nov. 4	255	65	53	658
Toy	J. H. Lancaster	437,209	Sept. 30	2944	769	52	1965
Toy	V. Lopez	432,316	July 15	2005	513	52	402
Toy	G. D. Merrill	431,211	July 1	273	68	52	56
Toy	E. F. Murdock	420,389	Jan. 28	2636	700	50	545
Toy	F. Oakley	420,463	Feb. 4	63	14	50	576
Toy	J. A. Raabe	425,343	Apr. 8	1387	370	51	279
Toy	W. V. Snyder	430,152	June 17	1603	399	51	1801
Toy	B. S. Taylor	430,155	June 17	1607	400	51	1802
Toy	J. W. Tripp	441,720	Dec. 2	145	39	53	1230
Toy	E. H. Truman	431,421	July 1	596	149	52	120
Toy	J. Wallace	420,709	Feb. 4	390	104	50	641
Toy	D. M. W. Waller	434,817	Aug. 19	2115	554	52	1189
Toy	M. E. Whitney	424,587	Apr. 1	232	63	51	47

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Toy	C. N. Wilcox	442,675	Dec. 16	1631	420	53	1599
Toy	O. B. Young	442,931	Dec. 16	2104	542	53	1690
Toy bank	F. W. Reilly	436,672	Sept. 16	2032	530	52	1775
Toy bank. Registering	W. R. Christie	422,116	Feb. 25	2462	651	50	1055
Toy bowling-alley	J. Meindl	418,737	Jan. 7	116	28	50	25
Toy building-block	J. W. Arold	419,019	Jan. 7	674	177	50	142
Toy chair. Adjustable	J. F. Shaw and E. L. Miller	435,656	Sept. 2	439	117	52	1458
Toy. Circus	J. Goodrich	442,038	Dec. 2	646	174	53	1369
Toy. Convertible	F. B. Bessette	419,405	Jan. 14	1146	305	50	241
Toy. De-tonating	G. F. Weigle	443,927	Dec. 30	3737	953	53	2021
Toy detonator	E. H. Cady	423,215	Mar. 11	1235	337	50	1390
Toy detonator	J. Vogel and J. Brooks	433,427	July 29	3698	955	52	748
Toy drag	F. H. Harris	420,787	Feb. 4	501	131	50	661
Toy engine	T. C. Conrad	433,275	July 29	3489	900	52	706
Toy figure	F. W. Carpenter	432,693	July 22	2586	662	52	523
Toy. Figure	J. Herron and J. Swaden	434,779	Aug. 19	2064	539	52	1179
Toy figures and objects. Mechanism for transmit- ting motion to	G. Cole	423,905	Mar. 25	2333	614	50	1603
Toy. Flying	E. G. Knoepfel and L. L. Lichtfield	421,290	Feb. 11	1274	329	50	814
Toy for forming soap-bubbles	C. Latschar	430,999	June 24	2970	729	51	2072
Toy fortune-telling device	A. T. Ballantine	432,813	July 22	2777	711	52	560
Toy game	J. F. Burd	442,012	Dec. 2	598	162	53	1380
Toy-game apparatus	M. P. Stewart	429,367	June 3	405	96	51	1548
Toy gun	P. A. Brandenburg	437,770	Oct. 7	151	47	53	31
Toy gun	H. V. Holmes	438,237	Oct. 14	867	234	53	172
Toy-gun game apparatus	F. F. Montrose	421,357	Feb. 11	1373	355	50	832
Toy hoop	J. E. Branagan and A. Martineau	418,885	Jan. 7	362	87	50	76
Toy horse	G. S. Crosby	435,685	Sept. 2	481	127	52	1467
Toy horse-race machine	E. J. Lumley	433,012	July 29	3091	793	52	626
Toy locomotive	G. S. Crosby	421,676	Feb. 18	1837	480	50	929
Toy. Locomotive	J. Hanley	439,064	Oct. 21	2147	576	53	422
Toy. Lung-testing	S. H. Pratt	426,683	Apr. 29	3422	898	51	702
Toy. Mechanical	O. E. Woodbury	432,810	July 22	2773	710	52	559
Toy. Musical	R. Händel	424,293	Mar. 25	2888	771	50	1709
Toy musical block	O. N. M. Watson	430,157	June 17	1609	400	51	1802
Toy or game	W. F. Lott	425,575	Apr. 15	1736	466	51	355
Toy or puzzle	A. G. Farwell	437,186	Sept. 30	2911	758	52	1959
Toy pistol	P. Adams	430,411	June 17	2032	501	51	1884
Toy pistol	H. Barnes	427,535	May 13	774	192	51	974
Toy pistol	O. C. Blackmer	438,139	Oct. 14	719	197	53	145
Toy pistol	C. Blampied	439,626	Nov. 4	11	3	53	608
Toy pistol	E. Denuis, Jr., and G. E. Williams	430,338	June 17	1933	473	51	1864
Toy pistol	L. Hill	420,068	Jan. 28	2138	566	50	453
Toy projectile	J. F. and M. A. Smith	442,464	Dec. 9	1295	335	53	1522
Toy. Puzzle	S. P. Baldwin	423,407	Mar. 18	1584	416	50	1453
Toy puzzle	E. Bennett	426,902	Apr. 29	3748	979	51	766
Toy puzzle	T. H. Bolls	435,790	Sept. 2	634	167	52	1496
Toy puzzle	A. W. Hanington and A. E. Southward	434,337	Aug. 12	1350	352	52	1031
Toy puzzle	F. T. O'Shaughnessy	426,569	Apr. 29	3251	853	51	669
Toy registering savings-bank	H. M. Hamrick	441,301	Nov. 25	2723	706	53	1153
Toy. Rotating	P. Kennedy, Jr., C. J. Diss, and W. W. Rosenfield	442,683	Dec. 16	1647	423	53	1602
Toy savings-bank	J. F. Lockwood	433,736	Aug. 5	433	111	52	840
Toy savings-bank or safe. Registering	A. S. and L. A. Munger	423,523	Mar. 18	1765	464	50	1457
Toy spring-gun	G. W. Kelley	437,605	Sept. 30	3563	930	52	2086
Toy. Swimming	L. Uebelacker	439,313	Oct. 28	2571	686	53	507
Toy target	E. E. Lommatzsch	439,082	Oct. 21	2179	585	53	429
Toy toboggan	A. M. Wood	429,492	June 3	597	147	51	1586
Toys and the like. Stand for	F. M. Schilling	425,709	Apr. 15	1952	519	51	397
Toys. Means for operating mechanical	W. Britain	427,734	May 13	1066	267	51	1031
Toys. Starting and propelling device for revolving mechanical	A. E. Seinecke	430,322	June 17	1904	466	51	1859
Trace and trace-chain supporter	M. E. Wroe	430,163	June 17	1614	402	51	1803
Trace-carrier	G. W. Brooks	429,224	June 3	176	43	51	1505
Trace-carrier	J. S. Brown	425,746	Apr. 15	2005	534	51	407
Trace-carrier	A. E. Clark	437,096	Sept. 23	2736	715	52	1921
Trace-carrier	J. R. Eaton	420,991	Feb. 11	852	220	50	734
Trace-carrier	T. J. Harbours	443,645	Dec. 30	3296	850	53	1937
Trace-carrier	A. Hartman	433,287	July 29	3507	905	52	709
Trace-carrier	N. J. Johanson	427,422	May 6	602	150	51	931
Trace-carrier	W. A. Marsh	438,418	Oct. 14	1141	308	53	224
Trace-carrier	A. M. Miller	430,740	June 24	2571	629	51	1995
Trace-carrier	J. G. Miller	425,235	Apr. 8	1232	328	51	249
Trace-carrier	W. D. Mitchell	436,253	Sept. 9	1354	353	52	1640
Trace-carrier	R. T. Semmes	443,870	Dec. 30	3638	936	53	2004
Trace-carrier	J. P. Strole	421,989	Feb. 25	2269	597	50	1020
Trace-carrier	A. P. Waddell	429,369	June 3	409	97	51	1549
Trace-detacher for singletrees	J. D. Blakeman	428,370	May 20	2041	514	51	1230
Trace-fastener	J. Duff	425,868	Apr. 15	2184	580	51	441
Trace-fastener	E. E. Johnson	429,452	June 3	528	127	51	1574
Trace-fastening	L. Bentley	427,957	May 13	1423	359	51	1098
Trace-fastening	W. R. Morse	429,696	June 10	895	218	51	1655
Trace for single harness	W. B. Hinton	424,984	Apr. 8	855	227	51	174
Trace holder. Spring	W. B. Silvers	432,250	July 15	1891	486	52	382
Trace-hook	P. Bartz	424,950	Apr. 8	798	214	51	163
Trace-post for carriages	J. G. English	440,400	Nov. 11	1200	309	53	850
Trace-support	F. F. Conner	422,382	Mar. 4	31	10	50	1143
Trace-support	H. F. Leible	430,659	June 24	2433	592	51	1969
Tracing-wheel	E. Klopp	438,734	Oct. 21	1629	437	53	323
Track-brake	J. T. Lee	424,487	Apr. 1	70	20, 21	51	16
Track-brake	J. Volk	423,294	Mar. 11	1424	369	50	1413
Track-cleaner	A. Day	420,639	Feb. 4	303	80	50	623

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Track-cleaner	E. T. Likes	439,783	Nov. 4	229	59	53	653
Track-cleaner	J. J. Wheat	443,247	Dec. 23	2656	682	53	1805
Track-gage	J. J. Griffith	418,712	Jan. 7	88	20	50	19
Track-laying apparatus	R. E. Hurley	428,276	May 20	1894	{ 476 477 478	{ 51	1200
Track-laying apparatus	R. E. Hurley	436,037	Sept. 9	1018	{ 265 266	{ 52	1577
Track-sanding apparatus	H. L. Leach, Jr.	433,686	Aug. 5	365	93	52	827
Track-sweeper	C. Conghlin	435,404	Sept. 2	43	14	52	1383
Track-walker's tool	G. Rohrbach and J. Shaughnessy	441,979	Dec. 2	542	145	53	1369
Traction apparatus. Electrical	W. Stephens	435,983	Sept. 9	933	{ 245 246	{ 52	1501
Traction-engine	D. Best	436,931	Sept. 23	2512	658	52	1875
Traction-engine	J. E. Clark	430,833	June 24	2717	666	51	2024
Traction-engine	J. B. Harris	434,131	Aug. 12	1042	269	52	969
Traction-engine	G. H. Pond	433,488	Aug. 5	73	22	52	771
Traction-engine	J. Price	419,284	Jan. 14	955	{ 251 252	{ 50	202
Traction-engine	B. F. Sammons	429,648	June 10	826	201	51	1641
Traction-engine	R. C. Smith	425,262	Apr. 8	1270	{ 339 340	{ 51	257
Traction-motor	J. S. Baldwin	429,804	June 10	1051	{ 258 259	{ 51	1684
Traction-wheel	A. Brosius	437,674	Oct. 7	2	1	53	3
Traction-wheel	L. Empie	438,411	Oct. 14	1134	305	53	223
Traction-wheel	J. Lewis	431,904	July 8	1365	345	52	275
Traction-wheels. Mud-hook for	M. H. Deatherage	435,483	Sept. 2	156	44	52	1405
Tractor	G. H. Edwards	425,600	Apr. 15	1777	{ 476 477	{ 51	362
Tractor	G. H. Edwards	425,662	Apr. 15	1885	503	51	384
Tractor	G. H. Edwards	425,663	Apr. 15	1886	504	51	384
Tractor	G. H. Edwards	425,664	Apr. 15	1887	504	51	384
Tractor	G. H. Edwards	425,665	Apr. 15	1888	504	51	385
Tractor	S. C. A. Holth	437,759	Oct. 7	127	{ 38 39 40 41 42 43	{ 53	27
Tractors. Plowing device for	J. A. Gardner	437,735	Oct. 7	123	37	53	26
Train-board	F. C. Cowden	419,185	Jan. 14	813	{ 214 215	{ 50	175
Train-order	C. E. Biddison	437,557	Sept. 30	3500	913	52	2075
Train-signal	F. S. Orem	440,053	Nov. 4	647	173	53	734
Train-signal	J. H. Parsons	426,679	Apr. 29	3417	897	51	701
Train-signal	W. D. Sheldon	441,031	Nov. 18	2237	{ 579 580	{ 53	1054
Train-signal. Automatic electric	A. W. Reppy	433,216	July 29	3404	879	52	687
Train-signal. Electric	F. W. Sargent	440,508	Nov. 11	1387	359	53	884
Train-signal. Electrical	G. D. Burton	426,522	Apr. 29	3181	835	51	655
Train-signal. Electrical	G. D. Burton	427,042	May 6	13	4.5	51	813
Train-stopping device	E. J. C. A. Hull	442,564	Dec. 9	1493	385	53	1562
Tramway and loader. Wire	C. T. Finlayson	434,900	Aug. 19	2262	{ 593 594	{ 52	1217
Tramway-carriage	G. H. Hulett	440,809	Nov. 18	1885	484	53	987
Tramways. Clip for rope	R. Rowland	422,892	Mar. 4	797	204	50	1288
Tramways. Coupling apparatus for elevated wire rope	A. Bleichert	433,974	Aug. 12	801	209	52	921
Transfer-carriage for elevated ways	W. S. Bogle	419,629	Jan. 21	1462	393	50	313
Transfer-table	N. G. Carpenter	440,419	Nov. 11	1248	323	53	857
Transferring apparatus	W. C. Hanson and L. C. Ferrell	427,314	May 6	435	{ 112 113	{ 51	897
Transit-instruments. Solar attachment for	W. Scott	431,286	July 1	382	96	52	78
Transmitting-motor	H. D. Layman and C. E. Rice	438,552	Oct. 14	1328	360	53	262
Transom-lifter	H. A. Bennett	434,910	Aug. 26	2306	609	52	1232
Transom-lifter	H. A. Bennett	436,065	Sept. 9	1062	275	52	1585
Transom-lifter	R. R. Buehler	431,963	July 8	1451	367	52	292
Transom-lifter	R. R. Buehler	437,391	Sept. 30	3237	{ 843 844	{ 52	2020
Transom-lifter	G. A. Colton	438,099	Oct. 7	659	179	53	127
Transom-lifter	G. J. Dickson	428,165	May 20	1718	435	51	1166
Transom-lifter	E. Herz	437,115	Sept. 23	2764	723	52	1926
Transom-lifter	E. Herz	442,482	Dec. 9	1322	341	53	1527
Transom-lifter	F. Kainer	441,670	Dec. 2	62	17	53	1274
Transom-lifter	J. Kelly	419,680	Jan. 21	1548	413	50	328
Transom-lifter	J. Kelly	419,681	Jan. 21	1548	413	50	328
Transom-lifter	F. A. Lipperit	419,964	Jan. 21	1972	518	50	413
Transom-lifter	J. M. Maddox	439,964	Nov. 4	515	136	53	708
Transom-lifter	A. A. Page	430,400	June 17	2021	498	51	1883
Transom-lifter	H. B. Rowland	443,796	Dec. 30	3532	906	53	1983
Transom-lifter	O. H. Taylor	423,835	Mar. 18	2211	584	50	1572
Transplanter	F. A. Bemis	423,723	Mar. 18	2053	{ 541 542	{ 50	1541
Transplanter	F. A. Bemis	423,724	Mar. 18	2055	542	50	1541
Transplanter	J. K. Leonard and J. O. Bender	426,455	Apr. 29	3084	{ 809 810	{ 51	637
Transplanter	P. O'Meara	433,957	Aug. 12	770	200	52	917
Transplanting-machine	C. G. Alward	423,200	Mar. 11	1273	{ 331 332	{ 50	1386
Transplanting-machines. Watering device for	A. Hatherell	438,155	Oct. 14	744	204	53	150
Transplanting trees. Apparatus for	W. A. Estes	423,746	Mar. 18	2087	551	50	1547
Transporting loads by means of traveling ropes or cables. Apparatus for	J. P. Roe	438,949	Oct. 21	1974	{ 526 527	{ 53	387

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Transporting loads. Means for.....	F. J. Arnodin and M. A. de Palacio.	425,724	Apr. 15	1978	{ 526 527	51	402
Transporting-receptacle.....	L. P. Rogers and J. Hofman.....	440,885	Nov. 18	2009	517	53	1011
Transportation. Means for.....	H. W. Kirchner and G. N. Chase.....	441,672	Dec. 2	64	17, 18	53	1274
Transportation. System of.....	B. S. Henning.....	418,718	Jan. 7	96	22	50	21
Trap:							
See Animal-trap. Minnow-trap.							
Ant-trap. Moth-trap.							
Ash-pit gravity-trap. Mouse-trap.							
Basin-trap. Plumber's trap.							
Bed bug-trap. Refrigerator-trap.							
Bird-trap. Safety-trap.							
Bug-trap. Sewer-trap.							
Crab and fish trap. Sewer or other trap.							
Drain-trap. Sink-trap.							
Electric trap. Sparrow-trap.							
Fish-trap. Sporting-trap.							
Fly-trap. Steam-trap.							
Gas-trap. Stock-trap.							
Grease-trap. Target-trap.							
Insect-trap. Waste and overflow trap.							
Jaw-trap. Water-trap.							
Trap.....	W. P. Austin.....	424,162	Mar. 25	2708	720	50	1673
Trap.....	H. B. Eareckson.....	424,188	Mar. 25	2744	732	50	1681
Trap for flies or other insects.....	T. J. Baker and A. J. Stanchfield.....	427,290	May 6	406	105	51	891
Trap for sanitary purposes.....	G. H. Garrett.....	424,943	Apr. 1	784	209	51	153
Trap-lock.....	J. F. Wollensak.....	432,716	July 22	2614	669	52	529
Trap-lock.....	J. F. Wollensak.....	432,964	July 22	3010	773	52	603
Traveler-clearer.....	C. E. Trowbridge.....	438,659	Oct. 21	1496	404	53	300
Traveler's companion.....	E. W. Lee.....	429,766	June 10	997	244	51	1675
Traveling-bag.....	J. Lagowitz.....	427,090	May 6	99	26	51	831
Traveling bag or satchel.....	K. Kaufmann.....	421,079	Feb. 11	978	251	50	758
Traveling block.....	A. Rewrick.....	433,601	Aug. 5	240	62	52	803
Traveling, toilet, or other case.....	G. C. Varwig.....	424,740	Apr. 1	467	125	51	92
Tray.....	H. S. Brewington.....	420,404	Jan. 28	2657	704	50	549
Tray. Exhibition.....	H. K. Dyer.....	430,842	June 24	2735	674	51	2027
Tray for delivering goods.....	F. G. Caldwell.....	422,717	Mar. 4	518	132	50	1235
Tray for tumblers or other articles.....	C. F. Sautter.....	424,028	Mar. 25	2521	670	50	1637
Treadle.....	P. Fournier.....	431,342	July 1	466	115	52	95
Treadle.....	F. B. Johnson.....	424,444	Mar. 25	3166	840	50	1763
Treadle-action.....	E. Ernold.....	427,227	May 6	309	79	51	872
Treadle mechanism.....	N. Clark.....	441,748	Dec. 2	186	49	53	1299
Treadle movement.....	A. M. Fenner.....	439,727	Nov. 4	148	39	53	636
Treadle. Pendulum-bar.....	E. A. Cochran.....	421,858	Feb. 18	2096	550	50	977
Treadle-power.....	W. Hargrove.....	425,571	Apr. 15	1727	463	51	354
Tree baller and transplanter.....	A. Harpold.....	442,184	Dec. 9	876	234	53	1441
Tree-protector.....	R. Bessel.....	442,095	Dec. 9	737	199	53	1415
Tree-protector.....	J. B. Brooks.....	426,106	Apr. 22	2564	674	51	522
Tree-protector.....	L. C. Fouquet.....	428,206	May 20	1773	448	51	1177
Trestle.....	N. W. Myers.....	430,141	June 17	1588	395	51	1798
Trestle. Extensible.....	G. and E. J. Bogusch.....	418,938	Jan. 7	454	111	50	95
Triangles. Portable support and striker for.....	J. B. Zeller.....	427,744	Oct. 7	101	32	53	92
Tricycle.....	C. Beer and R. Bond.....	429,715	June 10	926	227	51	1661
Tricycle.....	J. D. Brooks.....	435,730	Sept. 2	543	143	52	1480
Tricycle.....	W. L. Bryden.....	439,382	Oct. 28	2671	711	53	525
Tricycle.....	A. E. Miller.....	438,273	Oct. 14	927	251	53	182
Tricycle.....	J. Mitchell.....	443,292	Dec. 23	2729	701	53	1819
Tricycle.....	F. Searle.....	440,442	Nov. 11	1281	331	53	863
Tricycle.....	I. A. Weston.....	439,915	Nov. 4	433	112	53	692
Tricycle.....	C. Yingst.....	426,518	Apr. 29	3173	{ 833 834	51	654
Tricycle. Railway.....	R. N. Mayfield.....	419,591	Jan. 14	1394	373	50	293
Tricycle tire. Railway.....	F. Brady.....	427,663	May 13	950	239	51	1008
Tricycles. Chair attachment for.....	D. Dennett.....	436,648	Sept. 16	1988	521	52	1767
Trigger-lock. Safety.....	L. H. Mayott.....	436,089	Sept. 9	1114	289	52	1594
Trigonometer.....	A. J. Leschorn.....	435,843	Sept. 2	716	192	52	1513
Trimmer:							
See Edge-trimmer. Rand-trimmer.							
Hedge-trimmer. Sewing-machine trimmer.							
Heel-trimmer. Sole-trimmer.							
Lumber-trimmer. Wick-trimmer.							
Trimming.....	S. Finkelstein.....	440,876	Nov. 18	1995	514	53	1008
Trimming for fabrics.....	J. D. Morley.....	424,568	Apr. 1	203	56	51	42
Trimming for the edges of fabrics.....	D. C. Bellis.....	431,160	July 1	187	48	52	39
Trimming for the edges of fabrics. Machine for making.....	D. C. Bellis.....	431,161	July 1	189	48	52	39
Trip-hook.....	J. H. Prichard.....	441,255	Nov. 25	2644	687	53	1139
Tripod.....	J. R. Moeller.....	435,315	Aug. 26	2903	769	52	1344
Trolley.....	I. F. Baker.....	437,961	Oct. 7	436	122	53	83
Trolley.....	W. F. Lewis.....	427,333	May 6	467	120	51	903
Trolley.....	W. C. Miller.....	432,063	July 15	1610	412	52	329
Trolley.....	W. Porter and H. George.....	425,694	Apr. 15	1931	513	51	393
Trolley and guard for electric wires. Adjustable.....	L. S. Hoyt.....	440,106	Nov. 4	715	190	53	748
Trolley-arm guide.....	A. F. Bardwell.....	439,092	Oct. 28	2199	590	53	439
Trolley-bridge.....	J. Stephenson.....	424,374	Mar. 25	3037	{ 805 806	50	1737
Trolley-carrier.....	B. F. Brown.....	429,113	June 3	8	3	51	1474
Trolley-carrier.....	D. C. Nelson and W. R. Easton.....	420,675	June 24	2460	600	51	1914
Trolley-equalizer.....	G. F. Corliss.....	426,436	Apr. 29	3059	801	51	632
Trolley-heads. Automatic wire-finder for.....	G. S. Slocum.....	439,308	Oct. 28	2564	684	53	506
Trolley-line switch.....	W. M. Ramsey.....	443,004	Dec. 16	2208	568	53	1712
Trolley-pole.....	J. M. Andersen.....	438,219	Oct. 14	836	227	53	167
Trolley-pole.....	L. Pängst.....	439,182	Oct. 28	2331	627	53	462
Trolley-pole-supporting mechanism.....	J. M. Andersen.....	431,684	July 8	1034	259	52	210

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Trolley. Reversing.....	H. P. Roberts	422,976	Mar. 11	944	248	50	1323
Trolley-stand	W. L. Emmet	441,753	Dec. 2	198	52	53	1302
Trolley-support	F. B. Rae	426,066	Apr. 22	2497	659	51	509
Trolley switch and trip. Electric	R. C. Hopson	442,623	Dec. 16	1558	403	53	1583
Trolley-wheel guide	H. A. Marks	427,589	May 13	855	215	51	990
Trolley-wire coupling	S. Harris	424,110	Mar. 25	2638	703	50	1660
Trolley-wire hanger	J. T. Herty	431,973	July 8	1471	372	52	296
Trolley-wire hanger	H. H. Luscomb	442,446	Dec. 9	1270	328	53	1517
Trolley-wire hanger or support	E. H. Kitfield	441,800	Dec. 2	270	72	53	1317
Trolley-wire support	J. H. Cunningham	421,677	Feb. 18	1839	480	50	999
Trolley-wire support or hanger	H. C. Wirt	438,211	Oct. 14	824	223	53	164
Trolley-wire supports. Pole-top for	W. L. Emmet	443,508	Dec. 30	3076	792	53	1895
Trolley-wire-supporting apparatus	W. Vogler	423,005	Mar. 11	980	278	50	1330
Trolley-wires. Suspension for	E. P. Morris	428,930	May 27	2884	738	51	1411
Trolley-wires. Tension-bracket for	W. D. MacQuesten	429,316	June 3	327	77	51	1532
Trolleys. Shipper for	H. H. Brooks	440,584	Nov. 11	1502	347	53	906
Trolling-spoon	E. F. Pfueger	432,436	July 15	2164	558	52	433
Trolling-spoon	H. E. Skinner	435,026	Aug. 26	2469	654	52	1263
Trough:							
See Eaves-trough. Hog-trough.							
Feed-trough. Pig-trough.							
Feeding-trough. Watering-trough.							
Trousers	V. E. Cervený and J. Nowak	428,271	May 20	1885	474	51	1199
Trousers	E. E. Ehrmann	426,717	Apr. 29	3489	913	51	714
Trousers	J. Finegold	442,597	Dec. 9	1513	389	53	1566
Trousers	M. Hamburger	434,984	Aug. 26	2404	636	52	1252
Trousers	F. W. Nevens	432,891	July 22	2884	738	52	581
Trousers. Apparatus for stretching and smoothing	T. V. Nichols	422,059	Feb. 25	2372	627	50	1033
Trousers. Device for supporting the legs of	W. T. Lorimer	431,664	July 8	992	247	52	204
Trousers-stretcher	J. K. Garson	444,129	Aug. 12	1039	268	52	969
Trousers-stretcher	J. A. Trant	442,926	Dec. 16	2097	540	53	1688
Trousers-stretcher	A. Wyman	437,390	Sept. 30	3236	843	52	2020
Trowel	W. B. Cleves	441,135	Nov. 25	2425	628	43	1100
Trowel. Plasterer's	C. Diaston	440,423	Nov. 11	1233	324	53	858
Truck	D. Bakenhus and A. Mueseler	418,838	Jan. 7	280	68	50	59
Truck	W. A. Clark	423,672	Mar. 18	1981	523	50	1529
Truck	W. F. Hite	442,891	Dec. 16	2038	523	53	1676
Truck	P. Kiltz	430,130	June 17	1574	391	51	1735
Truck	S. Lyon	438,015	Oct. 7	527	148	53	100
Truck	H. Martin	429,463	June 3	542	130	51	1577
Truck	F. A. Stecher	421,204	Feb. 11	1161	298	50	793
Truck	W. Voss	431,089	July 1	88	22	52	20
Truck	D. S. West	420,322	Jan. 28	2539	673	50	527
Truck and axle. Car	G. W. Colbath	434,655	Aug. 19	1878	491	52	1143
Truck and barrel hoister. Combined	I. A. Ekstrom	423,227	Mar. 11	1312	341	50	1374
Truck and gear. Electric-motor	E. Peckham	440,189	Nov. 11	854	219	53	786
Truck and jack. Barrel	J. H. Stansbury and I. U. Hyatt	423,188	Mar. 11	1258	328	50	1383
Truck and weighing-scales. Combined hand	H. W. Thurston	425,271	Apr. 8	1284	343	51	259
Truck and tilting device. Barrel	J. E. Jenkins	436,040	Sept. 9	1028	268	52	1579
Truck and triple ladder. Fire	G. M. Kim	434,512	Aug. 19	1633	429	52	1095
Truck. Baggage	E. H. Norris	424,898	Apr. 1	719	192	51	139
Truck. Barrel	G. P. Clark	422,729	Mar. 4	532	136	50	1238
Truck. Barrel	L. Rawdon	423,442	Mar. 18	1634	430	50	1463
Truck. Car	G. A. Aenbachbacher	434,125	Aug. 12	1031	267	52	967
Truck. Car	W. S. G. Bakor	426,096	Apr. 22	2545	669	51	518
Truck. Car	J. C. Barber	431,063	July 29	3174	816	52	642
Truck. Car	P. J. Boris	419,139	Jan. 7	726	191	50	152
Truck. Car	J. A. and G. M. Brill	430,418	June 17	2042	503	51	1886
Truck. Car	C. C. Butterbaugh	431,554	July 8	808	201	52	169
Truck. Car	A. B. Clark	435,918	Sept. 9	844	222	52	1544
Truck. Car	J. H. Elliott	424,282	Mar. 25	2809	766	50	1706
Truck. Car	J. H. Elliott	441,650	Dec. 2	32	9	53	1268
Truck. Car	M. G. Hubbard	423,158	Mar. 11	1218	317	50	1375
Truck. Car	E. Huber	422,079	Feb. 25	2401	635	50	1044
Truck. Car	W. H. Marshall	421,593	Feb. 18	1721	448	50	906
Truck. Car	E. Peckham	419,876	Jan. 21	1850	486	50	388
Truck. Car	E. Peckham	419,877	Jan. 21	1852	487	50	388
Truck. Car	E. Peckham	419,878	Jan. 21	1854	487	50	389
Truck. Car	E. Peckham	424,722	Apr. 1	437	116	51	86
Truck. Car	E. Peckham	424,723	Apr. 1	438	116	51	87
Truck. Car	W. C. Nason	440,645	Nov. 18	1610	414	53	936
Truck. Car	L. C. Sharp and J. A. Gutsche	421,111	Feb. 11	1023	262	50	767
Truck. Car	J. Taylor	437,167	Sept. 23	2873	747	52	1945
Truck. Car	P. A. Williams	431,133	July 1	145	38	52	31
Truck. Electric-car	J. Stephenson	424,372	Mar. 25	3034	804	50	1736
Truck. Electric-motor-car	E. W. Goss	426,779	Sept. 23	2204	581	52	1817
Truck. Electric-railway-motor	C. J. Van Depoele	429,746	June 10	965	237	51	1669
Truck for cars. Motor	J. A. and G. M. Brill	425,653	Apr. 15	1864	498	51	380
Truck for center rails. Car	F. A. Bartholomew	440,126	Nov. 11	753	198	53	765
Truck for electric cars. Removable	J. Stephenson	424,371	Mar. 25	3033	804	50	1736
Truck for electric-railway cars. Motor	C. J. Van Depoele	437,535	Sept. 30	3469	905	52	2068
Truck for electrically-propelled vehicles. Motor	F. B. Rae	437,661	Sept. 30	3638	950	52	2102

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Truck for railway-cars	L. Pfingst and S. A. Bemis	440,365	Nov. 11	1131	{ 290 291 }	53	836
Truck frame. Electric-car	J. Stephenson	424,373	Mar. 25	3036	805	50	1737
Truck-frame for tread-powers	C. F. and C. C. Smalley	426,474	Apr. 29	3112	818	51	642
Truck. Hand-	J. Annin	421,649	Feb. 18	1803	470	50	922
Truck. Hand-	F. J. Fairchild	425,871	Apr. 15	2186	581	51	442
Truck. Hand-	J. Harps	427,232	May 6	323	83	51	874
Truck. Hand-	F. B. Mallory	429,140	June 3	51	13	51	1482
Truck. Hand-	W. A. Rogers	432,566	July 22	2375	612	52	483
Truck. Hand weighing-	H. N. Brown	432,597	July 22	2411	622	52	490
Truck. Harvester-	H. E. Pridmore	435,521	Sept. 2	209	58	52	1415
Truck. House-moving	J. Devereux	423,222	Mar. 11	1304	340	50	1302
Truck. Logging-	T. W. Garbutt	439,580	Oct. 23	2961	786	53	582
Truck. Logging-car	R. S. Battles	421,893	Feb. 25	2146	563	50	996
Truck. Mining-machine	E. E. Carter	423,551	May 20	2998	584	51	1278
Truck. Railway-	J. W. Jenkins	431,057	July 1	43	10	52	10
Truck. Railway-car	D. L. Barnes	431,544	July 8	793	198	52	165
Truck. Railway-car	D. L. Barnes	431,736	July 8	1116	{ 277 278 }	52	227
Truck. Railway-car	E. F. Bosdevex	424,089	Mar. 25	2606	694	50	1654
Truck. Railway-car	J. A. and G. M. Brill	433,932	Aug. 12	734	191	52	910
Truck. Railway-car	R. R. Hazard	424,062	Mar. 25	2567	686	50	1646
Truck. Railway passenger-car	D. L. Barnes	431,543	July 8	792	{ 197 198 }	52	165
Truck. Sectional coal-	G. A. Thompson and D. E. Harris	431,786	July 8	1186	297	52	240
Truck. Self-oiling car-	H. M. Goodman	438,999	Oct. 21	2051	549	53	404
Truck. Stove-	L. Gwinner	439,776	Nov. 4	218	57	53	651
Truck. Stove-	J. M. Pinckney	431,953	July 8	1434	364	52	289
Truck. Stove-	W. P. Randall	442,825	Dec. 16	1915	492	53	1653
Truck. Street-railway-car	W. M. Cary	424,269	Mar. 25	2845	761	50	1701
Truck. Street-railway-car	J. B. Odell	431,072	July 1	67	16	52	15
Truck. Wagon-	D. S. Tuthill	430,494	June 17	2153	{ 529 530 }	51	1907
Truck. Warehouse-	K. S. Ward	441,206	Nov. 25	2556	660	53	1125
Truck. Weighing-	H. W. Thurston	441,451	Nov. 25	2958	762	53	1199
Trucks. Bolster guide-bar for car-	C. T. Schoen	437,722	Oct. 7	71	23	53	17
Trucks. Bolster-guide plate for car-	E. W. Grieves	434,336	Aug. 12	1349	{ 351 352 }	52	1031
Trunks. Corner-iron for	W. B. Morris	436,986	Sept. 23	2581	675	52	1889
Trunks. Safety attachment for car-	R. J. Spearing	443,382	Dec. 23	2876	739	53	1848
Trunks. Stake-socket for.	M. D. Lawrence	440,169	Nov. 11	828	214	53	780
Trunk	E. Andrews	433,389	July 29	3639	939	52	735
Trunk	W. W. Brinkerhoff	419,819	Jan. 21	1742	462	50	366
Trunk	A. C. Frankel	428,274	May 20	1891	475	51	1200
Trunk	F. Lyford	421,949	Feb. 25	2221	563	50	1010
Trunk	G. Owens	437,716	Oct. 7	58	18	53	14
Trunk	F. J. Palica	425,247	Apr. 8	1250	333	51	253
Trunk	F. J. Palica	436,566	Sept. 16	1856	{ 488 489 }	52	1742
Trunk	H. P. Sleigh	421,442	Feb. 18	1489	3-6	50	862
Trunk. Barrel-	S. B. Jones	432,138	July 15	1736	446	52	353
Trunk-catch	H. C. Hunt	423,607	Mar. 18	1868	492	50	1506
Trunk. Compartment-	J. P. Lavandeyra	424,008	Mar. 25	2497	663	50	1633
Trunk corner-protector	S. S. Arnold	420,759	Feb. 4	458	122	50	654
Trunk-crate	E. A. Atwater	432,925	July 22	2934	752	52	591
Trunk-fastener	P. R. Derrick	437,581	Sept. 30	3530	921	52	20-0
Trunk-fastening	M. C. Hutton	440,636	Nov. 18	1596	411	53	934
Trunk. Knockdown	M. Green	436,657	Sept. 16	2006	524	52	1771
Trunk-tray elevating and supporting device	O. B. Gaston	443,436	Dec. 23	2952	760	53	1862
Trunk. Wardrobe-	G. N. Klein	438,889	Oct. 21	1889	501	53	371
Trunk. Wardrobe-	S. M. McCormack	440,957	Nov. 18	2135	{ 552 553 }	53	1034
Truss	B. Bannister	429,556	June 3	686	168	51	1604
Truss	G. W. Bell	425,159	Apr. 8	1122	{ 297 298 }	51	226
Truss	J. H. Browulow and J. S. Warner	434,316	Aug. 12	1322	344	52	1025
Truss	F. Cluskey	430,924	June 24	2857	701	51	2051
Truss	G. A. Greene	422,768	Mar. 4	584	150	50	1248
Truss	C. E. McCandliss	436,721	Sept. 16	2097	552	52	1789
Truss	O. E. Miller and G. S. Bennett	438,169	Oct. 14	764	{ 208 209 }	53	153
Truss	L. Munson	423,941	Mar. 25	2385	634	50	1612
Truss	J. F. Newton	437,788	Oct. 7	181	57	53	37
Truss	W. and W. H. Payne	430,676	June 24	2463	601	51	1974
Truss	J. J. Pelton	439,252	Oct. 28	2458	659	53	486
Truss	A. D. Smith	436,270	Sept. 9	1376	359	52	1644
Truss	A. G. Smith	419,226	Jan. 14	873	230	50	187
Truss	L. B. Stuart	425,712	Apr. 15	1957	520	51	398
Truss	W. E. Vary	424,741	Apr. 1	467	125	51	92
Truss	G. S. Wells and H. P. Ewell	435,910	Sept. 2	832	220	52	1536
Truss	M. Wise	440,083	Nov. 4	680	181	53	741
Truss-hoop	D. Delano	437,645	Sept. 30	3614	945	52	2098
Truss-pad	C. Gilson	439,141	Oct. 28	2272	610	53	451
Truss-pad	C. S. Leonard	436,630	Sept. 16	1953	513	52	1760
Tub:							
See Bath-tub.	Mash-tub.						
Bird bath-tub.	Wash-tub.						
Tub cover. Packing-	L. S. Hendrix	423,319	Mar. 11	1463	382	50	1421
Tub-fastener	H. E. McNally	442,196	Dec. 9	891	237	53	1444
Tub-stand. Folding	M. Gindorff	424,878	Apr. 1	689	182	51	133
Tubs. Making crockery wash-	C. Graham	436,413	Sept. 16	1617	426	52	1698
Tubs. Making elongated.	L. E. Flint	426,720	Apr. 29	3491	913	51	715
Tubs. Manufacturing crockery wash-	W. D. Stewart	438,200	Oct. 24	803	219	53	161

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Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
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Tube:							
See Chimney-tube.	Pneumatic dispatch-tube.						
Duplex tube.	Speaking-tube.						
Flexible tube.	Tack-feeding tube.						
Metal tube.	Test-tube.						
Metallic tube.	Wick-tube.						
Paper tube.							
Tube.	E. T. Greenfield and J. Nagel	442,090	Dec. 2	723	194	53	1404
Tube and pipe cutter, header, and expander	J. Hyland	441,566	Nov. 25	3131	804	53	1232
Tube-cleaning device	F. Brady	430,767	June 24	2617	641	51	2005
Tube-corrugating machine	J. S. Hansen and C. D. Wainwright	434,060	Aug. 12	903	238 239	52	942
Tube-cutter	D. S. Chesebro	422,725	Mar. 4	527	135	50	1237
Tube-cutter	J. B. Fry and J. Zink	441,479	Nov. 25	3005	774	53	1207
Tube-cutter	C. C. Gerlach	422,341	Feb. 25	2822	744	50	1121
Tube-cutter	F. Levasseur	442,125	Dec. 9	782	211	53	1423
Tube-expander	P. H. Benade	434,314	Aug. 12	1319	344	52	1024
Tube-expander	F. H. Knight	442,598	Dec. 9	1514	389 390	53	1566
Tube-finishing machine	J. C. Coram	426,526	Apr. 29	3188	837	51	656
Tube-machine	T. M. Macnair and F. Wood	443,601	Dec. 30	3219	828 829	53	1923
Tube-machine	J. M. Riley	435,078	Aug. 26	2547	671 672	52	1278
Tube-making machine	W. H. Dayton	434,431	Aug. 19	1515	395	52	1070
Tube-making machine	M. E. Fitzpatrick and W. Geddes	431,041	July 1	19	5	52	6
Tube or case for holding drawings	B. Arnold	423,712	Mar. 18	2041	538	50	1539
Tubes, &c. Apparatus for making	J. Robertson	429,098	May 27	3144	810 812	51	1461
Tubes. Apparatus for pickling	J. P. Serve	440,511	Nov. 11	1393	360	53	885
Tubes, &c., by electro-deposition. Making metal.	F. E. Elmore	442,428	Dec. 9	1244	321	53	1512
Tubes. Drawing seamless	G. U. Meyer	441,888	Dec. 2	402	106	53	1343
Tubes from pulp. Machine for molding	H. J. Medbery	437,497	Sept. 30	3403	891 892	52	2056
Tubes. Machine for forming seamless	L. White	432,463	July 15	2213	571	52	444
Tubes. Making compound metal.	G. H. Everson	438,072	Oct. 7	622	169	53	1119
Tubes. Manufacture of ribbed	J. P. Serve	440,512	Nov. 11	1394	360	53	885
Tubes. Mechanism for making ribbed	J. P. Serve	438,025	Oct. 7	549	151	53	104
Tubes. Mechanism for polishing	J. P. Serve	438,026	Oct. 7	551	151	53	104
Tubes or hose. Apparatus for connecting flexible	J. Jackson	442,121	Dec. 9	775	209	53	1421
Tubing. Apparatus for making metal	E. Norton and E. Adcock	441,374	Nov. 25	2832	730 731	53	1173
Tubing. Composite	A. and E. L. Wyckoff	441,733	Dec. 2	161	43	53	1293
Tubing. Die for making spiral	F. J. Richard	436,463	Sept. 16	1693	446	52	1713
Tubing joint. Sheet-metal	J. W. Abrahams	430,458	June 17	2103	518	51	1897
Tubing. Machine for corrugating	J. F. Fife	426,439	Apr. 29	3063	802 803	51	633
Tubing. Machine for corrugating wrought-metal	J. F. Fife	432,232	July 15	1870	481	52	378
Tubing. Machine for making	W. Probert	433,580	Aug. 5	206	55	52	796
Tubing. Machine for making wire	J. Crowfoot and G. Doolittle	434,920	Aug. 26	2319	612 613	52	1235
Tubing. Machine for manufacturing	D. N. Hurlbut	441,845	Dec. 2	340	90, 91	53	1330
Tubing. Making metal	E. Norton and E. Adcock	441,375	Nov. 25	2834	731 732	53	1174
Tubing. Manufacture of helical coils of metallic	D. A. Quiggin	434,804	Aug. 19	2094	548 549	52	1185
Tubing. Metal	C. Maschmeyer	432,059	July 15	1606	411	52	328
Tubing or tubular cups. Forming ornamental	J. Burkhardt	425,022	Apr. 8	915	243	51	185
Tubing. Socket-tip for flexible	A. Caldwell	425,367	Apr. 8	1426	381	51	266
Tubular and other bodies. Securing trimmings upon	P. Gendron	419,009	Jan. 7	545	136	50	115
Tubular articles. Machine for applying fittings and trimmings on	W. Jackson	425,510	Apr. 15	1638	437	51	337
Tubular boiler	N. S. and E. R. Bowdish	440,872	Nov. 18	1989	512 513	53	1006
Tubular boiler	A. E. Dain	438,090	Oct. 7	646	176 177	53	124
Tubular boiler	H. Warden	442,156	Dec. 9	834	223	53	1433
Tubular boiler. Upright	J. Baird	425,910	Apr. 22	2361	626	51	483
Tuft	W. H. Hutchinson and H. A. Cables	440,710	Nov. 18	1722	442	53	957
Tufts or buttons. Machine for making	W. H. Hutchinson and H. A. Cables	440,708	Nov. 18	1716	440 441	53	956
Tufts or buttons. Machine for making	W. H. Hutchinson and H. A. Cables	440,709	Nov. 18	1720	441	53	957
Tufted fabric	A. Bollenstein	423,659	Mar. 18	1965	578	50	1525
Tufted fabric and forming the same	H. Heine	433,242	July 29	3441	889	52	696
Tug	J. P. Royburn	430,254	June 17	1764	438	51	1832
Tug clip. Hame	A. F. Duvall	441,473	Nov. 25	2996	771	53	1205
Tug-coupling	C. Lentz	431,368	July 1	513	127	52	103
Tug. Draft	A. G. Olson and J. S. Lindquist	419,545	Jan. 14	1335	357	50	281
Tug for harness. Metal	J. T. Pohlman	439,682	Nov. 4	87	23	53	624
Tug. Hame	G. W. Chapman	431,437	July 1	625	156	52	126
Tug. Hame	M. M. Killinger	434,511	Aug. 19	1632	428	52	1095
Tug. Hame	W. E. King	425,678	Apr. 15	1906	508	51	388
Tug. Hame	F. Lather	427,002	May 6	104	28	51	832
Tug. Hame	J. B. Marshall	434,937	Aug. 26	2342	619	52	1239
Tug. Hame	J. D. McAnally	421,105	Feb. 11	1016	260	50	765
Tug. Hame	P. Penner	430,146	June 17	1597	397	51	1800
Tug. Hame	W. G. Riley	425,345	Apr. 8	1390	370	51	279
Tug. Hame	C. H. Schick	427,619	May 13	894	225	51	997
Tug. Hame	C. H. Smith and O. B. North	419,800	Jan. 21	1716	456	50	361
Tug. Hame	J. M. Stiver and G. A. Hilton	428,156	May 20	1709	433	51	1164
Tug. Hame	A. G. Woolley	433,159	July 29	3324	860	52	671
Tug. Hame	E. M. Woolley	427,958	Oct. 7	432	121	53	83
Tug. Harness	W. E. Hudson	428,915	May 27	2867	733	51	1408

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Tug. Harness.....	J. L. Wilcox.....	434,648	Aug. 19	1866	488	52	1141
Tug. Shaft.....	H. F. Bock.....	418,679	Jan. 7	18	5	50	6
Tug. Shaft.....	J. B. Crosby.....	429,606	June 10	766	185	51	1630
Tug. Shaft.....	C. W. Haas.....	439,002	Oct. 21	2053	550	53	404
Tug. Shaft.....	P. Schlomer.....	441,329	Nov. 25	2764	715	53	1161
Tug. Thill.....	M. Clifford and H. L. Warner.....	442,512	Dec. 9	1379	353	53	1539
Tog. Thill.....	W. J. Engle.....	435,740	Sept. 2	553	147	52	1482
Tug. Thill.....	D. Singletary.....	428,641	May 27	2439	621	51	1324
Tumbling-barrel.....	J. Henderson, Jr.....	423,250	Mar. 11	1341	349	50	1399
Tumbling-box.....	J. von Serkey.....	439,901	Nov. 4	414	107	53	688
Tumbling-box.....	E. H. Taylor.....	433,663	Aug. 5	330	85	52	820
Tunnel and cable railway. Combined.....	R. D. Radcliffe.....	440,577	Nov. 11	1494	385	53	904
Tunnel. Sectional tubular.....	D. Hobart.....	439,841	Nov. 4	316	79	53	670
Tunnels in water-bearing soil. Apparatus for driving.....	J. H. Vering.....	438,509	Oct. 14	1264	342	53	248
Tunneling. Method of and apparatus for.....	S. Mattson.....	427,339	May 6	473	{ 121 122 }	51	905
Tunneling-shield.....	J. H. Greathead.....	432,871	July 22	2855	731	52	576
Turbine.....	W. H. Elmer.....	443,905	Dec. 30	3687	944	53	2013
Turbine water-wheel.....	N. F. Burnham.....	427,552	May 13	795	200	51	979
Turbine water-wheel.....	J. Humphrey.....	428,409	May 13	1552	393	51	1124
Turbines. Mechanism for operating gates of.....	W. O. Harris.....	439,351	Oct. 28	2622	699	53	517
Turn-buckle blanks. Machine for making.....	C. B. Beach.....	438,092	Oct. 7	650	177	53	125
Turn-buckles. Die for making.....	J. Bass.....	422,175	Feb. 25	2547	673	50	1071
Turn-buckles. Die for making.....	S. A. Clark.....	435,033	Aug. 26	2479	656	52	1265
Turn-table.....	L. M. Clement, G. C. Watriss, and L. Heynemann.....	427,970	May 13	1438	364	51	1101
Turn-table.....	T. L. Johnson.....	427,328	May 6	457	118	51	901
Turn-table.....	J. C. H. Stur.....	425,151	Apr. 8	1107	294	51	222
Turner's work-carrier.....	F. W. Taylor.....	420,614	Feb. 4	265	70, 71	50	616
Turning and preparing piles or spars. Machine for.....	A. Ames.....	442,471	Dec. 9	1307	338	53	1524
Turning chain legs, rounds, and the like. Tool for.....	W. M. Palmer.....	419,873	Jan. 21	1846	485	50	387
Turning, engraving, or planing tools. Moving and guiding.....	G. M. Guerrant.....	431,578	July 8	843	210	52	175
Turning round rods. Tool for.....	E. J. Palmer.....	430,144	June 17	1594	397	51	1799
Turnstiles. Coin-operated lock for.....	H. Caspar.....	439,107	Oct. 28	2216	595	53	442
Turret and turreted barbettes for guns.....	J. B. G. A. Canet.....	419,921	Jan. 21	1909	{ 502 503 351 352 }	50	400
Turret or shield. Hydrostatic disappearing.....	F. A. Souriau.....	431,922	July 8	1386	{ 351 352 }	52	279
Tuyere.....	F. G. Nordmann.....	431,005	June 24	2982	732	51	2074
Tuyere.....	J. Stoll.....	420,286	Jan. 28	2496	662	50	519
Tuyere. Forge.....	C. G. Taylor and W. T. Angell.....	427,933	May 13	1383	350	51	1090
Tuyere. Water.....	F. G. Nordmann.....	421,867	Feb. 18	2107	553	50	979
Tuyeres. Slag-escape for.....	J. C. Bansemmer and E. L. Davies.....	426,702	Apr. 29	3456	906	51	708
Tweezers. Hair-spring.....	J. R. Graves.....	421,925	Feb. 25	2193	575	50	1005
Twine.....	W. Deering.....	437,378	Sept. 30	3220	839	52	2017
Twine.....	G. L. Rice.....	436,261	Sept. 9	1363	355	52	1642
Twine and making the same.....	F. R. Williams.....	437,386	Sept. 30	3230	842	52	2019
Twine-cutter.....	C. E. Hicks.....	442,254	Dec. 9	975	256	53	1461
Twine-cutter.....	A. A. Low.....	419,269	Jan. 14	931	246	50	198
Twine-cutter.....	A. A. Low.....	419,271	Jan. 14	933	247	50	199
Twine-cutter.....	A. A. Low.....	419,273	Jan. 14	936	247	50	199
Twine-cutter.....	G. E. Tripp.....	425,194	Apr. 8	1178	312	51	239
Twine for binding grain, &c.....	O. H. Watkins.....	431,298	July 1	399	100	52	82
Twine for use in grain-binding harvesters. Machine for manufacturing.....	F. R. Williams.....	429,829	June 10	1095	270	51	1692
Twine from straw, flax, hemp, &c. Machine for making.....	G. H. Ellis.....	433,856	Aug. 5	617	161	52	877
Twine from straw. Machine for making.....	B. M. Watkin.....	438,745	Oct. 21	1652	443	53	327
Twine from straw. Manufacturing.....	G. H. Ellis.....	433,855	Aug. 5	616	161	52	877
Twine-holder.....	J. T. Jones.....	435,425	Sept. 2	65	21	52	1387
Twine-holder.....	W. C. Riesberry.....	426,645	Apr. 29	3367	882	51	691
Twine-holder.....	A. Vileyn.....	441,454	Nov. 25	2974	765	53	1201
Twine-holder. Automatic.....	W. N. Candee.....	436,301	Sept. 9	1423	371	52	1654
Twine holder. Wrapping.....	J. J. Hooker.....	428,561	May 20	2312	587	51	1281
Twine in balls. Means for securing.....	E. E. Biederman.....	423,116	Mar. 11	1149	299	50	1361
Twine. Machine for making combined paper and fiber.....	F. R. Williams.....	439,225	Oct. 28	2412	647	53	478
Twine-making machine.....	G. A. Lowry.....	436,908	Sept. 23	2472	645	52	1868
Twine or cord holder.....	A. D. Huntley.....	428,340	May 20	1996	502	51	1220
Twist-drills. Manufacture of.....	J. C. Taft.....	430,792	June 24	2656	651	51	2013
Twist-preventer.....	N. S. Key.....	434,279	Aug. 12	1269	329	52	1014
Twister-ring.....	J. Belfield.....	422,699	Mar. 4	497	127	50	1231
Twisting machine. Band and cord.....	J. L. Inman.....	426,383	Apr. 22	2961	{ 777 778 }	51	604
Twisting machine. Driving-band.....	W. H. Naylor.....	422,611	Mar. 4	368	91	50	1206
Twisting machine. Strand.....	J. W. Martin.....	438,686	Oct. 21	1562	420	53	310
Twisting mechanism.....	H. Lacasse and S. Wile.....	443,192	Dec. 23	2564	{ 658 659 }	53	1787
Twisting or spinning silk or other fiber. Machine for.....	O. O. Sullivan.....	419,569	Jan. 14	1365	{ 365 366 }	50	287
Type-bar.....	R. H. St. John.....	435,777	Sept. 2	616	163	52	1493
Type-bar machine.....	R. H. St. John.....	442,551	Dec. 9	1439	{ 369 370 471 }	53	1550
Type-bars. Machine for forming.....	O. Mergenthaler.....	436,531	Sept. 16	1787	{ 472 473 474 287 288 }	52	1730
Type-bars. Machine for producing.....	O. Mergenthaler.....	425,140	Apr. 8	1086	{ 289 290 291 }	51	219
Type-bed-operating mechanism.....	J. L. Cox.....	433,396	July 29	3650	942	52	738

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Type-case stand	P. C. Johns	435,587	Sept. 2	319	89	52	1436
Type-case stand. Folding	D. B. Bush, Jr.	436,211	Sept. 9	1294	338	52	1627
Type-cleaner	A. T. Brown	421,044	Feb. 11	932	241	50	749
Type-cleaning attachment for writing-machines	W. B. Northrop	425,387	Apr. 8	1455	390	51	291
Type-dies. Producing	C. L. Travis	427,716	May 13	1042	261	51	1026
Type-distributing apparatus	L. K. Johnson and A. A. Low	435,564	Sept. 2	281	78, 79	52	1430
Type-distributing apparatus	L. K. Johnson and A. A. Low	436,039	Sept. 9	1023	266 267	52	1578
Type-distributing machine	P. P. Craven	441,750	Dec. 2	189	50, 51	53	1299
Type-distributing machine	L. Dow and D. Powers	430,007	June 10	1365	337 338 339 340	51	1746
Type-distributing machine	L. K. Johnson and A. A. Low	421,001	Feb. 11	863	223 224 225	50	736
Type-forms. Machine for washing printers'	W. R. Wilson	423,402	Mar. 11	1574	412	50	1443
Type-holder	B. B. Hill	420,454	Feb. 4	43	9	50	571
Type-impressions. Apparatus for producing in- dented	W. J. Howell	423,688	Mar. 18	2001	527 528 529	50	1532
Type-impressions. Apparatus for producing in- dented	W. J. Howell	423,689	Mar. 18	2008	529 530 531	50	1533
Type-making mechanism	G. Corsa	443,085	Dec. 23	2346	599 600 601	53	1745
Type. Relief	H. W. Taylor and C. W. Welman ..	424,147	Mar. 25	2684	714	50	1669
Type setting and printing machine	G. G. Allen	427,947	May 13	1407	355 356	51	1095
Type-setting apparatus	J. Gustafson	428,906	May 27	2852	725	51	1405
Type-setting apparatus. Machine for perforating strips for use in automatic	J. B. Odell	431,280	July 1	376	94	52	76
Type-setting machine	J. W. Chadwick	429,754	June 10	979	240	51	1671
Type-setting machine	P. P. Craven	422,122	Feb. 25	2469	652 653	50	1056
Type-setting machine	J. Gustafson	419,119	Jan. 7	700	184 185	50	147
Type-setting machine	J. Gustafson	427,685	May 13	988	249 250	51	1016
Type-setting machine	J. B. Odell	434,942	Aug. 26	2351	622 623	52	1241
Type-setting machine	G. P. Prescott	433,030	July 29	3124	802 803 804	52	633
Type-setting machines. Feed appliance for	R. Clay and J. E. Marchant	430,624	June 24	2367	578	51	1956
Type-transferring case	E. E. Baker	423,715	Mar. 18	2044	539	50	1539
Type-writer	J. Brady	439,998	Nov. 4	567	149 150	53	718
Type-writer	L. T. Foss and T. K. Keith	441,654	Dec. 2	36	10	53	1269
Type-writer	J. F. Frankey	421,921	Feb. 25	2185	573	50	1004
Type-writer	J. Hall	425,876	Apr. 15	2192	563	51	443
Type-writer	J. F. McLaughlin	421,838	Feb. 18	2055	542	50	969
Type-writer	H. K. Sauder	427,118	May 6	147	39	51	841
Type-writer	F. Van Fleet and G. E. Graff	425,589	Apr. 15	1758	471 472	51	359
Type-writer attachment	W. S. Romme	441,705	Dec. 2	121	33	53	1286
Type-writer cabinet	M. Bancroft	427,216	May 6	292	75	51	869
Type-writer cabinet	M. Bancroft	427,217	May 6	293	75	51	869
Type-writer cabinet	M. Bancroft	442,658	Dec. 16	1600	414	53	1592
Type-writer cabinet	J. E. Davis	427,841	May 13	1232	312	51	1063
Type-writer case	M. Bancroft	427,954	May 13	1418	358	51	1097
Type-writer cipherograph	M. A. Wier	442,674	Dec. 16	1628	420	53	1599
Type-writer inking-ribbon	L. H. Rogers	420,312	Jan. 28	2526	670	50	525
Type-writer scale	H. A. Iddings and J. P. Megeath ..	433,789	Aug. 5	523	136	52	858
Type-writers. Adjustable copy-holder for	F. K. Ward	442,467	Dec. 9	1299	336	53	1523
Type-writers. Copy-holder for	J. Chase	425,406	Apr. 15	1487	399	51	307
Type-writers. Guide-chart for	J. R. Free	429,614	June 10	773	187	51	1631
Type-writing and matrix-making machine	E. Wright	440,086	Nov. 4	683	182 183	53	741
Type-writing machine	H. Abbott	437,371	Sept. 30	3210	836	52	2011
Type-writing machine	H. Abbott	437,372	Sept. 30	3211	837	52	2015
Type-writing machine	W. Baker	432,154	July 15	1759	451	52	357
Type-writing machine	W. J. Barron	430,416	June 17	2038	502 503	51	1886
Type-writing machine	W. J. Barron	432,220	July 15	1852	475	52	377
Type-writing machine	W. J. Barron	436,820	Sept. 23	2289	603	52	1834
Type-writing machine	J. W. Bartlett	437,473	Sept. 30	3371	882 883	52	2049
Type-writing machine	G. C. Blickensderfer	432,295	July 15	1973	504	52	395
Type-writing machine	G. C. Blickensderfer	432,298	July 15	1979	505	52	398
Type-writing machine	J. J. Boyer	428,264	May 20	1876	471	51	1197
Type-writing machine	J. Brady	431,869	July 8	1323	331	52	266
Type-writing machine	J. Brady and J. R. Vellacott	426,360	Apr. 22	2920	768	51	596
Type-writing machine	B. A. Brooks	423,900	Mar. 25	2322	612 613	50	1600
Type-writing machine	B. A. Brooks	438,985	Oct. 21	2032	542 543	53	400
Type-writing machine	A. T. Brown	436,333	Sept. 16	1475	385 386	52	1672
Type-writing machine	W. M. Carpenter	437,090	Sept. 23	2726	712 713	52	1918
Type-writing machine	A. W. Cash	425,931	Apr. 15	2280	603 604	51	458
Type-writing machine	A. W. Cash	427,500	May 6	712	178	51	953

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Type-writing machine	A. W. Cash	428,891	May 27	2831	719	51	1400
Type-writing machine	C. R. Clerk	438,430	Oct. 14	1153	312	53	226
Type-writing machine	C. M. Clinton and J. McNamara	443,932	Dec. 30	3733	954 955 956	53	2022
Type-writing machine	M. Cohn	432,981	July 29	3043	781 782	52	616
Type-writing machine	M. Cohn	432,982	July 29	3045	782 783	52	617
Type-writing machine	S. Collins	433,765	Aug. 5	485	126	52	850
Type-writing machine	C. A. Conkle and J. A. McCulloch	431,919	Aug. 26	2318	612	52	1234
Type-writing machine	C. A. Conkle and J. A. McCulloch	436,338	Sept. 16	1484	387	52	1673
Type-writing machine	L. Dart	432,479	July 15	2241	579 580	52	450
Type-writing machine	A. S. Dennis	437,753	Oct. 7	119	36	53	26
Type-writing machine	G. L. Depuy	443,957	Dec. 30	3773	964 965	53	2029
Type-writing machine	D. W. Dodson	438,724	Oct. 21	1602	430 432 433	53	318
Type-writing machine	G. C. Elliott	440,307	Nov. 11	1051	270 271	53	821
Type-writing machine	J. M. Fairfield and G. I. Francis	420,870	Feb. 4	654	170	50	688
Type-writing machine	J. Felbel and A. W. Steiger	441,948	Dec. 2	497	133	53	1361
Type-writing machine	D. E. Felt	441,232	Nov. 25	2604	673 674 675 676	53	1131
Type-writing machine	F. Felt	432,025	July 15	1552	394	52	318
Type-writing machine	E. S. Field	442,028	Dec. 2	629	170	53	1385
Type-writing machine	G. K. Flower	426,931	Apr. 29	3782	988	51	773
Type-writing machine	J. H. Forrest	438,617	Oct. 21	1133	387	53	288
Type-writing machine	L. T. Foss and T. K. Keith	429,025	May 27	3024	777	51	1438
Type-writing machine	L. T. Foss and T. K. Keith	438,916	Oct. 21	1923	512	53	378
Type-writing machine	J. B. Gathright	436,916	Sept. 23	2492	652	52	1872
Type-writing machine	J. W. Gibboney	426,005	Apr. 22	2416	639	51	493
Type-writing machine	J. Hall	421,702	Feb. 18	1872	491	50	937
Type-writing machine	E. M. Hamilton	427,858	May 13	1259	318 319	51	1068
Type-writing machine	E. M. Hamilton	430,771	June 24	2622	642 643	51	2006
Type-writing machine	E. M. Hamilton	430,772	June 24	2623	643	51	2006
Type-writing machine	E. M. Hamilton	430,773	June 24	2626	643 644	51	2007
Type-writing machine	E. M. Hamilton	430,775	June 24	2629	644 645	51	2007
Type-writing machine	E. M. Hamilton	430,776	June 24	2630	645 646	51	2008
Type-writing machine	E. M. Hamilton	430,777	June 24	2636	646	51	2009
Type-writing machine	D. D. and J. L. Harr	442,973	Dec. 16	2155	555 556	53	1700
Type-writing machine	M. J. Hewlett	439,068	Oct. 21	2151	577 578	53	423
Type-writing machine	W. A. Hill and W. F. Foss	419,522	Jan. 14	1303	348	50	273
Type-writing machine	J. Houlehan	442,318	Dec. 9	1073	281	53	1478
Type-writing machine	J. Houlehan	442,583	Dec. 9	1492	384	53	1562
Type-writing machine	S. C. Hurlbut	441,068	Nov. 18	2306	597 598	53	1068
Type-writing machine	J. Hutchison	425,799	Apr. 15	2072	553 554 58	51	422
Type-writing machine	A. H. Huth	427,173	May 6	230	59 60	51	857
Type-writing machine	R. H. Ingersoll	429,195	June 3	136	33	51	1497
Type-writing machine	H. R. Kennedy	437,119	Sept. 23	2770	724 725	52	1927
Type-writing machine	G. H. Lasar	439,530	Oct. 28	2888	768	53	568
Type-writing machine	A. Lowe	441,880	Dec. 2	392	103 104	53	1342
Type-writing machine	F. F. Main	438,078	Oct. 7	631	172	53	121
Type-writing machine	U. S. McCormack	439,544	Oct. 28	2909	774	53	572
Type-writing machine	J. F. McLaughlin	421,836	Feb. 18	2047	541 542	50	968
Type-writing machine	J. F. McLaughlin	421,837	Feb. 18	2052	542	50	969
Type-writing machine	J. F. McLaughlin	429,359	June 3	390	92, 93	51	1546
Type-writing machine	M. G. Merritt	421,183	Feb. 11	1127	288 289	50	787
Type-writing machine	M. G. Merritt	434,991	Aug. 26	2416	639	52	1253
Type-writing machine	M. G. Merritt	440,360	Nov. 11	1123	288	53	835
Type-writing machine	P. Mesick and A. E. Ayer	442,323	Dec. 9	1079	283 284 481	53	1479
Type-writing machine	C. T. Moore	419,864	Jan. 21	1822	482 483 499	50	381
Type-writing machine	D. A. Murray	423,622	Mar. 18	1894	500 501	50	1511
Type-writing machine	F. Myers	419,209	Jan. 14	844	222	50	181
Type-writing machine	F. Myers	419,278	Jan. 14	942	249	50	200
Type-writing machine	F. Myers	439,171	Oct. 28	2312	621 622	53	459
Type-writing machine	F. Myers	441,687	Dec. 2	85	23, 24	53	1279
Type-writing machine	F. Myers	442,819	Dec. 16	1894	488 489	53	1649

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Type-writing machine	F. Myers	442,820	Dec. 16	1899	{ 489 490	53	1650
Type-writing machine	C. M. North	435,349	Aug. 26	2964	{ 786 787	52	1355
Type-writing machine	L. J. Odell	437,791	Oct. 7	186	58	53	37
Type-writing machine	C. R. Osborne	427,791	May 13	1163	{ 291 292	51	1050
Type-writing machine	J. H. Osgood	423,945	Mar. 25	2391	{ 636 637	50	1613
Type-writing machine	C. H. Perry	435,654	Sept. 2	431	{ 115 116	52	1456
Type-writing machine	J. W. Pierce	419,217	Jan. 14	858	{ 225 226	50	184
Type-writing machine	G. G. Prentice	427,609	May 13	880	221	51	994
Type-writing machine	W. P. Quentell	433,820	Aug. 5	572	{ 149 150	52	868
Type-writing machine	W. M. Reason	439,847	Nov. 4	326	84	53	671
Type-writing machine	W. H. Robertson	439,689	Nov. 4	96	25	53	627
Type-writing machine	J. W. Schuckers	423,576	Mar. 18	1824	{ 480 481	50	1498
Type-writing machine	J. W. Schuckers	433,097	July 29	3232	{ 832 833	52	653
Type-writing machine	J. W. Schuckers	441,197	Nov. 25	2522	{ 651 652	53	1119
Type-writing machine	J. W. Schuckers	441,257	Nov. 25	2646	{ 687 688	53	1139
Type-writing machine	J. W. Schuckers and M. O. Rehfuss	441,198	Nov. 25	2532	{ 654 655 656 657	53	1121
Type-writing machine	E. J. Silkman	436,319	Sept. 9	1447	{ 377 378	52	1658
Type-writing machine	R. T. Smith	443,546	Dec. 30	3128	{ 805 806	53	1905
Type-writing machine	R. T. Smith	443,547	Dec. 30	3132	806	53	1906
Type-writing machine	C. Spiro	422,042	Feb. 25	2345	619	50	1033
Type-writing machine	C. Spiro	435,775	Sept. 2	610	162	52	1492
Type-writing machine	S. Sweet, O. C. Hoffmann, and F. Sanderson	427,637	May 13	917	230	51	1002
Type-writing machine	A. Von Brandis	420,843	Feb. 4	608	{ 156 157	50	678
Type-writing machine	J. A. Wallace	423,644	Mar. 18	1937	{ 510 511	50	1520
Type-writing machine	G. B. Webb	443,707	Dec. 30	3394	{ 871 872	53	1955
Type-writing machine	L. T. Weiss	438,665	Oct. 21	1501	405	53	301
Type-writing machine	P. P. Wenz	438,965	Oct. 21	1994	{ 533 534	53	392
Type-writing machine	A. A. Wilcox	421,536	Feb. 18	1635	422	50	889
Type-writing machine	J. N. Williams	442,697	Dec. 16	1671	{ 428 429 430	53	1606
Type-writing machine	A. Wirsching	422,276	Feb. 25	2708	{ 713 714	50	1100
Type-writing machine	T. D. Worrall	419,396	Jan. 14	1125	{ 397 398	50	237
Type-writing machine	A. E. Wynn	437,959	Oct. 7	433	121	53	83
Type-writing machine	G. W. N. Yost	420,567	Feb. 4	196	51	50	603
Type-writing machine	G. W. N. Yost	428,294	May 20	1927	484	51	1306
Type-writing machine	G. W. N. Yost	428,438	May 20	2146	540	51	1250
Type-writing machine	G. W. N. Yost	429,710	June 10	931	225	51	1659
Type-writing machine	G. W. N. Yost and C. E. Merritt	442,409	Dec. 9	1217	314	53	1506
Type-writing machine	E. F. Youngs	438,971	Oct. 21	2005	536	53	894
Type-writing machine	F. A. Young	428,738	May 27	2606	661	51	1354
Type-writing-machine attachment	R. Durin and R. Sheldon	424,187	Mar. 25	2743	731	50	1680
Type-writing-machine attachment	G. A. Goodson	427,680	May 13	977	247	51	1014
Type-writing-machine attachment	H. O. Hooper	427,683	May 13	998	251	51	1018
Type-writing-machine attachment	W. W. Street	427,712	May 13	1036	{ 259 260	51	1025
Type-writing-machine attachment	C. L. Travis	427,715	May 13	1040	261	51	1026
Type-writing-machine driving mechanism	G. W. N. Yost	427,652	May 13	938	235	51	1006
Type-writing machine for the blind	E. J. Nolan	422,614	Mar. 4	375	92, 93	50	1208
Type-writing machine for the blind	L. Shreshley	443,977	Dec. 30	3512	972	53	2036
Type-writing-machine key	E. M. Hamilton	430,774	June 24	2628	644	51	2077
Type-writing-machine type-bar	L. B. Harkness and C. E. Quaife	422,775	Mar. 4	595	152	50	1251
Type-writing machines. Automatic type-cleaner for	J. V. Gibbonsey	428,618	Oct. 21	1436	387	53	288
Type-writing machines. Changeable ribbon-spool for	W. L. Salvage	428,860	May 27	2753	707	51	1390
Type-writing machines. Cleaning attachment for	A. T. Brown	427,393	May 6	542	138	51	919
Type-writing machines. Cleaning attachment for	S. Ford	443,672	Dec. 30	3337	859	53	1945
Type-writing machines. Cleaning attachment for	W. P. Lewis	436,424	Sept. 16	1636	430	52	1702
Type-writing machines. Cleaning device for	O. Cohn	430,469	June 17	2123	521	51	1901
Type-writing machines. Copy-holder for	M. L. Pipes and E. F. Pernot	434,356	Aug. 12	1379	362	52	1037
Type-writing machines. Inking-pad for	H. Abbott	443,032	Dec. 16	2253	579	53	1720
Type-writing machines. Inking-ribbon spool for	H. Ray. (Re-issue)	11,097	July 22	3012	774	52	604
Type-writing machines. Mechanism for rotating the platens of	M. G. Merritt and G. S. Heath	442,129	Dec. 9	789	213	53	1424
Type-writing machines. Paper carriage for	G. C. Blickensderfer	432,297	July 15	1977	505	52	397
Type-writing machines. Paper-carriage for	G. S. Graff	429,757	June 10	985	241	51	1672
Type-writing machines. Paper-holding device for	M. G. Merritt	442,633	Dec. 16	1569	405	53	1586
Type-writing machines. Ribbon-feed shifter for	C. Spiro	438,901	Oct. 21	1903	506	53	373
Type-writing machines. Roller or platen for	G. C. Blickensderfer	442,603	Dec. 16	1331	395	53	1578
Type-writing machines. Safety locking device for	J. M. Badollet	428,444	May 20	2153	541	51	1251
Type-writing machines. Stem-key for	G. W. N. Yost	420,566	Feb. 4	195	50	50	603
Type-writing machines. Type-aligner for	A. W. Hallenborg	418,791	Jan. 7	199	49	50	44

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Type-writing machines. Type-bar and hanger for.	M. G. Merritt	440,574	Nov. 11	1489	384	53	904
Type-writing machines. Type-bar for.	E. A. Brandenburg	420,005	Jan. 21	2040	538	50	425
Type-writing machines. Type-cleaning brush for.	M. Swartout	441,906	Dec. 2	433	115	53	1350
Type-writing machines. Type-cleaning device for.	B. H. Holmes and J. H. Ralston	443,830	Dec. 30	3594	924	53	1995
Type-writing machines. Type-wheel for.	G. C. Blickensderfer	432,296	July 15	1975	505	52	397
Type-writing machines. Word-spacing mechanism for.	F. H. Harris and C. E. Crandall	442,315	Dec. 9	1068	280	53	1477
Typograph.	F. E. Bright	437,141	Sept. 23	2823	734 735 736 737 738 731 732 733 734	52	1936
Typograph.	J. R. Rogers	437,139	Sept. 23	2811	732 733	52	1935
Typographing stenciling material.	W. G. Fuerth	441,235	Nov. 25	2616	677	53	1133
Umbrella.	H. Alfman	420,375	Jan. 28	2615	694	50	541
Umbrella.	J. Bergesen	433,270	July 29	3482	899	52	704
Umbrella.	J. Bergesen	438,983	Oct. 21	2028	541	53	399
Umbrella.	A. W. Berne	429,557	June 3	687	168	51	1604
Umbrella.	A. Cappel	437,287	Sept. 30	3066	803	52	1989
Umbrella.	G. W. Dill	435,735	Sept. 2	548	145	52	1481
Umbrella.	C. H. Knobel	418,845	Jan. 7	294	71	50	62
Umbrella.	G. A. Linke	420,690	Feb. 4	369	98	50	636
Umbrella.	S. B. McCormico	429,466	June 3	553	134	51	1579
Umbrella.	J. McCormick	421,419	Feb. 18	1459	378	50	857
Umbrella and cane. Combined.	Z. Davis	433,332	July 29	3569	921	52	722
Umbrella attachment.	M. Dattlebaum	423,990	Mar. 25	2461	653	50	1626
Umbrella-clasp.	W. R. S. Fluck	425,128	Apr. 8	1069	283	51	216
Umbrella-cover.	C. H. Shaw	422,643	Mar. 4	420	105	50	1216
Umbrella drip-cup.	S. B. Minnich	424,122	Mar. 25	2653	706	50	1663
Umbrella drip-cup.	H. Rohrer	425,109	Apr. 8	1033	276	51	208
Umbrella. Folding.	J. F. Flint	419,325	Jan. 14	1021	270	56	216
Umbrella. Folding.	F. Mussen	432,324	July 15	2015	518	52	403
Umbrella-frame.	J. Jeffery and J. Simpson	433,625	Aug. 5	270	72	52	809
Umbrella-frame.	J. H. Sprague	429,160	June 3	78	19	51	1486
Umbrella-frame.	J. H. Sprague	429,783	June 10	1022	250	51	1678
Umbrella-holder.	G. W. Dalton	437,681	Oct. 7	9	3	53	4
Umbrella-holder.	F. W. Strong	434,304	Aug. 12	1305	339	52	1021
Umbrella-holder.	F. F. Ward	424,041	Mar. 25	2540	677	50	1641
Umbrella-notches. Apparatus for cutting.	O. M. Smith	439,437	Oct. 28	2734	734	53	542
Umbrella-notches. Making.	O. M. Smith	436,676	Sept. 16	2037	532	52	1777
Umbrella or cane holder.	J. B. Potts	439,423	Oct. 28	2733	729	53	538
Umbrella or parasol.	W. J. Chambers	429,420	June 3	483	115	51	1563
Umbrella or parasol.	H. A. Fleuss	423,422	Mar. 18	1607	421	50	1458
Umbrella or parasol.	F. James	433,733	Aug. 5	430	110	52	839
Umbrella or parasol exhibitor.	A. Y. and J. P. Knisely	431,266	July 1	351	88	52	72
Umbrella or parasol fastener.	R. G. Ledig	426,454	Apr. 29	3063	809	51	637
Umbrella or parasol. Folding.	C. A. Anderson	438,461	Oct. 14	1202	326	53	236
Umbrella or parasol frame.	H. Albin	428,661	May 27	2475	629	51	1330
Umbrella or parasol ribs. Machine for covering.	T. Adams	428,873	May 27	2801	712	51	1394
Umbrella-rack.	C. B. De Weese and T. E. Maxwell	421,352	Feb. 11	1364	353	50	830
Umbrella rack and lock.	L. W. Morse	428,814	May 27	2715	688 689	51	1376
Umbrella-runner.	W. H. Gaskill	428,320	May 20	2087	524	51	1239
Umbrella-runner retainer.	J. Rose	427,368	May 6	510	130	51	912
Umbrella-sticks. Inscription device for.	J. McLaughlin	436,799	Sept. 23	2255	594	52	1827
Umbrella-support.	L. E. Bobemirith	419,137	Jan. 7	724	190	50	151
Umbrella-supporter.	H. H. Pattee	435,446	Sept. 2	101	28, 29	52	1394
Umbrella-tips and the like. Fastening for.	A. J. Robinson	435,979	Sept. 9	930	244	52	1560
Umbrella-tips to bows. Device for attaching.	A. A. Armstrong	422,688	Mar. 4	481	122	50	1228
Umbrellas. Combined protection-case and drip-fer- nle for.	A. McKevitt	442,991	Dec. 16	2189	563	53	1707
Umbrellas. Fabric for covering.	S. Takaki	438,202	Oct. 14	807	219	53	162
Umbrellas. Machine for turning ribbed collars for.	W. E. and D. E. Doolittle	420,045	Jan. 28	2098	554	50	445
Umbrellas or parasols. Detachable cover for.	A. J. Robinson	422,632	Mar. 4	405	100	50	1214
Umbrellas or parasols. Machine for making springs for.	G. Rich	422,835	Mar. 4	692	177	50	1270
Umbrellas or parasols. Spring-retainer for.	W. Milatz	432,887	July 22	2878	737	52	580
Under-garment.	J. T. Brodnax	428,375	May 20	2054	517 518	51	1233
Under-garment.	W. A. Harder	429,310	June 3	316	74	51	1531
Under-garment. Invalid's.	E. L. Tozer	429,665	June 10	852	206 207	51	1646
Undershirt.	J. Adair	421,038	Feb. 11	920	237	50	747
Undershirt.	J. C. Sanford	432,442	July 15	2172	559	52	435
Underwaist.	G. M. Sigsbee	436,862	Sept. 23	2399	626	52	1854
Union-coupling.	A. E. Dart	424,468	Apr. 1	38	11	51	10
Universal joint.	W. L. Judson	423,562	Mar. 18	1808	477	50	1495
Upholsterer's web-stretcher.	W. E. Morton	432,428	July 15	2152	554	52	431
Upper.	V. Andretta	431,761	July 8	1146	286	52	233
Upper.	R. Nagle	432,326	July 15	2017	519	52	404
Upright drill.	S. E. Hildreth	426,588	Apr. 29	3282	862	51	675
Upsetting-machine.	S. Harris	440,565	Nov. 11	1476	380 381	53	901
Upsetting-machine die.	W. J. Parmelee	429,701	June 10	907	221	51	1657
Urinal.	J. R. Gibson	436,174	Sept. 9	1236	322	52	1616
Urinal.	P. White	432,465	July 15	2217	573	52	445
Urn. Coffee.	H. Brunhaus	427,735	May 13	1067	267	51	1031
Urn. Coffee.	L. Malen	429,139	June 3	50	13	51	1482
Uterine repositor.	M. Chisholm	424,178	Mar. 25	2729	728	50	1678
Uterine supportor.	A. T. Sherwood	436,861	Sept. 23	2398	626	52	1853

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Vacua. Apparatus for producing and maintaining high	J. Patten	427,792	May 13	1166	292	51	1050
Vacuum apparatus	C. Birkery and G. R. Case	442,474	Dec. 9	1312	293		
Vacuum-chamber	J. Patten	440,747	Nov. 18	1779	459	53	1525
Vacuum-evaporator	W. H. Collings	421,163	Feb. 11	1102	233	50	783
Vacuum preserving apparatus	R. S. Dixon	439,125	Oct. 23	2243	603	53	447
Vaginal injections. Apparatus for removing the waste liquids from.	P. A. Adelman	425,559	Apr. 15	1713	458	51	351
Valve	W. G. Adams	432,744	July 22	2660	680	52	538
Valve	C. Birkery	423,118	Mar. 11	1151	299		1362
Valve	C. Birkery	423,199	May 20	1764	446	51	1175
Valve	J. D. Bowman	429,881	June 10	1177	292	51	1708
Valve	G. W. Burr	426,635	Apr. 29	3353	878	51	629
Valve	O. F. Burton	420,224	Jan. 28	2396	638		501
Valve	P. Conway	425,756	Apr. 15	2018	537	51	410
Valve	C. B. Dudley	422,924	Mar. 11	856	223	50	1308
Valve	F. J. Ferrell	423,671	May 27	2492	634	51	1333
Valve	J. Frölich	436,578	Sept. 16	1881	494	52	1747
Valve	W. T. Harris	433,731	Aug. 5	428	109		839
Valve	H. P. Hood	434,592	Aug. 19	1767	462	52	1122
Valve	C. R. Hoopes	435,630	Sept. 2	397	107	52	1449
Valve	C. Jenkins	427,326	May 6	454	117	51	901
Valve	W. H. Kelly	443,833	Dec. 30	3597	924	53	1995
Valve	J. Knickerbacker	424,715	Apr. 1	430	114	51	85
Valve	E. W. Luce	425,442	Apr. 15	1542	413	51	318
Valve	F. J. Mitchell	441,682	Dec. 2	78	21	53	1277
Valve	J. J. Morrison	440,181	Nov. 11	843	217	53	784
Valve	W. Nugent	419,471	Jan. 14	1230	329	50	261
Valve	L. Roovers	419,076	Jan. 7	645	167	50	136
Valve	J. E. Sagne	430,042	June 10	1428	355	51	1757
Valve	C. H. Shepherd	424,580	Apr. 1	224	61	51	46
Valve	C. E. Van Auker	442,505	Dec. 9	1509	388	53	1565
Valve	W. Vielhaber	423,003	Mar. 11	977	257	50	1329
Valve	W. Vielhaber	423,097	Mar. 11	1122	293	50	1356
Valve	G. Vining	429,294	June 3	281	68	51	1524
Valve	E. H. Weatherhead	437,806	Oct. 7	207	64	53	41
Valve	J. C. Wood and C. F. Houston	426,351	Apr. 22	2910	765	51	594
Valve. Air-brake	A. R. Boluss	436,298	Sept. 9	1419	370	52	1653
Valve. Air-brake	A. R. Boluss	436,299	Sept. 9	1420	370	52	1654
Valve and cut-off for steam, water, and other pipes	J. and A. Zehren	433,060	July 29	3170	815	52	641
Valve and faucet	A. H. Dauchy	433,072	July 29	3187	819	52	644
Valve and faucet	A. H. Dauchy	433,198	July 29	3380	874	52	683
Valve and governor. Pressure-regulating	F. Henneböhl	419,440	Jan. 14	1193	316	50	251
Valve and racking-off cock. Check	M. Warren	441,727	Dec. 2	154	41	53	1292
Valve. Automatic	J. Clapp	425,751	Apr. 15	2011	536	51	409
Valve. Automatic	J. Clapp	425,752	Apr. 15	2012	536	51	409
Valve. Automatic	J. Clapp	440,100	Nov. 4	708	188	53	747
Valve. Automatic	W. S. Gray	424,974	Apr. 8	838	223	51	171
Valve. Automatic cut-off	C. W. Tremain	421,453	Feb. 18	1504	390	50	865
Valve. Automatic relief	F. Schreidt	433,543	Aug. 5	143	41	52	785
Valve. Automatic water	M. Magin	425,333	Apr. 8	1374	367	51	276
Valve. Back-pressure	L. Hussey	419,447	Jan. 14	1204	319	50	253
Valve. Balanced	T. M. Rees and C. L. Burgermeister	435,546	Sept. 2	253	70, 71	52	1424
Valve. Balanced cut-off	J. T. Case	441,092	Nov. 18	2348	608	53	1076
Valve. Balanced governor	F. C. Olin	443,107	Dec. 23	2403	613	53	1756
Valve. Balanced rotary	D. F. Stayman	439,608	Oct. 28	3012	798	53	582
Valve. Balanced slide	J. Baird	442,699	Dec. 16	1678	430	53	1607
Valve. Balanced slide	F. I. Freeman	420,495	Feb. 4	98	24		582
Valve. Balanced slide	E. V. Thomas	441,782	Dec. 2	241	63	53	1311
Valve. Balanced steam	G. H. Chappell	443,450	Dec. 23	2975	766	53	1867
Valve casing and seat	P. T. Coffield	438,572	Oct. 14	1357	368	53	268
Valve. Check	W. Craig	442,284	Dec. 9	1021	269	53	1468
Valve-closer. Electric	L. Mellett	434,671	Aug. 19	1904	496	52	1147
Valve. Controlled	A. Riedler	439,824	Nov. 4	288	73		664
Valve. Controlled	A. Riedler	439,825	Nov. 4	290	73	53	665
Valve-controller	J. B. Odell	426,466	Apr. 29	3100	813	51	640
Valve-controller. Electric	L. Bell and F. H. Root	437,673	Oct. 7	1	1	53	3
Valve-controller. Electric	H. W. Deeds	436,219	Sept. 9	1303	340	52	1629
Valve-controller. Electric	E. R. Malmborg	422,956	Mar. 11	907	238	50	1317
Valve-controller. Electric	C. E. Ongley	443,789	Dec. 30	3521	903	53	1980
Valve-controller. Electric	E. Thomson	423,965	Mar. 25	2428	644	50	1620
Valve-controller. Electro-magnetic	J. V. Stout	421,449	Feb. 18	1497	388	50	864
Valve. Cut-off	C. R. James	425,176	Apr. 8	1155	304		233
Valve. Cut-off	A. E. Norris	438,637	Oct. 21	1462	395	53	293
Valve device	J. Kelly	433,628	Aug. 5	275	73	52	810
Valve device	M. B. Mills	439,885	Nov. 4	385	100	53	62
Valve. Duplex	A. and F. E. Turner	440,448	Nov. 11	1287	333	53	865
Valve-eccentrics. Device for shifting	G. Brown	429,415	June 3	475	113	51	1562
Valve. Electro-thermostatic	L. Bell and F. H. Root	441,817	Dec. 2	301	81	53	1322
Valve. Engine	P. Brotherhood	436,694	Sept. 16	2059	539	52	1771
Valve. Engine	N. T. Edison	419,509	Jan. 14	1286	343		270
Valve. Engine	W. M. Smith	425,264	Apr. 8	1273	340	51	257
Valve. Engine-reversing	Z. O. Grabel	429,852	June 10	1125	275		1694
Valve. Engineer's air-brake	R. E. Marshall	441,432	Nov. 25	2029	755	53	1194

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Valve. Exhaust.	B. V. Nordberg.	421,606	Feb. 18	1742	456	50	910
Valve. Filter.	E. Burhorn.	423,122	Mar. 11	1156	300	50	1363
Valve. Float.	T. W. Beal.	433,435	Aug. 5	4	2	52	757
Valve. Float.	J. Krebbiel.	435,066	Aug. 26	2531	668	52	1275
Valve. Fluid-pressure signaling.	T. W. Welsh, F. L. Clark, and F. Moore.	435,783	Sept. 2	624	165	52	1495
Valve. Flushing.	P. W. Meehan.	437,864	Oct. 7	290	87	53	57
Valve for air-brakes. Automatic.	J. D. Callahan.	431,506	July 1	731	182	52	146
Valve for air-brakes. Automatic.	J. F. Carpenter.	431,331	July 1	447	111	52	92
Valve for air-brakes. Automatic.	H. Gnels. (Reissue)	11,071	Apr. 15	2349	622	51	473
Valve for air-brakes. Car-reservoir relief.	H. S. Park.	421,427	Feb. 18	1467	380	50	858
Valve for air brakes. Engineer's.	C. E. Leeman and A. W. Jones.	437,607	Sept. 30	3564	{ 930 931 }	52	2087
Valve for air-brakes. Governor.	F. Lansberg.	436,713	Sept. 16	2087	549	52	1787
Valve for automatic air-brakes. Release.	P. Grabler.	433,895	Aug. 5	677	175	52	889
Valve for automatic brake apparatus. Triple.	E. J. Lewis.	433,598	Aug. 5	236	61	52	802
Valve for automatic brake mechanism. Triple.	F. Moore.	435,762	Sept. 2	589	158	52	1488
Valve for automatic brake mechanism. Triple.	F. Moore.	435,763	Sept. 2	591	158	52	1489
Valve for basins, tanks or tubs.	P. White.	439,456	Oct. 28	2784	742	53	547
Valve for compound engines. Slide.	P. Brotherhood.	435,794	Sept. 2	644	170	52	1499
Valve for controlling pressure.	J. Howard.	431,660	July 8	980	244	52	203
Valve for dash-pots. Escape.	F. Phillips.	420,887	Feb. 4	689	177	50	693
Valve for direct-acting engines. Throttle.	W. F. Schmidt.	433,150	July 29	3313	856	52	669
Valve for dry-pipe fire-extinguishers. Automatic.	W. H. Stratton.	420,977	Feb. 11	828	214	50	730
Valve for elevators. Hydraulic.	D. P. Allen.	423,105	Mar. 11	1136	295	50	1358
Valve for engines. Exhaust.	N. T. Greene.	424,605	Apr. 1	258	69	51	53
Valve for engines. Reversing.	H. Vineyard.	423,194	Mar. 11	1266	329	50	1385
Valve for engines. Rotary.	P. N. Dellinger.	436,699	Sept. 16	2064	541	52	1782
Valve for engines. Slide.	S. S. Babbitt.	436,393	Sept. 16	1587	419	52	1693
Valve for engines. Slide.	O. L. Ward.	431,367	Aug. 12	1397	366	52	1040
Valve for fluid-pressure signaling apparatus.	E. J. Lewis.	435,758	Sept. 2	583	155	52	1487
Valve for fuel-gas pipes. Safety.	C. Wahl.	420,750	Feb. 4	446	118	50	651
Valve for gas-service pipes. Automatic.	C. Finch and J. Hummel.	422,583	Mar. 4	319	81	50	1197
Valve for hydraulic elevators. Safety.	W. H. Hultgren.	443,208	Dec. 23	2598	{ 668 669 }	53	1795
Valve for hydraulic machinery. Safety check.	H. Warden.	425,276	Apr. 8	1292	345	51	261
Valve for hydraulic presses. Relief.	J. M. Meloney.	421,182	Feb. 11	1126	288	50	787
Valve for locomotives. Relief.	W. M. Smith.	425,265	Apr. 8	1274	{ 341 342 }	51	258
Valve for motors.	R. Solano.	424,660	Apr. 1	342	90,91	51	67
Valve for pipes. Air.	A. P. Merrill.	442,529	Dec. 9	1406	359	53	1544
Valve for pumping-engines. Duplex.	M. T. Davidson.	431,180	July 1	221	55, 56	52	46
Valve for reciprocating engines.	H. C. Sergeant.	422,095	Feb. 25	2426	{ 640 641 }	50	1047
Valve for regulating fluid-pressure. Automatic.	A. P. Massey.	426,507	Apr. 29	3158	830	51	651
Valve for regulating the ingress of liquids to tanks.	J. H. Bullard.	419,408	Jan. 14	1151	306	50	242
Valve for sewer-pipes. Automatic discharge.	C. H. Shepherd.	429,156	June 3	71	18	51	1486
Valve for sewers or drains. Flap.	H. Walker.	420,367	Jan. 28	2606	693	50	540
Valve for stand-pipes. Indicator.	J. Giles.	437,489	Sept. 30	3393	889	52	2054
Valve for steam-boilers. Mud.	J. B. Barnes.	436,491	Sept. 16	1736	458	52	1722
Valve for steam-engines. Reversing.	J. W. Dennis and F. A. Shoemaker.	424,183	Mar. 25	2735	730	50	1679
Valve for steam engines. Slide.	N. T. Greene.	439,349	Oct. 28	2619	698	53	517
Valve for steam-engines. Steam-balance.	F. I. Freeman.	442,368	Dec. 9	1151	300	53	1493
Valve for steam-radiators. Air.	G. H. Noyes.	437,616	Sept. 30	3576	934	52	2089
Valve for steam-radiators. Air.	J. Poulson.	442,911	Dec. 16	2068	531	53	1682
Valve for steam-radiators. Air.	J. Poulson.	442,912	Dec. 16	2070	531	53	1682
Valve for steam-radiators. Air.	W. Todd.	430,448	June 17	2081	514	51	1894
Valve for water-filters. Check.	A. J. West.	442,158	Dec. 9	836	224	53	1433
Valve for water-pipes and means for operating the same. Waste.	W. T. Maurice.	423,540	July 22	2336	603	52	476
Valve. Gas.	F. C. Buttz.	427,152	May 6	203	52	51	851
Valve. Gas-engine.	S. Lawson.	433,246	July 29	3447	890	52	697
Valve. Gas-engine.	W. S. Sharpneck.	441,029	Nov. 18	2233	578	53	1054
Valve. Gas-meter.	H. Logue.	429,383	June 3	434	102	51	1554
Valve-gear.	H. W. Armstrong.	431,735	July 8	1114	{ 276 277 }	52	227
Valve-gear.	L. Czischek.	435,994	Sept. 9	952	250	52	1564
Valve-gear.	E. N. Dickerson.	431,880	July 8	1338	337	52	270
Valve-gear.	H. F. Gaskill.	423,993	Mar. 25	2465	{ 655 656 }	50	1627
Valve-gear.	M. E. Hall.	420,058	Jan. 28	2123	561	50	450
Valve-gear.	H. F. Jones.	423,165	Mar. 11	1229	320	50	1377
Valve-gear.	F. S. McKibben.	438,085	Oct. 7	639	174	53	123
Valve-gear.	H. P. Morgan.	443,782	Dec. 30	3507	900	53	1977
Valve-gear.	B. V. Nordberg.	428,316	May 20	1958	{ 491 492 }	51	1212
Valve-gear.	G. B. Petsche.	442,136	Dec. 9	801	216	53	1426
Valve-gear.	J. Richardson and B. R. Rowland.	435,323	Aug. 26	2916	774	52	1346
Valve-gear.	E. Roy.	436,266	Sept. 9	1369	357	52	1643
Valve-gear.	W. Sechrist.	443,463	Dec. 23	3001	771	53	1872
Valve-gear.	A. P. Toms.	440,796	Nov. 18	1866	480	53	983
Valve gear. Cut-off.	G. R. Babbitt.	439,619	Nov. 4	2	1	53	607
Valve gear. Cut-off.	I. F. Thompson. (Reissue)	11,128	Nov. 25	3240	{ 835 836 837 }	53	1254
Valve-gear. Engine.	W. B. Coulter.	419,184	Jan. 14	809	{ 213 214 }	50	174
Valve-gear. Engine.	E. F. Gordon.	432,343	Feb. 25	2824	745	50	1122
Valve-gear. Engine.	W. O. Knowlson.	430,528	June 17	2208	543	51	1917
Valve-gear. Engine.	R. F. McFeely.	418,741	Jan. 7	121	29, 30	50	27
Valve-gear for engines. Exhaust.	N. T. Greene.	425,219	Apr. 8	1212	322	51	245
Valve-gear for engines. Liberating.	N. T. Greene.	422,769	Mar. 4	584	150	50	1249
Valve-gear for gas-engines or petroleum-engines.	O. Vogelsang.	438,785	Oct. 21	1706	458	53	338
Valve-gear for fluid rams and pistons.	J. Parkin.	419,874	Jan. 21	1847	486	50	387
Valve-gear for steam-engines.	C. W. Hunt.	437,928	Oct. 7	390	111	53	75

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Valve-gear. Gas-engine.....	W. Heckert.....	425,132	Apr. 8	1073	285	51	216
Valve-gearing.....	J. Baird.....	441,786	Dec. 2	247	65, 66	53	1312
Valve-gearing.....	R. G. V. Mytton.....	427,704	May 13	1021	257	51	1022
Valve. Globe.....	J. O. Teft and C. W. Carpenter.....	423,288	Mar. 11	1418	368	50	1412
Valve. Governor.....	P. and K. Simon.....	431,406	July 1	569	{ 142 143 }	52	115
Valve. Hydraulic.....	L. M. Hosea.....	423,255	Mar. 11	1353	352	50	1401
Valve. Hydraulic.....	L. M. Hosea.....	423,256	Mar. 11	1356	353	50	1401
Valve. Hydraulic.....	L. Miller and J. H. B. Bryan.....	424,718	Apr. 1	433	115	51	86
Valve. Hydraulic-elevator.....	W. H. Hultgren.....	420,801	Feb. 4	530	{ 138 139 }	50	665
Valve. Hydraulic-elevator.....	A. Kieckhefer.....	436,245	Sept. 9	1342	{ 350 351 }	52	1637
Valve. Lock.....	W. A. Lamb and M. D. Crowell.....	440,714	Nov. 18	1726	443	53	958
Valve-lock.....	L. Weil.....	443,885	Dec. 30	3657	{ 942 943 }	53	2008
Valve-locking and store-closing mechanism. Combined.....	L. Weil.....	443,886	Dec. 30	3659	943	53	2008
Valve mechanism. Elevator.....	C. I. Hall.....	443,644	Dec. 30	3294	{ 849 850 }	53	1937
Valve mechanism for engines.....	C. Schmid.....	437,672	Sept. 30	3653	{ 953 954 }	52	2105
Valve mechanism. Slide.....	C. Schmid.....	423,492	Mar. 18	1706	450	50	1477
Valve-motion for steam-engines. Automatic.....	W. H. Blake.....	428,449	May 20	2159	{ 542 543 }	51	1252
Valve-operating mechanism.....	G. J. Graebert.....	423,240	Mar. 11	1330	345	50	1397
Valve-operating mechanism.....	S. T. Wellman and H. Hyatt.....	442,929	Dec. 16	2103	541	53	1689
Valve. Piston.....	C. J. Mellin.....	431,818	July 8	1244	{ 310 311 }	52	251
Valve. Piston.....	F. H. Richards.....	430,484	June 17	2138	526	51	1904
Valve. Piston.....	F. H. Richards.....	435,322	Aug. 26	2915	773	52	1346
Valve-plate. Adjustable.....	E. V. Thomas.....	426,151	Apr. 22	2630	690	51	536
Valve. Pop safety.....	E. P. Robinson.....	426,516	Apr. 29	3170	833	51	654
Valve. Radiator.....	W. E. Wood.....	428,031	May 13	1527	387	51	1120
Valve. Regulating.....	T. H. Holmes.....	436,177	Sept. 9	1242	324	52	1617
Valve. Regulating.....	J. F. McElroy.....	428,932	May 27	2886	739	51	1412
Valve regulator. Damper.....	A. V. Bay.....	432,294	July 15	1971	{ 503 504 }	52	396
Valve-regulator. Thermostatic.....	C. D. Harris.....	430,578	June 17	2279	560	51	1930
Valve. Relief.....	E. Martyn.....	429,632	June 10	801	195	51	1636
Valve-reseating machine.....	C. L. Morse.....	429,939	June 10	1255	311	51	1724
Valve. Reversing.....	A. L. Engelbach.....	434,328	Aug. 12	1338	349	52	1028
Valve. Rotary balanced.....	C. R. Hawkins.....	425,610	Apr. 15	1792	461	51	366
Valve. Safety.....	P. J. and C. F. Cunneen.....	438,471	Oct. 14	1213	329	53	238
Valve. Safety.....	R. Iwanowitsch.....	427,264	May 6	370	96	51	883
Valve. Safety.....	A. Lohbiller.....	440,315	Nov. 11	1063	273	53	823
Valve. Safety.....	G. Spencer.....	424,031	Mar. 25	2524	{ 671 672 }	50	1638
Valve. Safety.....	W. C. Walda.....	432,459	July 15	2208	569	52	443
Valve. Safety relief.....	A. D. Kilborn.....	432,140	July 15	1738	446	52	354
Valve-seat.....	R. Bean.....	429,412	June 3	471	112	51	1561
Valve-seat. Glass.....	J. H. Shea.....	419,720	Jan. 21	1598	427	50	337
Valve-seats. Tool for operating upon.....	J. Murphy.....	442,818	Dec. 16	1893	488	53	1649
Valve-seater.....	J. Carey.....	424,957	Apr. 8	812	218	51	166
Valve. Slide.....	G. W. De Groff.....	433,853	Aug. 5	614	160	52	876
Valve. Slide.....	G. Duvinage.....	440,349	Nov. 11	1109	244	53	832
Valve. Slide.....	G. Duvinage.....	441,541	Nov. 25	3098	795	53	1225
Valve. Slide.....	E. Leslie.....	425,681	Apr. 15	1910	509	51	388
Valve. Slide.....	E. Leslie.....	428,847	May 27	2762	702	51	1366
Valve. Slide-gate.....	W. Ross.....	442,458	Dec. 9	1286	{ 332 333 }	53	1520
Valve. Slow-closing.....	G. B. Moore.....	443,052	Dec. 16	2280	585	53	1725
Valve. Steam-actuated.....	A. Ball.....	421,890	Feb. 25	2141	{ 561 562 }	50	995
Valve. Steam-actuated.....	R. L. Frost.....	428,672	May 27	2494	634	51	1333
Valve. Steam-actuated.....	G. S. Faulkner.....	434,080	Aug. 12	951	250	52	953
Valve. Steam-actuated.....	W. Foster and W. H. Millward.....	433,200	July 29	3383	875	52	683
Valve. Steam-actuated.....	R. L. Frost.....	431,045	July 1	27	6	52	7
Valve. Steam-actuated.....	J. C. Gräbner and H. Ruperti.....	434,335	Aug. 12	1347	351	52	1030
Valve. Steam-actuated.....	D. E. Kempster.....	436,830	Sept. 23	2309	608	52	1837
Valve. Steam-actuated.....	B. R. Patten.....	424,666	Apr. 1	383	101	51	75
Valve. Steam-boiler.....	W. F. Cunningham.....	433,618	Aug. 5	260	69	52	808
Valve. Steam-brake.....	H. D. Dunbar and W. L. Austin.....	419,508	Jan. 14	1285	343	50	269
Valve. Steam-engine.....	A. R. Boluss.....	443,233	Dec. 23	2636	677	53	1801
Valve. Steam-engine.....	P. Brotherhood.....	436,693	Sept. 16	2058	{ 538 539 }	52	1781
Valve. Steam-engine.....	R. L. Frost.....	421,355	Feb. 11	1368	354	50	831
Valve. Steam-engine.....	H. N. Gale.....	440,757	Nov. 18	1797	{ 464 465 }	53	972
Valve. Steam-engine.....	W. Gehring.....	425,169	Apr. 8	1145	302	51	231
Valve. Steam-engine.....	L. A. Le Mieux.....	441,176	Nov. 25	2492	644	53	1113
Valve. Steam-engine.....	L. B. Phillips.....	440,057	Nov. 4	652	174	53	735
Valve. Steam-engine.....	F. Pilkington.....	437,618	Sept. 30	3577	{ 935 936 }	52	2090
Valve. Steam-engine.....	A. F. Radant.....	441,897	Dec. 2	420	112	53	1347
Valve. Steam-engine.....	J. Rose.....	440,965	Nov. 18	2143	{ 555 556 }	53	1036
Valve. Steam-engine.....	F. E. Sickels.....	424,581	Apr. 1	225	61	51	46
Valve. Steam-engine.....	S. T. Williams.....	430,160	June 17	1611	401	51	1803
Valve. Steam-engine.....	W. Wright.....	428,541	May 20	2282	580	51	1275
Valve. Steam-radiator.....	C. E. Van Auker.....	438,332	Oct. 14	1011	274	53	199
Valve-stems. Lock-wheel for.....	M. D. Crowell.....	441,357	Nov. 25	2802	724	53	1168
Valve. Stop.....	G. Adam.....	436,884	Sept. 23	2438	636	52	1862
Valve. Stop.....	C. A. Sulzman.....	431,082	July 1	79	19	52	18

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Valve. Stop and waste	P. Harvey	440,263	Nov. 11	970	248	53	809
Valve. Straight-way	J. Giles	423,755	Mar. 18	2098	554	50	1549
Valve. Straight-way	E. Lunkeuheimer	426,539	Apr. 29	3207	841	51	660
Valve. Straight-way	W. Porteous. (Reissue)	11,115	Oct. 7	704	191	53	136
Valve system. Engine	J. Wheelock	440,523	Nov. 11	1408	364	53	888
Valve. Tank	J. V. N. Stults	432,579	July 22	2389	616	52	486
Valve. Throttle	E. Leslie	434,796	Aug. 19	2082	544	52	1182
Valve. Throttle	G. Leverich	443,326	Dec. 23	2790	716	53	1831
Valve. Wash-basin	J. W. Hale	439,818	Nov. 4	278	71	53	662
Valve. Water-cooled	J. Hanlon	434,867	Aug. 19	2192	574	52	1204
Valves. Controlling shut-off and throttle	M. W. Sewall	430,089	June 10	1511	375	51	1773
Valves. Device for packing steam	J. W. Stanton	440,444	Nov. 11	1283	332	53	864
Valves for oil-burners. Mechanism for automatically operating	T. A. Lathrop	431,596	July 8	869	216	52	181
Valves. Machine for dressing	C. H. Sampson and P. J. Wright	435,904	Sept. 2	821	218	52	1534
Valves. Mechanism for actuating shut-off and throttle	M. W. Sewall	430,090	June 10	1513	{ 375 376 }	{ 51 51 }	{ 1773 1773 }
Valves. Means for reversing steam	C. E. Brown	439,472	Oct. 28	2805	747	53	551
Valves. Seat for pistons of triple	H. Fueller	422,392	Mar. 4	41	12	50	1145
Vamp-marking machine	J. F. Rogers	429,389	June 3	443	104	51	1555
Vapor and ammonia engine	J. H. Campbell	427,394	May 6	551	140	51	920
Vapor-bath	T. G. Humphrey	441,761	Dec. 2	211	56	53	1305
Vapor-burner	L. S. Calder	421,162	Feb. 11	1101	283	50	763
Vapor-burner	A. F. Chable	441,747	Dec. 2	185	49	53	1299
Vapor-burner	P. J. Fitzgerald	423,747	Mar. 18	2088	552	50	1547
Vapor-burner	A. Gateau	434,634	Aug. 19	1837	480	52	1135
Vapor-burner	C. W. Ingraham	441,763	Dec. 2	214	56	53	1305
Vapor-burner	W. R. Jeavons	438,548	Oct. 14	1319	358	53	261
Vapor-burner	D. T. Kirkpatrick	434,791	Aug. 19	2075	542	52	1181
Vapor-burner	T. D. McClary	421,188	Feb. 11	1139	291	50	769
Vapor-burner	E. G. Mummery	442,693	Dec. 16	1661	427	53	1604
Vapor-burner	A. Seizle-Goujon	439,307	Oct. 28	2562	684	53	505
Vapor-burner	J. Stabbers	422,166	Feb. 25	2535	669	50	1068
Vapor-burner	J. Stabbers	423,639	Apr. 15	1846	493	51	376
Vapor-burner	T. L. Sturtevant	422,993	Mar. 11	963	254	50	1327
Vapor-burner	R. Wallwork and A. C. Wells	437,268	Sept. 30	3031	{ 795 796 }	{ 52 52 }	{ 1982 1982 }
Vapor-burner cone	C. A. Pope	421,759	Feb. 18	1944	511	50	950
Vapor-burner. Generating duplex	H. Ruppel	432,332	July 15	2023	520	52	405
Vapor-engine	J. C. Diederichs	439,813	Nov. 4	271	68	53	661
Vapor face-bath	M. E. Stolp	427,807	May 13	1191	299	51	1055
Vapor-generating burner	G. Littlefield	421,411	Feb. 18	1451	376	50	855
Vapor generator and burner	A. H. Calkins	433,515	Aug. 5	108	31	52	778
Vapor generator and burner. Petroleum	B. B. Christie	421,551	Feb. 18	1660	430	50	894
Vapor or ammonia engines. Apparatus for operating	J. H. Campbell	427,400	May 6	558	141	51	922
Vapor or ammonia engines. Operating	J. H. Campbell	427,399	May 6	554	140	51	921
Vapor or decomposing hydrocarbon burner	T. D. McClary	437,310	Sept. 30	3096	{ 811 812 }	{ 52 52 }	{ 1994 1994 }
Vapor-purifying apparatus	H. Goldwater	432,525	July 22	2316	598	52	472
Vaporizer	C. A. Allen	439,317	Oct. 28	2575	687	53	508
Vaporizer	W. W. Netherfield	423,388	Mar. 11	1547	407	50	1438
Vaporizer	E. W. Parker	426,512	Apr. 29	3166	832	51	653
Vaporizer	E. W. Parker	428,054	May 13	1561	395	51	1126
Vaporizer	H. P. Roberts	435,903	Sept. 2	820	{ 217 218 }	{ 52 52 }	{ 1534 1534 }
Vaporizer	G. M. Sherman	432,842	July 22	2810	720	52	567
Vaporizer	G. M. Sherman	432,843	July 22	2812	720	52	567
Vaporizer	G. M. Sherman	436,063	Sept. 9	1057	{ 274 275 }	{ 52 52 }	{ 1585 1585 }
Vaporizer	J. O. Woods	430,161	June 17	1613	401	51	1803
Vaporizer	J. O. Woods	430,162	June 17	1613	402	51	1803
Vaporizer and burner. Combined oil and water	F. B. Meyers	433,870	Aug. 5	640	166	52	822
Vaporizer and burner for oil and water. Retort	M. D. Miller	435,236	Aug. 26	2765	730	52	1320
Vaporizer and burner. Hydrocarbon	J. D. Blakeley	421,700	Apr. 1	407	107	51	80
Vaporizer and burner. Hydrocarbon	R. M. Gardner	435,692	Sept. 2	493	131	52	1470
Vaporizer and burner. Hydrocarbon	C. E. McGhie	442,078	Dec. 2	709	190	53	1401
Vaporizer and burner. Hydrocarbon-oil	G. Botsford	431,322	July 1	434	108	52	89
Vaporizer and burner. Oil	E. Ralph	421,760	Feb. 18	1945	512	50	950
Vaporizing and burning hydrocarbon oils. Apparatus for	D. Bradshaw and J. M. Ashley	437,969	Oct. 7	454	127	53	86
Vaporizing and burning hydrocarbon oils. Apparatus for	J. L. Styron	425,009	Apr. 8	897	237	51	182
Vaporizing liquid hydrocarbons and supplying the vapor to burners	C. M. Hollingsworth	420,797	Feb. 4	524	136	50	664
Vaporizing liquid hydrocarbons and supplying the vapor to burners. Apparatus for	C. M. Hollingsworth	421,834	Feb. 18	2043	541	50	968
Vaporization of liquids. Apparatus for the	M. M. Monsanto	441,106	Nov. 18	2371	615	53	1081
Varnish	W. D. Field	422,195	Feb. 25	2580	50	50	1077
Varnish	W. D. Field	434,330	Aug. 12	1342	52	52	1029
Varnish, &c. Apparatus for applying	J. J. Clause and F. Rudolph	430,269	June 17	1822	447	51	1842
Varnish. Manufacture of	B. Piffard	444,853	Dec. 2	355	53	53	1333
Varnish-tanks. Combined strainer and discharge-cock for	D. T. Crockett	435,921	Sept. 9	848	223	52	1545
Varnishing and polishing moldings. Machine for	J. W. Hussey and E. Woodward	425,034	Apr. 8	931	{ 247 248 249 }	{ 51 51 51 }	{ 188 188 188 }
Vat: See Cheese and cream- ery vat. Milk-vat.							
Vault. Bank	C. O. Yale	428,241	May 20	1839	461	51	1190
Vault-cover	H. W. Sauer	436,639	Sept. 16	1967	516	52	1763
Vault-cover. Ventilating	J. Jacobs	436,084	Sept. 9	1094	253	52	1591
Vault-heater	I. D. Smead	426,551	Apr. 29	3224	845	51	664

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Vault-light frame	J. C. French	427,067	May 6	53	15	51	890
Vault or cell for outhouses	T. W. Carrico	434,244	Aug. 12	1210	315	52	1002
Vault or like structure. Safety-	G. S. Clark	440,914	Nov. 18	2061	533	53	1021
Vault or strong room	A. S. Wiley	424,664	Apr. 1	353	93	51	68
Vaulting-horse	R. Reach	438,640	Oct. 21	1466	395	53	294
Vegetable black	E. A. de Lisle	432,053	July 15	1605	411	52	328
Vegetable-chopper	J. W. McAlpin, Jr.	442,075	Dec. 2	706	189	53	1400
Vegetable-cutter	J. M. Lillpop	427,096	May 6	108	29	51	833
Vegetable cutter or slicer	G. Schoell	419,364	Jan. 14	1082	286	50	229
Vegetable-slicer	C. Schmetzer	436,022	Sept. 9	988	259	52	1571
Vegetable substances. Apparatus for treating	A. Chambers	425,980	Apr. 22	2377	629	51	486
Vegetables, &c. Extracting bad odors from	G. D. Nellenstejn	431,278	July 1	374	93	52	76
Vehicle	C. Dumke	437,335	Sept. 30	3132	819	52	2000
Vehicle	H. S. Fairbanks	439,936	Nov. 4	467	122	53	700
Vehicle	S. Garwood	441,151	Nov. 25	2451	635	53	1106
Vehicle	D. N. Kratzer	441,768	Dec. 2	222	58	53	1307
Vehicle	G. T. Newhall	428,815	May 27	2717	689	51	1376
Vehicle	D. M. Parry and D. S. Reel	435,366	Aug. 26	2991	793	52	1361
Vehicle	J. R. Parsons and D. A. Willcox	435,154	Aug. 26	2655	702	52	1299
Vehicle	T. Slevin	424,365	Mar. 25	3019	801	50	1733
Vehicle	C. J. Sullivan	436,949	Sept. 23	2533	663	52	1880
Vehicle	A. Wentling	435,598	Sept. 2	333	93	52	1439
Vehicle-body	J. C. Boone	436,493	Sept. 16	1737	459	52	1722
Vehicle-brake	E. C. Butt	431,873	July 8	1328	333	52	267
Vehicle-brake	L. M. Carpenter	419,110	Jan. 7	689	181	50	145
Vehicle-brake	W. S. Jobes	424,677	Apr. 1	369	97	51	71
Vehicle-brake	A. Kretzchmar	428,725	May 27	2588	656	51	1351
Vehicle-brake	W. H. Kaseberg	437,834	Oct. 7	248	76	53	49
Vehicle-brake	J. Lemoine	441,801	Dec. 2	271	72, 73	53	1317
Vehicle-brake	J. W. Martin	420,815	Feb. 4	562	144	50	671
Vehicle-brake	A. Paul	421,607	Feb. 18	1742	456	50	911
Vehicle-brake	M. P. Peterson	434,459	Aug. 19	1553	405	52	1078
Vehicle-brake	S. A. Seat and M. W. Perkins	421,522	Feb. 18	1613	415	50	885
Vehicle-brake	C. A. Shank	433,748	Aug. 5	461	118	52	845
Vehicle-brake	A. A. Smith	419,293	Jan. 14	970	257	50	205
Vehicle-brake	T. S. Smith	436,090	Sept. 9	1102	286	52	1592
Vehicle-brake	W. E. Stevens	432,775	July 22	2718	695	52	549
Vehicle-brake	E. Trickett	431,118	July 1	587	148	52	119
Vehicle-brake	E. Trickett	431,419	July 1	591	149	52	119
Vehicle-brake	E. Trickett	431,420	July 1	593	149	52	120
Vehicle-brake	A. Weisenhorn	443,449	Dec. 23	2974	765	53	1866
Vehicle-brake	H. M. Wingert	428,361	May 20	2028	509	51	1227
Vehicle-brake apparatus	W. Panter, J. C. Taite, and T. W. Carlton. }	437,449	Sept. 30	3338	871	52	2041
Vehicle-brake. Automatic	C. Wening	422,475	Mar. 4	165	44	50	1168
Vehicle-brake. Automatic	G. S. Hunter and J. Sheerer	425,075	Apr. 8	990	265	51	200
Vehicle-brake. Automatic	L. E. Van Antwerp	425,195	Apr. 8	1179	342	51	239
Vehicle-brake. Automatic	R. O. Wood	438,669	Oct. 21	1507	407	53	302
Vehicle-coupling	G. B. St. John	435,865	Sept. 2	746	200	52	1519
Vehicle-curtain fastener	J. Watters	436,962	Sept. 23	2548	667	52	1833
Vehicle dash-rail	G. S. Caldwell	428,266	May 20	1879	472	51	1197
Vehicle dash-rail	G. S. Caldwell	428,267	May 20	1880	472	51	1197
Vehicle. Electrically-propelled	J. Adair	421,887	Feb. 25	2137	561	50	995
Vehicle. Electrically-propelled	J. W. Henderson	432,237	July 15	1876	492	52	379
Vehicle. Electrically-propelled	R. M. Hunter	418,893	Jan. 7	379	92	50	79
Vehicle. Electrically-propelled	R. M. Hunter	424,207	Mar. 25	2766	738	50	1685
Vehicle. Electrically-propelled	R. M. Hunter	425,076	Apr. 8	991	266	51	200
Vehicle. Electrically-propelled	R. M. Hunter	432,136	July 15	1733	445	52	353
Vehicle. Electrically-propelled	R. M. Hunter	434,148	Aug. 12	1065	274	52	974
Vehicle. Electrically-propelled	R. M. Hunter	441,305	Nov. 25	2736	708	53	1155
Vehicle. Electrically-propelled	R. M. Hunter	441,565	Nov. 25	3129	804	53	1211
Vehicle. Electrically-propelled	A. A. Ingraham	428,917	May 27	2870	734	51	1408
Vehicle. Farn	F. G. McClellan	419,380	Jan. 14	947	250	50	201
Vehicle. Four-wheeled	A. W. Johnson	437,600	Sept. 30	3557	928	52	2085
Vehicle-frame. Adjustable	W. R. Connor	425,985	Apr. 22	2383	630	51	457
Vehicle-gear	H. J. Richardson	426,329	Apr. 22	2879	757	51	588
Vehicle-gear	G. A. W. Robertson	436,264	Sept. 9	1366	356	52	1642
Vehicle-gear	J. W. Vaughn	431,129	July 1	141	37	52	30
Vehicle gear-connection	G. B. St. John	422,992	Mar. 11	962	253	50	1327
Vehicle-gearing	P. Erb	428,835	May 27	2746	698	51	1383
Vehicle-gearing	W. J. Rawlings	431,755	July 8	1140	284	52	232
Vehicle-gearing. Electrically-propelled	N. S. Possons	434,949	Aug. 26	2360	625	52	1243
Vehicle. Hand-propelled	J. I. Herrick	433,202	July 29	3385	875	52	653
Vehicle-handle	G. S. Caldwell	428,268	May 20	1880	472	51	1198
Vehicle-heater	J. W. Everhart	432,389	July 15	2105	541	52	421
Vehicle-iron	E. J. Sugden	426,878	Apr. 29	3719	971	51	760
Vehicle. Jump-seat	E. J. Hess and W. L. Hawes	438,884	Oct. 21	1880	499	53	370
Vehicle. Motor	J. W. Quinn	431,993	July 8	1496	73	52	301
Vehicle-operating mechanism. Wheeled	W. H. Minnix	435,665	Sept. 2	452	120	52	1461
Vehicle-pedestal	T. Hill	421,403	Feb. 18	1438	473	50	852
Vehicle power-gearing	E. A. Sperry	434,097	Aug. 12	978	255	52	957
Vehicle power-gearing	E. A. Sperry	434,098	Aug. 12	980	256	52	958
Vehicle-propeller	A. C. Mather	442,985	Dec. 16	2178	561	53	1705
Vehicle-propelling mechanism	M. A. Libbey	438,010	Oct. 7	517	145	53	98

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Vehicle-roof	J. H. Ficken	419,759	Jan. 21	1654	439	50	348
Vehicle running gear	H. T. Baker	432,850	July 22	2823	723	52	569
Vehicle running gear	G. E. Bartholomew	427,033	May 6	3	1	51	811
Vehicle running gear	C. A. Behlen	440,871	Nov. 18	1987	512	53	1006
Vehicle running gear	J. J. Black. (Reissue)	11,120	Nov. 11	1563	401	53	917
Vehicle running gear	C. W. Canfield	419,315	Jan. 14	1005	266	50	212
Vehicle running gear	H. W. Cooper	435,208	Aug. 26	2736	722	52	1314
Vehicle running gear	D. H. Emery	421,254	Feb. 11	1223	317	50	805
Vehicle running gear	J. J. Fetzner	436,344	Sept. 16	1500	391	52	1677
Vehicle running gear	B. F. Fleshman	420,872	Feb. 4	658	171	50	689
Vehicle running gear	A. W. Grant	429,681	June 10	872	212	51	1650
Vehicle running gear	C. C. Hayes	437,198	Sept. 30	2927	762	52	1962
Vehicle running gear	C. C. Hayes	437,778	Oct. 7	162	51	53	33
Vehicle running gear	J. W. Henney	440,707	Nov. 18	1715	440	53	956
Vehicle running gear	T. A. Jones	426,126	Apr. 22	2588	681	51	527
Vehicle running gear	J. W. Leete	440,867	Nov. 18	1980	510	53	1005
Vehicle running gear	J. E. Locke	436,248	Sept. 9	1349	351	52	1639
Vehicle running gear	J. H. and J. F. Lueth	434,350	Aug. 12	1369	358	52	1035
Vehicle running gear	R. L. Munger	427,351	May 6	492	126	51	908
Vehicle running gear	E. V. Overman	420,606	Feb. 4	254	68	50	614
Vehicle running gear	J. W. Patterson	440,960	Nov. 18	2138	554	53	1035
Vehicle running gear	C. W. Saladee	418,753	Jan. 7	136	33	50	30
Vehicle running gear	L. W. Sharpe	440,778	Nov. 18	1838	473	53	978
Vehicle running gear	J. E. Steele	442,833	Dec. 16	1925	495	53	1655
Vehicle running gear	A. B. Stevens	436,320	Sept. 9	1454	379	52	1660
Vehicle running gear	G. A. Stom	432,150	July 15	1755	450	52	357
Vehicle running gear	E. Takken	430,356	June 17	1959	481	51	1869
Vehicle running gear	R. F. Vaughan	440,819	Nov. 18	1907	489	53	991
Vehicle sand-band	J. H. Barnes	429,713	June 10	924	226	51	1660
Vehicle sand-band	J. Cable	440,911	Nov. 18	2054	531	53	1019
Vehicle sand-band	J. F. Smith	429,654	June 10	839	203	51	1643
Vehicle sand-band	J. S. Walker	427,137	May 6	173	46	51	849
Vehicle-seat	D. Bishop	427,960	May 13	1426	360	51	1039
Vehicle-seat	J. F. Goodrich	436,129	Sept. 9	1166	305	52	1603
Vehicle-seat	J. R. Kaufmann	422,225	Feb. 25	2624	695	50	1085
Vehicle-seat	T. J. Kerstetter	429,533	June 3	656	161	51	1597
Vehicle-seat	J. McCradden	422,431	Mar. 4	98	27	50	1155
Vehicle-seat	D. F. Oliver	439,325	Oct. 28	2585	690	53	510
Vehicle-seat	D. M. Sechler	421,322	Feb. 11	1325	343	50	823
Vehicle-seat	M. Thorkelson	422,660	Mar. 4	446	112	50	1221
Vehicle-seat. Adjustable	J. Heilrath	424,649	Apr. 1	327	85	51	64
Vehicle-seat back	W. A. Nason	431,004	June 24	2982	732	51	2074
Vehicle-seat lock	A. Jaenicke	433,081	July 29	3203	823	52	647
Vehicle-seat lock	C. E. Little	442,630	Dec. 16	1565	404	53	1585
Vehicle-seat lock	H. A. Lombard and J. R. Rankin	429,352	June 3	381	90	51	1544
Vehicle-seat lock	J. Sherlock	443,010	Dec. 16	2213	569	53	1713
Vehicle-seat. Movable	W. H. Lingle	428,992	May 27	2876	735	51	1410
Vehicle-seat shade	J. J. Letchworth and C. J. Bessen	424,116	Mar. 25	2645	705	50	1661
Vehicle-seat. Shifting	A. Dom	426,782	Apr. 29	3581	935	51	733
Vehicle-seat top	H. McCurry	426,302	Apr. 22	2842	749	51	580
Vehicle shifting seat	C. M. Blydenburgh	428,062	May 20	1573	399	51	1137
Vehicle. Shifting-seat	M. M. Dennett	438,610	Oct. 21	1422	385	53	286
Vehicle. Short-turning	C. Comstock	432,226	July 15	1861	478	52	377
Vehicle. Short-turning	C. Comstock	432,227	July 15	1862	478	52	377
Vehicle. Short-turning	C. Comstock	432,228	July 15	1864	478	52	377
Vehicle. Short-turning	D. M. Parry	432,554	July 22	2359	609	52	480
Vehicle side spring	G. B. Schoepf	431,403	July 1	563	141	52	114
Vehicle-skid	M. Donovan	423,136	Mar. 11	1188	310	50	1369
Vehicle-spindle	W. C. Howe	426,815	Apr. 29	3631	947	51	742
Vehicle. Spring	A. Schubert	418,931	Jan. 7	445	109	50	93
Vehicle. Spring	A. Schubert	418,932	Jan. 7	446	109	50	93
Vehicle-spring	T. E. Allen	428,440	May 20	2149	540	51	1250
Vehicle-spring	I. L. Blakeslee	434,239	Aug. 12	1206	313	52	1002
Vehicle-spring	H. Brooks	427,665	May 13	953	240	51	1009
Vehicle-spring	W. L. Bush	436,398	Sept. 16	1593	421	52	1695
Vehicle-spring	M. F. Carroll	422,048	Feb. 25	2356	622	50	1035
Vehicle-spring	M. F. Carroll	441,746	Dec. 2	184	48	53	1298
Vehicle-spring	D. P. Clark	423,219	Mar. 11	1299	339	50	1391
Vehicle-spring	E. Clipp	429,842	June 10	1113	275	51	1696
Vehicle-spring	H. P. Colby	425,984	Apr. 22	2382	630	51	487
Vehicle-spring	A. Conner	441,400	Nov. 25	2877	743	53	1183
Vehicle-spring	B. C. Cook	425,755	Apr. 15	2017	537	51	410
Vehicle-spring	E. Cook	420,990	Feb. 11	851	219	50	734
Vehicle-spring	D. W. Glidden	425,029	Apr. 8	925	246	51	187
Vehicle-spring	G. T. Glover	440,402	Nov. 11	1204	311	53	851
Vehicle-spring	G. T. Glover	440,403	Nov. 11	1205	311	53	851
Vehicle-spring	A. Gummer	443,573	Dec. 30	3175	816	53	1914
Vehicle-spring	F. A. Gunkelmann	438,543	Oct. 14	1312	355	53	259
Vehicle-spring	C. C. Hayes	419,196	Jan. 14	828	218	50	178
Vehicle-spring	E. P. Holden	422,784	Mar. 4	604	155	50	1252
Vehicle-spring	M. G. Hubbard	423,159	Mar. 11	1320	318	50	1376
Vehicle-spring	E. Jarrell	419,956	Jan. 21	1964	516	50	411
Vehicle-spring	P. J. Kern	432,880	July 22	2868	735	52	578
Vehicle-spring	E. Neff	430,745	June 24	2580	632	51	1997
Vehicle-spring	J. Percy	428,628	May 27	2422	616	51	1321
Vehicle-spring	F. L. Perry	433,026	July 29	3119	800	52	631
Vehicle-spring	W. J. Rawlings	434,994	Aug. 26	2420	640	52	1254
Vehicle-spring	G. E. Raymond	433,367	July 29	3614	932	52	730
Vehicle-spring	S. H. Raymond	436,504	Sept. 16	1753	463	52	1724
Vehicle-spring	G. A. Richards	427,189	May 6	251	65	51	860
Vehicle-spring	G. A. Richards	432,563	July 22	2372	611	52	483
Vehicle-spring	B. F. Rix	419,475	Jan. 14	1245	330	50	262

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Vehicle-spring	J. A. Rodman	437,405	Sept. 30	3255	848	52	2024
Vehicle-spring	E. B. Sample	432,840	July 22	2899	719	52	567
Vehicle-spring	F. Schelp, Jr	440,063	Nov. 4	659	176	53	737
Vehicle-spring	J. Schmidlapp	429,247	June 3	208	52	51	1512
Vehicle-spring	R. M. Stivers	429,820	June 10	1081	265 266	51	1689
Vehicle-spring	H. C. Swan	419,770	Jan. 7	170	41	50	38
Vehicle-spring	E. C. Tecktonius	437,733	Oct. 7	86	28	53	19
Vehicle-spring	C. L. Thomas	420,395	Jan. 28	2645	702	50	547
Vehicle-spring	E. M. Van Valkenburg	438,207	Oct. 14	816	221	53	163
Vehicle-spring	J. D. Whipple	440,093	Nov. 4	697	185 186	53	745
Vehicle-spring	J. B. Whitcomb	423,099	Mar. 11	1125	293	50	1357
Vehicle spring-check	J. L. Meeks	432,062	July 15	1609	412	52	329
Vehicle spring-gear	F. Dupee	438,285	Oct. 14	944	254	53	186
Vehicle spring-gear	J. T. Westwood	421,365	Feb. 11	1381	357	50	833
Vehicle-spring, Hydrostatic	J. Randall	443,112	Dec. 23	2411	615 616	53	1758
Vehicle, Spring-propelled	J. M. Rogers	424,903	Apr. 1	724	193 194	51	140
Vehicle-standard	S. Graham	425,070	Apr. 8	984	264	51	199
Vehicle, Steam road-	A. C. Marshall	438,168	Oct. 14	762	208	53	153
Vehicle steering-gear	B. F. Fleshman	420,873	Feb. 4	659	171	50	689
Vehicle-step	A. Colbert	429,143	Jan. 28	2262	599	50	477
Vehicle-step	G. D. Lewis	430,530	June 17	2212	544	51	1918
Vehicle-step, Movable	E. P. Robbins	438,021	Oct. 7	533	149 150	53	101
Vehicle-top	T. B. McCurdy	437,224	Sept. 30	2962	775	52	1969
Vehicle-top	R. D. Morrison	436,900	Sept. 23	2462	642 643	52	1866
Vehicle-top joint	J. Higgins	437,598	Sept. 30	3556	928	52	2085
Vehicle-top prop	F. E. Benton	439,927	Nov. 4	452	118	53	696
Vehicle-top support	S. Sanders	430,439	June 17	2069	510	51	1891
Vehicle, Transporting and distributing	W. W. Kimball	420,456	Feb. 4	44	10 11	50	572
Vehicle, Two-wheeled	C. L. Baker	426,753	Apr. 29	3542	924	51	725
Vehicle, Two-wheeled	C. S. Beebe	422,697	Mar. 4	495	126	50	1231
Vehicle, Two-wheeled	E. H. Carpenter	437,749	Oct. 7	111	34	53	24
Vehicle, Two-wheeled	G. M. Cox	423,910	Mar. 25	2338	616	50	1604
Vehicle, Two-wheeled	J. Daley	425,566	Apr. 15	1722	462	51	353
Vehicle, Two-wheeled	C. A. Davis	425,410	Apr. 15	1495	402	51	308
Vehicle, Two-wheeled	J. T. Fenton	436,407	Sept. 16	1607	424	52	1697
Vehicle, Two-wheeled	A. J. Glick	428,303	May 20	1940	428	51	1209
Vehicle, Two-wheeled	W. D. Harper	438,742	Oct. 21	1650	442	53	326
Vehicle, Two-wheeled	C. C. Hayes	424,297	Mar. 25	2896	773	50	1711
Vehicle, Two-wheeled	J. Heilrath	424,648	Apr. 1	326	85	51	64
Vehicle, Two-wheeled	D. F. Kain	421,579	Feb. 18	1698	440 441	50	901
Vehicle, Two-wheeled	D. N. Kratzer	441,767	Dec. 2	220	57	53	1306
Vehicle, Two-wheeled	D. Lippy	424,488	Apr. 1	75	21	51	18
Vehicle, Two-wheeled	H. H. Lockwood	430,190	June 17	1652	411	51	1810
Vehicle, Two-wheeled	H. H. Lockwood	441,247	Nov. 25	2633	683	53	1137
Vehicle, Two-wheeled	J. J. Ludwick	429,197	June 3	138	34	51	1497
Vehicle, Two-wheeled	E. F. Morse	432,889	July 22	2881	738	52	581
Vehicle, Two-wheeled	F. L. Perry	439,681	Nov. 4	85	23	53	624
Vehicle, Two-wheeled	L. C. Pratt	435,710	Sept. 2	518	137	52	1475
Vehicle, Two-wheeled	C. A. Rieder and D. Ford	431,710	July 8	1077	269	52	219
Vehicle, Two-wheeled	D. Snyder	421,444	Feb. 18	1491	366	50	863
Vehicle, Two-wheeled	W. N. Sterner	423,830	Mar. 18	2205	522	50	1571
Vehicle, Two-wheeled	E. D. Stevenson and C. Wertz	426,874	Apr. 29	3715	970	51	759
Vehicle, Two-wheeled	T. M. Sngroue	442,261	Dec. 9	983	259	53	1462
Vehicle, Two-wheeled	M. J. Sunderlin	439,362	Oct. 28	2638	704	53	520
Vehicle, Two-wheeled	J. G. Trump	433,833	Aug. 5	590	153	52	871
Vehicle, Two-wheeled	F. Weyandt, Jr	435,374	Aug. 26	3004	796	52	1363
Vehicle-wheel	J. A. Ashford	443,034	Dec. 16	2257	580	53	1721
Vehicle-wheel	J. N. Brown	438,468	Oct. 14	1211	328	53	238
Vehicle-wheel	J. Carpenter	443,745	Dec. 30	3451	885	53	1967
Vehicle-wheel	G. J. de Cordova and P. A. Isaacs	431,334	July 1	451	112	52	92
Vehicle-wheel	P. Deunau, Sr	427,057	May 6	34	11	51	817
Vehicle-wheel	L. H. Donkel	425,934	Apr. 15	2249	605	51	460
Vehicle-wheel	R. L. Ewing	425,095	Apr. 8	1016	272	51	205
Vehicle-wheel	J. E. Fisher	442,113	Dec. 9	766	206	53	1420
Vehicle-wheel	P. Gendron	434,146	Aug. 12	1061	273	52	973
Vehicle-wheel	A. C. Hall	425,506	Apr. 15	1633	435	51	335
Vehicle-wheel	A. J. Hanks	433,285	July 29	3503	904	52	709
Vehicle-wheel	N. N. Horton	431,896	July 8	1356	343	52	274
Vehicle-wheel	J. Kennelly	420,075	Jan. 28	2147	568	50	455
Vehicle-wheel	E. B. Lake	439,408	Oct. 28	2700	723	53	533
Vehicle-wheel	J. B. Lott	436,565	Sept. 16	1854	488	52	1742
Vehicle-wheel	M. S. Mantun	422,136	Feb. 25	2488	658	50	1060
Vehicle-wheel	H. Q. Maurino	442,069	Dec. 2	697	187	53	1398
Vehicle-wheel	J. McLachlan	436,374	Sept. 16	1559	409	52	1688
Vehicle-wheel	R. McLean	442,079	Dec. 2	716	191	53	1402
Vehicle-wheel	A. L. H. Messmer and C. H. Luthman	428,313	May 20	1955	490	51	1211
Vehicle-wheel	E. T. Millen and C. F. Milburn	424,121	Mar. 25	2652	706	50	1663
Vehicle-wheel	V. F. Mogk	423,779	Dec. 16	1829	473	53	1637
Vehicle-wheel	J. A. Morsman and E. H. Higby	425,898	Apr. 15	2221	590	51	448
Vehicle-wheel	F. Newhouse	425,240	Apr. 8	1237	329	51	250
Vehicle-wheel	S. S. Nuckolls	425,900	Apr. 15	2223	590	51	448
Vehicle-wheel	G. R. Peare	421,013	Feb. 11	885	228	50	740
Vehicle-wheel	H. W. Reaben	431,398	July 1	560	140	52	114
Vehicle-wheel	H. A. Reinhold	430,687	June 24	2481	606	51	1978
Vehicle-wheel	A. Rowan	424,577	Apr. 1	219	59	51	45

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Vehicle-wheel.	J. H. Rowland	424,579	Apr. 1	222	60	51	45
Vehicle-wheel.	A. C. Smith	434,999	Aug. 26	2429	643	52	1256
Vehicle-wheel.	D. B. Wesson	438,334	Oct. 14	1014	275	53	200
Vehicle-wheel.	H. E. West	418,904	Jan. 7	400	98	50	84
Vehicle-wheel.	W. S. Wilson	427,286	May 6	400	104	51	889
Vehicle-wheel fender.	G. J. Keeney	431,362	July 1	501	124	52	101
Vehicle-wheel. Metallic	G. H. Everson	425,311	Apr. 8	1350	360	51	270
Vehicle-wheels. Machine for making	E. Battle	426,615	Apr. 29	3322	872	51	684
Vehicle-wrench	W. M. Chamberlain, H. B. Smith, and R. L. Warner.	427,743	May 13	1090	274	51	1036
Vehicles. Apparatus for steering wheeled	A. Hirst	440,035	Nov. 4	624	165	53	730
Vehicles. Automatic recording apparatus for	J. Bellussich	442,849	Dec. 16	1949	501 502	53	1660
Vehicles by electricity. Apparatus for propelling	F. Wynne	419,094	Jan. 7	665	174 175	50	140
Vehicles. Center-bearing plate for	W. Voss	442,561	Dec. 9	1460	374 375	53	1555
Vehicles. Compensating and steering gear for road.	C. P. Brown	434,624	Aug. 19	1810	473	52	1131
Vehicles, especially for street-watering carts. Gear- ing for spring.	O. Türcke	424,235	Mar. 25	2803	748	50	1693
Vehicles. Feed-bag support for	J. W. Lynn	422,239	Feb. 25	2657	702	50	1092
Vehicles. Folding step for	W. A. Miller	432,421	July 15	2148	553	52	430
Vehicles. Means for the electrical propulsion of	D. E. Johnson	418,843	Jan. 7	289	70, 71	50	61
Vehicles. Propelling mechanism for electric	T. A. Edison	434,589	Aug. 19	1752	458 459	52	1119
Vehicles. Reach-plate for	T. G. Mandt	438,441	Oct. 14	1169	316	53	230
Vehicles. Sand-band for	J. P. Wright	435,472	Sept. 2	133	38	52	1400
Vehicles. Spring-gear for	T. J. Sterey	433,830	Aug. 5	587	133	52	871
Vehicles. Trolley-wheel for electrically-propelled	L. Pfingst	438,359	Oct. 14	1055	287	53	208
Veil-fastener	H. W. Adams and P. N. Tryon	423,159	May 20	1712	434	51	1165
Velocimeter. Recording-	H. Flad	424,547	Apr. 1	172	47 48 49	51	36
Velocipede	W. P. Akers	433,508	Aug. 5	100	28	52	776
Velocipede	L. Barrow and C. H. Guest	425,017	Apr. 8	909	240 241	51	184
Velocipede	H. A. Becker	439,095	Oct. 28	2202	590 591	53	440
Velocipede	J. C. Belyea	443,890	Dec. 30	3665	944	53	2009
Velocipede	D. Black	432,814	July 22	2779	711	52	560
Velocipede	W. E. Brock	430,107	June 17	1545	383 384	51	1789
Velocipede	J. H. Bullard	443,818	Dec. 30	3571	915 916	53	1991
Velocipede	A. F. Chace	433,720	Aug. 5	411	105	52	835
Velocipede	A. E. Clausen	433,852	Aug. 5	613	160	52	876
Velocipede	W. Clegg	427,048	May 6	22	7, 8	51	815
Velocipede	J. N. Clouse	433,889	Aug. 5	672	174	52	888
Velocipede	S. Coram and J. Kuolt	443,499	Dec. 30	3065	789	53	1893
Velocipede	W. H. Dillon	432,381	July 15	2090	536	52	419
Velocipede	C. E. Duryea	432,124	July 15	1711	440 441	52	348
Velocipede	A. Easthope	423,471	Mar. 18	1675	442 443	50	1471
Velocipede	S. Elliott	442,663	Dec. 16	1611	416	53	1595
Velocipede	J. L. Ferson	424,965	Apr. 8	825	220	51	168
Velocipede	R. Flachs	437,026	Sept. 23	2639	689	52	1901
Velocipede	R. J. Fleischer	439,395	Oct. 28	2693	716 717	53	530
Velocipede	S. Garwood	435,493	Sept. 2	172	48	52	1408
Velocipede	L. B. Gaylor	433,562	Aug. 5	176	47, 48	52	791
Velocipede	S. Gissinger	429,344	June 3	371	88	51	1541
Velocipede	H. C. Goodrich	425,779	Apr. 15	2048	545 546	51	416
Velocipede	F. Hamminger	427,076	May 6	80	20	51	827
Velocipede	O. Hansen and P. Lobben	420,059	Jan. 28	2125	261 262	50	450
Velocipede	E. E. Hardy	436,873	Sept. 23	2417	630 631	52	1857
Velocipede	E. E. Hardy	441,409	Nov. 25	2890	745 746	53	1185
Velocipede	W. Hillman	430,019	June 10	1388	345	51	1749
Velocipede	F. and L. C. Hopkinson	432,312	July 15	2000	511 512	52	401
Velocipede	N. N. Horton	431,894	July 8	1354	342	52	273
Velocipede	C. P. Hoyt	424,986	Apr. 8	857	227	51	174
Velocipede	J. W. James	442,980	Dec. 16	2170	558	53	1704
Velocipede	W. Jasper	426,384	Apr. 22	2974	779	51	607
Velocipede	T. B. Jeffery	434,449	Aug. 19	1541	402	52	1076
Velocipede	T. B. Jeffery	441,417	Nov. 25	2902	748	53	1188
Velocipede	J. Jett	433,173	July 29	3345	865	52	676
Velocipede	R. M. Keating	420,805	Feb. 4	544	140	50	667
Velocipede	R. M. Keating	426,670	Apr. 29	3399	894	51	698
Velocipede	T. M. Kenney	431,060	July 1	46	11	52	11
Velocipede	T. M. Kenney	431,061	July 1	48	11	52	11
Velocipede	C. Kramer	421,100	Feb. 11	1010	259	50	764
Velocipede	A. C. Latta	428,919	May 27	2872	734	51	1409
Velocipede	E. G. Latta	438,551	Oct. 14	1324	359 360	53	261
Velocipede	E. G. Latta	440,897	Nov. 18	2027	522 523	53	1015
Velocipede	E. G. Latta	443,663	Dec. 30	3319	855 856	53	1942
Velocipede	W. J. Lloyd and W. Priest	421,946	Feb. 25	2218	582	50	1010

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Velocipede.....	C. H. Loser.....	422,087	Feb. 25	2410	637	50	1045
Velocipede.....	F. Martin.....	440,954	Nov. 18	2129	{ 551 552 }	{ 53	1033
Velocipede.....	O. McCarthy.....	437,223	Sept. 30	2960	774	52	1968
Velocipede.....	N. McKee.....	435,977	Sept. 9	927	244	52	1559
Velocipede.....	G. A. Melin.....	422,089	Feb. 25	2412	638	50	1045
Velocipede.....	C. G. Molin.....	434,605	Aug. 19	1776	464	52	1124
Velocipede.....	F. Newhouse.....	420,826	Feb. 4	581	{ 149 150 }	{ 50	674
Velocipede.....	A. H. Overman.....	442,387	Dec. 9	1176	306	53	1498
Velocipede.....	F. E. Peck.....	437,820	Oct. 7	230	70, 71	53	45
Velocipede.....	N. T. Quevedo.....	427,110	May 6	140	36, 37	51	839
Velocipede.....	J. F. Rauhut.....	433,962	Aug. 12	779	204	52	918
Velocipede.....	A. J. E. Readie.....	420,416	Jan. 28	2670	708	50	552
Velocipede.....	M. Redlinger.....	431,529	July 1	765	191	52	153
Velocipede.....	G. Rothgiesser.....	442,275	Dec. 9	1005	265	53	1466
Velocipede.....	A. J. Samuels.....	425,052	Apr. 8	955	255	51	193
Velocipede.....	P. Schaefer.....	433,542	Aug. 5	140	40, 41	52	784
Velocipede.....	J. L. F. Schulze.....	442,240	Dec. 9	953	252	53	1457
Velocipede.....	M. Schwertfährer.....	436,673	Sept. 16	2033	530	52	1776
Velocipede.....	D. H. Smith.....	428,356	May 20	2021	508	51	1226
Velocipede.....	A. M. Stoner.....	418,963	Jan. 7	487	121	50	103
Velocipede.....	F. R. Surfleet.....	421,068	Feb. 11	964	248	50	755
Velocipede.....	C. Terrot.....	435,466	Sept. 2	123	35	52	1399
Velocipede.....	A. W. Thomas.....	422,548	Mar. 4	265	68	50	1187
Velocipede.....	C. G. Toense.....	425,471	Apr. 15	1591	425	51	326
Velocipede.....	B. L. Toquet.....	425,837	Apr. 15	2133	569	51	432
Velocipede.....	G. T. Warwick.....	424,941	Apr. 1	780	208	51	152
Velocipede.....	G. T. Warwick.....	434,615	Aug. 19	1794	{ 468 469 }	{ 52	1128
Velocipede.....	G. T. Warwick.....	438,124	Oct. 7	691	188	53	133
Velocipede.....	F. White.....	437,827	Oct. 7	237	73	53	47
Velocipede.....	A. L. Withers, Jr.....	428,737	May 27	2604	660	51	1354
Velocipede.....	E. W. Wood and C. E. Burnap.....	439,922	Nov. 4	442	{ 114 115 }	{ 53	694
Velocipede.....	C. E. W. Woodward and C. R. Overman.....	428,991	May 27	2970	762	51	1427
Velocipede.....	E. Worms and A. S. Zwierzchowski.....	442,345	Dec. 9	1117	{ 291 292 }	{ 53	1485
Velocipede-brake.....	S. Elliott.....	428,383	May 20	2073	521	51	1236
Velocipede-fork.....	H. Bell.....	443,266	Dec. 23	2686	{ 688 689 }	{ 53	1811
Velocipede-handle.....	J. M. Horton and M. M. Levison.....	421,277	Feb. 11	1259	325	50	811
Velocipede-handle.....	J. M. Horton and M. M. Levison.....	421,936	Feb. 25	2205	577	50	1007
Velocipede-handle.....	M. Hoyt.....	436,978	Sept. 23	2572	672	52	1887
Velocipede-handle-bar.....	C. E. McGlinchey.....	442,532	Dec. 9	1410	360	53	1544
Velocipede, Ice.....	W. F. Flickinger and G. J. Wiatt.....	441,545	Nov. 25	3103	796	53	1227
Velocipede-lock.....	G. R. Fuller.....	440,949	Nov. 18	2118	550	53	1032
Velocipede, Railway.....	I. E. Stump.....	436,811	Sept. 23	2277	600	52	1832
Velocipede-saddle.....	J. B. Brooks.....	421,233	Feb. 11	1196	307	50	799
Velocipede-saddle.....	C. E. Duryea.....	432,125	July 15	1716	{ 441 442 }	{ 52	349
Velocipede-saddle.....	S. Nodder and W. H. Petford.....	423,800	Mar. 18	2165	572	50	1562
Velocipede-saddle.....	G. T. Warwick.....	427,488	May 6	693	174	51	949
Velocipede-saddle.....	G. T. Warwick.....	429,587	June 3	733	177	51	1613
Velocipede-seat.....	O. Hanson.....	420,060	Jan. 28	2128	562	50	451
Velocipede-seat.....	C. H. Veeder.....	420,421	Jan. 28	2677	{ 709 710 }	{ 50	553
Velocipede, Tandem.....	S. Elliott.....	442,174	Dec. 9	859	230	53	1438
Velocipede-wheel.....	A. Carpentier.....	434,041	Aug. 12	882	233	52	938
Velocipede-wheel.....	O. Hansou.....	420,061	Jan. 28	2129	562	50	451
Velocipedes, Electric signal for.....	C. G. Jiran.....	436,979	Sept. 23	2573	673	52	1887
Velocipedes, Locking device for.....	G. Singer and R. H. Lea.....	435,157	Aug. 26	2660	704	52	1300
Velocipedes, Pedal-bar for.....	M. Hoyt.....	439,779	Nov. 4	222	58	53	652
Velocipedes, Power-transmitting mechanism for.....	H. E. Brannfeld.....	428,881	May 27	2813	715	51	1397
Velocipedes, Variable crank for.....	H. E. Lewis.....	422,066	Feb. 25	2408	637	50	1045
Velocipedes, Variable-speed gear for.....	J. Clough and G. Carter.....	426,524	Apr. 29	3185	836	51	656
Velvet skirt-binding.....	H. C. F. Koch.....	441,423	Nov. 25	2910	750	53	1190
Vending apparatus.....	J. J. Busenbenz.....	430,463	June 17	2108	520	51	1898
Vending apparatus.....	J. J. Busenbenz.....	430,464	June 17	2112	520	51	1899
Vending apparatus.....	J. J. Busenbenz.....	430,465	June 17	2115	520	51	1899
Vending apparatus.....	J. J. Busenbenz.....	430,466	June 17	2116	521	51	1900
Vending apparatus.....	J. C. Estelle.....	443,906	Dec. 30	3689	941	53	2014
Vending apparatus.....	W. H. Hammer.....	440,029	Nov. 4	608	161	53	727
Vending apparatus.....	H. M. Knight.....	426,537	Apr. 29	3205	840	51	660
Vending apparatus.....	R. C. Krause.....	430,389	June 17	2002	491	51	1878
Vending apparatus.....	W. S. Lemmon.....	427,093	May 6	104	28	51	832
Vending apparatus.....	A. Mayer and M. Mueller.....	437,610	Sept. 30	3567	{ 931 932 }	{ 52	2087
Vending apparatus.....	J. B. Moos.....	434,606	Aug. 19	1777	464	52	1124
Vending apparatus.....	J. Schofield.....	437,048	Sept. 23	2666	697	52	1906
Vending apparatus.....	J. S. Wallace.....	443,340	Dec. 23	2811	{ 722 723 }	{ 53	1835
Vending apparatus.....	J. A. Williams.....	426,086	Apr. 22	2527	666	51	514
Vending apparatus.....	J. A. Williams.....	430,497	June 17	2158	531	51	1909
Vending apparatus.....	J. A. Williams.....	440,983	Nov. 18	2170	561	53	1042
Vending apparatus.....	J. A. Williams.....	440,984	Nov. 18	2171	562	53	1042
Vending apparatus.....	J. A. Williams.....	443,343	Dec. 23	2817	724	53	1836
Vending apparatus.....	J. A. Williams.....	443,344	Dec. 23	2820	724	53	1836
Vending apparatus, Automatic.....	C. L. Coffin.....	439,477	Oct. 28	2812	749	53	552
Vending apparatus, Automatic.....	C. L. Coffin.....	439,478	Oct. 28	2813	749	53	552
Vending apparatus, Automatic.....	F. Villiers-Stead and E. R. Hedgeman.....	422,326	Feb. 25	2791	{ 734 735 }	{ 50	1116
Vending apparatus, Coin-controlled.....	W. Lang.....	431,366	July 1	508	126	52	102

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Vending apparatus. Coin-controlled	W. Lang	431,367	July 1	511	{ 126 127	52	103
Vending apparatus. Coin-controlled	C. H. Thompson	437,527	Sept. 30	3452	902	52	2065
Vending apparatus. Liquid	F. J. Fairchild	441,615	Nov. 25	3216	828	53	1249
Vending apparatus. Coin-operated	C. S. Batdorf	424,591	Apr. 1	237	63	51	48
Vending apparatus for liquids	L. V. Moulton and H. L. Boyle	424,428	Mar. 25	3135	832	50	1757
Vending device	A. H. Fancher	428,388	May 20	2082	523	51	1238
Vending device. Coin-controlled	G. A. Ellis	437,584	Sept. 30	3532	922	52	2081
Vending device. Coin-operated	D. Olmsted	435,901	Sept. 2	817	{ 216 217	52	1533
Vending-machine	G. B. Cornell	441,536	Nov. 25	3086	793	53	1223
Vending-machine	F. G. Dieterich	423,033	Mar. 11	1018	{ 266 267	50	1337
Vending-machine	F. G. Dieterich	423,034	Mar. 11	1023	{ 267 268	50	1338
Vending-machine	F. G. Dieterich	425,996	Apr. 22	2402	{ 636 637	51	491
Vending-machine	F. G. Dieterich	434,127	Aug. 12	1033	{ 267 268	52	968
Vending-machine	F. G. Dieterich	439,030	Oct. 21	2092	{ 560 561	53	412
Vending-machine	E. S. Doubleday	436,074	Sept. 9	1079	{ 279 280	52	1588
Vending-machine	E. T. Gilliland	443,254	Dec. 23	2662	{ 683 684	53	1806
Vending-machine	H. D. Pursell	442,439	July 15	2167	558	52	434
Vending-machine	P. L. Sylvester	431,083	July 1	60	20	52	13
Vending-machine	P. L. Sylvester	441,259	Nov. 25	2656	689	53	1141
Vending-machine	J. A. Williams	430,498	June 17	2161	532	51	1909
Vending-machine. Automatic	J. A. Williams	430,499	June 17	2163	532	51	1910
Vending-machine. Coin-actuated liquid	W. S. Van Sant and E. C. Eames	441,861	Dec. 2	367	96, 97	53	1336
Vending-machine. Coin-operated	C. S. Batdorf	424,592	Apr. 1	239	64	51	49
Vending-machine. Coin-operated	F. B. Cochran	425,163	Apr. 8	1128	{ 299 300	51	227
Vending-machine. Coin-operated	F. B. Cochran	440,470	Nov. 11	1317	341	53	871
Vending-machine. Coin-operated	J. C. Stevens	435,370	Aug. 26	2998	{ 794 795	52	1362
Veneer and board cutting machine	G. A. Oncken	437,039	Sept. 23	2657	{ 694 695	52	1905
Veneer. Combined wood and paper	H. Silver	438,246	Oct. 14	879	238	53	174
Veneer-cutting machine	H. M. Brown	433,511	Aug. 5	102	29	52	777
Veneer-cutting machine	L. B. McAlpine	440,321	Nov. 11	1064	275	53	824
Veneer-cutting machine	G. A. Oncken	431,952	July 8	1431	{ 363 364	52	288
Veneer-cutting machine	E. F. Smith	419,975	Jan. 21	1990	{ 523 524	50	416
Veneer-cutting machine	E. F. Smith and T. A. Fredericks	435,158	Aug. 26	2661	704	52	1300
Veneer cylinders. Machine for manufacturing	J. H. Christie	436,635	Sept. 16	1941	510	52	1758
Veneer-drying machine	G. Seaver	428,147	May 20	1697	430	51	1162
Veneer. Machine for cutting stave or barrel	J. W. Chapman	435,480	Sept. 2	145	41, 42	52	1403
Veneers. Manufacturing ornamented	L. Ling	425,233	Apr. 8	1230	327	51	249
Veneering	H. H. King and B. F. K. Jennings	424,484	Apr. 1	63	19	51	15
Veneering-press	A. Newell	423,074	Mar. 11	1084	{ 281 282 283	50	1349
Veneering with fabric	G. Muller	421,298	Feb. 11	1284	.....	50	816
Vent	J. C. Hartman	437,988	Oct. 7	487	139	53	93
Vent-box	W. E. Warner	442,789	Dec. 16	1842	476	53	1640
Vent for casks and barrels	A. Schütz and A. Weber	429,323	June 3	338	80	51	1535
Vent-peg. Automatic	C. Wayte	425,530	Apr. 15	1674	446	51	343
Ventilated cushion	E. F. J. Bullene	442,099	Dec. 9	742	200	53	1416
Ventilating apparatus for kitchen or other apartments	Z. M. Moe	430,667	June 24	2451	598	51	1972
Ventilating conduits	J. H. Hilliker	419,993	Jan. 21	2017	532	50	421
Ventilating halls, rooms, or other interiors. Apparatus for	D. G. Hoey	420,796	Feb. 4	522	136	50	664
Ventilating-heater	D. L. Stine	420,123	Jan. 28	2225	589	50	471
Ventilating-shutter	M. E. Moore	424,015	Mar. 25	2507	667	50	1634
Ventilating system for electric subways	W. Gee	424,778	Apr. 1	535	144	51	105
Ventilator: See Automatic venti- Car-ventilator. lator. Ceiling-ventilator. Body-ventilator. Hat-ventilator Boot or shoe venti- Radiator-ventilator. lator. Window-ventilator.							
Ventilator	R. E. Burke	426,237	Apr. 22	2754	721	51	561
Ventilator	W. T. Cottier	432,817	July 22	2783	711	52	561
Ventilator	W. J. Fellheimer	436,701	Sept. 16	2070	545	52	1783
Ventilator	H. L. Morrell	435,544	Sept. 2	250	69, 70	52	1423
Ventilator	B. M. Turnbull	426,883	Apr. 29	3727	973	51	761
Ventilator for carriages or moving vehicles	A. W. J. Swindells, W. S. Peel, and G. F. Freeman	442,924	Dec. 16	2092	538	53	1687
Vertical anti-friction engine	O. Colborne	423,315	Mar. 18	1740	458	50	1483
Vertical boiler	E. J. Moore	426,838	Apr. 29	3668	954	51	749
Vertical boiler	E. J. Moore	426,839	Apr. 29	3669	955	51	749
Vessel and pump. Combined	W. C. Winfield	441,530	Nov. 25	3077	791	53	1221
Vessel. Armored	G. Meacom	432,061	July 15	1607	{ 411 412	52	328
Vessel-closure	A. Michaux	439,249	Oct. 28	2455	658	53	496
Vessel. Double-hulled	G. Shone	424,508	Apr. 1	106	31	51	23
Vessel for steam propulsion. Navigable	T. L. Sturtevant	441,202	Nov. 25	2547	658	53	1122
Vessel. Navigable	T. L. Sturtevant	441,203	Nov. 25	2548	658	53	1123
Vessel. Navigable	M. von Szabel	435,107	Aug. 26	2589	{ 683 684	52	1285

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Vessels. Apparatus for and method of registering and indicating the course and position of marine	J. O'Neil	441,579	Nov. 25	3152	{ 810 811 812 }	53	1235
Vessels. Cleaning the bottoms of	W. Freeborn	429,125	June 3	29	7	51	1478
Vessels. Device for raising sunken	C. H. Brown	435,054	Aug. 26	2511	{ 663 664 }	52	1271
Vessels. Device for suspending boats in davits on	G. L. Enggren	431,741	July 8	1124	280	52	229
Vessels. Floating stranded	F. M. Barber	435,788	Sept. 2	632	167	52	1496
Vessels in fogs. Means for distinguishing.	W. Nelson	425,145	Apr. 8	1100	292	51	221
Vessels. Side light for	F. B. Torrey	439,312	Oct. 28	2570	686	53	507
Vessels. Storm-rig for	A. F. Paine	435,568	Sept. 2	291	81, 82	52	1432
Veterinary cutting forceps.	J. T. Lee	427,772	May 13	1139	286	51	1046
Veterinary dental forceps.	D. M. Scheffer	426,074	Apr. 22	2508	662	51	511
Veterinary instrument	S. C. Meddick	430,137	June 17	1584	394	51	1797
Veterinary medicine	J. A. and J. S. Youngkin	426,355	Apr. 22	2915	51	595	
Veterinary obstetrical instrument	S. Hartzell	442,887	Dec. 16	2032	521	53	1675
Veterinary operating table.	M. M. Copp	439,052	Oct. 21	2123	{ 570 571 }	53	418
Veterinary remedy.	J. R. Anderson	423,893	Mar. 25	2705	50	1597	
Veterinary surgical device.	J. F. Van Ness	435,468	Sept. 2	128	36	52	1400
Veterinary surgical instrument	D. J. Bunce	421,814	Feb. 18	2015	533	50	963
Viaduct. Subaqueous	F. E. Strom	439,610	Oct. 28	3015	{ 799 800 801 }	53	593
Vignetter	H. J. Lloyd	425,812	Apr. 15	2005	560	51	425
Vine-securer device.	J. Stangl	437,056	Sept. 23	2676	699	52	1909
Vines. Apparatus for atomizing liquids for destroying disease in grape.	L. P. Lasmolles and J. E. Fréchet	424,680	Apr. 1	372	98	51	72
Vines. Compound for treating grape.	E. Schmidt	422,544	Mar. 4	257	66	50	1185
Vinegar apparatus	P. Spink	439,980	Nov. 4	545	144	53	713
Vinegar. Apparatus for making	C. W. Shedd	427,636	May 13	904	227	51	999
Vinegar-generators and for clarifying beer. Shavings for	R. H. Herder	437,902	Oct. 7	346	101	53	67
Vinegar-making apparatus.	E. E. Murphy and W. Berkel	432,190	July 15	1809	465	52	367
Vinegar-tank	J. Doran	418,784	Jan. 7	189	46	50	42
Violin	J. Kopp	431,722	July 8	1093	272	52	223
Violin-bow	J. Glass	425,503	Apr. 15	1630	434	51	334
Violin-case	G. A. Holmes	425,427	Apr. 15	1521	407	51	314
Violin chin-rest	W. Schuster	439,199	Oct. 28	2361	634	53	468
Violin tail-piece	C. Tindall	441,716	Dec. 2	136	36	53	1288
Viols. Base-bar for	M. W. White	436,963	Sept. 23	2550	667	52	1883
Viols. Sounding-post for	M. W. White	420,025	Jan. 21	2068	544	50	431
Viols. Tuning-peg for	S. W. Wilcox	423,648	Mar. 18	1949	513	50	1522
Vise	F. C. Avery	429,105	May 27	3157	814	51	1463
Vise	R. S. Cooper	440,543	Nov. 11	1433	371	53	894
Vise	J. Ernst	434,541	Aug. 19	1677	438	52	1104
Vise	O. Noack	422,613	Mar. 4	372	92	50	1208
Vise	S. H. Randall	438,826	Oct. 21	1784	477	53	352
Vise	G. H. Squier	436,641	Sept. 16	1973	518	52	1764
Vise	C. Wies	432,918	July 22	2919	748	52	588
Vise. Adjustable	G. H. Cole	423,737	Mar. 18	2077	547	50	1545
Vise. Adjustable bench.	G. H. Cole	437,572	Sept. 30	3518	918	52	2078
Vise. Bench	L. Armstrong	433,973	Aug. 12	800	208	52	921
Vise. Bench	H. Liefer	418,247	Jan. 7	297	72	50	62
Vise. Bench	J. Tripp	435,954	Sept. 9	893	235	52	1552
Vise. Door-supporting	W. Bateson	423,719	Mar. 18	2049	540	50	1540
Vise for bolt-cutting machines. Laterally-adjustable	A. L. Bretland	430,825	June 24	2711	664	51	2022
Vise. Locking	J. N. Folsom	438,104	Oct. 7	670	182	53	129
Vise. Matcher-head cutter.	A. Krost	427,517	May 6	740	184	51	958
Vise. Milling-machine	F. H. Richards	419,072	Jan. 7	639	166	50	135
Vise. Milling-machine	F. H. Richards	419,884	Jan. 21	1860	489	50	390
Vise. Milling-machine	F. H. Richards	419,855	Jan. 21	1861	489	50	390
Vise. Plumber's	J. Hirst	432,829	July 22	2798	715	52	564
Vise, punch, and drill. Combined.	J. N. Sargent	437,047	Sept. 23	2665	697	52	1906
Volt or ampere meter	R. Eickemeyer	434,557	Aug. 19	1702	446	52	1109
Voltaic armor	A. I. Scott	428,420	May 20	2123	533	51	1245
Voltaic battery	T. A. Edison	430,279	June 17	1840	450	51	1846
Voltmeter	M. M. Garver	425,068	Apr. 8	979	263	51	197
Volumetric values. Mechanism for recording	C. N. Dutton	441,094	Nov. 18	2350	{ 609 610 611 }	53	1077
Vote indicator and recorder for legislative bodies. } Electric	W. H. Robinson	420,964	Feb. 11	810	{ 210 211 212 }	50	726
Vote-recorder. Electrical	S. D. Locke	442,126	Dec. 9	783	212	53	1423
Vote-recording machine	J. W. Rhines	422,891	Mar. 4	793	203	50	1287
Vote-registering machine	K. Dongan	440,546	Nov. 11	1441	372	53	894
Voting apparatus	P. Hoffman	435,225	Aug. 26	2754	{ 727 728 }	52	1318
Voting-booth	O. H. Hasselman	435,604	Sept. 2	340	95	52	1440
Voting-booth	O. H. Hasselman	437,691	Oct. 7	21	7	53	7
Voting-booth. Folding	A. W. Elsner	442,664	Dec. 16	1614	416	53	1595
Voting-booth. Portable	J. Payne	423,571	Mar. 18	1818	479	50	1497
Voting-machine	J. H. Myers	424,332	Mar. 25	2961	{ 789 790 }	50	1723
Voting-machine and toy bank	C. M. Kemp and A. Bixby	439,406	Oct. 28	2706	122	53	532
Vulcanite. Producing configurations on	A. Wendlinger	425,357	Apr. 8	1406	374	51	232
Vulcanized plastic compound	W. Kiel	430,958	June 24	2908	51	2060	
Vulcanized plastic compounds. Manufacturing	W. Kiel	430,959	June 24	2910	51	2060	
Vulcanizer	C. A. Davis	420,590	Feb. 4	231	60	50	610
Vulcanizer	C. A. Davis. (Reissue)	11,105	Aug. 26	3024	800	52	1367
Vulcanizing apparatus	A. B. Woodard and R. W. Barney	424,942	Apr. 1	783	209	51	152
Vulcanizing apparatus. Safety device for	G. B. Snow	443,873	Dec. 30	3641	937	53	2005
Vulcanizing rubber	F. G. Fowler	439,137	Oct. 28	2265	609	53	450
Vulcanizing wood	W. C. Andrews	430,055	June 10	1450	51	1760	

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Waffle-iron handle	E. H. Chesterton	427,835	May 13	1227	310	51	1062
Wagon	J. N. Clouse	431,508	July 1	733	183	52	146
Wagon	J. D. Hall	427,416	May 6	590	148	51	928
Wagon	W. W. Haupt	423,475	Mar. 18	1683	444	50	1473
Wagon	J. C. Huhn, L. D. Ramsey, and J. H. Huhn.	418,796	Jan. 7	207	51	50	45
Wagon	J. R. Kunzelman	430,131	June 17	1576	392	51	1796
Wagon	J. W. McCanley	419,537	Jan. 14	1324	353	50	278
Wagon attachment	W. W. Haupt	424,981	Apr. 8	851	226	51	173
Wagon-bed iron	F. Herman	424,479	Apr. 1	54	16	51	13
Wagon-bed iron	D. A. Plecker	422,249	Feb. 25	2670	705	50	1094
Wagon-bed rack	M. C. Craig	425,303	Apr. 8	1341	358	51	269
Wagon-bed raiser	H. E. Jackson	423,771	Mar. 18	2121	560	50	1554
Wagon-beds. Elevating	J. R. Lamkin	434,637	Aug. 19	1840	481	52	1136
Wagon-block and clevis. Log.	W. H. Miller, Sr.	431,778	July 8	1175	292	52	238
Wagon-bodies. Apparatus for raising or lowering	E. E. Scott	442,460	Dec. 9	1290	334	53	1521
Wagon-bodies. Loading and unloading	H. Lillie	430,662	June 24	2442	595	51	1970
Wagon-bodies while being riveted. Support for sheet-metal	G. Van Wagenen	431,826	July 8	1255	314	52	254
Wagon-body	D. H. Allen	434,905	Aug. 26	2298	606	52	1231
Wagon-body	C. T. Evans	419,146	Jan. 7	739	195	50	155
Wagon-body	Z. F. Jones	434,342	Aug. 12	1358	355	52	1033
Wagon-body	B. F. Short	423,184	Mar. 11	1255	327	50	1383
Wagon-body	T. Tyson	419,804	Jan. 21	1720	457	50	361
Wagon-body and stake-holder	E. A. Leinard	425,211	Apr. 15	2093	560	51	425
Wagon-body. Folding	L. G. Locke	419,693	Jan. 21	1562	419	50	331
Wagon-body lifter	S. Langford	422,424	Mar. 4	88	23	50	1154
Wagon body or rack elevator	S. H. Holt	435,497	Sept. 2	179	50	52	1410
Wagon-holster	J. H. Revis	438,278	Oct. 14	936	253	53	184
Wagon-holster plate	J. Deitrick	443,571	Dec. 30	3174	815	53	1914
Wagon-holster spring	E. Clif	431,251	July 1	331	2	52	67
Wagon-box. Collapsible	D. C. Lang	419,689	Jan. 21	1557	416	50	330
Wagon-brake	J. W. Avis	434,055	Aug. 12	897	236	52	940
Wagon-brake	H. B. Bearisto	419,626	Jan. 21	1457	391	50	312
Wagon-brake	L. M. Brands	426,759	Apr. 29	3548	926	51	726
Wagon-brake	J. W. Bruce	437,281	Sept. 30	3058	800	52	1988
Wagon-brake	P. S. Criswell	437,916	Oct. 7	365	105	53	71
Wagon-brake	W. H. Grant	434,776	Aug. 19	2061	538	52	1178
Wagon-brake	M. L. Haskins	419,045	Jan. 7	595	153	50	126
Wagon-brake	D. Herrington	440,032	Nov. 4	614	163	53	728
Wagon-brake	C. E. Holley	422,940	Mar. 11	878	229	50	1311
Wagon-brake	J. B. Hutchinson	441,008	Nov. 18	2203	570	53	1048
Wagon-brake	A. Jeanel	441,874	Dec. 2	386	101	53	1341
Wagon-brake	J. McGonegal	435,512	Sept. 2	196	54	52	1413
Wagon-brake	H. L. Monroe	443,371	Dec. 23	2859	735	53	1845
Wagon-brake	F. W. Oeburg	423,695	Mar. 18	2022	533	50	1535
Wagon-brake	G. W. Pardee, G. and R. H. Leaman	419,548	Jan. 14	1338	357	50	281
Wagon-brake	W. Platto	441,774	Dec. 2	230	59	53	1308
Wagon-brake	A. A. Ross and E. S. Chatfield	429,062	May 27	3090	797	31	1449
Wagon-brake	H. W. Smith	440,515	Nov. 11	1397	361	53	886
Wagon-brake	W. S. Smith	419,081	Jan. 7	650	170	50	137
Wagon-brake	W. J. Stephenson	434,612	Aug. 19	1789	466	52	1127
Wagon-brake	W. E. Stevens	423,454	Mar. 18	1651	435	50	1466
Wagon-brake	R. P. Taylor	433,753	Aug. 5	467	120	52	846
Wagon-brake	G. C. Thayer	423,356	Mar. 11	1503	394	50	1429
Wagon-brake	N. E. Thompson	427,529	May 6	757	188	51	961
Wagon-brake	J. R. Wade	434,027	Aug. 12	861	227	52	933
Wagon-brake	G. W. Walton	434,573	Aug. 19	1722	450	52	1113
Wagon-brake	N. A. Wheeler	430,050	June 10	1439	357	51	1759
Wagon-brake	J. A. Whitcomb	426,974	Apr. 29	3843	1004	51	783
Wagon-brake. Automatic	E. K. Emig	426,930	Apr. 29	3781	988	51	772
Wagon. Buckboard	G. E. Spare	422,649	Mar. 4	428	107	50	1218
Wagon. Buckboard	G. E. Webster and W. H. Kimball	421,794	Feb. 18	1993	525	50	959
Wagon. Delivery	C. See	438,191	Oct. 14	793	216	53	159
Wagon. Dump	H. Hild	440,034	Nov. 4	621	165	53	730
Wagon-dump	J. Simpson	418,763	Jan. 7	156	38	50	34
Wagon-dump	E. L. Thoms	431,678	July 8	1019	255	52	208
Wagon. Dumping	B. F. Bryant	437,885	Oct. 7	321	95	53	63
Wagon. Dumping	E. T. Callahan	427,153	May 6	204	53	51	851
Wagon. Dumping	L. C. Hicks	441,662	Dec. 2	50	14	53	1271
Wagon. Dumping	E. L. Layton	431,064	July 1	51	12	52	12
Wagon. Dumping	A. C. McEwen	422,822	Mar. 4	663	170	50	1264
Wagon. Dumping	L. Rodenhansen	421,143	Feb. 11	1068	274	50	776
Wagon. Dumping	J. M. Stoner	432,963	July 22	3008	773	52	603
Wagon. Dumping	S. S. Whitmore	440,936	Nov. 18	2098	544	53	1028
Wagon. Dumping	G. Worthington	422,561	Mar. 4	283	72	50	1190
Wagon. Farm	L. S. Crittenden	443,902	Dec. 30	3682	948	53	2012
Wagon. Farm	J. Herby	419,672	Jan. 21	1534	409	50	325
Wagon for tar, &c. Boiler	O. F. Washburn	440,209	Nov. 11	887	228	53	792
Wagon-frame	D. S. Tuthill	432,343	July 15	2033	523	52	407
Wagon-gate. Automatic	C. W. Thompson	440,853	Nov. 18	1964	505	53	1002
Wagon-jack	N. Allen	420,400	Jan. 28	2653	703	50	549
Wagon-jack	H. Blume	427,144	May 6	18	49	51	848
Wagon-jack	A. T. and A. W. Brann	436,594	Sept. 16	1902	499	52	1750
Wagon-jack	J. Burne	419,031	Jan. 7	577	146	50	122
Wagon-jack	S. C. Hall	433,862	Aug. 5	630	163	52	880

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Wagon-jack.....	W. S. Hinman.....	429,686	June 10	877	214	51	1651
Wagon-jack.....	S. Lincoln.....	425,682	Apr. 15	1912	509	51	389
Wagon-jack.....	A. J. Oliver and R. M. Wren.....	428,350	May 20	2011	506	51	1223
Wagon-jack.....	D. C. Slaght and J. L. Ryno.....	443,603	Dec. 30	3228	830	53	1925
Wagon-jack.....	H. D. Voorbies.....	419,298	Jan. 14	976	259	50	207
Wagon-jack.....	A. L. Weatherhead.....	440,339	Nov. 11	1096	281	53	829
Wagon-jack.....	R. H. Wilson.....	440,678	Nov. 18	1659	425	53	946
Wagon-jack or shaft-holder. Convertible.....	C. D. Townsend.....	420,478	Feb. 4	80	18	50	579
Wagon-loader.....	W. J. Edwards.....	442,517	Dec. 9	1386	{ 354 355 }	{ 53 53 }	1540
Wagon-platform.....	J. Mack.....	441,881	Dec. 2	395	104	53	1342
Wagon-reach protector.....	C. J. A. Saugman and S. Hansen.....	432,084	July 15	1642	421	52	336
Wagon. Road.....	J. J. Black.....	439,097	Oct. 28	2204	591	53	440
Wagon. Road.....	C. W. Saladee.....	434,299	Aug. 12	1297	{ 337 338 }	{ 52 52 }	1020
Wagon. Road.....	C. W. Saladee.....	434,300	Aug. 12	1299	338	52	1020
Wagon running-gear.....	P. Gendron.....	419,010	Jan. 7	545	136	50	115
Wagon running-gear.....	T. J. Thorp.....	432,002	July 8	1509	{ 382 383 }	{ 52 52 }	303
Wagon running-gear. Road.....	C. W. Saladee.....	438,189	Oct. 14	789	{ 215 216 }	{ 53 53 }	158
Wagon-seat.....	W. I. Hunt.....	442,977	Dec. 16	2167	557	53	1703
Wagon-seat and end-gate. Combined.....	L. Salm.....	427,618	May 13	892	225	51	997
Wagon-seat lock.....	D. W. Glidden.....	423,681	Mar. 18	1993	525	50	1531
Wagon-seat lock.....	M. D. Schaller.....	420,701	Feb. 4	381	101	50	639
Wagon-seat riser.....	J. Handy and W. D. Sherman.....	434,183	Aug. 12	1117	290	52	985
Wagon-seat standard.....	B. Peacock.....	444,158	Aug. 12	1085	279	52	978
Wagon-seat support.....	W. I. Hunt.....	442,978	Dec. 16	2168	558	53	1703
Wagon-skein.....	J. Herby.....	419,991	Jan. 21	2016	532	50	421
Wagon-skein.....	G. J. Larson.....	423,433	Mar. 18	1623	426	50	1460
Wagon-skein.....	G. J. Larson.....	432,882	July 22	2871	736	52	579
Wagon-spring.....	M. D. Conley.....	422,050	Feb. 25	2359	623	50	1036
Wagon-spring.....	W. H. Willcraft.....	424,842	Apr. 1	635	167	51	123
Wagon. Spring-board.....	J. K. P. Pine.....	441,191	Nov. 25	2514	649	53	1117
Wagon-spring buffer.....	A. G. Fischer.....	430,770	June 24	2621	642	51	2006
Wagon-standard.....	A. Coble.....	442,421	Dec. 9	1232	319	53	1510
Wagon-step.....	E. A. Nichols.....	429,635	June 10	805	196	51	1637
Wagon-step.....	R. K. Thompson.....	440,661	Nov. 18	1631	421	53	940
Wagon. Sugar.....	G. Van Wagenen.....	441,264	Nov. 25	2668	{ 692 693 }	{ 53 53 }	1144
Wagon. Sugar.....	G. Van Wagenen and J. Graves.....	428,790	May 27	2681	679	51	1369
Wagon-track.....	G. E. Elliott.....	433,118	July 29	3264	840	52	659
Wagon. Vender's.....	G. R. Kent.....	432,533	July 22	2325	600	52	474
Wagon-wheel.....	B. McGovern.....	420,663	Feb. 4	333	87	50	629
Wagon-wheel.....	W. H. Sullenberger.....	443,125	Dec. 23	2430	620	53	1761
Wagon-wrench.....	E. Eberhardt.....	424,471	Apr. 1	42	12	51	11
Wagons. Combined hay and stock rack for.....	J. E. Garlinghouse.....	440,426	Nov. 11	1256	325	53	859
Wagons. Spring-platform for road.....	C. W. Saladee.....	433,308	July 29	3537	913	52	715
Wagons. Spring-platform for road.....	C. W. Saladee.....	435,861	Sept. 2	739	198	52	1518
Wagons. Spring-platform for road.....	C. W. Saladee.....	441,901	Dec. 2	426	{ 113 114 }	{ 53 53 }	1348
Wagons. Stop-block for.....	J. W. Carter.....	441,533	Nov. 25	3083	792	53	1323
Waist and skirt. Combined.....	C. Caen.....	443,390	Dec. 23	2886	742	53	1850
Waistband-fastener.....	J. Ewig.....	438,474	Oct. 14	1217	330	53	239
Walking, running, and jumping. Apparatus for facilitating.....	N. Yagn.....	420,178	Jan. 28	2320	613	50	487
Walking, running, and jumping. Apparatus for facilitating.....	N. Yagn.....	420,179	Jan. 28	2322	{ 613 614 }	{ 50 50 }	487
Walking, running, and jumping. Apparatus for facilitating.....	N. Yagn.....	438,830	Oct. 21	1793	478	53	354
Walking, running, and jumping. Apparatus for facilitating.....	N. Yagn.....	440,684	Nov. 18	1667	430	53	947
Walking-stick or cane. Combination.....	W. Flam.....	429,234	June 3	190	46	51	1508
Wall-bracket for staging.....	R. N. Hall.....	420,937	Feb. 11	771	200	50	719
Wall-covering composition.....	R. B. and E. H. Martin.....	427,591	May 13	857	.....	51	990
Wall-coverings. Coloring or decorating paper for.....	T. Strahan.....	430,707	June 24	2515	616	51	1985
Wall-decoration.....	J. C. Haire.....	437,112	Sept. 23	2760	721	52	1926
Wall ornament.....	M. E. Conegan.....	440,764	Nov. 18	1807	467	53	973
Wall-paper exhibitor.....	T. H. Fritz.....	425,417	Apr. 15	1502	403	51	310
Wall-paper. Machine for unwinding and trimming.....	F. H. Shepherd and J. W. Meyer.....	441,835	Nov. 25	2772	717	53	1163
Wall-paper-pasting machines. Track for.....	P. McQueney.....	439,789	Nov. 4	239	61	53	655
Wall-plaster, &c. Method of and device for ornamenting.....	J. H. Harding.....	433,785	Aug. 5	519	135	52	857
Wall-pocket or paper-holder.....	C. Mee.....	430,138	June 17	1585	394	51	1797
Walls and ceilings. Producing fire-proof.....	C. F. W. Döhring.....	432,023	July 15	1550	394	52	318
Walls and chimneys. Flashing for.....	J. White.....	423,888	Mar. 18	2295	606	50	1588
Walls. Apparatus for use in the construction of dry.....	E. A. Adams.....	428,327	May 20	1978	498	51	1216
Walls. Binding-plate for brick.....	C. Bischoff.....	425,854	Apr. 15	2167	577	51	437
Walls. Ornamentation of.....	M. B. Church.....	420,920	Feb. 11	759	196	50	716
Walls. Ornamentation of.....	M. B. Church.....	437,095	Sept. 23	2735	715	52	1921
Wardrobe-hook.....	G. W. Tucker.....	425,918	Apr. 15	2250	596	51	453
Wardrobe-hook.....	A. G. Williams and S. H. Hackett.....	424,239	Mar. 25	2809	750	50	1694
Wardrobe. Portable or knockdown.....	M. M. Killinger.....	436,482	Sept. 16	1727	{ 455 456 }	{ 52 52 }	720
Warming and ventilating. Apparatus for.....	F. A. Weber.....	443,022	Dec. 16	2228	574	53	1716
Warp-beaming machine.....	E. H. Taylor.....	423,643	Mar. 18	1935	{ 509 510 }	{ 50 50 }	1519
Warp-dressers. Leasing mechanism for.....	J. M. Simoneau.....	438,563	Oct. 14	1344	{ 364 365 }	{ 53 53 }	266
Warp machine. Traverse.....	J. Upsdale.....	435,002	Aug. 26	2433	{ 643 644 }	{ 52 52 }	1256
Warp sizing and drying machines. Cut marker for.....	W. C. Lovering.....	432,535	July 22	2327	601	52	474
Warping-machine.....	P. Goldschmidt.....	428,772	May 27	2651	672	51	1364

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				Spec.	Dis.	Vol.	Page.
Warping-machines. Electric stop-motion for.....	P. Goldschmidt.....	443,674	Dec. 30	3342	{ 860 861	53	1946
Warping-machines. Electric stop-motion for.....	J. P. Haslam.....	432,040	July 15	1574	403		322
Warping-machines. Electric stop-motion for.....	J. E. Prest.....	424,997	Apr. 8	878	231	51	178
Wash-bench.....	I. D. and S. F. Brown.....	428,070	May 20	1583	402	51	1140
Wash-bench.....	J. McLain.....	440,958	Nov. 18	2136	553	53	1034
Wash-board.....	H. H. Bellows.....	443,844	Dec. 30	3608	928	53	1998
Wash-board.....	C. Cornelius.....	440,101	Nov. 4	710	188	53	747
Wash-board.....	S. Duryee.....	423,379	Mar. 11	1538	404	50	1436
Wash-board.....	V. Landrieu.....	422,810	Mar. 4	648	166	50	1261
Wash-board.....	J. T. Sargent.....	421,317	Feb. 11	1321	341	50	822
Wash-board.....	J. T. Sargent.....	421,318	Feb. 11	1322	342	50	822
Wash-board.....	J. T. Sargent.....	437,869	Oct. 7	299	89	53	58
Wash board holder.....	A. Pettit and J. Powers.....	437,617	Sept. 30	3577	935	52	2090
Wash-boiler.....	W. H. Barron.....	439,856	Nov. 4	340	88	53	674
Wash-boiler.....	G. Bowler.....	440,941	Nov. 18	2107	547	53	1030
Wash-boiler.....	L. I. Burbank and C. Nippert.....	422,114	Feb. 25	2460	651	50	1054
Wash-boiler.....	M. L. W. Martinot.....	432,419	July 15	2141	551	52	428
Wash-boiler.....	C. M. McGowen.....	442,533	Dec. 9	1411	360	53	1544
Wash-boiler.....	H. J. F. Rose.....	430,486	June 17	2140	526	51	1905
Wash-boiler.....	B. Schuessler.....	434,841	Aug. 19	2149	562	52	1196
Wash-boiler.....	A. C. Smith.....	440,660	Nov. 18	1630	421	53	940
Wash-boiler.....	A. P. Thissell and G. S. Bradstreet.....	433,498	Aug. 5	84	24	52	773
Wash-boiler.....	J. M. Watson.....	420,753	Feb. 4	449	119	50	652
Wash-boiler.....	J. H. Whitmarsh.....	420,526	Feb. 4	142	35	50	591
Wash-stand.....	N. O. Bond.....	438,368	Oct. 14	1064	290	53	209
Wash-stand.....	S. S. Burr.....	434,914	Aug. 26	2311	{ 610 611	52	1233
Wash-stand.....	S. S. Burr.....	434,915	Aug. 26	2313	611		1234
Wash-stand.....	C. H. Hildreth.....	419,442	Jan. 14	1198	317	50	252
Wash-stand splasher-holder.....	L. Smith.....	434,053	Aug. 12	896	236	52	940
Wash-tub.....	H. Johnson.....	426,536	Apr. 29	3204	840	51	659
Wash-tub.....	M. L. W. Martinot.....	438,930	Oct. 21	1943	517	53	382
Wash-tub pipe-connection.....	B. C. Smith.....	425,553	Apr. 15	1705	456	51	350
Washer.....							
See Barrel-washer. Leather washer.							
Bottle-washer. Ore-washer.							
Clothes and dish washer. Photographic-print washer.							
Diamond-washer. Resilient spiral washer.							
Dish-washer. Slate-washer.							
Gas-washer. Spring-washer.							
Gravel-washer. Window-washer.							
Washer.....	J. A. Turnbull.....	440,870	Nov. 18	1986	512	53	1006
Washer-making machine.....	S. J. Shimer.....	430,892	June 24	2811	{ 689 690 691	51	2042
Washers. Machine for making spiral.....	H. A. Harvey.....	420,557	Feb. 4	184	47		600
Washers. Machine for manufacturing.....	W. H. Light.....	437,440	Sept. 30	3319	{ 866 867	52	2037
Washing compound.....	E. Hand.....	428,486	May 20	2312	.....		1261
Washing compound.....	C. E. Starr.....	429,161	June 3	79	.....	51	1487
Washing-machine.....	H. C. Anderson.....	426,978	Apr. 29	3850	1006	51	785
Washing-machine.....	J. Anderson.....	428,996	May 27	2979	764	51	1429
Washing-machine.....	J. P. Anderson and J. F. Miller.....	427,031	May 6	1	1	51	811
Washing-machine.....	J. W. Anderson.....	429,831	June 10	1096	270	51	1693
Washing-machine.....	S. Arcus.....	439,852	Nov. 4	334	86	53	673
Washing-machine.....	W. F. Bach.....	438,047	Oct. 7	580	158	53	110
Washing-machine.....	J. W. Bader.....	418,668	Jan. 7	5	2	50	4
Washing-machine.....	G. W. Ballard.....	425,397	Apr. 15	1472	395	51	303
Washing-machine.....	D. Barekall.....	443,609	Dec. 30	3236	831	53	1926
Washing-machine.....	S. Bartlett.....	426,755	Apr. 29	3544	925	51	725
Washing-machine.....	R. P. Baugh.....	439,266	Oct. 28	2479	665	53	490
Washing-machine.....	P. T. Benbow.....	435,913	Sept. 9	838	221	52	1543
Washing-machine.....	M. K. Biser.....	438,223	Oct. 14	843	228	53	168
Washing-machine.....	J. M. Bolton.....	429,993	June 10	1342	333	51	1741
Washing-machine.....	C. Bopp.....	421,898	Feb. 25	2153	565	50	998
Washing-machine.....	W. G. Beston.....	439,628	Nov. 4	13	4	53	609
Washing-machine.....	D. W. Bowman.....	425,563	Apr. 15	1717	460	51	352
Washing-machine.....	W. J. Brackney.....	431,323	July 1	435	108	52	89
Washing-machine.....	B. R. Briles.....	435,479	Sept. 2	143	40, 41	52	1403
Washing-machine.....	B. Brobst.....	443,566	Dec. 30	3164	813	53	1912
Washing-machine.....	M. A. Caldwell.....	426,433	Apr. 29	3056	800	51	631
Washing-machine.....	L. H. Canfield.....	425,861	Apr. 15	2173	579	51	439
Washing-machine.....	H. F. Carrico.....	431,557	July 8	812	202	52	169
Washing-machine.....	J. H. Carriger.....	420,637	Feb. 4	301	80	50	622
Washing-machine.....	T. Clarke.....	434,699	Aug. 19	1956	508	52	1156
Washing-machine.....	A. Coen.....	442,612	Dec. 16	1544	399	53	1581
Washing-machine.....	E. M. Colles, R. C. Kitchell, and D. C. Applegate.....	427,745	May 13	1094	275	51	1037
Washing-machine.....	H. W. Cook.....	420,589	Feb. 4	230	59, 60	50	609
Washing-machine.....	N. Denny.....	426,367	Apr. 22	2933	772	51	598
Washing-machine.....	A. B. Devitt.....	439,576	Oct. 28	2953	785	53	580
Washing-machine.....	J. Dietrich.....	429,428	June 3	499	119	51	1568
Washing-machine.....	P. Downing.....	432,747	July 22	2666	682	52	539
Washing-machine.....	E. Draper.....	422,192	Feb. 25	2576	682	50	1077
Washing-machine.....	M. Drolet.....	419,425	Jan. 14	1174	312	50	247
Washing-machine.....	H. Ernst.....	419,932	Jan. 21	1925	507	50	404
Washing-machine.....	D. M. Felts.....	425,127	Apr. 8	1067	283	51	215
Washing-machine.....	L. W. Freeman.....	440,556	Nov. 11	1462	377	53	898
Washing-machine.....	C. W. Gaston.....	431,691	July 8	1045	262	52	213
Washing-machine.....	W. H. Gilstrap.....	432,133	July 15	1728	444	52	352
Washing-machine.....	O. F. Glidden.....	435,822	Sept. 2	684	183	52	1507
Washing-machine.....	R. L. Gore.....	435,092	Aug. 26	2568	678	52	1282

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Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Washing-machine.....	C. F. Goss.....	428,478	May 20	2204	557	51	1259
Washing-machine.....	J. W. Hamilton.....	427,859	May 13	1262	319	51	1069
Washing-machine.....	C. Hammons.....	442,183	Dec. 9	874	{ 233 234 }	53	1441
Washing-machine.....	J. E. Hartman.....	439,243	Oct. 28	2443	655	53	483
Washing-machine.....	H. Hassenpflug.....	427,861	May 13	1264	320	51	1069
Washing-machine.....	G. W. Hatch.....	419,519	Jan. 14	1299	347	50	273
Washing-machine.....	S. Hawkins.....	419,669	Jan. 21	1531	408	50	324
Washing-machine.....	W. H. Hobbs.....	428,911	May 27	2562	732	51	1407
Washing-machine.....	H. Q. Hood.....	420,011	Jan. 21	2047	540	50	426
Washing-machine.....	E. Keith.....	420,302	Jan. 28	2514	667	50	522
Washing-machine.....	T. Laffey.....	429,538	June 3	662	161	51	1598
Washing-machine.....	F. A. S. dit Lallemand and A. Gravel.....	425,889	Apr. 15	2208	586	51	446
Washing-machine.....	G. Laube.....	427,582	May 13	846	{ 212 213 }	51	988
Washing-machine.....	C. W. Leubner.....	436,794	Sept. 23	2244	591	52	1825
Washing-machine.....	L. Logan.....	427,775	May 13	1142	287	51	1047
Washing-machine.....	J. H. Lowrey.....	440,774	Nov. 18	1828	471	53	976
Washing-machine.....	W. Manning.....	436,367	Sept. 16	1548	407	52	1686
Washing-machine.....	J. and M. McCarter.....	421,959	Feb. 25	2233	587	50	1013
Washing-machine.....	W. I. McCausland.....	427,601	May 13	869	218	51	992
Washing-machine.....	J. D. McCurdy.....	432,548	July 22	2350	606	52	478
Washing-machine.....	E. McDonald.....	433,133	July 29	2388	{ 246 247 }	52	664
Washing-machine.....	A. J. McKee.....	442,726	Dec. 16	1754	454	53	1620
Washing-machine.....	C. and J. W. Mears.....	443,774	Dec. 30	3502	899	53	1976
Washing-machine.....	H. C. Meeker.....	426,836	Apr. 29	3666	954	51	748
Washing-machine.....	D. E. Merrill and W. T. Falconer.....	438,081	Oct. 7	635	173	53	122
Washing-machine.....	J. W. Moberly.....	432,832	July 22	2801	716	52	564
Washing-machine.....	L. J. Montgomery and C. P. Townsend.....	422,144	Feb. 25	2498	660	50	1062
Washing-machine.....	E. W. Moore.....	436,716	Sept. 16	2090	550	52	1788
Washing-machine.....	C. G. Patterson.....	425,693	Apr. 15	1929	513	51	392
Washing-machine.....	J. Persanowsky.....	431,821	July 8	1247	312	52	252
Washing-machine.....	B. C. Phillips.....	419,063	Jan. 7	627	163	50	132
Washing-machine.....	S. W. Reynolds.....	431,756	July 8	1141	285	52	232
Washing-machine.....	J. L. Ridings.....	432,082	July 15	1641	421	52	335
Washing-machine.....	H. Rose.....	422,160	Feb. 25	2526	668	50	1067
Washing-machine.....	H. T. Royster.....	425,000	Apr. 8	882	{ 232 233 }	51	179
Washing-machine.....	W. J. Sage.....	436,089	Sept. 9	1100	285	52	1592
Washing-machine.....	J. H. Sawyer.....	420,313	Jan. 28	2527	670	50	525
Washing-machine.....	J. Scharr.....	420,108	Jan. 28	2303	583	50	467
Washing-machine.....	A. Schlingman.....	429,870	June 10	1155	285	51	1704
Washing-machine.....	W. Shedlock.....	421,198	Feb. 11	1152	{ 294 295 296 }	50	791
Washing-machine.....	G. L. Shorey.....	440,204	Nov. 11	877	{ 225 226 }	53	790
Washing-machine.....	W. H. H. Small.....	420,742	Feb. 4	435	{ 115 116 }	50	649
Washing-machine.....	J. B. Sohn.....	430,548	June 17	2234	548	51	1022
Washing-machine.....	J. Starek.....	419,732	Jan. 21	1609	429	50	339
Washing-machine.....	F. Taylor and J. Roderick.....	428,975	May 27	2952	758	51	1424
Washing-machine.....	H. S. Tremble.....	441,606	Nov. 25	3196	823	53	1245
Washing-machine.....	J. F. Wade.....	419,482	Jan. 14	1252	332	50	263
Washing-machine.....	D. D. Weisell.....	441,523	Nov. 25	3063	788	53	1218
Washing-machine.....	C. E. Williams.....	442,408	Dec. 9	1216	314	53	1506
Washing-machine.....	M. V. Wolfe.....	420,323	Jan. 28	2540	673	50	528
Washing-machine.....	J. D. Yound.....	419,904	Jan. 21	1886	{ 495 496 }	50	395
Washing-machine.....	J. S. Young.....	438,216	Oct. 14	832	226	53	166
Washing-machines. Reversing mechanism for waste and overflow trap.....	J. E. Boardman.....	419,627	Jan. 21	1159	391	50	312
Waste-box.....	J. J. Wade.....	434,609	Aug. 19	1939	504	52	1153
Waste-picker.....	J. H. Dalton.....	441,141	Nov. 25	2440	632	53	1103
Watch.....	J. P. Hillard.....	430,474	June 17	2127	523	51	1902
Watch.....	H. Albert.....	427,653	May 13	939	235	51	1006
Watch.....	A. Amaron.....	442,301	Dec. 9	1045	{ 274 275 }	53	1473
Watch-balance springs. Apparatus for pinning.....	E. J. Hall.....	437,345	Sept. 30	3153	825	52	2005
Watch-balance staff.....	S. and M. Botkowsky.....	439,629	Nov. 4	14	4	53	609
Watch-balances. Apparatus for testing.....	W. D. Olney.....	429,609	June 10	902	220	51	1656
Watch-balances. Device for testing.....	W. D. Olney.....	432,616	Mar. 4	380	94	50	1209
Watch-balances. Making hair-springs for.....	J. Logan.....	443,256	Dec. 23	2668	684	53	1808
Watch-bow fastener.....	E. C. Chappatte.....	438,094	Oct. 7	654	178	53	126
Watch-bow fastener.....	O. R. Decker.....	426,927	Apr. 29	3779	987	51	772
Watch-bow fastener.....	C. M. Fogg.....	425,375	Apr. 8	1436	384	51	267
Watch-bow fastener.....	J. W. Hansen.....	437,690	Oct. 7	20	6	53	6
Watch-bow fastener.....	E. Klahn.....	441,172	Nov. 25	2468	643	53	1113
Watch-bow fastener.....	F. Mink.....	425,382	Apr. 8	1449	388	51	290
Watch-bow fastener.....	F. Mink.....	433,532	Aug. 5	130	37	52	782
Watch-bow fastener.....	F. Mink.....	439,414	Oct. 28	2715	724	53	535
Watch-bow fastener.....	C. F. Morrill.....	441,434	Nov. 25	2931	755	53	1194
Watch-bow fastener.....	L. Plataner.....	419,552	Jan. 14	1342	359	50	282
Watch-bow fastener.....	J. D. Shoots and C. E. Carpenter.....	420,741	Feb. 4	434	115	50	649
Watch-bows. Chain-guard for.....	D. O'Hara.....	432,762	July 22	2702	691	52	546
Watch-case.....	O. R. Decker.....	440,544	Nov. 11	1438	371	53	894
Watch-case.....	J. H. Fleming.....	440,308	Nov. 11	1055	272	53	822
Watch-case.....	F. Mink.....	433,939	Mar. 25	2363	634	50	1611
Watch-case.....	F. Mink.....	424,491	Apr. 1	80	23	51	18
Watch-case.....	F. Mink.....	425,383	Apr. 8	1450	388	51	290
Watch-case.....	D. O'Hara.....	433,693	Aug. 5	372	95	52	829
Watch-case backs and covers and other like articles. Method of and means for ornamenting.....	A. W. Hofmann.....	435,836	Sept. 2	704	{ 188 189 }	52	1511

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Watch-case bezel	C. Kornrumpf	442,443	Dec. 9	1267	327	53	1517
Watch-case centers and other like articles. Means for ornamenting	A. W. Hofmann	435,834	Sept. 2	701	187	52	1511
Watch-case centers and other like articles. Ornamenting	A. W. Hofmann	435,835	Sept. 2	703	188	52	1511
Watch-case centers. Manufacture of	D. O'Hara	432,761	July 22	2701	691	52	545
Watch-case centers. Mechanism for making	F. Ecaubert	420,337	Jan. 28	2561	{ 679 680 }	50	531
Watch-case centers. Mechanism for the manufacture of	W. H. Fitz Gerald	420,380	Jan. 28	2623	{ 696 697 }	50	542
Watch-case centers. Ornamenting	F. Ecaubert	434,539	Aug. 19	1673	438	52	1103
Watch-case hinge	D. O'Hara	435,765	Sept. 2	596	158	52	1489
Watch-case pendant	F. G. Faxon	427,757	May 13	1117	280	51	1041
Watch-case pendant	E. C. Fitch	424,191	Mar. 25	2748	732	50	1681
Watch-case pendant	C. W. Hathaway	443,480	Dec. 23	3031	779	53	1878
Watch-case pendant	C. F. Morrill	441,322	Nov. 25	2755	712	53	1159
Watch-case pendant	C. F. Morrill	441,435	Nov. 25	2933	755	53	1194
Watch-case pendant	C. F. Morrill	441,436	Nov. 25	2934	756	53	1194
Watch-case spring	T. K. Benton	430,824	June 24	2710	664	51	2022
Watch-case spring	J. H. Fleming	420,048	Jan. 28	2104	556	50	446
Watch-case spring	P. A. Florimont	441,833	Dec. 2	323	86	53	1327
Watch-case spring	B. M. Greene	419,517	Jan. 14	1295	346	50	272
Watch-case spring	P. Muhr	423,174	Mar. 11	1242	323	50	1380
Watch-cases, &c. Apparatus for ornamenting	E. C. Chappatte	427,501	May 6	713	179	51	953
Watch-cases. Decorating	E. Leach	425,808	Apr. 15	2087	558	51	424
Watch-cases. Machine for decorating	E. Leach	425,807	Apr. 15	2085	{ 557 558 559 }	51	424
Watch-cases. Machine for decorating	E. Leach	425,809	Apr. 15	2088	558	51	424
Watch-cases. Machine for decorating	E. Leach	441,495	Nov. 25	3028	780	53	1211
Watch-cases. Manufacture of	S. T. J. Byam	424,048	Mar. 25	2551	680	50	1643
Watch-cases. Mechanism for making	F. Ecaubert and T. B. Hagstoz	426,118	Apr. 22	2572	678	51	525
Watch-crown-pieces. Manufacturing	A. C. Dalzell, Jr.	435,802	Sept. 2	655	172	52	1501
Watch-crystals. Calipers for fitting	A. Nylén	421,132	Feb. 11	1062	273	50	775
Watch-demagnetizer	C. F. Berlin	436,205	Sept. 9	1288	335	52	1626
Watch-demagnetizer	F. F. Ide	429,033	May 27	3045	786	51	1441
Watch-dial-marking device	E. J. Guilford	431,807	July 8	1234	306	52	247
Watch-dials. Applying designs to	F. Schmalz and J. C. Firmbach	424,228	Mar. 25	2794	50	50	1692
Watch-dials. Applying lines and characters to	W. S. Eaton	430,424	June 17	2051	51	51	1888
Watch-dials. Manufacture of	D. R. Buchanan	425,020	Apr. 8	913	51	51	185
Watch-dials. Tool for enameling	E. H. Ryon	428,417	May 20	2119	532	51	1244
Watch-fastener	J. A. Vansickle	441,515	Nov. 25	3050	785	53	1216
Watch-guard	I. Siff	424,362	Mar. 25	3014	800	50	1732
Watch-hand remover	P. H. Nefflen	440,496	Nov. 11	1371	354	53	881
Watch-key	R. Ueltzen	432,584	July 22	2396	617	52	487
Watch key. Stem-winding	G. H. Remington	434,050	Aug. 12	891	235	52	939
Watch-keys. Manufacture of	R. H. Franklin	439,059	Oct. 21	2138	574	53	420
Watch-mainspring-holding device	J. Logan	435,844	Sept. 2	717	192	52	1513
Watch-mainsprings. Apparatus for polishing the edges of	J. Logan	432,755	July 22	2687	687	52	543
Watch-makers' calipers	J. M. Irmen	439,156	Oct. 28	2289	615	53	455
Watch-maker's polisher	F. Hardinge	438,415	Oct. 14	1139	307	53	224
Watch-maker's roller-extractor	F. Hardinge	438,416	Oct. 14	1140	308	53	224
Watch-makers. Seconds-hand tool for	A. Schwerter	442,142	Dec. 9	810	218	53	1428
Watch-maker's staking and punching tool	E. Rivett	425,522	Apr. 15	1664	444	51	341
Watch-maker's staking-tool and lathe	J. G. Rawls	428,020	May 13	1509	383	51	1116
Watch-maker's tool	J. Sabek	433,218	July 29	3408	880	52	688
Watch-maker's tweezers	R. H. Franklin	437,647	Sept. 30	3617	946	52	2098
Watch-maker's tweezers	E. P. Swain	420,125	Jan. 28	2228	589	50	472
Watch-movement box	W. J. Savage	435,324	Aug. 26	2917	775	52	1347
Watch-movement holder	E. Allen	437,636	Sept. 30	3604	943	52	2096
Watch movement. Interchangeable stem-winding	H. Abbott	432,256	July 15	1897	488	52	383
Watch movement. Interchangeable stem-winding	H. Abbott	432,290	July 15	1963	502	52	395
Watch movement. Interchangeable stem-winding	H. Abbott	432,291	July 15	1965	502	52	395
Watch. Pendant-set	F. G. Faxon	424,189	Mar. 25	2745	732	50	1681
Watch-pendants. Machine for forming nibs on	C. W. Butts	431,435	July 1	623	{ 155 156 }	52	126
Watch-pocket fastener	J. Kershaw	442,056	Dec. 2	678	183	53	1395
Watch-protector	C. C. Wright	441,046	Nov. 18	2264	586	53	1060
Watch. Repeating	C. Barbezat-Baillet	433,225	July 29	3417	{ 882 883 }	52	690
Watch. Repeating	J. Richter	430,739	June 24	2567	{ 628 629 }	51	1995
Watch. Repeating	C. Ruhnke	430,692	June 24	2488	607	51	1979
Watch-regulator	W. Goldthwait	427,072	May 6	75	19	51	826
Watch-shipping case	A. J. Niles	434,945	Aug. 26	2355	623	52	1242
Watch. Stem-winding	P. Perret	432,709	July 22	2608	667	52	528
Watch. Stem-winding	A. H. Potter	425,342	Apr. 8	1386	{ 369 370 }	51	278
Watch. Stem-winding	J. Ranschenbach	420,919	Feb. 4	739	189	50	703
Watch. Stem winding and setting	L. Burri-Haldi	429,905	June 10	1054	259	51	1684
Watch. Stem winding and setting	B. Frese	419,654	Jan. 21	1500	401	50	320
Watch. Stem winding and setting	B. Heidbrink	433,289	July 29	3509	905	52	710
Watch. Stem winding and setting	C. T. Higginbotham	440,878	Nov. 18	1997	514	53	1008
Watch. Stem winding and setting	T. F. Sheridan. (Reissue)	11,100	Aug. 5	720	187	52	898
Watch. Stop	H. J. Eisen	437,683	Oct. 7	11	4	53	5
Watch. Stop	A. Leconte-Pignet	435,699	Sept. 2	501	133	52	1472
Watch. Stop	C. Schlatter	426,396	Apr. 22	2288	783	51	609
Watch. Stop	T. J. Wrangham	441,608	Nov. 25	3198	824	53	1246
Watch-testing mechanism	B. Copeland	443,695	Dec. 30	3378	{ 867 868 }	53	1952
Watch. Time-striking	J. Robinson	425,582	Apr. 15	1749	468	51	357
Watch winding mechanism	L. and M. Donne	424,185	Mar. 25	2739	730	50	1680

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Watches. Adjusting	G. E. Hunter and F. H. Corthell....	437,203	Sept. 30	2931	763	52	1963
Watches. Adjusting	G. E. Hunter and F. H. Corthell....	437,204	Sept. 30	2933	764		
Watches. Apparatus for adjusting	G. E. Hunter and F. H. Corthell....	437,205	Sept. 30	2935	765	52	1964
Watches. Apparatus for adjusting	G. E. Hunter and F. H. Corthell....	437,206	Sept. 30	2938	766	52	1964
Watches. Balance-escapement for	A. Bannatyne	443,248	Dec. 23	2658	767	53	1806
Watches. Cannon-pinion for	F. P. Allen	443,354	Dec. 23	2878	768	53	1848
Watches. Cannon-pinion for	W. B. Learued	439,845	Nov. 4	325	83	53	671
Watches. Device for securing dials to	F. F. Ide	419,525	Jan. 14	1307	349	50	274
Watches, &c. Device to facilitate the drilling of holes centrally in shafts for	W. M. Preston	437,796	Oct. 7	192	59	53	38
Watches. Hair-spring collet for	W. E. Banta	438,672	Oct. 21	1512	408	53	303
Watches. Hair-spring stud for	C. T. Higginbotham	440,877	Nov. 18	1996	514	53	1008
Watches. Manufacture of balance-wheels for	P. Perret	433,255	July 29	3462	894	52	700
Watches or other time-pieces. Repeating mechanism for	F. Terstegen	421,844	Feb. 18	2066	545	50	971
Watches. Repeating attachment for	F. Terstegen	436,162	Sept. 9	1216	317	52	1612
Water-alarm. Electrical	F. M. Ashton	438,598	Oct. 21	1397	379	53	281
Water and gas box. Street	A. W. Morgan	429,733	June 10	947	233	51	1665
Water and generating steam by electricity. Apparatus for heating	J. C. Hubinger	421,498	Feb. 18	1575	407	50	879
Water and generating steam by electricity. Heating	J. C. Hubinger	421,499	Feb. 18	1578	408	50	879
Water. Apparatus for detecting waste of	B. S. Church	428,075	May 20	1589	404	51	1141
Water, &c. Apparatus for heating and circulating	S. Cutler	433,330	July 29	3567	920	52	721
Water. Apparatus for recording the flow of	G. F. Deacon	428,804	May 27	2696	684	51	1372
Water. Apparatus for utilizing natural gas for raising	W. H. and S. B. Castor	441,056	Nov. 18	2285	593	53	1064
Water chute or flume and water-basin	H. W. Libbey	419,860	Jan. 21	1816	480	50	380
Water-closet	F. Adeo	436,451	Sept. 16	1679	442	52	1710
Water-closet	J. M. Anderson	429,494	June 3	600	147		
Water-closet	H. H. Craigie	440,755	Nov. 18	1792	463	53	970
Water-closet	S. S. Ferguson	441,360	Nov. 25	2806	725	53	1168
Water-closet	A. J. Finnegan	424,872	Apr. 1	683	180	51	132
Water-closet	R. Frame and C. A. Neff	425,416	Apr. 15	1501	403	51	309
Water-closet	H. C. Hart	440,030	Nov. 4	611	162	53	728
Water-closet	H. C. Hart	442,041	Dec. 2	650	175	53	1390
Water-closet	J. W. Hogue	429,853	June 10	1126	279	51	1699
Water-closet	G. B. Howell	430,855	June 24	2755	675	51	2031
Water-closet	E. H. Israel	434,340	Aug. 12	1354	353	52	1032
Water-closet	J. Kelly	428,278	May 20	1897	478		
Water-closet	E. McDonald	437,709	Oct. 7	42	13	53	11
Water-closet	C. R. Schmidt	423,182	Mar. 11	1252	326	50	1382
Water-closet	W. Scott	419,566	Jan. 14	1361	364	50	286
Water-closet	P. White	441,045	Nov. 18	2262	586		
Water-closet	P. White	443,419	Dec. 23	2924	752	53	1857
Water-closet	D. Whiteford	442,564	Dec. 9	1463	375	53	1556
Water-closet and snpply-tank therefor	J. P. Putnam	440,197	Nov. 11	863	222		
Water-closet bowl	W. H. Newell	423,175	Mar. 11	1243	323	50	1380
Water-closet bowl	H. C. Weedon	443,341	Dec. 23	2815	724	53	1856
Water-closet bowl and trap	J. E. Boyle	423,032	Mar. 11	1000	263	50	1334
Water-closet cistern	H. A. Egan	431,023	June 24	3012	739	51	2079
Water-closet coupling	J. J. Ricketts	434,116	Aug. 12	1016	264	52	965
Water-closet coupling	J. J. Ricketts	434,117	Aug. 12	1017	264	52	965
Water-closet flushing apparatus	A. J. Finnegan	424,871	Apr. 1	682	180	51	131
Water-closet flushing apparatus	J. Kelly	441,799	Dec. 2	3268	71	53	1316
Water-closet flushing attachment	A. Elmendorf	443,625	Dec. 30	3260	839	53	1930
Water-closet flushing mechanism	C. A. Blessing	420,327	Jan. 28	2543	674	50	528
Water-closet flushing mechanism	C. A. Blessing	443,845	Dec. 30	3609	928	53	1998
Water-closet flushing-tank	A. Haarlander	439,062	Oct. 21	2145	576	53	421
Water-closet hoppers and pipes. Coupling for	E. T. and F. S. Mathews	432,318	July 15	2007	513	52	402
Water-closet indicator	J. Dührberg	437,101	Sept. 23	2745	717	52	1922
Water-closet overflow	W. S. Mayo	430,966	June 24	2922	717	51	2062
Water-closet. Pump	W. D. Baxter	438,981	Oct. 21	2023	540	53	398
Water-closet sanitary service-tank	R. A. L. Blondel	428,372	May 20	2043	541		
Water-closet sanitary service-tank	R. A. L. Blondel	428,373	May 20	2047	514	51	1230
Water-closet seat	F. P. Larkin	426,287	Apr. 22	2819	741		
Water-closet seat-back	A. F. Blesch and J. Herrmann	443,564	Dec. 30	3162	813	53	575
Water-closet seat-pad	J. Tiffany	443,170	Dec. 23	2514	643	53	1776
Water-closet supply-valve	J. Budde	442,419	Dec. 9	1230	318	53	1509
Water-closet tank	A. F. Blesch	425,288	Apr. 8	1316	352	51	264
Water-closet tank	R. T. Hurst	422,417	Mar. 4	80	22	50	1152
Water-closet. Tank	P. White	425,921	Apr. 15	2252	597	51	453
Water-closet valve	N. A. Conklin	429,422	June 3	485	115	51	1564
Water-closet valve and operating mechanism therefor	T. McHugh	435,021	Aug. 26	2463	652	52	1262
Water-closet-valve mechanism	J. Hankenhof	434,778	Aug. 19	2063	539	52	1199
Water-closet valves. Retarding device for	T. McHugh	431,387	July 1	548	136	52	111
Water-closets and bath-rooms. Indicator for	H. Tate	438,505	Oct. 14	1257	340		
Water-closets, &c. Flushing device for	W. C. Hughes	434,020	Aug. 12	853	225	52	931
Water-closets. Flushing-tank for	C. Gielow	442,804	Dec. 16	1870	483	53	1644
Water-closets. Inlet-valve for	T. Keyworth	439,730	Nov. 4	151	40	53	637
Water-closets. Seat-connection for	W. Scott	433,964	Aug. 12	785	205	52	918
Water-conductor pipe	T. C. Belding	433,882	Aug. 5	662	171	52	886
Water-conductors. Fastener for	W. H. Berger	425,852	Apr. 15	2164	576	51	437
Water-conduits. Sand-box for	C. N. Earle	429,191	June 3	129	32	51	1495

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Water-conveyer.....	G. W. Bailey.....	431,542	July 8	791	197	52	165
Water-cooler.....	G. Hilmyer.....	431,464	July 1	662	166	52	133
Water-cooler.....	J. W. Meyer and F. H. Shepherd.....	433,739	Aug. 5	437	113	52	841
Water-current motor.....	G. R. Driggs.....	433,165	July 29	3332	862	52	673
Water-ejector for vessels. Automatic.....	N. N. Frost.....	422,391	Mar. 4	41	12	50	1145
Water-elevator.....	G. M. Atherton.....	418,861	Jan. 7	316	77	50	66
Water-elevator.....	G. W. Campbell.....	424,920	Apr. 1	747	200	51	145
Water-elevator.....	G. W. Gale.....	434,029	Aug. 12	863	227	52	933
Water-elevator.....	G. V. Killian.....	421,581	Feb. 18	1700	{ 441 442 }	50	902
Water elevator and carrier.....	J. W. Rosborough.....	437,246	Sept. 30	2996	{ 783 784 }	52	1976
Water-elevator. Compressed-air.....	H. J. Freudenfeld.....	424,775	Apr. 1	532	143	51	104
Water-elevator. Endless-chain.....	R. P. Hufey.....	427,997	May 13	1475	374	51	1109
Water from sea-water. Apparatus for producing fresh.....	W. F. Pamphlett.....	419,215	Jan. 14	855	{ 224 225 }	50	184
Water-gage.....	E. R. Allen.....	443,063	Dec. 16	2295	588	53	1729
Water-gage.....	H. G. Brooks.....	442,010	Dec. 2	596	161	53	1379
Water-gage.....	C. H. Stamer.....	442,465	Dec. 9	1296	335	53	1522
Water-gage.....	F. S. Thring.....	436,616	Sept. 16	1927	506	52	1755
Water-gage.....	A. Worthington.....	419,743	Jan. 21	1629	434	50	343
Water-gage. Safety.....	P. Barclay.....	423,206	Mar. 11	1282	333	50	1388
Water-gage. Safety.....	W. P. Phillips.....	421,139	Feb. 11	1063	273	50	775
Water-gage. Safety.....	G. H. Wall.....	426,154	Apr. 22	2632	691	51	536
Water-heater.....	S. Bernstein.....	429,300	June 3	298	71	51	1527
Water-heater.....	F. P. Blodgett.....	425,062	Apr. 8	969	{ 260 261 }	51	195
Water-heater.....	A. Brake.....	422,288	Feb. 25	2733	720	50	1105
Water-heater.....	O. T. Conger.....	436,575	Sept. 16	1874	{ 492 493 }	52	1745
Water-heater.....	J. Hacker, L. W. Colby, and J. W. Helton.....	421,274	Feb. 11	1255	324	50	811
Water-heater.....	L. L. Culver.....	438,531	Oct. 14	1298	351	53	256
Water-heater.....	J. F. McElroy.....	435,075	Aug. 26	2544	671	52	1277
Water-heater.....	J. D. Monat.....	443,104	Dec. 23	2399	612	53	1756
Water-heater.....	A. P. Monnier.....	436,254	Sept. 9	1355	353	52	1640
Water-heater.....	C. B. Rice.....	420,019	Jan. 21	2056	542	50	428
Water-heater.....	E. Ruud.....	443,797	Dec. 30	357	906	53	1983
Water-heater.....	R. G. Ward.....	421,792	Feb. 18	1989	{ 523 524 }	50	958
Water-heater.....	G. Wells.....	426,157	Apr. 22	2636	692	51	537
Water-heater.....	W. R. Whitelaw.....	419,379	Jan. 14	1114	294	50	235
Water heater and purifier.....	J. S. Roake.....	428,694	May 27	2536	644	51	1342
Water heater and purifier. Steam.....	J. Bryce.....	439,574	Oct. 28	2951	784	53	580
Water-heater and steam-cooker.....	J. Hacker.....	433,238	July 29	3437	888	52	635
Water-heater or low-pressure steam-boiler.....	D. E. Howatt.....	431,354	July 1	488	121	52	99
Water-heater. Sectional.....	D. E. Howatt.....	431,355	July 1	490	{ 121 122 }	52	100
Water-heater. Submerged.....	J. P. Stabler.....	441,338	Nov. 25	2777	718	53	1163
Water. Heating and purifying.....	C. E. Ferreira.....	434,592	Aug. 19	1757	460	52	1121
Water-heating apparatus.....	T. Hall.....	429,237	June 3	198	49	51	1510
Water-heating apparatus.....	J. D. Kutz.....	420,807	Feb. 4	550	141	50	669
Water-heating device.....	O. M. Shannon.....	429,799	June 10	1041	{ 255 256 }	51	1682
Water-jacketed boiler.....	J. J. Hogan.....	425,942	Apr. 15	2300	609	51	462
Water-level indicator and alarm.....	I. A. Fuller.....	423,680	Mar. 18	1993	525	50	1530
Water-level regulator.....	S. Bessonoff.....	440,218	Nov. 11	897	231	53	795
Water-meter.....	F. B. Giesler.....	427,852	May 13	1251	{ 315 316 }	51	1066
Water-meter. Disk.....	J. Thomson.....	427,485	May 6	687	{ 172 173 }	51	948
Water-meter. Oscillating.....	R. J. Rogers.....	431,622	July 8	904	{ 226 227 }	52	188
Water-meter. Rotary.....	F. A. Bishop.....	432,929	July 22	2939	753	52	592
Water-meter. Rotary.....	G. H. Glad.....	440,559	Nov. 11	1464	378	53	899
Water-meter. Rotary.....	W. G. Kent.....	429,923	June 10	1231	305	51	1719
Water-meter. Rotary.....	J. A. Tilden.....	423,289	Mar. 11	1419	368	50	1412
Water-meter. Rotary.....	H. D. Winton.....	423,298	Mar. 11	1428	371	50	1414
Water-meter with revolving piston.....	L. H. Nash.....	433,088	July 29	3215	{ 827 828 }	52	649
Water-meters. Angle-connection for disk.....	J. Thomson.....	427,486	May 6	690	173	51	948
Water-meters. Apparatus for applying strainers within service-pipes in circuit with.....	J. Thomson.....	427,447	May 6	641	160	51	938
Water-motor.....	G. W. Brown.....	424,918	Apr. 1	746	199	51	145
Water-motor.....	W. S. and Z. M. Collins.....	436,595	Sept. 16	1903	500	52	1750
Water-motor.....	E. Courtright.....	419,321	Jan. 14	1015	269	50	215
Water-motor.....	S. B. Goff.....	426,361	Apr. 22	2784	731	51	568
Water-motor.....	A. J. Kuehn.....	425,806	Apr. 15	2083	557	51	424
Water-motor.....	G. W. Mason.....	436,715	Sept. 16	2089	550	52	1787
Water-motor.....	S. Smyth.....	429,392	June 3	447	105	51	1557
Water-motor.....	J. S. Teed.....	429,487	June 3	592	144	51	1585
Water-motor.....	H. E. Trumble.....	431,156	July 1	183	47	52	38
Water-motor.....	W. E. Vernon.....	420,257	Jan. 28	2451	{ 650 651 }	50	510
Water on land. Means for controlling the shifting action of moving.....	G. H. Henshaw.....	419,121	Jan. 7	703	185	50	148
Water-pipe feed-tank.....	E. D. Bertine.....	428,823	May 27	2732	{ 693 694 }	51	1379
Water-power.....	A. C. Mather.....	441,183	Nov. 25	2501	{ 645 646 }	53	1115
Water-power. Device for the development of.....	M. Maginn.....	439,165	Oct. 28	2304	619	53	457
Water-power from natural falls. Device for utilizing waste.....	C. J. Zeitinger.....	432,923	July 22	2927	751	52	590
Water-power. Method of and apparatus for utilizing.....	S. H. Hamilton.....	431,540	July 1	784	195	52	156

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Water-power of falls. Device for utilizing the.....	C. J. Zeitinger.....	442,000	Dec. 2	579	{ 157 158 }	53	1376
Water-power utilizer. High-grade.....	A. H. and A. Quain and G. P. Warner.....	437,511	Sept. 30	3428	897	52	2061
Water-proof collar, &c.....	J. R. Franco.....	425,129	Apr. 8	1070	284	51	216
Water-proof fabrics. Making gossamer.....	T. H. Videto.....	431,712	July 8	1078	.....	52	220
Water-proof garment.....	M. L. Brown.....	439,103	Oct. 28	2210	{ 593 594 }	53	441
Water-proof garment.....	A. F. Chase.....	422,917	Mar. 11	845	219	50	1305
Water-proof garment.....	P. H. Loehr.....	422,814	Mar. 4	651	167	50	1262
Water-proof gossamer fabric.....	T. H. Videto.....	432,005	July 8	1514	.....	52	304
Water-purifier and cooler.....	G. Simpson.....	423,824	Mar. 18	2196	580	50	1569
Water-purifier. Domestic.....	J. Caven.....	441,826	Dec. 2	312	84	53	1325
Water-purifier. Eccentric revolving.....	W. Anderson.....	443,736	Dec. 30	3442	883	53	1965
Water-purifier. Revolving.....	W. Anderson.....	443,737	Dec. 30	3443	883	53	1965
Water-purifier. Revolving.....	E. Devonshire.....	439,588	Oct. 28	2974	789	53	584
Water-purifier. Revolving.....	E. Devonshire.....	439,589	Oct. 28	2976	790	53	585
Water-purifier. Revolving.....	E. Devonshire.....	439,590	Oct. 28	2977	790	53	585
Water. Purifying.....	P. Degener.....	433,890	Aug. 5	673	.....	52	888
Water-purifying apparatus.....	O. H. and W. M. Jewell.....	434,666	Aug. 19	1893	494	52	1146
Water-purifying apparatus.....	F. H. Moore.....	424,124	Mar. 25	2655	707	50	1663
Water-purifying system.....	J. J. Hoppes.....	419,446	Jan. 14	1202	318	50	253
Water-raising apparatus.....	D. P. Wright.....	432,849	July 22	2822	723	52	569
Water-slide.....	J. Inglis.....	435,227	Aug. 26	2757	728	52	1318
Water-sprinkler.....	W. M. Eccles.....	436,406	Sept. 16	1604	424	52	1696
Water-sprinkler.....	W. S. Kisinger.....	421,729	Feb. 18	1908	502	50	943
Water-sprinkler.....	W. S. Kisinger and H. G. Stiebel, Jr.....	420,879	Feb. 4	669	173	50	691
Water-sprinkler.....	J. H. Layman.....	428,113	May 20	1652	419	51	1154
Water-sprinkler.....	H. G. Stiebel.....	422,458	Mar. 4	145	39	50	1164
Water supply and discharge to and from cylinders. Controlling device for.....	A. and F. E. Turner.....	443,468	Dec. 23	3007	772	53	1873
Water-tank.....	R. W. Jackson.....	434,448	Aug. 19	1540	{ 401 402 }	52	1076
Water-tower.....	M. Burns.....	439,383	Oct. 28	2672	712	53	526
Water-tower and extension-ladder. Combined.....	E. Crippen.....	423,135	Mar. 11	1182	{ 308 309 310 }	50	1368
Water-tower. Portable.....	G. C. Hale.....	428,092	May 20	1613	{ 410 411 }	51	1145
Water-trap.....	W. A. Mundy.....	431,384	July 1	543	135	52	110
Water trap. Condensed.....	I. Cumberbatch.....	421,559	Feb. 18	1669	432	50	896
Water-trap. Double-sealed.....	R. Baker.....	436,114	Sept. 9	1147	299	52	1599
Water-tube boiler.....	W. S. Black.....	430,914	June 24	2845	698	51	2048
Water-tube boiler.....	C. J. Galloway and J. H. Beckwith.....	442,036	Dec. 2	644	173	53	1388
Water-utilizing apparatus. Rain.....	R. C. Sayer.....	422,451	Mar. 4	129	36	50	1161
Water-vessel.....	V. Stuyvesandt.....	419,230	Jan. 14	883	232	50	189
Water-vessel. Surface-leakage.....	G. R. Moore.....	443,781	Dec. 30	3505	900	53	1977
Water-way gate.....	R. A. Lang.....	425,231	Apr. 8	1226	326	51	248
Water-wheel.....	H. Burrill.....	420,988	Feb. 11	848	219	50	733
Water-wheel.....	S. B. Goff.....	426,263	Apr. 22	2786	732	51	568
Water-wheel.....	S. B. Goff.....	426,265	Apr. 22	2789	732	51	569
Water-wheel.....	W. H. Gunsolus.....	440,353	Nov. 11	1113	286	53	832
Water-wheel.....	C. C. Hogue.....	432,875	July 22	2860	732	52	577
Water-wheel.....	C. Le Duc.....	423,935	Mar. 25	2377	{ 632 633 }	50	1610
Water-wheel.....	T. A. McDonald.....	442,694	Dec. 16	1662	427	53	1604
Water-wheel.....	L. Middleton.....	427,885	May 13	1316	332	51	1078
Water-wheel.....	A. Patrick.....	436,291	Sept. 9	1408	367	52	1651
Water-wheel.....	L. M. Sharps.....	443,151	Dec. 23	2486	635	53	1770
Water-wheel.....	J. L. Shelton.....	429,780	June 10	1020	{ 249 250 }	51	1678
Water-wheel.....	H. C. Simpson.....	427,629	May 13	907	{ 227 228 }	51	1000
Water-wheel.....	D. A. Van Kleek.....	434,306	Aug. 12	1306	340	52	1021
Water-wheel.....	F. W. Wood.....	440,085	Nov. 4	682	182	53	741
Water-wheel-controlling device.....	H. B. Utter.....	437,825	Oct. 7	235	72	53	46
Water-wheel governor.....	T. H. Coulter.....	434,381	Aug. 12	1417	372	52	1014
Water-wheel governor.....	A. W. and E. E. Woodward.....	432,105	July 15	1676	431	52	342
Water wheel or motor.....	S. B. Goff.....	426,262	Apr. 22	2785	731	51	568
Water wheel or motor.....	S. B. Goff.....	426,264	Apr. 22	2787	732	51	569
Water-wheel. Turbine.....	N. F. Burnham.....	438,878	Oct. 21	1869	{ 496 497 }	53	367
Water-wheels. Hydraulic nozzle for.....	W. Buhlman.....	431,739	July 8	1122	279	52	228
Waterer. Automatic stock.....	H. Hubbard.....	436,082	Sept. 9	1092	282	52	1590
Waterer. Hog.....	D. Brigham.....	422,113	Feb. 25	2459	650	50	1054
Watering apparatus. Stock.....	H. T. Maxwell and T. McCall.....	426,459	Apr. 29	3090	811	51	638
Watering device. Animal.....	A. C. Quade, Jr.....	432,078	July 15	1636	420	52	334
Watering-pot.....	C. C. Read.....	443,717	Dec. 30	3408	{ 875 876 }	53	1957
Watering stock. Fountain for.....	A. Friedrick.....	428,838	May 27	2751	699	51	1384
Watering-tank heater.....	A. McGowan.....	428,124	May 20	1665	422	51	1156
Watering-tank heater. Stock.....	O. G. Stowell.....	428,702	May 27	2550	647	51	1344
Watering-trough.....	J. F. May.....	443,647	Dec. 30	3299	850	53	1938
Watering-trough. Animal.....	H. W. Clapp.....	439,290	Oct. 28	2521	675	53	497
Watering trough. Stock.....	W. Kouns.....	443,446	Dec. 23	2970	765	53	1865
Waterproofing composition for paper.....	H. J. Bird.....	426,633	Apr. 29	3351	.....	51	688
Wave and tide motor.....	L. M. Lloyd.....	443,367	Dec. 23	2853	734	53	1844
Wave-motor.....	E. Chaffey.....	426,167	Apr. 22	2650	696	51	539
Wave-motor.....	R. B. Davy.....	418,943	Jan. 7	461	114	50	97
Wave-motor.....	T. C. Naramore.....	428,283	May 20	1909	480	51	1203
Wave-power.....	N. O. Bond.....	425,927	Apr. 15	2269	601	51	456
Wave-power.....	H. Commandoer.....	440,397	Nov. 11	1197	308	53	849
Wave-power.....	J. E. Gray.....	429,617	June 10	776	188	51	1632
Wave-power motor.....	E. D. Stodder.....	441,449	Nov. 25	2954	{ 761 762 }	53	1198

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Waves. Apparatus for utilizing the force of	F. Starkenberg	430,790	June 24	2651	650	51	2012
Wax. Composition for shoe-maker's	E. Roche	440,762	Nov. 18	1805	.....	53	973
Wax-pad	A. R. Sherwood	419,079	Jan. 7	648	170	50	137
Way-bill	E. P. Campbell	431,765	July 8	1151	227	52	234
Way-bills, &c. Cover for	G. H. Ogden	418,815	Jan. 7	233	57	50	50
Weaner. Calf	E. H. Geisler	436,655	Sept. 16	1999	{ 523 524 }	52	1769
Weaner. Calf	S. E. Shaw	419,078	Jan. 7	647	169	50	136
Weaner. Calf	J. A. Smith and S. R. Libbey	438,247	Oct. 14	880	239	53	174
Weaner. Calf	S. Stearly	433,751	Aug. 5	464	119	52	846
Wearing-apparel. Apparatus for suspending	C. O. Gehrckens	431,944	July 8	1419	360	52	286
Weather-boarding machine	J. M. Dunn and A. A. Paschal	423,419	Mar. 18	1600	420	50	1456
Weather-boards. Adjustable gage for supporting	H. Schill	418,754	Jan. 7	133	33	50	30
Weather-strip	R. Brennan	435,658	Sept. 2	442	118	52	1459
Weather-strip	G. A. and J. E. Capewell	437,478	Sept. 30	3378	885	52	2051
Weather-strip	W. S. Corpman	424,540	Apr. 1	156	45	51	33
Weather-strip	A. Drynan	426,175	Apr. 22	2664	699	51	542
Weather-strip	A. M. Evers	419,249	Jan. 14	906	239	50	194
Weather-strip	J. H. Ferguson	421,256	Feb. 11	1225	317	50	806
Weather-strip	I. F. Field and S. Byers	433,460	Aug. 5	35	9, 10	52	763
Weather-strip	J. T. Hart	423,925	Mar. 25	2366	629	50	1609
Weather-strip	T. Hibbert	419,949	Jan. 21	1954	514	50	409
Weather-strip	B. F. Higgins and A. Skinner	420,067	Jan. 28	2137	505	50	453
Weather-strip	J. H. Hummel	426,936	Apr. 29	3791	990	51	774
Weather-strip	J. H. Hummel	426,937	Apr. 29	3792	991	51	774
Weather-strip	J. E. Jones	435,841	Sept. 2	713	191	52	1513
Weather-strip	C. Saville	434,890	Aug. 19	2239	588	52	1213
Weather-strip	A. C. Sims	424,905	Apr. 1	729	194	51	141
Weather-strip	W. H. Sutherland	423,352	Mar. 11	1499	393	50	1428
Weather-strip	C. F. Tavenor	433,106	July 29	3247	836	52	656
Weather-strip	A. M. Ulmer and F. Fowler	423,292	Mar. 11	1422	369	50	1413
Weather-strip	T. B. Withers and C. Knobel	440,857	Nov. 18	1969	507	53	1002
Weather-strip and threshold. Combined	J. L. Stevens	423,964	Mar. 25	2428	614	50	1620
Weather strip for windows	F. Fowler and A. M. Ulmer	423,752	Mar. 18	2093	553	50	1548
Weather-strip. Sliding	W. Fitzpatrick	425,414	Apr. 15	1499	402	51	309
Weather-stripping. Machine for manufacturing	W. H. Cosper	432,726	July 22	2629	{ 672 673 }	52	532
Weaving double pile fabrics	A. Hind	431,466	July 1	665	167	52	134
Weaving double-weight goods	A. D. Emery	441,230	Nov. 25	2584	{ 669 670 671 }	53	1130
Weaving. Protecting manufacturers of cloth against loss of cloth in	W. C. Lovering	432,536	July 22	2330	601	52	475
Weaving two-ply figured fabrics	A. D. Emery	441,231	Nov. 25	2592	{ 671 672 673 }	53	1131
Web fabrics. Apparatus for manufacturing	R. Dick	432,303	July 15	1984	507	52	399
Web-severing mechanism	L. C. Crowell	419,835	Jan. 21	1780	471	50	372
Webbs. Device operated by the edges of moving	J. Arkell	428,363	May 20	2032	511	51	1238
Wedge	E. S. Marshall	443,581	Dec. 30	3192	290	53	1918
Wedge	A. Sanford	426,071	Apr. 22	2502	661	51	510
Weeder	J. P. Roe	442,918	Dec. 16	2079	534	53	1685
Weigher. Automatic grain	F. W. Day	431,140	July 1	156	40	52	33
Weigher. Automatic grain	J. Henry	419,947	Jan. 21	1950	513	50	408
Weigher. Automatic grain	J. Henry	419,948	Jan. 21	1952	514	50	409
Weigher. Automatic grain	C. R. Stanton	431,533	July 1	772	192	52	154
Weigher. Grain	C. H. Cooley	442,722	Dec. 16	1734	{ 448 449 450 }	53	1618
Weigher. Grain	C. H. Cooley	442,723	Dec. 16	1739	{ 450 451 452 }	53	1618
Weigher. Grain	C. H. Cooley	443,569	Dec. 30	3168	814	53	1913
Weigher. Grain	C. H. Cooley and F. H. Richards	434,702	Aug. 19	1960	509	52	1157
Weigher. Grain	C. H. Cooley and F. H. Richards	442,724	Dec. 16	1745	{ 451 452 453 }	53	1619
Weigher. Grain	C. H. Cooley and F. H. Richards	442,859	Dec. 16	1971	506	53	1665
Weigher. Grain	C. H. Cooley and F. H. Richards	442,860	Dec. 16	1974	507	53	1665
Weigher. Grain	C. H. Cooley and F. H. Richards	442,861	Dec. 16	1975	507	53	1665
Weigher. Grain	C. H. Cooley and F. H. Richards	443,933	Dec. 30	3736	956	53	2022
Weigher. Grain	S. B. Hart	420,789	Feb. 4	505	132	50	662
Weigher. Grain	J. H. Poulter	439,024	Oct. 21	2085	558	53	410
Weigher. Grain	F. H. Richards	442,712	Dec. 16	1703	{ 437 438 439 440 }	53	1612
Weigher. Grain	F. H. Richards	442,713	Dec. 16	1708	{ 439 440 441 }	53	1612
Weigher. Grain	F. H. Richards	442,714	Dec. 16	1711	{ 441 442 443 }	53	1613
Weigher. Grain	F. H. Richards	442,717	Dec. 16	1721	{ 443 444 445 }	53	1615
Weigher. Grain	F. H. Richards	442,719	Dec. 16	1727	{ 445 446 447 }	53	1616
Weigher. Grain	F. H. Richards	442,720	Dec. 16	1731	448	53	1617
Weigher. Grain	F. H. Richards	443,180	Dec. 23	2529	647	53	1779
Weigher. Grain	F. H. Richards	443,583	Dec. 30	3194	{ 821 822 }	53	1918
Weigher. Grain	F. H. Richards	443,718	Dec. 30	3409	876	53	1958
Weigher regulator. Grain	F. H. Richards	442,715	Dec. 16	1713	{ 441 442 443 }	53	1614
Weigher regulator. Grain	F. H. Richards	442,716	Dec. 16	1718	{ 442 443 444 }	53	1615
Weighers. Regulator for grain	F. H. Richards	434,723	Aug. 19	1983	516	52	1162
Weighing and measuring scoop	L. Zwiesler and J. Menchen	421,221	Feb. 11	1182	304	50	797

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Weighing and registering apparatus. Grain	R. N. Robinson	422,542	Mar. 4	254	65	50	1185
Weighing and strength-testing machine. Coin-controlled	J. F. Bower	422,876	Mar. 4	762	{ 194 195 689 690 691	50	1282
Weighing apparatus. Grain	E. O'Brien	428,816	May 27	2720	{ 435 436	51	1377
Weighing device. Grain	A. I. Anderson	430,244	June 17	1748	{ 435 436	51	1829
Weighing-fork	N. B. Marston	436,427	Sept. 16	1639	431	52	1702
Weighing-instruments. Attachment for	T. W. Jeffries	426,818	Apr. 29	3636	949	51	743
Weighing machine. Automatic grain	W. T. Barker	421,850	Feb. 18	2080	547	50	974
Weighing machine. Automatic grain	W. T. Black	441,225	Nov. 25	2576	667	53	1129
Weighing-machine. Coin-controlled	F. J. and J. H. Lancaster	422,230	Feb. 25	2631	697	50	1087
Weighing-machine. Electrical	W. Snelgrove	436,910	Sept. 23	2475	{ 646 647 648	52	1868
Weighing-machine for testing purposes	L. Girdler	427,169	May 6	226	57	51	856
Weighing machine. Grain	C. H. Phillips	440,794	Nov. 18	1862	{ 479 480	53	982
Weir	M. D. Czvetkovics	441,470	Nov. 25	2992	{ 770 771	53	1204
Welding aluminium	M. Emme	428,834	May 27	2746	431	51	1382
Welding and metal working. Electric	M. W. Dewey	441,401	Nov. 25	2877	743	53	1183
Welding and upsetting machine	B. Toulouse and J. Delorieux	430,710	June 24	2521	617	51	1986
Welding and working purposes. Electrically-heating bars, &c., for	M. W. Dewey	422,190	Feb. 25	2573	681	50	1076
Welding and working purposes. Electrically-heating bars, &c., for	M. W. Dewey	436,519	Sept. 16	1769	467	52	1728
Welding apparatus	J. C. Bayles	441,277	Nov. 25	2687	698	53	1146
Welding apparatus. Electric	H. Lemp	440,641	Nov. 18	1605	{ 412 413	53	935
Welding apparatus. Electric	H. Lemp	443,224	Dec. 23	2621	674	53	1799
Welding apparatus. Induction-discharge protector for	E. Thomson	434,531	Aug. 19	1663	435	52	1101
Welding apparatus. Sliding clamp for electric	H. Lemp	428,616	May 27	2405	611	51	1318
Welding apparatus. Tube	P. Patterson	412,454	Dec. 9	1279	331	53	1519
Welding by electricity	C. L. Coffin	419,032	Jan. 7	578	146	50	122
Welding by electricity. Method of and apparatus for	C. L. Coffin	435,283	Aug. 26	2842	752	52	1334
Welding calks to horseshoes. Machine for	C. E. Schroeder	433,423	July 29	3691	953	52	747
Welding clamp. Electric	H. Lemp	434,450	Aug. 19	1543	402	52	1076
Welding compound	W. G. Clark	427,969	May 13	1432	51	1101	
Welding compound	F. Durrant	440,946	Nov. 18	2116	53	1031	
Welding compound	M. Garrison	425,418	Apr. 15	1503	51	310	
Welding compound	A. D. Le Roy and C. A. Lowell	428,114	May 20	1653	51	1154	
Welding compound	H. S. McLeod	427,786	May 13	1158	51	1049	
Welding compound	A. J. Severance	429,777	June 10	1017	51	1677	
Welding compound	H. B. Straut and C. B. Shute	432,497	July 15	2262	32	454	
Welding compound	C. Wrigley	426,897	Apr. 29	3743	51	765	
Welding. Electric	C. L. Coffin	419,033	Jan. 7	578	146	50	122
Welding. Electric	C. L. Coffin	422,730	Mar. 4	537	136	50	1238
Welding. Electric	C. L. Coffin	425,164	Apr. 8	1136	301	51	229
Welding. Electric	C. L. Coffin	427,971	May 13	1440	364	51	1102
Welding. Electric	M. W. Dewey	435,643	Sept. 2	417	111	52	1454
Welding. Electric	M. W. Dewey	435,644	Sept. 2	418	112	52	1454
Welding. Electric	R. Robb	434,468	Aug. 19	1565	407	52	1080
Welding. Electric	E. Thomson	434,532	Aug. 19	1665	{ 435 436	52	1102
Welding. Electric	E. Thomson	438,657	Oct. 21	1491	403	53	299
Welding. Electric	E. Thomson	440,664	Nov. 18	1639	423	53	942
Welding machine. Cross	G. R. Green	429,568	June 3	705	171	51	1608
Welding metals by electricity	C. L. Coffin	423,732	Mar. 18	2071	546	50	1544
Welding metals by electricity	C. L. Coffin	423,734	Mar. 18	2073	546	50	1545
Welding metals by electricity	C. L. Coffin	423,735	Mar. 18	2074	547	50	1545
Welding metals by electricity	H. E. Fowler	434,017	Aug. 12	847	223	52	930
Welding metals electrically	C. L. Coffin	423,736	Mar. 18	2075	547	50	1545
Welding metals electrically	C. L. Coffin	428,459	May 20	2175	548	51	1254
Welding metals electrically	C. L. Coffin	437,570	Sept. 30	3516	917	52	2078
Welding metals electrically	C. L. Coffin	437,571	Sept. 30	3517	917	52	2078
Welding metals electrically	C. L. Coffin	442,954	Dec. 16	2133	549	53	1696
Welding. Method of and apparatus for electric	C. L. Coffin	423,733	Mar. 18	2072	546	50	1545
Welding or metal-working. Electric	M. W. Dewey	430,838	June 24	2729	669	51	2026
Welding pipes by electricity	E. Thomson	432,653	July 22	2507	644	52	508
Welding rings by electricity	H. Lemp	428,619	May 27	2410	612	51	1319
Welding rings. Electrical apparatus for	H. Lemp	428,617	May 27	2406	{ 611 612	51	1318
Welding seams of pipes	M. Blakey	433,591	Aug. 5	226	60	52	800
Welding transformer. Electric	H. Lemp	440,640	Nov. 18	1602	412	53	935
Well-boring apparatus	L. V. Elder	419,757	Jan. 21	1650	438	50	348
Well-boring apparatus	L. V. Elder	421,486	Feb. 18	1557	402	50	875
Well-boring apparatus	E. F. Littlepage	418,873	Jan. 7	340	82, 83	50	71
Well-boring machine	J. W. Teetzel	435,593	Sept. 2	325	90, 91	52	1438
Well-curb	J. New	427,267	May 6	374	97	51	884
Well-drill	W. R. Welke	443,688	Dec. 30	3365	865	53	1950
Well-drill attachment. Self-turning	W. T. Nance	423,387	Mar. 11	1546	406	50	1437
Well-drilling apparatus	G. Siebens	436,675	Sept. 16	2036	{ 531 532	52	1777
Well-drilling apparatus	W. Webber	431,131	July 1	143	37, 38	52	30
Well-drilling machine	W. M. Bowers and W. Hamilton	420,004	Jan. 21	2038	537	50	424
Well-drilling machine	G. Peck	440,924	Nov. 18	2081	537	53	1024
Well-grapple	H. B. Hess	437,200	Sept. 30	2929	762	52	1962
Well-lining	A. Blackmon	427,728	May 13	1057	265	51	1029
Well packer. Deep	D. W. Black	439,233	Oct. 28	2424	650	53	480
Well packer. Deep	B. Massey	439,166	Oct. 28	2306	619	53	458
Well packer. Oil or gas	J. C. McManus	423,337	Mar. 11	1481	388	50	1425

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Well packer. Oil or gas.	A. W. Newell	423,338	Mar. 11	1482	388	50	1425
Well-pipes. Apparatus for sinking.	C. A. Sellon	431,920	July 8	1384	351	52	279
Well-sinking apparatus	M. T. Chapman	443,070	Dec. 16	2306	590 591	53	1731
Well-sinking apparatus	M. T. Chapman	443,071	Dec. 16	2312	592 593	53	1731
Well-sinking apparatus	M. T. Chapman	443,072	Dec. 16	2317	593	53	1732
Well-sinking machine	A. Cameron	443,486	Dec. 23	3039	781 782	53	1880
Well-sinking machine	H. H. Davenport and D. A. Brosius	442,021	Dec. 2	614	165	53	1383
Well-sinking machines. Point for.	J. R. and W. B. Coffin	436,889	Sept. 23	2444	638	52	1863
Well tools. Wrench for oil.	D. J. Thayer	421,020	Feb. 11	894	231	50	742
Well. Tubular	M. Walker	426,884	Apr. 29	3728	974	51	762
Wells. Apparatus for and process of sinking	M. T. Chapman	443,069	Dec. 16	2304	590	53	1730
Wells. Apparatus for removing paraffine from the pipes of oil.	M. Turton	424,837	Apr. 1	630	165 166	51	122
Wells. Automatic check for oil.	J. O'Neil	429,317	June 3	328	77	51	1533
Wells. Device for operating oil.	W. M. Copeland	436,216	Sept. 9	1300	339	52	1628
Wells. Device for raising water from	A. C. Witt	434,969	Aug. 26	2385	631 632	52	1248
Wells. Ejecting oil out of oil.	W. Geiser	443,513	Dec. 30	3080	704	53	1896
Wells. Electrical apparatus for driving Artesian	G. G. Fryer	422,201	Feb. 25	2587	684	50	1078
Wells. Implement for recovering lost pipe from tubular	S. Maxfield	424,612	Apr. 1	271	71	51	55
Wells. Rig for drilling	G. Corbett	423,461	May 20	2177	548 549	51	1255
Wells. Strainer for tube	S. H. Dickerson	420,553	Feb. 4	174	43	50	598
Wells. Tool for extracting drill-rods, &c., from	J. Hart	431,890	July 8	1349	340	52	272
Well-trimming machine	H. S. Schaadt and F. L. Clark	429,065	May 27	3093	708	51	1450
Whalebone. Case for preserving	E. T. Towler	438,296	Oct. 14	964	261	53	189
Wheat-breaks, &c. Device for scalping	A. Hunter	423,258	Mar. 11	1358	353	50	1402
Wheat-heater	J. E. Welch	421,796	Feb. 18	1995	525 526	50	959
Wheat-scouring machine.	H. J. Livergood	427,585	May 13	850	214	51	989
Wheat separator.	G. E. D. Baldwin	419,238	Jan. 14	890	234	50	190
Wheel:							
See Anti-friction wheel. Locomotive driving-wheel.							
Barrow-wheel.							
Car-wheel.	Leather-stuffing wheel.						
Cog-wheel.	Metal wheel.						
Crank-wheel.	Metallic wheel.						
Cycle-wheel.	Paddle-wheel.						
Ditching-wheel.	Perforating-wheel.						
Door-hanger wheel.	Propeller-wheel.						
Driving-wheel.	Rubber-tired wheel.						
Electromotor traction-wheel.	Seeding-machine wheel.						
Expansible wheel.	Sprocket-wheel.						
Face-wheel.	Stone-grinding wheel.						
Fifth-wheel.	Stone-polishing wheel.						
Fly-wheel.	Supporting-wheel.						
Friction-wheel.	Toothed wheel.						
Game-wheel.	Tracing-wheel.						
Gear-wheel.	Traction wheel.						
Glass-polishing wheel.	Turbine water-wheel.						
Harvester-wheel.	Vehicle-wheel.						
Knitting-machine	Velocipede-wheel.						
burr-wheel.	Wagon-wheel.						
	Water-wheel.						
	Wind-wheel.						
Wheel	D. J. C. Arnold and C. B. Post	419,488	Jan. 14	1258	334	50	265
Wheel	G. H. Bartlett	418,673	Jan. 7	11	3	50	5
Wheel	W. E. Bartlett	434,974	Aug. 26	2392	633	52	1249
Wheel	D. Best	433,193	July 29	3374	873	52	681
Wheel	J. Bolick	443,232	Dec. 23	2634	676	53	1801
Wheel	W. J. Brown	435,963	Sept. 9	906	239	52	1555
Wheel	F. Dentler	435,581	Sept. 2	309	86	52	1435
Wheel	J. Frenier	424,707	Apr. 1	417	110	51	82
Wheel	J. J. Halstead	422,404	Mar. 4	60	16	50	1148
Wheel	W. Haslup	412,043	Dec. 2	652	176	53	1390
Wheel	J. V. D. Haven	423,051	Mar. 11	1051	273	50	1343
Wheel	G. W. Howell	420,343	Jan. 28	2569	682	50	533
Wheel	A. O. Hubbard	435,358	Aug. 26	2980	790	52	1358
Wheel	T. M. Keuney	437,998	Oct. 7	501	141	53	95
Wheel	A. N. McCortery	442,077	Dec. 2	708	190	53	1401
Wheel	R. Mooney	432,833	July 22	2801	716	52	565
Wheel	A. H. Overman	438,383	Oct. 14	1083	296	53	213
Wheel	C. J. Reynolds	439,188	Oct. 28	2337	629	53	404
Wheel	E. A. Seale	439,359	Oct. 28	2632	703	53	519
Wheel	W. Sheridan	442,832	Dec. 16	1924	494	53	1655
Wheel	E. E. A. Sorel	441,041	Nov. 18	2257	585	53	1059
Wheel	R. Stalter	435,776	Sept. 2	615	163	52	1493
Wheel	A. B. Starky	433,105	July 29	3246	836	52	656
Wheel	A. K. Stone	437,260	Sept. 30	3023	793	52	1980
Wheel	T. J. Thorp	433,704	Aug. 5	387	98, 99	52	831
Wheel	E. Walter	422,169	Feb. 25	2538	670	50	1069
Wheel	J. Wood	432,848	July 22	2821	722 723	52	569
Wheel	J. S. Young	431,927	July 8	1394	354	52	281
Wheel and axle	J. P. Spicer	419,895	Jan. 21	1876	493	50	393
Wheel-balancing device	D. B. Cook	430,270	June 17	1824	447	51	1842
Wheel-manufacturing machine	J. M. Sweet	427,021	Apr. 29	3916	1021	51	797
Wheel or pulley	C. C. Frazier and W. J. Davis	436,409	Sept. 16	1610	425	52	1697
Wheel rim and rubber tire. Vehicle	C. E. W. Woodward	443,735	Dec. 30	3441	883	53	1965
Wheel-rim-finishing machine	J. M. Sweet	433,054	July 29	3161	812	52	639

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Wheel rim. Vehicle.	H. M. Du Bois	424,766	Apr. 1	514	139	51	100
Wheel-supporting frame	W. P. Bettendorf	420,761	Feb. 4	461	123	50	654
Wheel-tread	T. Williamson	430,309	June 17	1881	462	51	1855
Wheels by electricity. Method of and apparatus for making metallic	W. P. and J. W. Bettendorf	440,534	Nov. 11	1427	368	53	892
Wheels. Making metallic	H. J. Phelps	433,183	July 29	3359	869	52	678
Wheels. Manufacture of rubber-tired	F. E. Southard and A. E. Klausner	420,609	Feb. 4	256	69	50	615
Wheels. Manufacture of rubber-tired	F. E. Southard and A. E. Klausner	420,610	Feb. 4	257	69	50	615
Wheels. Method of and means for manufacturing metal	E. P. Lynch	434,990	Aug. 26	2414	638	52	1253
Wheels. Rail-climber for vehicle	L. A. Turner	424,584	Apr. 1	928	62	51	47
Wheelbarrow	W. Haslup	442,042	Dec. 2	651	175	53	1390
Wheelbarrow	R. L. Nelson	428,176	May 20	1735	439	51	1169
Wheelbarrow spring-bearing	D. J. C. Arnold	427,655	May 13	943	237	51	1007
Whetstone for animal-clippers	C. M. Palmer	432,431	July 15	2156	555	52	432
Whetstone-holder	W. H. Brackett	427,965	May 13	1430	361	51	1099
Whetstone or hone with metallic core. Composite	O. A. Stempel	438,502	Oct. 14	1252	339	53	246
Whiffletree	C. W. Edwards	426,176	Apr. 22	2665	700	51	542
Whiffletree	W. E. Jacobs	424,208	Mar. 25	2768	738	50	1686
Whiffletree	A. S. Johnston	423,519	Mar. 18	1745	460	50	1485
Whiffletree	H. L. Moyer	423,546	Apr. 15	1694	452	51	347
Whiffletree	A. J. Parkhurst	423,730	May 27	2593	637	51	1352
Whiffletree	G. Reiss	428,950	May 27	2909	745	51	1416
Whiffletree	G. J. Smith	437,006	Sept. 23	2611	682	52	1894
Whiffletree attachment	D. Bakenhus and A. Mueseler	426,227	Apr. 22	2742	718	51	558
Whiffletree attachment	W. J. Lohr	433,355	July 29	3596	927	52	727
Whiffletree-bolt. Safety	P. H. Flynn	421,071	Feb. 11	967	249	50	756
Whiffletree-clevis	F. M. Pierce	433,091	July 29	3222	829	52	651
Whiffletree-clip	W. M. Myers	436,429	Sept. 16	1641	432	52	1703
Whiffletree clip and hook	W. W. Burson	439,289	Oct. 28	2519	675	53	497
Whiffletree-connection	O. J. Fisk	421,880	Feb. 18	2122	557	50	922
Whiffletree-coupling	C. St. James	423,459	Mar. 4	146	39	50	1164
Whiffletree-coupling	O. J. La Baie	439,802	Nov. 4	256	65	53	658
Whiffletree-coupling	M. B. Runyan	429,702	June 10	908	292	51	1657
Whiffletree-hook	C. W. Blackburn	437,558	Sept. 30	3502	914	52	2075
Whiffletree-hook	H. Bodenstein	424,166	Mar. 25	2713	722	50	1674
Whiffletree-hook	J. R. Davis	424,896	May 27	2836	721	51	1401
Whiffletree-hook	J. E. Eller and J. S. Jordan	435,807	Sept. 2	664	174	52	1503
Whiffletree-hook	A. T. Fox	436,229	Sept. 9	1316	343	52	1632
Whiffletree-hook	W. H. Gibbs	429,615	June 10	774	187	51	1631
Whiffletree-hook	M. H. Holcomb	423,321	Mar. 11	1464	383	50	1422
Whiffletree-hook	T. G. Mandt	428,504	May 20	2232	565	51	1266
Whiffletree-hook	A. B. Neiman and C. A. Shetter	429,284	June 3	263	64	51	1522
Whiffletree-hook	F. P. Randall	422,628	Mar. 4	400	99	50	1213
Whiffletree-hook	A. Sant, Sr., and E. A. Boardwell	428,354	May 20	2018	507	51	1225
Whiffletree-hooks. Spring-catch for	J. M. White	430,716	June 24	2529	619	51	197
Whiffletree-plate	J. R. Moore	427,702	May 13	1019	256	51	1022
Whiffletree. Spring	F. R. Wilson, Sr.	432,659	July 22	2524	648	52	511
Whiffletrees. Stay-chain for	W. Rinehold	427,114	May 6	143	38	51	840
Whip	C. J. Bradley	423,725	Mar. 18	2058	543	50	1542
Whip	J. Farrell	435,889	Sept. 2	793	211	52	1528
Whip	R. T. Gowdy	432,486	July 15	2250	582	52	452
Whip	J. W. Middleton	437,127	Sept. 23	2793	728	52	1931
Whip	G. Pirnie	419,130	Jan. 7	715	188	50	150
Whip	W. M. Shelton	441,710	Dec. 2	128	34	53	1287
Whip	J. T. Sullivan	426,419	Apr. 22	3038	795	51	619
Whip-lashes and the like. Racer adapted to the braiding of	J. A. Turner	432,582	July 22	2393	616	52	487
Whip-rack	D. T. Wilson and F. C. Rheubottom	429,987	June 10	1335	331	51	1739
Whip-socket	F. E. Benton	419,815	Jan. 21	1739	460	50	365
Whip-socket	E. Miller	443,483	Dec. 23	3035	780	53	1879
Whip-socket	E. W. Scott	426,605	Apr. 29	3304	867	51	680
Whip-socket and rein-holder	G. B. Catton	429,677	June 10	867	210	51	1649
Whip-socket and rein-holder	W. H. Peffley	443,242	Dec. 23	2651	680	53	1804
Whip-socket and rein-holder	E. W. Sweigard	422,656	Mar. 4	440	110	50	1220
Whip-socket and rein-holder. Combined	F. Tompkins	419,087	Jan. 7	658	172	50	138
Whip-socket attachment	D. D. Fraser	423,679	Mar. 18	1991	525	50	1530
Whip-socket cap	E. W. Scott	426,606	Apr. 29	3305	867	51	680
Whip-socket support	A. E. Tulloch	440,447	Nov. 11	1286	333	53	865
Whip-sockets. Band-fastener for	F. E. Benton	427,036	May 6	8	2	51	812
Whips to their sockets. Locking	J. McGeo	434,519	Aug. 19	1643	481	52	1097
Whistle. Steam	W. B. Dunning	427,059	May 6	39	11	51	818
Whistle. Steam	E. F. Quinlan and J. G. Knebel	431,007	June 24	2985	733	51	2074
Wick adjuster and trimer for lanterns	W. B. Marks and E. H. Lea	424,489	Apr. 1	76	21	51	18
Wick-adjusting device	W. C. Homan	428,170	May 20	1724	436	51	1167
Wick-adjusting device	W. C. Homan	434,929	Aug. 26	2333	616	52	1237
Wick-adjusting device	F. Rhind	429,743	June 10	962	236	51	1668
Wick material	M. H. Chapin	431,033	July 1	8	2	52	4
Wick-raiser	H. L. Clark	440,739	Nov. 18	1760	453	53	966
Wick-raiser	B. P. Luce	435,663	Sept. 2	449	119	52	1461
Wick-raiser	A. W. Paull	420,093	Jan. 28	2176	573	50	460
Wick-trimmer	J. Badger	426,425	Apr. 29	3047	798	51	629
Wick-trimmer	W. R. Cole	436,934	Sept. 23	2516	659	52	1876
Wick-trimmer	A. Reichmann	431,008	June 24	2986	733	51	2074
Wick-tube	P. J. Grunberg	431,577	July 8	842	209	52	175
Wick-tube and attachment	J. McConnell	436,948	Sept. 23	2532	663	52	1879
Wicks. Material for lamp	M. H. Chapin	430,832	June 24	2716	666	51	2023
Wind-engine	G. S. Eastman	443,641	Dec. 30	3287	847	53	1935
Wind-engine	J. Harder	438,251	Oct. 14	884	240	53	175
Wind-engine	W. B. McCalla	420,824	Feb. 4	578	144	50	674
Wind-engine	T. Rogers	427,911	May 13	1351	341	51	1085
Wind-guard	J. Keane	424,212	Mar. 25	2773	739	50	1687

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wind-motor	H. Otto	419,345	Jan. 14	1054	279	50	223
Wind-vane indicator	H. J. Haight	420,057	Jan. 28	2119	560	50	449
Wind-wheel	A. W. Chamberlin	426,241	Apr. 22	2759	722 723	51	562
Wind-wheel	L. M. Gatlin	434,108	Aug. 12	996	260	52	961
Wind-wheel	J. W. Vincent, W. C. Knox, and W. M. Rynerson.	440,669	Nov. 18	1646	425	53	943
Wind-wheel attachment	R. H. Sargent	427,483	May 6	685	172	51	947
Winder, darning, and spool-stand. Combined yarn-	H. Gimmimi	427,553	May 13	1252	316	51	1066
Winding cotton, &c., upon cores. Machine for	C. F. Bradford	438,910	Oct. 21	1915	509	53	376
Winding-drum	J. M. Chatfield	436,824	Sept. 23	2296	605	52	1835
Winding machine. Silk-	H. D. Klotz and H. Nightingale	427,696	May 13	1011	255	51	1021
Winding machine. Yarn-	J. W. Foster	435,560	Sept. 2	276	77	52	1428
Winding-machines. Take-up and brake attachment for supply of spools of	V. Royle	424,620	Apr. 1	285	74	51	57
Winding skeins of yarn, zephyr, &c. Reel for	J. A. Shepard	435,460	Sept. 2	117	33	52	1397
Winding thread. Apparatus for	J. Keats	440,811	Nov. 18	1899	486	53	988
Winding trimmings, ruckings, &c. Reel for	G. H. Taylor	425,392	Apr. 8	1466	392	51	293
Windlass	T. H. Brady	421,480	Feb. 18	1545	399	50	873
Windlass	T. H. Bridges	424,537	Apr. 1	153	44	51	32
Windlass	A. S. Peck	440,279	Nov. 11	1006	258	53	813
Windlass	E. and F. E. Perkins	425,185	Apr. 8	1166	307	51	236
Windlass and capstan. Steam	J. R. Andrews and E. F. Kelley	429,404	June 3	463	109 110	51	1560
Windlass operative mechanism	R. W. Wonson	435,128	Aug. 26	2620	693	52	1292
Windlass. Portable	J. I. Kinkead	429,242	June 3	203	50	51	1511
Windlass. Ship's	F. S. Manton	426,673	Apr. 29	3409	895	51	699
Windlass. Ship's	J. W. Yewell	434,054	Aug. 12	897	236	52	940
Windlasses. Locking-gear for	E. H. Whitney	440,784	Nov. 18	1845	47	53	980
Windmill	A. S. Baker	441,631	Dec. 2	1	1	53	1263
Windmill	G. N. Ball	426,162	Apr. 22	2645	695	51	538
Windmill	C. Barnes	438,282	Oct. 14	940	254	53	185
Windmill	W. J. Cunningham	427,975	May 13	1445	365 366	51	1103
Windmill	E. De Witt	432,696	July 22	2591	663	52	524
Windmill	L. S. Fletcher	427,064	May 6	50	14	51	819
Windmill	J. E. Garcia-Sanchez	427,846	May 13	1239	313	51	1064
Windmill	J. J. Gardner	423,602	Mar. 18	1860	490 491	50	1504
Windmill	J. R. Godshall	441,153	Nov. 25	2454	636	53	1106
Windmill	G. D. Hawley	436,661	Sept. 16	2012	526	52	1772
Windmill	W. J. Hogue	419,123	Jan. 7	705	186	50	148
Windmill	W. H. Keep	419,526	Jan. 14	1308	349	50	274
Windmill	M. G. Kendrick	421,580	Feb. 18	1699	441	50	902
Windmill	O. J. Kilby	431,983	July 8	1484	375	52	299
Windmill	C. E. Kittinger	428,495	May 20	2221	562	51	1263
Windmill	L. E. Martin	428,849	May 27	2765	703	51	1387
Windmill	S. W. Martin	433,531	Aug. 5	129	37	52	782
Windmill	E. E. Meredith	440,266	Nov. 11	978	249	53	810
Windmill	F. Miller	427,100	May 6	114	31	51	834
Windmill	E. Parker	435,652	Sept. 2	429	114	52	1456
Windmill	O. W. Parker	432,146	July 15	1750	449	52	356
Windmill	E. Peck	432,435	July 15	2163	557 558	52	433
Windmill	T. O. Perry	431,851	July 8	1295	325	52	262
Windmill	W. H. Randle	431,076	July 1	72	17, 18	52	16
Windmill	T. O. Reeme	420,520	Feb. 4	131	32	50	589
Windmill	M. C. Robbins	437,897	Oct. 7	341	99	53	66
Windmill	M. D. Saggau	420,921	Feb. 4	742	190	50	704
Windmill	W. E. Shields	441,035	Nov. 18	2246	581	53	1056
Windmill	R. B. Sinclair	436,293	Sept. 9	1411	367 368	52	1652
Windmill	S. D. Straw	419,024	Jan. 7	569	143	50	120
Windmill	A. Wallace	441,519	Nov. 25	3057	786 787	53	1217
Windmill	D. C. D. Whitcomb	435,575	Sept. 2	302	84	52	1433
Windmill	E. B. and O. E. Winger	425,841	Apr. 15	2143	571 572	51	433
Windmill	P. E. Wistrand	440,084	Nov. 4	681	181	53	741
Windmill	F. T. Zimmerman	418,859	Jan. 7	312	76	50	65
Windmill attachment	T. Annis	432,110	July 15	1683	432	52	344
Windmill attachment	W. S. Briggs	442,417	Dec. 9	1227	317	53	1508
Windmill attachment	A. M. Clark	435,682	Sept. 2	476	126	52	1466
Windmill attachment	C. F. Needham	424,812	Apr. 1	589	155	51	114
Windmill-derrick	T. O. Perry	431,991	July 8	1493	377	52	301
Windmill-gearing	M. R. Martin	429,931	June 10	1245	309	51	1722
Windmill-governor	A. J. Salisbury	418,877	Jan. 7	349	84	50	73
Windmill. Horizontal	M. W. Schumacher	441,510	Nov. 25	3045	784	53	1215
Windmill-regulating device	W. H. Van Schaick	419,232	Jan. 14	885	232	50	189
Windmill-regulator	H. L. Ferris	422,582	Mar. 4	316	80	50	1197
Windmill-regulator	S. S. Gibson	441,296	Nov. 25	2714	704	53	1151
Windmill-regulator	J. M. Lowe	442,487	Dec. 9	1336	344 345	53	1531
Windmill-regulator	W. R. McGowen	438,555	Oct. 14	1333	361	53	263
Windmill-regulator	L. E. Nelson	437,712	Oct. 7	51	16	53	12
Windmill-regulator. Automatic.	A. C. Hough	437,783	Oct. 7	168	52, 53	53	34
Windmill-regulator. Automatic.	F. G. Tallerdar	439,611	Oct. 28	3020	801	53	594
Windmill-regulator. Automatic.	J. E. Van Schaick	435,595	Sept. 2	328	92	52	1438
Window	J. P. Clark, Jr.	424,179	Mar. 25	2730	728	50	1678
Window	O. M. Edwards	421,563	Feb. 18	1674	433 434	50	897
Window	C. H. Fischer	443,755	Dec. 30	3472	891	53	1971
Window	F. H. Jury	424,306	Mar. 25	2909	777	50	1713
Window	G. L. H. Muehe	428,851	May 27	2769	704	51	1388

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Window	J. J. Norton	431,279	July 1	375	94	52	76
Window	G. Roxer	438,596	Oct. 14	1389	376	53	274
Window attachment	C. F. Olcese	420,956	Feb. 11	796	{ 206 207 }	50	723
Window-balcony for flowers	J. B. March	443,369	Dec. 23	2856	735	53	1845
Window-bead fastener	J. Hooper	443,852	Dec. 30	3616	{ 930 931 }	53	2000
Window-bead fastener	M. Lane	436,939	Sept. 23	2522	660	52	1877
Window-bead fastener	W. Randel and C. A. French	428,181	May 20	1742	441	51	1170
Window-bracket	H. Weber	435,533	Sept. 2	233	64	52	1419
Window casing and frame. Fire-proof	E. E. D. Kern	431,025	June 24	3014	740	51	2080
Window-chair	H. D. Plimsoll	423,698	Mar. 18	2025	534	50	1536
Window-cleaner	P. H. O'Toole	427,896	May 13	1330	{ 335 336 }	51	1081
Window-cleaner	F. Redmond	427,363	May 6	505	129	51	911
Window-cleaner	C. A. Sullivan and J. A. Smith	439,331	Oct. 28	2592	691	53	512
Window-cleaner. Fountain	H. W. Münch	422,429	Mar. 4	96	27	50	1155
Window-cleaning chair	W. M. Reynolds	432,643	July 22	2486	{ 639 640 }	52	504
Window-cleaning implement	G. Pilson	418,959	Jan. 7	483	120	50	102
Window-dresser	A. J. Fisher	440,554	Nov. 11	1460	376	53	897
Window fastener. Storm	A. P. Andrews	443,348	Dec. 23	2824	725	53	1837
Window fastening. Storm	C. R. Moore	424,014	Mar. 25	2505	667	50	1634
Window. Folding bay	C. Fredrickson	422,585	Mar. 4	322	81	50	1197
Window. Folding bay	C. Fredrickson	436,066	Sept. 9	1063	276	52	1586
Window-frame	B. Aschenbach	431,639	July 8	939	235	52	195
Window-frame attachment	P. M. Lewis	422,233	Feb. 25	2636	698	50	1088
Window-glass	J. H. Reynolds	419,882	Jan. 21	1859	499	50	390
Window-grate	A. S. Jordan	419,048	Jan. 7	598	154	50	126
Window-guard	A. G. Nance	426,676	Apr. 29	3413	696	51	700
Window-jamba. Adjustable strip for	E. F. Wilcox	431,500	July 1	724	180	52	144
Window-jack	G. H. Reed	430,971	June 24	2929	719	51	2063
Window or door screen	W. W. Moore	439,751	Nov. 4	180	47	53	643
Window or door screen. Adjustable hinged	W. H. Grubb	441,096	Nov. 13	2356	611	53	1078
Window-screen	P. Ahlberg	419,398	Jan. 14	1130	299	50	238
Window-screen	W. H. and W. J. Clark	435,797	Sept. 2	648	171	52	1499
Window-screen	F. A. Edwards	436,173	Sept. 9	1235	322	53	1615
Window-screen	W. H. Flesher	429,210	June 3	160	38	51	1502
Window-screen	C. K. Hann	443,092	Dec. 23	2374	606	53	1751
Window-screen	G. F. Hawley	433,343	July 29	3582	924	52	724
Window-screen	G. A. Jacobs	421,719	Feb. 18	1897	468	50	941
Window-screen	M. and G. Nelson	435,943	Sept. 9	878	230	52	1550
Window-screen	G. L. Reynolds	428,413	May 20	2115	531	51	1244
Window-screen	T. Robinson	443,783	Dec. 16	1834	474	53	1638
Window-screen	C. C. Schupbach	442,495	Dec. 9	1349	347	53	1533
Window-screen	T. Smith	441,088	Nov 13	2342	606	53	1075
Window-screen	H. N. Swartz	442,150	Dec. 9	827	{ 221 222 }	53	1432
Window-screen. Adjustable	P. Ahlberg	419,397	Jan. 14	1129	298	50	237
Window-screen. Adjustable	J. A. Baldwin	430,560	June 17	2248	552	51	1924
Window-screen. Adjustable	J. T. Henderson	438,544	Oct. 14	1313	355	53	259
Window-screen. Adjustable	C. I. Markham and L. R. Pomeroy	428,309	May 20	1949	489	51	1210
Window-screen. Extension	D. Limoge	424,802	Apr. 1	573	152	51	111
Window-screen or other slide	R. H. Krall and J. E. Dutt	426,620	Apr. 29	3331	873	51	685
Window-screen. Rolling and adjustable	J. H. W. Doering	424,280	Mar. 25	2864	{ 765 766 }	50	1705
Window-screens, &c. Frame for	E. C. Hussey	420,724	Feb. 4	413	110	50	645
Window-screens. Machine for driving guide-rods in wings of	F. Leduc	427,584	May 13	848	213	51	988
Window-shade exhibitor	E. McMannus	422,146	Feb. 25	2503	661	50	1063
Window-shades. Spring-roller for	G. D. Peters	422,314	Feb. 25	2772	730	50	1113
Window-stand	M. Pianko	424,351	Mar. 25	2995	796	50	1729
Window-stop	J. A. and A. C. Harold	439,655	Nov. 4	47	13	53	616
Window-stop fastener	O. B. White	430,158	June 17	1610	400	51	1802
Window. Swinging	G. D. Crocker	431,202	July 1	255	{ 24, 25 }	52	53
Window-ventilator	P. Abrahamson	428,739	May 27	2607	661	51	1355
Window-ventilator	J. De Long	433,450	Aug. 5	25	6	52	761
Window-ventilator	E. L. Howe	424,113	Mar. 25	2642	704	50	1661
Window-ventilator	N. McDonald	424,895	Apr. 1	716	191	51	138
Window-washer	W. Orcutt	419,871	Jan. 21	1844	484	50	386
Window-washer	E. A. Stauffer	434,734	Aug. 19	1997	521	52	1165
Window washer and wiper	F. Tylee	430,047	June 10	1436	357	51	1758
Windows. Device for mounting and operating swinging	E. E. De Kalb	441,943	Dec. 2	486	130	53	1359
Windows. Storm-screen for	F. T. Aikins	443,345	Dec. 23	2821	725	53	1837
Windows. Support for persons cleaning	C. E. Britt	439,798	Nov. 4	252	64	53	657
Wine-cooler	A. S. Morton	439,084	Oct. 21	2180	586	53	429
Wine-schoener	L. Wagner	439,735	Nov. 4	185	48	53	644
Wire and track cleaner	J. Bauer	429,990	June 10	1339	332	51	1740
Wire. Art and means for covering insulating	T. W. Norman	443,536	Dec. 30	3116	802	53	1903
Wire, bands, &c. Manufacture of	F. E. and A. S. Elmore	440,548	Nov. 11	1450	{ 373 374 }	53	896
Wire. Barbed	W. T. Walton	437,805	Oct. 7	206	63	53	41
Wire-bending tool	J. A. Robbins	429,961	June 10	1300	321	51	1732
Wire block and carrier	L. T. Wooster	423,015	Mar. 11	991	261	50	1332
Wire braces. Machine for making	L. J. Aderbold	434,311	Aug. 12	1313	342	52	1023
Wire carrier and stretcher	A. D. Leech	443,697	Dec. 30	3382	868	53	1953
Wire-cloth	F. P. Hinds	422,214	Feb. 25	2609	690	50	1082
Wire-coating apparatus	C. Q. Goodwin	434,866	Aug. 19	2189	{ 573 574 }	52	1203
Wire-coiling apparatus	T. C. McPherson	436,256	Sept. 9	1359	354	52	1641
Wire-coiling device	G. Lehberger	420,909	Feb. 4	724	186	50	700
Wire-coiling machine	W. Edenborn	429,511	June 3	620	152	51	1590
Wire-coiling machine	W. Edenborn	429,512	June 3	621	152	51	1590

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Wire-coiling machine	G. Hildreth	423,252	Mar. 11	1344	350	50	1400
Wire, cord, &c. Machine for covering	K. Vogel	437,266	Sept. 30	3029	794	52	1982
Wire-coupling	D. B. Morrison	428,123	May 20	1065	422	51	1156
Wire-covering machine	F. E. Davis and J. Scott, Jr	428,201	May 20	1767	446	51	1175
Wirecrossing. Overhead	J. Kuehnle	426,452	Apr. 29	3080	808	51	636
Wire-cutter	J. Knibbs	426,128	Apr. 22	2591	681	51	528
Wire-cutter	A. Kraenter	441,309	Nov. 25	2740	709	53	1156
Wire-cutting machine	D. A. Ritchie	432,565	July 22	2374	612	52	483
Wire desk-basket	G. K. Rix	423,181	Mar. 11	1251	326	50	1382
Wire. Device for supporting shells in the manufacture of seamless plated	H. T. Smith	434,681	Aug. 19	1919	501	52	1150
Wire dishcloths. Making	F. P. Hinds	442,436	Dec. 9	1254	324	53	1514
Wire-drawing apparatus	J. W. White	424,839	Apr. 1	632	166	51	122
Wire-drawing apparatus	J. W. White	431,499	July 1	723	180	52	144
Wire-drawing die	R. Hadfield	432,236	July 15	1876	422	52	379
Wire-drawing die	L. T. Wooster	423,016	Mar. 11	993	261	50	1333
Wire-drawing drum	W. W. Shearer	437,135	Sept. 23	2802	730	52	1933
Wire-drawing machine	J. E. Burnes	427,150	May 6	198	51	51	850
Wire-drawing machine	J. E. Burnes	440,133	Nov. 11	764	200	53	767
Wire-drawing machine	J. F. Ellis	443,752	Dec. 30	3467	888	53	1970
Wire-drawing machine	A. H. Limont	420,303	Jan. 28	2515	667	50	523
Wire-drawing machine	C. S. Morse	420,165	Jan. 28	2293	607	50	483
Wire-drawing machine	G. Wirth	440,680	Nov. 18	1661	429	53	946
Wire, &c. Electric machine for covering	F. E. Davis and J. Scott, Jr	425,990	Apr. 22	2392	634	51	489
Wire fabric	J. Hancock	436,977	Sept. 23	2571	672	52	1887
Wire fabric	I. Kinney	429,537	June 3	660	161	51	1598
Wire floor-mat. Coiled	T. W. Klipfel	432,244	July 15	1884	484	52	381
Wire foot-mat	W. F. Benedict	420,985	Feb. 11	841	218	50	732
Wire-galvanizing apparatus	B. A. Grant	423,995	Mar. 25	2470	657	50	1628
Wire-galvanizing apparatus	C. E. Matteson	431,905	July 8	1366	345	52	275
Wire. Guide for machines for covering	J. McCahey	439,675	Nov. 4	74	20	53	622
Wire. Implement for tying the ends of	C. W. Lanpher	424,423	Mar. 25	3128	830	50	1756
Wire. Machine for cleaning coils of	A. H. Scarles	434,891	Aug. 19	2240	588	52	1213
Wire, &c. Machine for covering	F. E. Davis and J. Scott, Jr	420,777	Feb. 4	487	127	50	658
Wire. Making seamless gold-plated	C. R. Smith	428,056	May 13	1564	395	51	1127
Wire. Making seamless plated hollow	H. T. Smith	422,647	Mar. 4	426	106	50	1217
Wire. Manufacturing steel-coated	F. Sedgwick	443,464	Dec. 23	3002	771	53	1872
Wire mat	T. Midgley	422,960	Mar. 11	912	239	50	1318
Wire. Method of and apparatus for drawing	T. A. Edison	436,968	Sept. 23	2561	669	52	1885
Wire. Method of and apparatus for drawing	T. A. Edison	436,969	Sept. 23	2562	670	52	1885
Wire-netting machine	E. S. Bond	432,223	July 15	1856	476	52	376
Wire-netting machine	H. B. Morris	441,437	Nov. 25	2936	756	53	1195
Wire-netting machine	B. Scarles	433,633	Aug. 5	280	75	52	811
Wire or cable tightener	W. Mason	433,799	Aug. 5	542	140	52	862
Wire or raising wagon-beds. Device for stretching	J. Markel	421,295	Feb. 11	1281	330	50	815
Wire. Plated	G. U. Meyer	441,884	Dec. 2	398	105	53	1343
Wire. Plated	G. U. Meyer	441,885	Dec. 2	399	105	53	1343
Wire. Plated	G. U. Meyer	443,698	Dec. 30	3383	869	53	1953
Wire-reducing machine	F. A. Peck	428,519	May 20	2255	572	51	1270
Wire-reducing machine	F. A. Peck	428,572	May 20	2330	591	51	1284
Wire-reel	J. A. Truman	438,718	Oct. 21	1595	428	53	317
Wire reel and stretcher	W. E. Bell, J. J. Lee, and J. T. Drummond	429,673	June 10	862	209	51	1648
Wire reel and stretching machine. Combined	J. Harper	443,442	Dec. 23	2960	762	53	1864
Wire-rod mill	T. W. Fitch	435,810	Sept. 2	668	175	52	1503
Wire-rod mill	T. W. Fitch	435,811	Sept. 2	669	176	52	1504
Wire-rod mill	T. W. Fitch	435,814	Sept. 2	671	177	52	1504
Wire-rod mill. Belgian	T. W. Fitch	435,812	Sept. 2	670	176	52	1504
Wire-rod mill. Continuous	T. W. Fitch	435,815	Sept. 2	672	177	52	1505
Wire rods. Coiling	F. G. Tallman	420,747	Feb. 4	442	117	50	651
Wire rope, band, or cable	E. E. Bird	429,005	May 27	2990	767	51	1432
Wire-rope grip	A. H. Mathesius	423,694	Mar. 18	2019	533	50	1535
Wire-rope machine	W. R. Beckmann	440,859	Nov. 18	1971	508	53	1003
Wire rope. Socket for fastening	F. C. Dumas	427,302	May 6	420	109	51	893
Wire-rope transmission. Self-loading mechanism for	B. McIntire	432,191	July 15	1811	465	52	367
Wire-rope-way clip	B. McIntire	419,466	Jan. 14	1233	328	50	259
Wire-rope-way clip	B. McIntire	431,476	July 1	682	170	52	137
Wire. Seamless plated	G. U. Meyer	441,886	Dec. 2	400	105	53	1343
Wire. Seamless plated hollow	L. L. Burdon	440,694	Nov. 18	1687	434	53	951
Wire. Shuttle-operating mechanism for looms for weaving	W. Hargreaves	439,145	Oct. 28	2276	611	53	452
Wire-splicing tool	H. W. Fisher	435,415	Sept. 2	55	18	52	1385
Wire-straightener	O. Collins	435,285	Aug. 26	2844	752	52	1335
Wire-straightener	S. W. Harman	431,582	July 8	850	211	52	177
Wire straightening and cutting machine	H. Eckerson	437,413	Sept. 30	3277	855	52	2028
Wire straightening and cutting machine	J. W. Griswold	420,509	Feb. 4	116	29	50	586
Wire-stretcher	J. Burdick	443,640	Dec. 30	3256	847	53	1935
Wire-stretcher	G. R. Case and G. V. Killian	430,621	June 24	2360	577	51	1954
Wire-stretcher	J. R. Deaver	437,178	Sept. 30	2901	755	52	1956
Wire-stretcher	W. J. Doherty	437,485	Sept. 30	3388	888	52	2053
Wire-stretcher	O. D. Hearn	418,794	Jan. 7	203	50	50	44
Wire-stretcher	H. P. Hood and F. A. Jacob	442,693	Dec. 16	2043	524	53	1677

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wire-stretcher.....	C. M. Kiler.....	431,265	July 1	350	88	52	72
Wire-stretcher.....	J. W. King.....	425,805	Apr. 15	2081	556	51	423
Wire-stretcher.....	J. Klopfenstein.....	434,513	Aug. 19	1635	429	52	1096
Wire-stretcher.....	J. B. McNelly.....	427,787	May 13	1159	290	51	1049
Wire-stretcher.....	A. Morrison.....	419,865	Jan. 21	1838	484	50	385
Wire-stretchers. Gripper for.....	C. La Grange.....	436,832	Sept. 23	2313	609	52	1838
Wire stretching and reeling machine.....	M. B. Claunch and A. Smith.....	439,720	Nov. 4	138	37	53	634
Wire-stretching machine.....	O. M. Mosher.....	437,612	Sept. 30	3572	933	52	2089
Wire-stretching machine. Barbed.....	W. O. McGee.....	437,402	Sept. 30	3250	847	52	2023
Wire system. Underground.....	E. Verstraete.....	441,043	Nov. 18	2259	585	53	1059
Wire-tightener.....	J. W. Austin.....	442,503	Dec. 9	1367	350	53	1536
Wire-tightener.....	W. N. Bellah.....	432,221	July 15	1854	476	52	375
Wire-tightener.....	J. Hutchins.....	438,730	Oct. 21	1624	436	53	322
Wire-tightener.....	C. M. Kiler.....	430,581	June 17	2281	560	51	1931
Wire-twister.....	J. S. Locke.....	424,117	Mar. 25	2645	705	50	1661
Wire-twisting machine.....	G. M. Ball.....	443,491	Dec. 30	3055	{ 785 786 }	53	1891
Wire-twisting tool.....	J. G. Calhoun and C. B. Garrison.....	439,835	Nov. 4	308	77	53	668
Wire-winding machines. Tension-regulating device for.....	C. S. Strowbridge.....	438,782	Oct. 21	1703	457	53	338
Wire with metal. Covering.....	T. B. Dooley.....	432,196	July 15	1817	{ 467 468 }	52	368
Wire with plastic material. Apparatus for covering.....	D. D. Parmelee.....	429,581	June 3	725	175	51	1611
Wire-working tool.....	C. Davis.....	435,580	Sept. 2	308	85	52	1434
Wires, cables, &c., and for making tubing and cord. Machine for covering.....	V. and J. Royle, Jr.....	441,808	Dec. 2	278	75, 76	53	1319
Wires. Device for shielding and protecting.....	H. E. Penney.....	425,107	Apr. 8	1031	275	51	208
Wires. Suspender or support for overhead.....	C. A. Lieb.....	435,505	Sept. 2	129	52	52	1411
Wood and fiber. Treating.....	W. A. Horrall.....	443,238	Dec. 23	2646	.....	53	1804
Wood and other compressible material. Machine for ornamenting.....	E. W. Alleigh. (Reissue).....	11,121	Nov. 18	2394	620	53	1085
Wood and other compressible material. Two-part cylinder and die for ornamenting.....	E. W. Alleigh. (Reissue).....	11,122	Nov. 18	2395	620	53	1085
Wood and other compressible material. Machine for ornamenting.....	E. W. Alleigh. (Reissue).....	11,133	Dec. 16	2342	{ 597 598 }	53	1736
Wood-bending device.....	J. Stoll.....	433,221	July 29	3411	881	52	689
Wood-bending form.....	A. Walbrunn.....	424,523	Apr. 1	122	35	51	27
Wood-bending machine.....	A. Hirschheimer and C. M. Mueller.....	426,641	Apr. 29	3362	{ 881 882 }	51	690
Wood-bending press.....	D. Jenkins.....	437,904	Oct. 7	348	101	53	68
Wood-bundling machine.....	T. F. Buckley.....	425,064	Apr. 8	974	261	51	197
Wood-channeling machine.....	A. B. Cameron.....	422,912	Mar. 11	836	217	50	1304
Wood-channeling machine.....	A. B. Cameron.....	422,913	Mar. 11	838	217	50	1304
Wood-channeling machines. Guide for.....	A. B. Cameron.....	436,966	Sept. 23	2557	{ 668 669 }	52	1884
Wood-cutting machine.....	J. R. von Kink and J. G. Kreis.....	434,112	Aug. 12	1007	262	52	963
Wood-drying apparatus.....	A. Stevens.....	437,731	Oct. 7	84	27, 28	53	19
Wood. Embellishing.....	S. M. Land and S. A. Van Enskirk.....	443,447	Dec. 23	2972	765	53	1866
Wood-filler.....	B. J. Coubig.....	432,119	July 15	1699	.....	52	346
Wood, &c. Machine for sorting disintegrated.....	L. Piette.....	425,341	Apr. 8	134	369	51	278
Wood. Means for joining.....	E. J. Fletcher.....	419,763	Jan. 21	1687	440	50	349
Wood. Mechanism for smoothing surfaces of.....	C. W. Abbott.....	437,911	Oct. 7	350	104	53	70
Wood. Preserving.....	C. T. Lee.....	419,858	Jan. 21	1813	.....	50	379
Wood press. Kindling.....	C. F. Smith.....	432,772	July 22	2715	694	52	548
Wood. Producing ornamental designs upon.....	C. Hettwig and F. Heckner.....	439,658	Nov. 4	50	.....	53	616
Wood pulp. Manufacturing articles from.....	W. Booth.....	420,763	Feb. 4	464	123	50	655
Wood pulp. Preparing.....	W. N. Cornell.....	433,326	July 20	3561	919	52	720
Wood. Solution for preserving.....	J. P. Card.....	419,582	Jan. 14	1381	.....	50	291
Wood to be converted into cylinders. Preparing strips of.....	J. MacFarlane.....	422,309	Feb. 25	2764	728	50	1111
Wood to pulp. Machine for grinding.....	E. R. Marshall.....	438,633	Oct. 21	1456	{ 393 394 }	53	292
Wood-work. Machine for laying off.....	R. G. Love.....	439,532	Oct. 28	2891	769	53	568
Wood-working clamp.....	H. Cone.....	424,960	Apr. 8	817	219	51	166
Wood-working machine.....	W. R. Briggs. (Reissue).....	11,110	Sept. 16	2181	573	52	1805
Wood-working machine.....	W. F. Cooper.....	427,158	May 6	213	54	51	853
Wood-working machine.....	E. J. Heule and D. Cameron.....	433,080	July 29	3200	822	52	646
Wood-working machine.....	F. S. Madison.....	428,051	May 13	1556	394	51	1125
Wood-working machine.....	W. E. Taft.....	434,846	Aug. 19	2152	564	52	1197
Wood-working machine.....	F. H. Van Houten.....	435,265	Aug. 26	2820	747	52	1340
Wood-working machine feed mechanism.....	C. J. Olson.....	428,284	May 20	1910	481	51	1203
Wood-working machines. Clamping mechanism for.....	J. Balsley.....	418,880	Jan. 7	354	85, 86	50	74
Wood-working machines. Driving-gear for.....	L. T. Pvoth.....	421,303	Feb. 11	1288	332	50	816
Wood-working machines. Feeding attachment for.....	E. Benjamin.....	440,735	Nov. 18	1754	452	53	965
Wood-working machinery.....	T. G. Bugbee.....	424,091	Mar. 25	2608	695	50	1654
Wood-working machinery.....	J. W. Carver.....	432,975	July 29	3032	779	52	614
Wood-working machinery.....	J. W. Carver.....	432,976	July 29	3034	{ 779 780 }	52	615
Wood-working machinery.....	G. A. Oncken.....	420,886	Feb. 4	685	{ 176 177 }	50	692
Wood-working. Ornamental.....	F. Koskul.....	436,041	Sept. 9	1030	268	52	1580
Wooden-dish machine.....	W. S. Shotwell.....	420,363	Jan. 28	2600	{ 691 692 }	50	539
Wooden roller.....	J. W. Hyatt.....	434,185	Aug. 12	1119	{ 290 291 }	52	985
Wooden surfaces. Ornamenting.....	N. Hecht.....	437,648	Sept. 30	3618	946	52	2098
Wooden vessel.....	W. Heiser.....	425,032	Apr. 8	929	247	51	188
Wool. Apparatus for carbonizing vegetable fiber in.....	D. Cole and J. Pedder.....	443,358	Dec. 23	2338	730	53	1841
Wool. Apparatus for extracting grease from.....	L. Pinagel.....	440,963	Nov. 18	2141	554	53	1035
Wool, &c. Apparatus for scouring.....	I. and J. Smith.....	432,573	July 22	2383	614	52	425
Wool-burring machine.....	F. G. and A. C. Sargent.....	433,186	July 29	3363	870	52	679
Wool. Cleaning.....	K. F. Stahl.....	420,315	Jan. 28	2530	50	526
Wool-cleansing apparatus.....	G. and A. Burnell.....	440,418	Nov. 11	1245	322	53	856

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wool-combing machine	J. Smith and J. Stake	438,755	Oct. 21	1668	{ 447 448	{ 53	330
Wool, cotton, &c. Machine for opening and mixing	H. Tindell and L. F. Dickerson	425,715	Apr. 15	1961	521	51	399
Wool. Machine for preparing and burring	F. G. and A. C. Sargent	422,635	Mar. 4	409	{ 101 102	{ 50	1214
Wool-scouring machine	J. E. Clark and S. C. Taft	424,405	Mar. 25	3103	{ 823 824	{ 50	1751
Wool-washers and similar machines. Squeeze-roll for	F. G. and A. C. Sargent	431,174	July 1	212	53	52	44
Wool-washing machine	F. G. Sargent	430,321	June 17	1902	466	51	1859
Wool-washing machine	F. G. Sargent	433,581	Aug. 5	207	55, 56	52	796
Wool-washing machine	F. G. Sargent	433,582	Aug. 5	209	56, 57	52	797
Wool-washing machine	F. G. and A. C. Sargent	433,583	Aug. 5	212	57	52	798
Work-bench	J. H. Stewart	435,331	Aug. 26	2928	777	52	1348
Work-bench	T. T. Wilson	427,139	May 6	176	46, 47	51	846
Work-box	H. W. Clapp	418,683	Jan. 7	24	7	50	7
Work-bolder	F. H. Richards	419,073	Jan. 7	641	166	50	135
Work-bolder	F. H. Richards	419,074	Jan. 7	642	{ 166 167	{ 50	135
Work-stand	J. V. Becker	434,237	Aug. 12	1203	312	52	1001
Work-stand	J. A. McGlohon	435,588	Sept. 2	320	89	52	1437
Work-table	A. Patterson	428,939	May 27	2896	741	51	1413
Work-table and writing-desk. Combined	A. B. Lawrence	441,876	Dec. 2	389	102	53	1341
Wort and yeast. Apparatus for mixing and aerating	J. Meier	424,325	Mar. 25	2945	785	50	1719
Woven fabric	A. Heald	424,201	Mar. 25	2760	736	50	1684
Woven fabric	A. Heald	431,844	July 8	1284	322	52	260
Woven fabric	M. Meyenberg and G. Simon	435,150	Aug. 26	2650	701	52	1298
Woven fabric composed of excelsior	J. A. Adams	435,719	Sept. 2	530	140	52	1477
Woven fabrics. Manufacturing	J. J. Ashworth	428,296	May 20	1932	485	51	1207
Woven pile fabric	S. C. Lister and J. Reixach	425,437	Apr. 15	1526	412	51	317
Woven pile fabric	G. Marchetti and H. N. Mellor	436,368	Sept. 16	1550	—	52	1686
Woven pile fabric	J. Reixach	442,749	Dec. 16	1784	462	53	1627
Wrap. Lady's	D. Beal	440,217	Nov. 11	897	231	53	794
Wrench:							
See Carriage-wrench. Monkey-wrench.							
Chain-wrench. Nut-wrench.							
Fence-wrench. Pipe-wrench.							
Friction-wrench. Pipe and nut wrench.							
Hose-wrench. Pipe or rod wrench.							
Hub-wrench. Screw-driver wrench.							
Jack-wrench. Vehicle-wrench.							
Jar-wrench. Wagon-wrench.							
Wrench	F. F. Asmus	423,509	Mar. 18	1733	457	50	1482
Wrench	C. C. Augustine	426,161	Apr. 22	2644	695	51	538
Wrench	J. H. Baker and G. F. Shevlin	421,154	Feb. 11	1088	279	50	780
Wrench	B. G. Berrien, Jr.	419,816	Jan. 21	1740	461	50	365
Wrench	F. J. Biel and J. S. Urban	443,216	Dec. 23	2609	671	53	1797
Wrench	H. Bornstein	434,912	Aug. 26	2309	610	52	1233
Wrench	A. T. and A. W. Brann	433,558	Aug. 5	173	46	52	790
Wrench	E. H. G. Brinser	423,592	Mar. 18	1845	487	50	1501
Wrench	W. S. Brunch	440,003	Nov. 4	577	152	53	721
Wrench	D. V. Cash	436,647	Sept. 16	1988	520	52	1766
Wrench	A. Cbainey	440,889	Nov. 18	2014	518	53	1012
Wrench	J. Clark	424,858	Apr. 1	656	173	51	127
Wrench	E. S. Cushman	439,388	Oct. 28	2663	714	53	528
Wrench	C. W. Dixon	437,102	Sept. 23	2746	718	52	1923
Wrench	R. Dodson	420,867	Feb. 4	648	168	50	687
Wrench	J. B. Foote	427,472	May 6	674	169	51	945
Wrench	O. P. Foote	422,516	Mar. 4	220	58	50	1178
Wrench	J. H. Gibson	431,655	July 8	972	242	52	201
Wrench	W. L. Gibson	437,589	Sept. 30	3542	924	52	2083
Wrench	I. C. Gray	422,767	Mar. 4	582	150	50	1248
Wrench	F. E. Heinig	422,526	Mar. 4	233	61	50	1180
Wrench	G. W. Hooks	433,786	Aug. 5	520	135	52	857
Wrench	W. S. Hoskins	419,254	Jan. 14	913	241	50	195
Wrench	J. Hull	432,409	July 15	2128	547	52	426
Wrench	F. W. Kasch	433,794	Aug. 5	531	137	52	860
Wrench	W. T. and W. T. Kosinski	441,245	Nov. 25	2631	682	53	1137
Wrench	J. H. Lane	442,190	Dec. 9	883	235	53	1443
Wrench	J. Lepley	423,483	Mar. 18	1693	447	50	1475
Wrench	J. J. McCarthy	433,358	July 29	3599	928	52	728
Wrench	A. J. O'Neill and H. Reinhart	440,435	Nov. 11	1271	328	53	861
Wrench	D. R. Porter	426,956	Apr. 29	3818	997	51	779
Wrench	F. E. Putnam	441,854	Dec. 2	355	94	53	1333
Wrench	H. Scheatzka	438,243	Oct. 14	876	237	53	173
Wrench	L. Schlesinger and L. Bowmann	424,359	Mar. 25	3010	799	50	1731
Wrench	S. D. Shambarger	441,199	Nov. 25	2543	657	53	1132
Wrench	S. F. Stever	434,004	Aug. 12	832	219	52	927
Wrench	G. L. Sutton and H. J. De Voe	434,409	Aug. 12	1470	383	52	1055
Wrench	F. S. Thring	419,571	Jan. 14	1367	366	50	287
Wrench	J. Tomlinson, Sr.	422,662	Mar. 4	447	112	50	1222
Wrench	W. Wells	429,075	May 27	3114	802	51	1454
Wrench	N. M. Willet	439,919	Nov. 4	438	113	53	694
Wrench	M. J. Wilson	440,294	Nov. 11	1032	265	53	818
Wrench	F. M. and J. Wirtz	429,553	June 3	683	167	51	1603
Wrench	T. Young	425,647	Apr. 15	1857	496	51	379
Wrench attachment. Monkey	J. Wilkes	439,918	Nov. 4	437	113	53	693
Wrench attachment. Monkey	L. D. Junkins	432,945	July 22	2965	760	52	596
Wrench for oil-well tools	W. Forgie	422,879	Mar. 4	774	198	50	1284
Wrench-tightener	J. W. Bess	433,928	Aug. 12	728	169	52	909
Wringer:							
See Clothes-wringer. Mop-wringer.							
Wringer-clamp	H. J. White	435,375	Aug. 26	3005	796	52	1362
Wrist-pin	J. Barthel	434,236	Aug. 12	1202	312	52	1001
Writing apparatus	J. Werner	424,633	Apr. 1	300	77	51	60

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Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
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Yard-protector	S. Poole	435,708	Sept. 2	516	136	52	1475
Yarn-dressers. Section tension-indicator for	T. J. Sands	437,134	Sept. 23	2801	730	52	1933
Yarn, &c. Machine for washing	S. C. Ayers	441,735	Dec. 2	166	44	53	1294
Yarn. Making roving for the manufacture of spotted or party-colored or clouded	R. W. Duxbury	421,824	Feb. 18	2030	537	50	986
Yarn-reel	E. Chamberlain	430,419	June 17	2044	504	51	1887
Yarn scouring and dyeing machine	H. J. Campbell	439,473	Oct. 28	2806	{ 747 748 }	53	551
Yarn. Steaming apparatus for tapestry	J. Hutchison	442,483	Dec. 9	1323	341	53	1528
Yarn washing and dyeing apparatus	G. A. Greeven	443,177	Dec. 23	2525	646	53	1778
Yarns. Device for the manufacture of union and fancy	W. C. Whitehead	420,669	Feb. 4	341	89, 90	50	630
Yeast-cake	J. W. Cameron	427,553	May 13	797	200	51	980
Yeast-cakes. Machine for making	O. S. Hoffman	418,841	Jan. 7	284	69, 70	50	60
Yeast. Preparing	E. Leconte	440,772	Nov. 18	1826	.....	53	976
Yeast. Preparing pressed	E. Bruun	439,834	Nov. 4	307	.....	53	668
Yoke and brush-holder	F. B. Rae	440,817	Nov. 18	1904	489	53	990
Yoke. Animal	W. C. Alford	432,503	July 22	2271	589	52	463
Yoke attachment. Neck	A. L. Kotze	443,142	Dec. 23	2466	631	53	1766
Yoke attachment. Neck	C. N. Waterhouse	430,495	June 17	2155	530	51	1908
Yoke center. Neck	S. A. Thomas	433,831	Aug. 5	588	153	52	871
Yoke coupling. Neck	L. Buob, Jr.	430,267	June 17	1820	446	51	1841
Yoke coupling. Neck	C. C. Schwaner	419,223	Jan. 14	870	229	50	126
Yoke fastener. Neck	C. L. Regester	438,562	Oct. 14	1343	364	53	265
Yoke. Neck	S. Arnold	427,949	May 13	1411	357	51	1096
Yoke. Neck	C. E. Davis and C. Lewis	441,538	Nov. 25	3090	794	53	1224
Yoke. Neck	B. M. O'Boylan and J. Thompson	443,374	Dec. 23	2865	736	53	1846
Yoke. Neck	L. M. Snyder	441,593	Nov. 25	3173	818	53	1240
Yoke. Ox	J. S. Milton and M. Pressnall	439,760	Nov. 4	197	51	53	647
Yoke. Ox	S. A. Smith	443,243	Dec. 23	2651	681	53	1804
Yoke. Poke	A. Bolding	419,138	Jan. 7	725	190	50	152
Yoke. Truss-rod	T. A. L. Moore	430,588	June 17	2297	565	51	1934
Zinc sulphide. Making	A. Keiller	425,081	Apr. 8	999	51	202
Zither-table	H. Meyer	433,801	Aug. 5	546	140	52	863

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Design.	Name.	No.	Date.	Official Gazette.	
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Advertising-banner	L. L. Higby	20,241	Oct. 28	53	436
Air-compressor case	E. H. Weatherhead	19,765	Apr. 15	51	302
Album-case	W. Bergner	20,347	Nov. 25	53	1096
Album cover or case	H. Pattberg and E. Brodhag	20,343	Nov. 18	53	926
Album-leaf	W. C. Horn	20,015	July 15	52	311
Album-leaf	E. G. Thorp	19,831	May 6	51	810
Album. Memorial	C. D. Sweet	19,648	Feb. 11	50	714
Album. Photographic	M. F. Harte	20,000	July 1	52	2
Album. Photographic	N. Lochbaum	19,737	Apr. 1	51	2
Altar or sbrine. Household	F. P. McGovern	19,922	June 24	51	1949
Badge	N. S. Boynton	20,159	Sept. 23	52	1812
Badge	E. G. Locke	20,365	Dec. 2	53	1262
Badge	E. L. Torsch and J. R. Lee	19,776	Apr. 22	51	482
Badge	W. H. Upton	20,212	Oct. 21	53	280
Badge or emblem	E. Volk	19,671	Feb. 25	50	994
Badge, pin, &c	W. H. Upmeyer	20,201	Oct. 14	53	142
Banner. Hanging	J. Kevan	20,234	Oct. 21	53	280
Barber's chair	H. A. Schneekloth	20,344	Nov. 18	53	926
Barber's dressing-case	T. J. Collins	{ 19,777 } 19,778	Apr. 29	51	628
Bath-tub	F. J. Torrance	19,682	Mar. 4	50	1136
Bath-tubs. Casing for	O. F. Grant	20,178	Sept. 30	52	1954
Bath-tubs. Cradle for	O. F. Grant	20,179	Sept. 30	52	1954
Battery-case. Electro-medical	H. C. Braun and A. Ford-Lloyd	20,207	Oct. 14	53	142
Bedstead	W. T. Mersereau	20,353	Dec. 2	53	1262
Belt-clasp	F. J. Herrick	{ 19,578 } to 19,580	Jan. 14	50	170
Belt-clasp	F. J. Herrick	19,863	May 27	51	1310
Belt-clasp	F. J. Herrick	20,110	Aug. 26	52	1229
Belt-clasp	F. J. Herrick	20,141	Sept. 9	52	1542
Belt-clasp	G. M. Hubbard	19,860	May 27	51	1310
Belt ornament	M. Hecht	20,368	Dec. 9	53	1412
Belt ornament	M. Hecht	20,410	Dec. 16	53	1576
Belts. Trimming for	A. Blumenkrohn	20,049	July 22	52	461
Billiard-table	H. Bonninghausen	19,560	Jan. 7	50	2
Boiler-head	T. I. Rankin	20,238	Oct. 28	53	436
Book-cover	J. Rangette	20,292	Nov. 11	53	762
Book or album leaf	E. G. Thorp	20,166	Sept. 23	52	1812
Book-rack	J. Danner	20,074	Aug. 5	52	756
Boots, &c. Wear-plate for	L. N. Beauchemin	19,891	June 10	51	1624
Bottle	E. Backus	19,892	June 10	51	1624
Bottle	C. E. Bentley	{ 20,026 } to 20,032	July 15	52	312
Bottle	C. P. Booth	20,135	Sept. 9	52	1542
Bottle	J. A. W. Fernow	19,733	Apr. 1	51	2
Bottle	C. L. Flacus	19,669	Feb. 25	50	994
Bottle	G. D. Glaser	19,864	June 3	51	1471
Bottle	J. J. Healy	19,577	Jan. 14	50	170
Bottle	H. J. Heinz	19,911	June 17	51	1788
Bottle	A. J. Houts	19,847	May 27	51	1310
Bottle	A. Kohn	19,866	June 3	51	1471
Bottle	C. W. Meinecke	{ 20,376 } 20,377	Dec. 9	53	1412
Bottle	A. P. Moore	19,640	Feb. 11	50	713
Bottle	E. J. N. Stent	{ 19,725 } 19,726	Mar. 25	50	1596
Bottle	W. B. Swindell	20,199	Oct. 14	53	142
Bottle	F. R. Wardle	19,798	Apr. 29	51	628
Bottle-cap	A. L. Fisher	{ 19,854 } 19,855	May 27	51	1310
Bottle-cap	A. L. Fisher	19,861	May 27	51	1310
Bottle-cap	G. W. Hahn	19,835	May 13	51	972
Bottle-cap	F. W. Perry	20,300	Nov. 11	53	762
Bottle-case	M. and A. Gerstendörfer	19,592	Jan. 21	50	308
Bottle-handle	R. D. Young	20,355	Dec. 2	53	1262
Bottle-stopper	E. L. Smith	19,586	Jan. 14	50	170
Bowl or basin	D. F. Haynes	19,575	Jan. 14	50	170
Bowls or dishes. Ornamentation of	D. Forbes	19,642	Feb. 11	50	713
Box	M. J. Bogert	20,167	Sept. 23	52	1812
Box	M. J. Bogert	20,356	Dec. 2	53	1262
Box	W. H. Mann	19,697	Mar. 11	50	1299
Bracelet	E. P. Beach	19,608	Jan. 28	50	439
Bracelet, &c.	E. P. Beach	19,715	Mar. 25	50	1596
Bracelet	H. W. Fishel	20,298	Nov. 11	53	762
Bracket	C. M. Peck	20,172	Sept. 30	52	1954
Braid	V. G. Schuck	19,630	Jan. 28	50	439
Braid	V. G. Schuck	{ 19,747 } 19,748	Apr. 1	51	2
Braid	V. G. Schuck	20,081	Aug. 5	52	756

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Design.	Name.	No.	Date.	Official Gazette.	
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Bread. Loaf.....	J. M. Loew.....	20,420	Dec. 23	53	1744
Bread-pan.....	W. Beckstein.....	19,696	Mar. 11	50	1299
Breast-pump.....	J. L. Hancock.....	19,593	Jan. 21	50	308
Bridle-bit.....	P. Gschwend.....	20,210	Oct. 21	53	280
Brooch.....	E. P. Beach.....	{ 20,008 } 20,009	July 15	52	311
Brooch or similar article.....	E. P. Beach.....	19,716	Mar. 25	50	1596
Brooch or similar article.....	E. P. Beach.....	{ 19,729 } 19,730	Apr. 1	51	2
Brush-back.....	H. Berry.....	{ 20,013 } 20,014	July 15	52	311
Brush-back.....	S. C. Howard.....	20,038	July 15	55	312
Brush back and handle.....	J. F. Whitney.....	20,345	Nov. 18	53	926
Brush. Dust.....	B. J. Lessard.....	20,006	July 8	52	164
Brush or mirror back.....	R. Fuchs and G. B. Beiderhase.....	{ 20,174 } to 20,176	Sept. 30	52	1954
Brush or mirror back.....	F. V. Jones.....	20,112	Aug. 26	52	1229
Brushes, &c. Back for.....	G. L. Crowell, Jr.....	19,803	May 6	51	810
Brushes, mirrors, &c. Back for.....	H. Berry.....	{ 19,702 } 19,703	Mar. 18	50	1452
Brushes, mirrors, &c. Back for.....	A. F. Jackson.....	{ 20,429 } to 20,433	Dec. 23	53	1744
Bubble-blower.....	E. Belcher.....	20,050	July 22	52	461
Buckle.....	W. A. Schleicher.....	19,666	Feb. 25	50	994
Buckle. Belt.....	L. Sanders.....	20,048	July 22	52	461
Building-block.....	E. H. Lewis.....	20,242	Oct. 28	53	436
Building-block.....	E. H. Lewis.....	20,287	Nov. 11	53	762
Burial-casket.....	W. J. Noble.....	19,567	Jan. 7	50	2
Burial-casket lid.....	L. Stein.....	19,724	Mar. 25	50	1596
Butter-fork.....	F. R. C. Strüver.....	20,400	Dec. 9	53	1412
Button.....	J. Pettibone.....	19,924	June 24	51	1949
Button.....	I. Sippili.....	20,216	Oct. 21	53	280
Button-hook.....	W. J. Keys.....	20,160	Sept. 23	52	1812
Button or similar article. Sleeve.....	E. P. Beach.....	19,672	Mar. 4	50	1136
Button, &c. Sleeve.....	E. P. Beach.....	19,728	Apr. 1	51	2
Button. Stair.....	J. H. Jolley.....	19,754	Apr. 8	51	160
Cake.....	R. Megson.....	20,434	Dec. 23	53	1744
Can.....	F. A. Monahan.....	19,738	Apr. 1	51	2
Cane or umbrella handle.....	A. Krouse.....	19,900	June 10	51	1624
Cane or umbrella handle.....	A. Rosenstein.....	20,047	July 22	52	461
Cane or umbrella handle.....	A. Rosenstein.....	{ 20,066 } to 20,068	July 29	52	610
Cane or umbrella handle.....	A. Rosenstein.....	20,096	Aug. 12	52	908
Cane or umbrella handle.....	A. Rosenstein.....	{ 20,143 } to 20,150	Sept. 9	52	1542
Cane or umbrella handle.....	A. Rosenstein.....	{ 20,162 } to 20,164	Sept. 23	52	1812
Cane or umbrella handle.....	H. O. Schmidt.....	{ 19,941 } to 19,948	June 24	51	1950
Cane or umbrella handle.....	H. O. Schmidt.....	{ 19,954 } to 19,964	July 1	52	1
Cane or umbrella handle.....	H. O. Schmidt.....	{ 19,962 } to 19,987	July 1	52	1
Cane or umbrella handle.....	H. O. Schmidt.....	19,998	July 1	52	1
Cane or umbrella handle.....	H. O. Schmidt.....	20,001	July 1	52	2
Cane or umbrella handle.....	H. A. Weihman.....	{ 19,949 } 19,950	June 24	51	1950
Cane or umbrella handle.....	H. A. Weihman.....	{ 19,965 } to 19,972	July 1	52	1
Cane or umbrella handle.....	H. A. Weihman.....	{ 19,988 } to 19,995	July 1	52	1
Cane or umbrella-handle plate.....	F. H. La Pierre.....	20,170	Sept. 23	52	1812
Carbon. Battery.....	J. F. Wollensak.....	19,999	July 1	52	1
Card.....	T. W. Kelley.....	19,901	June 10	51	1624
Carpet.....	W. Blackburn.....	20,259	Nov. 4	53	605
Carpet.....	L. Clemencet.....	20,261	Nov. 4	53	605
Carpet.....	A. Cortes.....	20,260	Nov. 4	53	605
Carpet.....	J. Douzel.....	20,262	Nov. 4	53	605
Carpet.....	E. Fisher.....	{ 19,878 } to 19,881	June 10	51	1624
Carpet.....	J. L. Folsom.....	{ 19,804 } to 19,809	May 6	51	810
Carpet.....	J. L. Folsom.....	{ 19,812 } to 19,820	May 6	51	810
Carpet.....	J. L. Folsom.....	{ 20,301 } to 20,313	Nov. 18	53	926
Carpet.....	J. L. Folsom.....	20,363	Dec. 2	53	1262
Carpet.....	A. L. Halliday.....	20,193	Oct. 7	53	2
Carpet.....	O. Heinigke.....	19,811	May 6	51	810
Carpet.....	O. Heinigke.....	{ 20,314 } 20,315	Nov. 18	53	926

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Carpet	H. Horan	19,882	June 10	51	1624
Carpet	H. Hunt	20,316	Nov. 18	53	926
Carpet	W. L. Jacobs	19,781 19,782	Apr. 29	51	628
Carpet	W. L. Jacobs	19,883 19,884	June 10	51	1624
Carpet	W. L. Jacobs	20,039	July 15	52	312
Carpet	N. Komori	20,263	Nov. 4	53	605
Carpet	T. L. Lawton	19,654 to 19,657	Feb. 18	50	843
Carpet	J. B. Moffat	20,264 20,266	Nov. 4	53	605
Carpet	H. W. Parton	to 20,272 20,278	Nov. 4	53	606
Carpet	H. W. Parton	to 20,285	Nov. 11	53	762
Carpet	P. Pignot	20,258	Nov. 4	53	605
Carpet	P. Pignot	20,265	Nov. 4	53	606
Carpet	P. Pignot	20,273	Nov. 4	53	606
Carpet	E. Poole	19,795	Apr. 29	51	628
Carpet	W. A. Schmidt	19,683 19,684	Mar. 4	50	1136
Carpet	G. J. Stengel	20,288 20,289	Nov. 11	53	762
Carpet	C. W. Swapp	19,885 to 19,887	June 10	51	1624
Carpet	W. Thomas	20,274	Nov. 4	53	606
Carpet fastener. Stair.	D. Walker and F. H. Howard	19,973	July 1	52	1
Carpet-sweepers. Casing for	W. J. Drew	20,294	Nov. 11	53	762
Carriage-body	W. P. Fest	19,951	June 24	51	1950
Carriage-body	W. P. Fest	20,037	July 15	52	312
Carriage-body	W. P. Fest	20,065	July 29	52	610
Carriage-body	J. C. Smith	20,041	July 15	52	312
Carriage-body	M. Woodhull	19,766	Apr. 15	51	302
Carriage-robe	L. S. Lee	20,243	Oct. 28	53	436
Carriage-step	E. L. Pratt	19,584	Jan. 14	50	170
Carriages. Fabric for children's	J. R. Martineau	19,566	Jan. 7	50	2
Caster	D. K. Alden	20,134	Sept. 9	52	1542
Ceiling	W. R. Kinnear	19,755	Apr. 8	51	160
Ceiling-strip. Metallic	L. L. Sagendorph	19,699	Mar. 11	50	1300
Chain bar. Watch	W. F. Duryea	19,759	Apr. 15	51	302
Chain. Ornamental	G. U. Meyer	20,052	July 22	52	461
Chair	F. P. Brooks	19,573	Jan. 14	50	170
Chair base. Rocking	G. F. Hall	19,693	Mar. 11	50	1299
Checkrein-hook	P. Gschwend	19,568	Jan. 7	50	2
Chenille fabric	W. T. Smith	20,351 20,352	Nov. 25	53	1096
Chenille fabric	W. T. Smith	20,371	Dec. 9	53	1412
Chimney top or cap	F. Maurer	19,823	May 6	51	810
Church-pew	S. Springsteen	20,151	Sept. 9	52	1542
Cigar	M. Boremsky	19,705	Mar. 18	50	1432
Cigar-lighter case	T. Rectanus	20,080	Aug. 5	52	756
Cigar or cigarette case	G. Tanner	19,667	Feb. 25	50	994
Clamp	F. N. Gardner	19,779	Apr. 29	51	628
Clasp	N. Eisenman	19,897	June 10	51	1624
Clasp or buckle for belts or sashes	A. W. Patching	20,094	Aug. 12	52	908
Clock-case	A. O. Jennings	19,822 19,868 to 19,870	May 6 June 3	51	810 1471
Clock-case	F. E. Morgan	to 19,870	June 3	51	1471
Cloth fabric. Pattern for	J. Gebauer	20,177	Sept. 30	52	1954
Clothes-line link	J. J. Wallace	19,685	Mar. 4	50	1136
Clothes pin	J. Van der Elst	20,412	Dec. 16	53	1576
Coin-receptacle	W. Monteith	19,708	Mar. 18	50	1452
Comb-handle	H. Berry	20,011 20,012	July 15	52	311
Comb. Toilet	F. V. Jones	20,071	Aug. 5	52	756
Combs, brushes, &c. Handle for	H. Berry	19,704	Mar. 18	50	1452
Combs, &c. Handle for	H. Berry	19,717	Mar. 25	50	1596
Corset-clasp	H. Mathieu	20,923	July 15	52	312
Compon-blank	H. von Schon	19,978	July 1	52	1
Cultivator-blade	S. L. Allen	19,712	Mar. 25	50	1596
Cultivator-rake	S. L. Allen	19,713	Mar. 25	50	1596
Curtain	R. Hartley	20,070	Aug. 5	52	756
Curtain-pole end	R. Lau	19,582	Jan. 14	50	170
Cuspidor	H. B. Goodwin	19,899	June 10	51	1624
Cutlery-handle	H. P. Fairchild	20,252	Nov. 4	53	605
Cutlery handle-tip	C. F. Smith	20,116	Aug. 26	52	1229
Desk. Cabinet	J. Roberts	19,746	Apr. 1	51	2
Dish	G. Demartial	19,975	July 1	52	1
Dish	G. Demartial	20,291	Nov. 11	53	762
Dish	C. E. Haviland	19,594 to 19,596	Jan. 21	50	308
Dish	C. E. Haviland	19,651	Feb. 18	50	843
Dish	E. M. Pearson	20,118	Aug. 26	52	1229
Dish	E. Pouyat	19,740 to 19,744	Apr. 1	51	2
Dish	C. C. Overton	19,690	Mar. 4	50	1136
Dish	G. Steel	20,374	Dec. 8	53	1412

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Dish.....	G. Vogt.....	20,250	Oct. 28	53	436
Dish.....	W. G. Walter.....	19,764	Apr. 15	51	302
Dish or basket.....	H. Berry.....	20,197	Oct. 14	53	142
Dishes. Ornamentation of.....	C. E. Haviland.....	19,849	May 27	51	1310
Dishes. Surface ornamentation of.....	H. E. Waddell.....	19,749	Apr. 1	51	2
Drain or other pipe.....	E. W. Carter.....	19,677	Mar. 4	50	1136
Drawer-pull and back plate.....	G. F. Voit.....	20,203	Oct. 14	53	142
Drawer-pull handle.....	G. S. Pearson.....	20,246	Oct. 28	53	436
Dress goods.....	C. Elmore.....	{ 20,184 } 20,185	Oct. 7	53	2
Electric-meter box.....	O. B. Shallenberger.....	19,723	Mar. 25	50	1596
Electrical appliances. Cabinet for.....	H. E. Waite.....	19,763	Apr. 15	51	302
Electrical-instrument case.....	E. Weston.....	19,895	June 10	51	1624
Engine bed. Steam.....	R. H. Mather.....	19,923	June 24	51	1949
Envelope.....	J. T. Story.....	19,695	Mar. 11	50	1299
Envelope.....	M. M. Young.....	19,799	Apr. 29	51	628
Eraser.....	W. H. Londergon.....	19,628	Jan. 28	50	439
Escutcheon, &c.....	W. H. Freyfogle.....	20,138	Sept. 9	52	1542
Ewer or jug.....	R. W. Binns.....	20,064	July 29	52	610
Ewer or jug.....	D. F. Haynes.....	19,576	Jan. 14	50	170
Fabric.....	J. Branson.....	20,073	Aug. 5	52	756
Fabric.....	P. Gumbinner.....	20,276	Nov. 11	53	762
Feeding-manger.....	F. O. Worthley.....	19,686	Mar. 4	50	1136
Fence-gate.....	J. B. Cleaveland.....	19,769	Apr. 22	51	482
Fence-ornament.....	J. McLean.....	19,773	Apr. 22	51	482
Fence-post stub.....	H. L. Ennes.....	20,137	Sept. 9	52	1542
Fence-strand.....	A. B. Woodard.....	19,974	July 1	52	1
File. Letter.....	T. Vaughn and R. A. Convery.....	19,902	June 10	51	1624
Finger-ring.....	W. A. Bryant.....	20,058	July 29	52	610
Fire-place.....	F. W. Keifel, jr.....	20,033	July 15	52	312
Flags, banners, &c. Ornamentation of.....	W. R. Washburn.....	20,097	Aug. 12	52	908
Flower-pot.....	J. G. Whilldin.....	20,034	July 15	52	312
Flower-pot.....	J. G. Whilldin.....	20,055	July 22	52	462
Flower-pot.....	J. G. Whilldin.....	20,133	Sept. 2	52	1374
Flower-pot.....	J. G. Whilldin.....	{ 20,335 } to 20,337	Nov. 18	53	926
Flushing-tank.....	A. F. Blesch and J. Herrmann.....	19,850	May 27	51	1310
Fork, &c.....	J. T. Curran.....	19,650	Feb. 18	50	843
Forks, spoons, &c.....	G. H. Balch.....	20,051	July 22	52	461
Fringe.....	T. H. Bartmann.....	20,171	Sept. 30	52	1954
Gallon.....	C. Weinberg.....	19,727	Mar. 25	50	1596
Game-board.....	F. H. Argersinger.....	20,117	Aug. 26	52	1229
Gas-pipe band.....	W. H. Berger.....	19,673	Mar. 4	50	1136
Gate.....	J. McLean.....	{ 19,771 } 19,772	Apr. 22	51	482
Gimp.....	C. Salathe.....	19,585	Jan. 14	50	170
Glass ornamentation.....	W. L. Pilkington.....	{ 19,643 } 19,644	Feb. 11	50	713
Glass. Ornamentation of.....	E. F. Chance.....	19,707	Mar. 18	50	1452
Glass. Ornamentation of.....	E. F. Chance.....	20,044	July 22	52	461
Glass. Ornamentation of.....	W. L. Pilkington.....	19,939	June 24	51	1950
Glass vessel.....	J. Proeger.....	20,079	Aug. 5	52	756
Glassware.....	J. G. Lyon.....	20,411	Dec. 16	53	1576
Glassware. Ornamentation of.....	W. H. Hawken.....	19,780	Apr. 29	51	628
Glassware. Ornamentation of.....	T. G. Hawkes.....	19,865	June 3	51	1471
Glassware. Ornamentation of.....	T. G. Hawkes.....	20,132	Sept. 2	52	1374
Glassware. Ornamentation of.....	T. G. Hawkes.....	20,257	Nov. 4	53	605
Glassware. Ornamentation of.....	L. B. Martin.....	20,018	July 15	52	311
Globe or shade.....	J. Webb.....	20,296	Nov. 11	53	762
Globe or shade.....	J. Webb.....	20,299	Nov. 11	53	762
Halter-trimming.....	J. N. Bull.....	19,676	Mar. 4	50	1136
Hame.....	C. B. Rosenburgh.....	20,235	Oct. 21	53	280
Hame line-ring.....	W. B. Hayden.....	19,761	Apr. 15	51	302
Hammer.....	D. L. Melvin.....	20,017	July 15	52	311
Hammer.....	C. Ottinger.....	19,689	Mar. 4	50	1136
Hammer.....	J. C. Richardson.....	20,247	Oct. 28	53	436
Hammock-stretcher.....	J. B. Patterson.....	20,102	Aug. 12	52	908
Hand-bag. Lady's.....	O. A. Lehman.....	20,153	Sept. 9	52	1542
Hand-wheel.....	F. J. Ferrell.....	20,056	July 29	52	610
Handle for spoons, &c.....	A. F. Jackson.....	{ 20,427 } 20,428	Dec. 23	53	1744
Handle for canes, umbrellas, &c.....	C. L. Dreher.....	{ 19,844 } to 19,846	May 20	51	1136
Handle for canes, umbrellas, &c.....	C. L. Dreher.....	19,853	May 27	51	1310
Handle for canes, umbrellas, &c.....	C. L. Dreher.....	19,859	May 27	51	1310
Handle for pulling traps.....	C. H. Gurney.....	19,980	July 1	52	1
Handle for sleighs, &c.....	G. S. Caldwell.....	19,758	Apr. 15	51	302
Handle for sleighs, doors, &c.....	G. S. Caldwell.....	19,561	Jan. 7	50	2
Handle for spoons, &c.....	A. F. Jackson.....	{ 20,077 } 20,078	Aug. 5	52	756
Handle for spoons, &c.....	W. Wilkinson.....	20,119	Aug. 26	52	1229
Handle for spoons and forks.....	A. G. Rogers.....	20,113	Aug. 26	52	1229
Handle for spoons, forks, &c.....	R. Leding.....	{ 20,338 } 20,339	Nov. 18	53	926
Handle for spoons, forks, &c.....	J. Mason.....	20,381	Dec. 9	53	1112
Hardware. Ornamentation of builders'.....	W. Gorman.....	19,646	Feb. 11	50	711
Harness breast-straps. Pad for.....	J. S. Cusson.....	20,277	Nov. 11	53	762
Hat-band.....	W. T. Brigham.....	20,255	Nov. 4	53	605
Hat-rack.....	G. Merkel.....	20,024	July 15	52	312
Hedge-knife.....	A. C. French.....	19,898	June 10	51	1624
Hinge.....	G. S. Barkentin.....	20,082	Aug. 12	52	907
Hob.....	T. McDonough.....	20,188	Oct. 7	53	2

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Hoe. Weeding.....	J. W. Douglas.....	19,562	Jan. 7	50	2
Hoods, &c. Ornament for.....	C. T. La Tour.....	19,867	June 3	51	1471
Hose-nozzle.....	C. W. Pearsall.....	19,908	June 17	51	1788
Hose-supporter clasp.....	M. Feldmann.....	19,857	May 27	51	1310
Hosiery.....	S. Vickers.....	{ 19,916 to 19,919 20,083 }	June 17	51	1788
House. Exterior of a.....	W. K. Benedict.....	{ 20,085 to 20,085 }	Aug. 12	52	907
House. Exterior of a.....	C. M. Dissosway.....	20,098	Aug. 12	52	908
House. Exterior of a.....	A. Lacroix, Jr.....	{ 20,087 to 20,090 20,091 }	Aug. 12	52	908
House. Exterior of a.....	A. B. Morison.....	{ 20,093 to 20,093 }	Aug. 12	52	908
Ice-cream. Receptacle for.....	W. F. Hunt.....	20,075	Aug. 5	52	756
Indicator.....	F. G. Dieterich and J. U. O'Meara.....	20,121	Aug. 26	52	1230
Inkstand.....	L. B. Martin.....	19,953	July 1	52	1
Inkstand.....	C. McKarahan.....	20,211	Oct. 21	53	250
Inkstand-cover.....	J. G. Lyon.....	20,046	July 22	52	461
Ironing-table.....	W. Hicks.....	19,852	May 27	51	1310
Jar and lid.....	R. W. Binns.....	20,293	Nov. 11	53	762
Jars. Surface ornamentation of.....	G. M. Irwin.....	20,059	July 29	52	610
Jewel-setting.....	N. L. Ripley.....	19,830	May 6	51	810
Jewel-setting.....	N. L. Ripley.....	20,025	July 15	52	312
Jeweler's finding-strip.....	E. S. Dodge.....	19,834	May 13	51	972
Jug.....	R. W. Binns.....	20,062	July 29	52	610
Jug or vase.....	R. W. Binns.....	20,063	July 29	52	610
Kitchen rack.....	J. H. Morse.....	19,907	June 17	51	1788
Knife.....	G. W. Steding.....	20,334	Nov. 18	53	926
Knitted fabric.....	R. M. Hampton.....	20,111	Aug. 26	52	1229
Knitted fabric.....	G. D. Kinsey.....	19,664	Feb. 25	50	993
Knitted fabric.....	P. S. Kinsey.....	19,647	Feb. 11	50	714
Knitted fabric.....	F. L. Wiggins.....	20,213	Oct. 21	53	280
Kuob. Door.....	H. Miller.....	19,976	July 1	52	1
Knobs and locks. Escutcheon-plate for door.....	G. S. Barkentin.....	{ 20,035 20,036 }	July 15	52	312
Kunrl.....	H. F. Cook.....	{ 20,348 20,349 }	Nov. 25	53	1096
Knurling-tool.....	C. Schaefer.....	20,317	Nov. 18	53	926
Lamp.....	G. W. Blair.....	19,718	Mar. 25	50	1596
Lamp.....	G. W. Bayley.....	20,053	July 22	52	761
Lamp-chimney.....	C. Hamm.....	19,836	May 13	51	972
Lamp-chimney.....	J. McMurtry.....	19,838	May 13	51	972
Lamp-chimney.....	E. J. Rambo.....	20,183	Sept. 30	52	1954
Lamp-chimney cap.....	F. C. Zanetti.....	20,114	Aug. 26	52	1229
Lamp. Coach.....	F. C. Cannon.....	{ 19,751 19,752 }	Apr. 8	51	160
Lamp-hanger.....	W. W. Willits.....	19,832	May 6	51	810
Lamp-screen.....	A. Hammerstein.....	19,996	July 1	52	1
Last.....	J. Condell.....	19,801	May 6	51	810
Latch-case.....	G. S. Barkentin.....	19,553	Jan. 7	50	1
Latch-case.....	R. W. E. Christesen.....	19,639	Feb. 11	50	713
Lathing. Metallic.....	L. L. Sagendorph.....	19,721	Mar. 25	50	1596
Lock-case.....	R. W. E. Christesen.....	20,099	Aug. 12	52	908
Machine-frame.....	F. H. Richards.....	19,745	Apr. 1	51	2
Magnet.....	E. Weston.....	19,896	June 10	51	1624
Magnet.....	E. Weston.....	20,318	Nov. 18	53	926
Mantel.....	W. Anderson.....	{ 19,872 19,873 }	June 3	51	1471
Mantel.....	W. Anderson.....	{ 19,875 to 19,877 20,106 }	June 3	51	1471
Mat.....	C. Carr.....	{ 20,108 to 20,108 }	Aug. 26	52	1229
Match-box.....	H. P. Fairchild.....	19,563	Jan. 7	50	2
Match-box.....	H. P. Fairchild.....	19,894	June 10	51	1624
Match-box.....	H. P. Fairchild.....	19,910	June 17	51	1788
Match-box.....	H. P. Fairchild.....	20,256	Nov. 4	53	605
Match-box.....	A. Thommen.....	20,200	Oct. 14	53	142
Match-box and stamp-holder.....	M. Brooks and D. S. Porter.....	19,574	Jan. 14	50	170
Measuring-instruments. Case for.....	E. Weston.....	20,354	Dec. 2	53	1262
Meat-supporters. Socket for.....	F. Steltz.....	19,587	Jan. 14	50	170
Medal.....	M. Weinschenk and W. Boldenweck.....	{ 20,195 20,196 }	Oct. 7	53	2
Mirror-frame, &c.....	B. F. Burnett.....	20,136	Sept. 9	52	1542
Miter-box.....	H. C. Marsh.....	19,629	Jan. 28	50	439
Money-box.....	M. Newman and G. H. Bennett.....	19,569	Jan. 7	50	2
Mop-rubber.....	B. C. Smith and A. T. Jackson.....	20,152	Sept. 9	52	1542
Music-rack.....	W. P. Haynes.....	20,168	Sept. 23	52	1812
Neck-wear. Gentlemen's.....	L. S. Hills.....	19,597	Jan. 21	50	308
Necktie.....	J. H. Fleisch.....	19,760	Apr. 15	51	302
Nut for mica-frame bolts.....	W. J. Keep.....	19,645	Feb. 11	50	713
Nut-lock. Ornamental.....	J. G. Ware.....	20,237	Oct. 28	53	436
Observatory.....	J. N. Schipek and A. Vedovelli.....	20,004	July 8	52	164
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 19,783 to 19,794 19,824 }	Apr. 29	51	628
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 19,829 to 19,829 }	May 6	51	810

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 19,930 to 19,938 20,383 }	June 24	51	1950
Oil-cloth.....	C. T. and V. E. Meyer.....	{ 20,399 to 20,366 }	Dec. 9	53	1412
Oiler.....	W. Vogel.....	20,217	Oct. 21	53	280
Organ-case.....	L. K. Fuller.....	20,342	Nov. 18	53	926
Organ-case.....	L. K. Fuller.....	20,419	Dec. 23	53	1744
Organ-case.....	T. Hill.....	19,915	June 17	51	1788
Ornamentation of vessels. Surface.....	J. Proeger.....	19,694	Mar. 11	50	1299
Paddle.....	G. Raibert, Jr.....	20,161	Sept. 23	52	1812
Padlock.....	M. Jackson.....	20,016	July 15	52	311
Panel.....	A. B. Cameron.....	19,590	Jan. 21	50	308
Panel.....	A. B. Cameron.....	{ 20,360 to 20,362 }	Dec. 2	53	1262
Panel.....	A. B. Cameron.....	{ 20,366 to 20,367 }	Dec. 9	53	1412
Panel.....	A. B. Cameron.....	{ 20,380 to 20,413 }	Dec. 9	53	1412
Panel.....	A. B. Cameron.....	{ 20,416 to 20,194 }	Dec. 16	53	1576
Paper-hangings.....	J. H. Lange.....	20,194	Oct. 7	53	2
Paper-weight. Glass.....	H. Miller.....	19,858	May 27	51	1310
Parasol.....	S. Heiter.....	{ 19,652 to 19,653 }	Feb. 18	50	843
Paving block or brick.....	C. V. Bartels.....	19,714	Mar. 25	50	1596
Pen-case.....	C. W. Boman.....	20,158	Sept. 23	52	1812
Pen case. Fountain.....	C. W. Boman.....	20,156	Sept. 16	52	1670
Pen-holder.....	E. S. Johnson, Jr.....	20,215	Oct. 21	53	2-0
Pen-holder.....	G. W. Mabie.....	20,040	July 15	52	312
Pen-tip.....	C. W. Boman.....	20,157	Sept. 23	52	1812
Pepper-pot or salt-shaker.....	J. C. Arensberg.....	20,042	July 22	52	461
Perfume-holder.....	H. Tappan.....	19,843	May 13	51	972
Photographic album.....	N. Lochbaum.....	19,720	Mar. 25	50	1596
Photographic card-board.....	E. Shepperd.....	20,350	Nov. 25	53	1096
Pile fabrics. Ornamentation of.....	H. Levy.....	19,906	June 17	51	1788
Pillow-cases, &c. Ornamentation of.....	F. S. Pinkus.....	20,370	Dec. 9	53	1412
Pipe bracket. Steam.....	J. H. Alexander.....	19,588	Jan. 21	50	308
Pipe-coupling.....	J. T. Kelly.....	20,236	Oct. 28	53	436
Pipe. Drain or other.....	E. W. Carter.....	19,731	Apr. 1	51	2
Poker.....	J. W. Hoop.....	20,142	Sept. 9	52	1542
Pot or jar.....	A. Cousen.....	19,609	Jan. 28	50	439
Pot or jar.....	C. W. Meinecke.....	19,762	Apr. 15	51	302
Precious or imitation stone.....	J. G. C. Cottier.....	20,043	July 22	52	461
Printed fabric.....	S. W. Johnson.....	19,564	Jan. 7	50	2
Purse.....	S. Cottle.....	19,591	Jan. 21	50	308
Puzzle-board.....	G. W. Spayd.....	19,756	Apr. 8	51	160
Quilting fabric.....	G. Raab.....	19,848	May 27	51	1310
Quilting fabric.....	C. Schultz.....	19,928	June 24	51	1950
Quilting fabric.....	C. Schultz.....	20,019	July 15	52	311
Radiator.....	L. R., G. C., and J. J. Blackmore.....	20,409	Dec. 16	53	1576
Radiator.....	J. J. Fisher.....	20,131	Sept. 2	52	1374
Radiator.....	C. R. Nelson.....	19,739	Apr. 1	51	2
Radiator. Horizontal.....	L. R., G. C., and J. J. Blackmore.....	20,254	Nov. 4	53	605
Radiator. Hot-water or steam.....	E. Gurney.....	19,625	Jan. 28	50	439
Radiator. Hot-water or steam.....	C. Levey.....	19,627	Jan. 28	50	439
Raisin-boxes. Inside wrapper for.....	H. J. Crocker.....	19,874	June 3	51	1471
Range.....	C. F. Walther.....	20,359	Dec. 2	53	1262
Range and boiler.....	H. T. and C. A. Spring.....	20,437	Dec. 23	53	1744
Range. Cooking.....	J. L. Gobeille.....	20,045	July 22	52	461
Range. Gas.....	W. W. Goodwin.....	{ 19,678 to 19,681 }	Mar. 4	50	1136
Range. Gas.....	W. W. Goodwin.....	19,734	Apr. 1	51	2
Range or stove.....	F. L. Sheppard and F. Ritchie.....	19,797	Apr. 29	51	628
Refrigerator-casing.....	A. J. Chase.....	{ 20,002 to 20,003 }	July 8	52	164
Register.....	V. M. Moore.....	19,839	May 13	51	972
Registering apparatus. Dial-plate for.....	G. C. Tewksbury.....	20,005	July 8	52	164
Residence. Exterior of a.....	W. K. Benedict.....	{ 19,554 to 19,559 }	Jan 7	50	1
Residence. Exterior of a.....	A. Lacroix, Jr.....	19,565	Jan. 7	50	2
Roofing-tile.....	G. H. Babcock.....	20,232	Oct. 21	53	280
Roofing-tile.....	G. H. Babcock.....	{ 20,401 to 20,408 }	Dec. 16	53	1576
Rug, &c.....	F. H. Bartlett.....	20,123	Sept. 2	52	1373
Rug.....	R. J. Grubb.....	19,920	June 24	51	1949
Rug, &c.....	F. A. Haas.....	20,125	Sept. 2	52	1373
Rug.....	W. McFadyen.....	19,583	Jan. 14	50	170
Rug, &c.....	G. Meguin.....	20,126	Sept. 2	52	1374
Rug.....	J. Pegel.....	20,369	Dec. 9	53	1412
Rug.....	J. Pegel.....	{ 20,372 to 20,373 }	Dec. 9	53	1412
Rug.....	J. Pegel.....	20,435	Dec. 23	53	1744
Rug.....	A. Petzold.....	19,940	June 24	51	1950
Rug.....	A. Petzold.....	{ 20,181 to 20,182 }	Sept. 30	52	1954
Rug.....	A. Petzold.....	20,436	Dec. 23	53	1744
Rug.....	W. T. Smith.....	{ 19,605 to 19,607 }	Jan. 21	50	308

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
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Rug	W. T. Smith	20,165	Sept. 23	52	1812
Rug, &c	G. Urstadt, Jr	{ 20,127 } { 20,128 }	Sept. 2	52	1374
Rug	A. Weiss	19,927	June 24	51	1950
Rug	W. G. Wilson	{ 19,632 } { 19,633 }	Jan. 28	50	440
Rug or carpet	G. Urstadt, Jr	{ 20,129 } { 20,130 }	Sept. 2	52	1374
Sachet-bag	C. T. Rogers	19,774	Apr. 22	51	482
Saddle-tree seats. Filling-block for	O. Taber	19,631	Jan. 28	50	440
Salt or pepper box	J. T. Harris	20,140	Sept. 9	52	1542
Sash-cord fastener	G. W. Lee	19,719	Mar. 25	50	1596
Sash-cord-guide face-plate	S. Palmer	19,570	Jan. 7	50	2
Saw-handle	C. A. McCann	19,904	June 10	51	1624
Scale-beam for grain-weighers	F. H. Richards	19,833	May 6	51	810
Scale weigh-beam standard	H. G. Beuckmann	20,022	July 15	52	311
Scarf-fastener	H. Berliner	20,010	July 15	52	311
Scissors or shears	R. S. Pearsall	20,422	Dec. 23	53	1744
Scraper	B. F. Spruill	19,979	July 1	52	1
Settee	W. Adams	19,767	Apr. 22	51	482
Sewer-block	A. Lamond	20,357	Dec. 2	53	1262
Sewer-grate	H. A. Palmer	19,636	Feb. 4	50	564
Shelf-bracket	M. D. Jones	20,233	Oct. 21	53	280
Shipping and exhibiting case	A. L. Dyke	20,104	Aug. 22	52	908
Shoe	E. L. Goding	20,109	Aug. 26	52	1229
Shoe	J. E. Tibbetts	19,912	June 17	51	1788
Show card or stand	E. C. Goetting	20,124	Sept. 2	52	1373
Show card or stand	E. C. Goetting	20,155	Sept. 9	52	1542
Show-case	J. J. Dunn	20,154	Sept. 9	52	1542
Show-case	F. H. Starling	19,571	Jan. 7	50	2
Silver or other table-ware. Ornamentation of	S. W. Babbitt	19,701	Mar. 18	50	1452
Sink-trap	H. C. Montgomery	20,421	Dec. 23	53	1744
Sinks, &c. Leg for	W. C. Peet	19,698	Mar. 11	50	1300
Sinks. Trap-standard for	F. J. Torrance and J. B. Geyser	19,665	Feb. 25	50	994
Skirt	G. Hargrave	20,295	Nov. 11	53	762
Slate-frames. Pattern for the ornamentation of	S. Marks	20,245	Oct. 28	53	436
Smoker's set	J. C. Dowd	20,209	Oct. 21	53	280
Soap-dish	G. W. Williams	19,668	Feb. 25	50	994
Society-emblem	M. S. Jones	19,862	May 27	51	1310
Spoon	M. A. Brockway	19,909	June 17	51	1788
Spoon, &c	G. C. Edwards	19,770	Apr. 22	51	482
Spoon, &c	G. L. Crowell, Jr	19,802	May 6	51	810
Spoon, &c	H. A. Pistorius	19,851	May 27	51	1310
Spoon	W. L. Wilks	19,649	Feb. 11	50	714
Spoon. Mustache	G. W. Thompson	19,926	June 24	51	1949
Spoon or fork-handle	A. G. Rogers	{ 19,840 } { 19,841 }	May 13	51	972
Spoon or similar article	G. Myrick and W. Reller	19,709	Mar. 18	50	1452
Spoon. Soup	N. A. Wheeler	20,340	Nov. 18	53	926
Spoons, &c	J. T. Cunran	20,173	Sept. 30	52	1954
Spoons, &c. Handle for	S. T. Adams	20,297	Nov. 11	53	762
Staking-tool	E. Rivett	19,637	Feb. 4	50	564
Stamp box. Postage	A. Thommen	19,925	June 24	51	1949
Stand. Ornamental	G. R. Buffham	20,425	Dec. 23	53	1744
Statuary. Portable niche for	Z. Rigali	20,248	Oct. 28	53	436
Statue	W. Tweeddale	{ 20,020 } { 20,021 }	July 15	52	311
Statue of a fireman	C. G. Demuth	20,426	Dec. 23	53	1744
Stool. Piano	M. Tonk	19,638	Feb. 4	50	564
Stove	T. I. Rankin	19,662	Feb. 18	50	843
Stove. Cooking	H. C. Bascom and F. Ritchie	20,105	Aug. 26	52	1229
Stove. Cooking	H. C. Bascom and F. Ritchie	20,319	Nov. 18	53	926
Stove. Cooking	J. D. Foster	20,115	Aug. 26	52	1229
Stove. Cooking	C. P. White and R. E. Warner	20,069	July 29	52	610
Stove. Cooking	W. H. Wilkinson	20,072	Aug. 5	52	756
Stove. Gas	C. F. Adams and A. W. Rivett	19,700	Mar. 18	50	1452
Stove. Heating	H. C. Bascom and F. Ritchie	19,768	Apr. 22	51	482
Stove. Heating	H. C. Bascom and F. Ritchie	{ 20,189 } to { 20,191 }	Oct. 7	53	2
Stove. Heating	H. C. Bascom and F. Ritchie	20,320	Nov. 18	53	926
Stove. Heating	H. C. Bascom and F. Ritchie	{ 20,423 } { 20,424 }	Dec. 23	53	1744
Stove. Heating	I. De Haven	20,208	Oct. 21	53	280
Stove. Heating	J. Dwyer	19,903	June 10	51	1624
Stove. Heating	W. J. Keep	19,921	June 24	51	1949
Stove. Heating	W. J. Keep and C. Wipfler	19,929	June 24	51	1950
Stove. Heating	W. H. Landers and F. Kernan, Jr	20,438	Dec. 30	53	1890
Stove. Heating	J. K. McLaughlin	20,418	Dec. 16	53	1576
Stove. Heating	F. Ritchie	19,914	June 17	51	1788
Stove. Oil	J. Goldstein and I. Block	20,139	Sept. 9	52	1542
Stove or range. Cooking	H. C. Bascom and R. Galbraith	20,240	Oct. 23	53	436
Stove-plate	W. W. Noble	20,100	Aug. 12	52	908
Stoves. Burner for oil or gas	W. H. Munn	19,641	Feb. 11	50	713
Sunshade	C. Falcinaigne	19,635	Feb. 4	50	564
Suspenders. Back-piece for	E. Gufmann	19,735	Apr. 1	51	2
Table-cloth, &c	F. S. Pinkus	20,101	Aug. 12	52	908
Table-cover, &c	J. Pegel	20,180	Sept. 30	52	1954
Table-cover, &c	A. Petzold	20,239	Oct. 28	53	436
Table-knife	A. W. Cox	20,341	Nov. 18	53	926
Table or stand. Rustic	J. T. Holder	19,837	May 13	51	972
Table-ware	J. Barlow	19,572	Jan. 14	50	170
Table-ware	J. E. Miller	19,871	June 3	51	1471
Table-ware. Surface ornamentation of	H. C. Schrader	19,842	May 13	51	972

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
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Tack-puller	C. H. Gurney	19,981	July 1	52	1
Tape. Ornamentation of	O. A. Steere	19,658	Feb. 18	50	843
Terret	P. Gschwend	19,661	Feb. 18	50	843
Thimble	H. A. Wehlman	19,750	Apr. 1	51	2
Tile. Roofing	G. H. Bahcock	{ 19,888 to 19,890 }	June 10	51	1624
Toilet-stand for babies	C. M. Burnett	19,706	Mar. 18	50	1452
Tool. Combination	F. J. Herrick	19,913	June 17	51	1788
Tool-handle	J. T. Pedersen	20,358	Dec. 2	53	1262
Toothpick-holder	J. Haley	20,186	Oct. 7	53	2
Tower	T. Reichard	20,095	Aug. 12	52	908
Toy	C. E. Herrick	20,187	Oct. 7	53	2
Toy bank	S. Bretzfeld	20,375	Dec. 9	53	1412
Toy money-box	Z. T. Hall	20,076	Aug. 5	52	756
Toy savings-bank	P. Adams	20,007	July 15	52	311
Toy savings-bank	J. F. Lockwood	20,086	Aug. 12	52	908
Tray. Wash	F. J. Torrance	19,711	Mar. 18	50	1452
Trimming	A. W. Durr	19,692	Mar. 11	50	1299
Trimming	I. Goodman	19,610	Jan. 28	50	439
Trimming	C. Kelsh	19,581	Jan. 14	50	170
Trimming	F. Leschhorn	19,626	Jan. 28	50	439
Trimming. Dress or upholstery	B. Lipper	20,054	July 22	52	462
Trousers-clasp	I. Blum	19,952	July 1	52	1
Truck frame. Electric-car	J. Stephenson	19,688	Mar. 4	50	1136
Truss-webbing	G. V. House, Jr.	19,905	June 17	51	1788
Twine-box	B. D. Milliken	19,691	Mar. 4	50	1136
Type-border. Combination	H. Ihlenburg	19,659	Feb. 18	50	843
Type-border. Font of	R. Gniewitz and E. C. Ruthven	19,821	May 6	51	810
Type. Font of	H. Ihlenburg	19,660	Feb. 18	50	843
Type. Font of printing	W. Barnhart	20,382	Dec. 9	53	1412
Type. Font of printing	M. M. Bear	20,204	Oct. 14	53	142
Type. Font of printing	C. H. Beeler, Jr.	20,103	Aug. 12	52	908
Type. Font of printing	L. B. Benton	20,120	Aug. 26	52	1230
Type. Font of printing	H. Brehmer	{ 19,674 to 19,675 }	Mar. 4	50	1136
Type. Font of printing	H. Brehmer	20,192	Oct. 7	53	2
Type. Font of printing	W. F. Capitain	19,800	May 6	51	810
Type. Font of printing	R. Gniewitz	20,057	July 29	52	610
Type. Font of printing	R. Gniewitz	20,364	Dec. 2	53	1262
Type. Font of printing	R. Gniewitz	20,417	Dec. 16	53	1576
Type. Font of printing	J. Guidentine	19,663	Feb. 25	50	993
Type. Font of printing	C. E. Heyer	20,205	Oct. 14	53	142
Type. Font of printing	H. Ihlenburg	20,169	Sept. 23	52	1812
Type. Font of printing	H. Ihlenburg	20,198	Oct. 14	53	142
Type. Font of printing	W. W. Jackson	19,753	Apr. 8	51	160
Type. Font of printing	W. W. Jackson	19,810	May 6	51	810
Type. Font of printing	E. Lausckhe and J. Schmohl	19,997	July 1	52	1
Type. Font of printing	E. Lausckhe and J. Schmohl	20,244	Oct. 28	53	436
Type. Font of printing	E. C. Ruthven	19,710	Mar. 18	50	1452
Type. Font of printing	J. Schmohl and E. Lausckhe	19,722	Mar. 25	50	1596
Type. Font of printing	J. Schmohl and E. Lausckhe	19,775	Apr. 22	51	482
Type. Font of printing	C. J. Whipple	20,253	Nov. 4	53	605
Umbrella-ferrule	O. M. Smith	20,249	Oct. 28	53	436
Umbrellas. Tip-cup for	L. H. Clogg	{ 20,275 to 20,276 }	Nov. 11	53	762
Umbrellas. Tip-cup for	L. H. Clogg	20,290	Nov. 11	53	762
Vase	R. W. Binns	20,060	July 29	52	610
Vase. Flower	H. Miller	19,977	July 1	52	1
Vase, jug, or ewer	R. W. Binns	20,061	July 29	52	610
Vehicle-spring	C. E. Chadwick	19,732	Apr. 1	51	2
Vending apparatus. Front frame for	C. H. Thompson	19,757	Apr. 8	51	160
Vending-machine front	F. G. Dieterich	20,251	Nov. 4	53	605
Vest. Lady's	L. J. Haas	19,687	Mar. 4	50	1136
Violin-case	H. Kleinelck	19,736	Apr. 1	51	2
Wagon-body	H. C. Armstrong	20,206	Oct. 14	53	142
Wagon-body	H. C. Armstrong	20,214	Oct. 21	53	280
Wagon. Laundry	H. C. Kroner	20,122	Aug. 26	52	1230
Wagons, sleighs, &c. Guard-rail for	G. S. Caldwell	19,893	June 10	51	1624
Wall and ceiling covering	P. Groeber	{ 19,611 to 19,624 }	Jan. 28	50	439
Wall and ceiling covering	P. Groeber	19,670	Feb. 25	50	994
Wall and ceiling covering	C. C. Hiscoe	{ 19,598 to 19,604 }	Jan. 21	50	308
Wall-paper	C. Booze	{ 20,218 to 20,231 }	Oct. 21	53	280
Wall-paper	C. Booze	{ 20,321 to 20,333 }	Nov. 18	53	926
Wash-board	S. R. Sargent	{ 20,378 to 20,379 }	Dec. 9	53	1412
Washing-machine dasher	O. W. Barnard	19,856	May 27	51	1310
Watch-case	T. Benfield	19,589	Jan. 21	50	308
Watch-case	T. Benfield	19,634	Feb. 4	50	564
Watch-pendant	J. C. Dueber	20,202	Oct. 14	53	142
Water-closets. Seat-plate for	J. Reid	20,346	Nov. 18	53	926
Weighing-machine frame. Grain	F. H. Richards	19,796	Apr. 29	51	628

ALPHABETICAL LIST OF TRADE-MARKS.

Title.	Name.	No.	Date.	Official Gazette.	
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Albuminates. Soluble metal	H. G. Drees	17,586	Feb. 25	50	994
Almond paste for making macaroons	Chapman & Smith Company	18,416	Sept. 9	52	1542
Ammonia. Prepared	Lasker Brothers	18,545	Oct. 21	53	280
Anæsthetic. Local	M. W. Cobb and E. D. Merriam	17,543	Feb. 18	50	844
Analgesic preparations	A. F. Poirrier	18,413	Sept. 9	52	1542
Anodyne	Lee, Johnson & Co.	17,708	Mar. 25	50	1596
Anodyne medicine	J. T. Smith	17,556	Feb. 18	50	844
Anti-febriles	Farbenfabriken, vormals Fr. Bayer & Co.	18,637	Nov. 18	53	926
Antibacterials, aseptics, antiseptics, and antizymotics	E. Merck	18,323	Aug. 19	52	1066
Antiseptic	C. J. Rademaker	18,650	Nov. 25	53	1096
Antiseptic astringents	E. T. Jester & Co.	17,912	May 13	51	972
Antiseptic material in solid form	C. J. Bailey	17,697	Mar. 25	50	1596
Antiseptic powder	Farbenfabriken, vorm. Friedr. Bayer & Co.	17,393	Jan. 14	50	170
Antiseptics and germicides	E. T. Jester & Co.	18,409	Sept. 9	52	1542
Apparel. Feminine	C. Caen	18,603	Nov. 11	53	762
Asparagus	L. B. Sidway	18,151	July 8	52	164
Astringents, expectorants, vermifuges, liniments, and hair-restoratives.	Van Vleet & Co.	18,347	Aug. 26	52	1230
Augers	C. Whitehouse & Sons	18,276	Aug. 5	52	756
Axes	Kelly Axe Manufacturing Company	18,084	June 24	51	1950
Axle-grease	Star Manufacturing Company	18,494	Oct. 7	53	2
Bacon	F. Whittaker & Sons	18,691	Dec. 9	53	1412
Bacon. Breakfast	T. M. Sinclair & Co.	17,525	Feb. 11	50	714
Baking-powder	J. H. Brookmire & Co.	17,362	Jan. 7	50	2
Baking-powder	T. P. Burke	17,435	Jan. 28	50	440
Baking-powder	Cleveland Baking Powder Company	18,058	June 17	51	1788
Baking-powder	G. H. Gibson & Brother	17,821	Apr. 29	51	628
Baking-powder	C. K. Groff	18,110	July 1	52	2
Baking-powder	Lievre, Fricke & Co.	17,925	May 20	51	1176
Baking-powder	Lievre, Fricke & Co.	17,926	May 20	51	1136
Baking-powder	W. H. Miner	18,469	Sept. 30	52	1954
Baking-powder	Parrish Bros	17,653	Mar. 11	50	1300
Baking-powder	W. S. Sammons	18,215	July 22	52	462
Baking-powder	G. Thalheimer	18,131	July 1	52	2
Baking-powder	Tone Bros	17,387	Jan. 7	50	2
Baking-powder	Vapor Baking Powder Co.	17,427	Jan. 21	50	308
Baking-powder	F. A. Waterhouse	18,028	June 10	51	1624
Balls. Playing	Keefe & Beccannon	18,121	July 1	52	2
Balm having both cosmetic and remedial qualities	C. J. Wilkins	17,908	May 13	51	972
Balsam for external and internal uses	B. S. Osborn	17,402	Jan. 14	50	170
Bananas	H. Dumois & Co.	18,460	Sept. 30	52	1954
Base-balls	J. C. Richard	17,683	Mar. 18	50	1452
Base-balls	J. C. Richard	17,739	Apr. 8	51	160
Base-balls, bats, caps, and belts	Steiner & Curnen	17,505	Feb. 4	50	564
Baskets	G. Gorton	18,312	Aug. 19	52	1066
Batteries for electric lighting and power purposes	United States Volta Electric Battery Company	18,437	Sept. 16	52	1670
Bearings. Anti-friction metals for journal	G. F. Bard	17,815	Apr. 29	51	628
Beef, spiced and seasoned. Extracts of	Armour & Co.	17,970	June 3	51	1471
Beer, ale, and porter	Hier & Burgweger	18,382	Sept. 2	52	1374
Beer, ale, porter, and other malt beverages	India Wharf Brewing Company	18,072	June 17	51	1788
Beer. Bottled lager	G. C. Sncro	17,836	Apr. 29	51	628
Beer. Lager	Bartholomay Brewery Company	18,350	Aug. 26	52	1230
Beer. Lager	Falk, Jung & Borchert Brewing Company	17,867	May 6	51	811
Beer. Lager	C. Joly	18,008	June 10	51	1624
Beer. Lager	Long Island Brewery	17,676	Mar. 18	50	1452
Beer. Lager	J. A. Medina	17,978	June 3	51	1472
Beer. Lager	F. Miller Brewing Company	17,893	May 6	51	812
Beer. Lager	Pfandler Vacuum Fermentation Company	18,231	July 29	52	610
Beer. Lager	G. Ringler & Company	18,178	July 15	52	312
Beer. Lager	P. Schoenhofen Brewing Company	17,461	Jan. 28	50	440
Beer. Lager	P. Schoenhofen Brewing Company	17,521	Feb. 11	50	714
Beer. Lager	P. Schoenhofen Brewing Company	17,602	Feb. 25	50	994
Beer. Lager	C. Weiler	18,644	Dec. 9	53	1412
Beer made of hops and malt	Singer & Wheeler	17,423	Jan. 21	50	308
Bells, alarm-bells, and door-bells. Call	New Departure Bell Company	17,455	Jan. 28	50	440
Belting and hose. Rubber	S. Ballard & Co.	17,843	May 6	51	810
Belting. Brass studs for machine	Greene, Tweed & Co.	18,379	Sept. 2	52	1374
Belting, hose, and packing. Rubber	Revere Rubber Company	17,604	Feb. 25	50	994
Beverages. Carbonated	Union Bottling Company	18,204	July 22	52	462
Beverages. Carbonated (aerated)	W. F. Roesen	18,188	July 15	52	312
Beverages. Frozen liquid	H. H. Livingston	17,648	Mar. 11	50	1300
Bicycles	Union Cycle Manufacturing Company	17,608	Mar. 4	50	1136
Bicycles, tricycles, and other velocipedes	A. J. Samuels	17,946	May 27	51	1310
Biscuits, crackers, and cakes	J. F. Werner	17,664	Mar. 11	50	1300
Biscuits, crackers, and wafers	Holmes & Coutts	17,417	Jan. 21	50	308
Biscuits, crackers, wafers, and similar articles	Holmes & Coutts	17,938	May 20	51	1136

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Bitters	H. Kantorowicz	18,344	Aug. 26	52	1230
Bitters	E. Lassig Co.	18,315	Aug. 16	52	1066
Bitters	R. Y. McWilliams	18,201	July 22	52	462
Bitters. Table	Rüther & Bendixen	17,882	May 6	51	811
Bitters. Tonic	Leavitt & Van Alstine	17,725	Apr. 1	51	2
Blackberry cordial	Rheinstrom Bros.	18,202	July 22	52	462
Blacking. Liquid and paste stove	S. S. Jewett & Co.	18,179	July 15	52	312
Blacking. Shoe	Wolf & Randolph	18,511	Oct. 7	53	2
Bleaching purposes. Chemical preparation for	Drevet Manufacturing Company	18,235	July 29	52	610
Blood-purifier and tonic remedy for internal and external use	N. E. Hickey	18,353	Aug. 26	52	1230
Blood-purifier entirely of vegetable origin	S. E. McCormick	17,783	Apr. 15	51	302
Blood purifiers and alteratives	B. C. Nye Medical and Chemical Syndicate	18,412	Sept. 9	52	1542
Blood-purifiers, tonics, and like remedies	W. S. Burnham	18,115	July 1	52	2
Blow-pipes	Globe Light and Heat Company	18,380	Sept. 2	52	1374
Blue for laundry purposes. Ball	O. J. Gude & Co.	18,708	Dec. 16	53	1576
Blue. Laundry	Carter, Dinsmore & Co.	17,585	Feb. 25	50	994
Blue. Laundry	Heller & Merz Company	17,777	Apr. 15	51	302
Blue. Wash	J. de Fremery & Co.	17,775	Apr. 15	51	302
Blue. Wash	J. de Fremery & Co.	17,901	May 13	51	972
Boilers. Compounds for preventing and removing scale in	W. J. Smith	18,161	July 8	52	164
Boilers. Compounds for removing scale from	C. H. Blake	18,310	Aug. 19	52	1066
Boilers. Metal for steam	A. T. Douthett	18,137	July 8	52	164
Boilers. Preparation for the prevention and removal of scale in steam	R. H. Cooper	18,341	Aug. 26	52	1230
Book-cases. Revoiving	J. Danner Manufacturing Company	17,613	Mar. 4	50	1136
Books, calendars, blotter-covers for writing-pads, and printed stationery. Blank	Clarke & Courts	18,612	Nov. 11	53	762
Books. Printed	R. Worthington	18,753	Dec. 30	53	1890
Books. Wood-bound blank	Pettibone, Wells & Co.	17,458	Jan. 28	50	440
Boots and shoes	Bemis & Fletcher	18,253	Aug. 5	52	756
Boots and shoes	I. Blyn & Sons	18,550	Oct. 28	63	436
Boots and shoes	E. W. Miller	18,471	Sept. 30	52	1954
Boots and shoes	J. F. Swain	17,463	Jan. 28	50	440
Boots and shoes	A. P. Tapley & Co.	17,837	Apr. 29	51	628
Boots and shoes. Bottom polish or finish for outsoles of	G. H. Taft	17,464	Jan. 28	50	440
Boots and shoes. Children's leather	J. F. Swain & Co.	17,607	Feb. 25	50	994
Boots and shoes. Ladies'	C. S. Grover	18,565	Oct. 28	53	436
Boots and shoes of all kinds	Rice & Hutchins	17,824	Apr. 29	51	628
Boots, shoes, and slippers	Rice & Hutchins	18,304	Aug. 12	52	908
Boots, shoes, and slippers	Rice & Hutchins	18,305	Aug. 12	52	908
Boots, shoes, and slippers	H. Robitsek & Co.	17,991	June 3	51	1472
Boots, shoes, slippers, hosiery, and insoles	Smith, Waters & Havens	17,686	Mar. 18	50	1452
Braces and suspenders	P. Bailly	18,132	July 1	52	2
Brandy	A. Heller & Bro.	18,352	Aug. 26	52	1230
Brandy	E. R. Martin & Co.	18,258	Aug. 5	52	756
Brandy	E. R. Martin & Co.	18,259	Aug. 5	52	756
Brandy	H. W. McIntyre	17,709	Mar. 25	50	1596
Brandy. Blackberry	Rheinstrom Bros.	18,295	Aug. 12	52	908
Brass pins	A. Shrimpton & Sons	18,530	Oct. 14	53	142
Bread	Loew & Weaver	18,743	Dec. 30	53	1890
Bread-raising materials	E. R. Durkee & Co.	18,374	Sept. 2	52	1374
Brick shapes and tiles. Fire	Kiesel Fire Brick Company	17,876	May 6	51	811
Brick shapes and tiles. Fire	Kiesel Fire Brick Company	17,877	May 6	51	811
Bromine water and lithia water	Bowden Lithia Springs Co.	18,646	Nov. 25	53	1096
Brushes. Tooth	F. V. Newman and R. A. Kinkale	17,381	Jan. 7	50	2
Buckboards	Biddle & Smart Co.	18,386	Sept. 2	52	1374
Buckles	J. Gump	17,872	May 6	51	811
Buckskin leather. Preparation for whitening and coloring	J. Pickering & Sons	18,578	Nov. 4	53	606
Buggies and light carriages	C. M. Blydenburgh	17,531	Feb. 11	50	714
Buggies and other spring vehicles	J. H. Mahler	18,002	June 3	51	1472
Building materials. Certain named	Houston & Harris	18,266	Aug. 5	52	756
Butter, cheese, eggs, and lard	C. H. Saunders	17,496	Feb. 4	50	564
Butter. Creamery	P. G. Henderson	17,533	Feb. 11	50	714
Button-fasteners. Three-pronged	Heaton-Peninsular Button Fastener Company	17,749	Apr. 8	51	160
Buttons	Rolfes & Co.	18,385	Sept. 2	52	1374
Buttons and necktie-holders	Howard & Son	18,614	Nov. 11	53	762
Buttons, clasps, and spring-fasteners for gloves and apparel	Consolidated Fastener Company	18,707	Dec. 16	53	1576
Buttons covered with pure-dye sewing-silk braid	Newell Brothers Manufacturing Company	18,451	Sept. 23	52	1812
Buttons covered with pure-dye sewing-silk braid	Newell Brothers Manufacturing Company	18,452	Sept. 23	52	1812
Buttons of jet and metal	L. Prange	17,383	Jan. 7	50	2
Cabs	J. T. Gurney	18,405	Sept. 9	52	1542
Calf-skins. Domestic	J. G. Schmidt	18,507	Oct. 7	53	2
Candies and confections	E. C. Rich Company	18,607	Nov. 11	53	762
Candy	P. C. Wiest & Co.	17,957	May 27	51	1310
Candy and rock-candy sirup. Rock	Dryden & Palmer	17,733	Apr. 8	51	160
Candles	F. Baumer	17,667	Mar. 18	50	1452
Candles. Beeswax	Miller, Hoffman & Co.	18,591	Nov. 4	53	606
Candles. Wax	Eckermann & Will	17,513	Feb. 11	50	714
Candles. Wax	Eckermann & Will	18,396	Sept. 2	52	1374
Canned fish, fruit, and vegetables	J. W. Brown & Co.	18,484	Oct. 7	53	2
Canned fish, meat, vegetables, and fruit	W. B. Timms	17,757	Apr. 8	51	160
Canned foods and relishes	W. B. Timms	17,730	Apr. 1	51	2
Canned foods and relishes	W. B. Timms	17,941	May 20	51	1136
Canned fresh oysters	C. W. Turner & Co.	18,483	Sept. 30	52	1954
Canned fruits	F. Tillmann, Jr.	17,529	Feb. 11	50	714
Canned fruits and vegetables	C. Meyer & Co.	18,450	Sept. 23	52	1812
Canned fruits and vegetables	Wentz, Fisher & Hoehn	17,732	Apr. 1	51	2
Canned fruits, vegetables, catsups, mustard, horse-radish, pickles, and table-sauces	H. S. Howland, Jr.	17,823	Apr. 29	51	628
Canned goods	G. K. McMechen & Son	17,961	May 27	51	1310

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Canned meats, fish, fruits, and vegetables.	Cutting Packing Company.	18,120	July 1	52	2
Canned meats, fish, fruits, and vegetables.	J. W. Matthews & Co.	18,294	Aug. 12	52	908
Canned meats, poultry, fish, vegetables, and fruits.	Merrell & Soule	18,013	June 10	51	1621
Canned oysters.	Fait & Winebrenner	17,445	Jan. 28	50	440
Canned oysters.	Turner, Frazier Mercantile Company.	18,026	June 10	51	1624
Canned oysters, meats, fruits, and vegetables.	Gibbs Preserving Company	18,516	Oct. 14	53	142
Canned vegetables, fruit, fish, and corn	W. B. Timms	18,164	July 8	52	164
Capsules. Gelatine	Krehbiel Capsule Company	17,619	Mar. 4	50	1136
Cards. Playing.	Russell & Morgan Printing Company.	18,582	Nov. 4	53	606
Cards. Playing.	Russell & Morgan Printing Company.	18,583	Nov. 4	53	606
Cards. Playing.	Russell & Morgan Printing Company.	18,584	Nov. 4	53	606
Cards. Playing.	Russell & Morgan Printing Company.	18,585	Nov. 4	53	606
Cards. Playing.	Russell & Morgan Printing Company.	18,586	Nov. 4	53	606
Cards. Playing.	Russell & Morgan Printing Company.	18,587	Nov. 4	53	606
Cards. Playing.	Russell & Morgan Printing Company.	18,588	Nov. 4	53	606
Cards. Playing.	Russell & Morgan Printing Company.	18,704	Dec. 16	53	1576
Cards. Playing.	Russell & Morgan Printing Company.	18,705	Dec. 16	53	1576
Cartridges for fire-arms.	Creedmoor Cartridge Company	18,723	Dec. 23	53	1744
Cartridges for fire-arms.	Creedmoor Cartridge Company	18,724	Dec. 23	53	1744
Cartridges for fire-arms.	Creedmoor Cartridge Company	18,759	Dec. 30	53	1290
Cartridges. Shotgun.	Standard Cartridge Company	18,272	Aug. 5	52	756
Cases for packing toilet outfits	London Toilet Bazar Company.	18,700	Dec. 16	53	1576
Cash indicators, recorders, registers, and tills	American Cash Register Company.	18,289	Aug. 12	52	908
Catarrh. Preparation for the cure of	D. D. Harr.	18,419	Sept. 9	52	1542
Catarrh-snuff	F. C. Keith	17,760	Apr. 15	51	302
Catsup	Curtice Brothers Company.	18,148	July 8	52	164
Cement	Commercial Wood & Lime Company.	17,862	May 6	51	811
Cement	Cumberland Hydraulic Cement and Manufacturing Company.	18,432	Sept. 16	52	1670
Cement for building purposes	McLean & Company	18,701	Dec. 16	53	1576
Cement for repairing broken articles	M. Major.	17,570	Feb. 18	50	844
Cement. Hydraulic.	Keystone Cement Company	17,487	Feb. 4	50	564
Cement, plaster, finish, calcimine, and plaster-of-paris	Saline County Plaster Company	18,129	July 1	52	2
Cement. Portland	Keystone Cement Company	17,485	Feb. 4	50	564
Cement. Portland	Keystone Cement Company	17,486	Feb. 4	50	564
Cement. Portland	Mannheimer Portland Cement Fab- rik	18,360	Aug. 26	52	1230
Cement. Portland or hydraulic	H. O. Berg.	18,359	Aug. 26	52	1230
Cements	Millen & Sons	18,053	June 17	51	1788
Cereals	H. Ohlmeyer	18,422	Sept. 9	52	1542
Champagne.	E. La Montagne & Sons	18,742	Dec. 30	53	1890
Champagne	Scherek & Co.	18,400	Sept. 2	52	1374
Champagne	Thomsen & Co.	17,426	Jan. 21	50	308
Champagne-wine	Hartman & Hubbard	17,447	Jan. 28	50	440
Cheese	A. L. & J. J. Reynolds.	17,968	June 3	51	1471
Cheese	W. E. Smith & Co.	17,499	Feb. 4	50	564
Cheese. Cream.	J. R. Thomas	18,057	June 17	51	1788
Chemical preparation for use in copying documents	Rogers Copying Company	18,270	Aug. 5	52	756
Chest-protectors	B. T. Mason	17,891	May 6	51	812
Chest-protectors	B. T. Mason	17,892	May 6	51	812
Chicory	Ditmar & Weissner	17,442	Jan. 28	50	440
Chocolate bonbons	W. M. Lowney.	18,370	Sept. 2	52	1374
Chocolates and candies	C. Gousset	17,673	Mar. 18	50	1452
Chocolates, desiccated cocoanut, jellies, and candies	C. B. Miller	17,379	Jan. 7	50	2
Chucks. Lathe.	Westcott Chuck Company	17,719	Mar. 25	50	1596
Cigar-lighter. Pocket	Magic Introduction Company	18,135	July 8	52	164
Cigars	A. Caffray	18,060	June 24	51	1950
Cigars	J. W. Craver.	18,538	Oct. 21	53	220
Cigars	M. I. Dougherty	18,106	July 1	52	2
Cigars	J. Eging	17,705	Mar. 25	50	1596
Cigars	C. Ensign	18,433	Sept. 16	52	1670
Cigars	H. B. Grauley	18,670	Dec. 2	53	1262
Cigars	J. Hatchwell	18,265	Aug. 5	52	756
Cigars	H. Huckfeld	18,140	July 8	52	164
Cigars	Joachim Bros	18,434	Sept. 16	52	1670
Cigars	S. Karnow	17,597	Feb. 25	50	994
Cigars	J. Laredo	17,949	May 27	51	1310
Cigars	H. Lutmer.	17,782	Apr. 15	51	302
Cigars	H. Lutmer	17,827	Apr. 29	51	628
Cigars	Manchester Cigar Manufacturing Co.	17,491	Feb. 4	50	564
Cigars	Mills & Gray.	17,905	May 13	51	972
Cigars	Mills & Gray.	17,906	May 13	51	972
Cigars	Perez, Rico y Villamil	18,675	Dec. 2	53	1262
Cigars	Perez, Rico y Villamil	18,676	Dec. 2	53	1262
Cigars	R. Reimers	18,254	Aug. 5	52	756
Cigars	F. R. Rice & Co.	18,279	Aug. 5	52	756
Cigars	F. R. Rice & Co.	18,316	Aug. 19	52	1066
Cigars	Rivero, Martinez & Co.	17,659	Mar. 11	50	1300
Cigars	Rivero, Martinez & Co.	17,660	Mar. 11	50	1300
Cigars	C. Schendel & Co.	18,088	June 24	51	1950
Cigars	Strong, Cobb & Co.	18,407	Sept. 9	52	1542
Cigars	H. Traiser	17,628	Mar. 4	50	1136
Cigars	D. L. Trujillo & Sons	18,561	Oct. 28	53	436
Cigars and cigarettes.	Fiss & Doerr.	18,403	Sept. 9	52	1542
Cigars and cigarettes.	H. R. Kelly & Company	17,645	Mar. 11	50	1300
Cigarettes, cigarros, cheroots, and cigars	Consolidated Cigarette Company	18,357	Aug. 26	52	1230
Cleaning and polishing preparations	Glassine Company	17,992	June 3	51	1472
Cloaks and suits. Misses'	Deutsch & Co.	18,443	Sept. 23	52	1812
Clothing and furnishing goods. Men's	N. Snellenburg & Co.	17,500	Feb. 4	50	564
Clothing for men and boys	W. F. Kyle	18,557	Oct. 28	53	436
Clothing for men and boys. Outside	F. B. O. Clothing Company	17,973	June 3	51	1471
Clothing for men and youths	Hirschberg & Steinmau	18,736	Dec. 23	53	1744
Clothing for men, boys, and children. Outer	Strouse & Bros	18,363	Aug. 26	52	1230

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Title.	Name.	No.	Date.	Official Gazette.	
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Clothing and hats and caps for men, boys, and children. Ready-made	J. McKey & Co.....	18,250	July 29	52	610
Clothing. Leather and canvas	Dunlap, Lawton & Hall.....	18,185	July 15	52	312
Cloths and serges. Italian	J. Maddocks & Co.....	17,543	Feb. 18	50	844
Cocoa	J. S. Fry & Sons.....	17,446	Jan. 28	50	440
Cocoa	E. Galer.....	17,672	Mar. 18	50	1452
Cod-liver oil	P. R. Whitcomb and T. H. Sayre ..	18,490	Oct. 7	53	2
Coffee	A. Roth Grocery Company.....	18,640	Nov. 18	53	926
Coffee and tea of all kinds	J. H. Brookmire & Co.....	17,363	Jan. 7	50	2
Coffee and tea pots	W. H. Silver.....	17,728	Apr. 1	51	2
Coffee. Breakfast	G. F. Gilman.....	18,734	Dec. 23	53	1744
Coffee. Green and roasted	R. Crooks & Co.....	18,729	Dec. 23	53	1744
Coffee. Parched and ground	Ohio Valley Coffee Company.....	18,601	Nov. 4	53	606
Coin-operated machines	J. U. O'Meara.....	18,156	July 8	52	164
Collar pads. Horse	A. Scott.....	17,918	May 13	51	972
Collars and cuffs	Celluloid Novelty Company.....	18,076	June 24	51	1950
Collars and cuffs	Water Lily Collar and Kuff Com- pany.....	17,376	Feb. 18	50	844
Colors. Coal-tar	H. Kohnstamm & Co.....	18,466	Sept. 30	52	1954
Colors. Coal-tar	H. Kohnstamm & Co.....	18,467	Sept. 30	52	1954
Complexion-powder	J. T. Grenamier.....	18,604	Nov. 11	53	762
Compound for removing stains, grease, &c., from the skin and for other toilet purposes.	H. Robbins.....	17,786	Apr. 15	51	302
Compound for the cure of diseases of a dysenteric nature	H. L. Vickery.....	17,663	Mar. 11	50	1300
Compound for the cure of kidney, liver, and stomach derange- ments.	C. H. Gridley.....	17,394	Jan. 14	50	170
Compound for throat and lung troubles	Rockey & Baltzly.....	18,765	Dec. 30	53	1890
Compounds and lotions for use on the skin.	J. Black and G. A. Kirchmaier ..	17,698	Mar. 25	50	1596
Computing and transcribing machine	Felt & Tarrant Manufacturing Com- pany.....	18,154	July 8	52	164
Condensers. Surface, jet, and other steam	F. M. Wheeler.....	17,909	May 13	51	972
Condition-powders	H. H. Clark & Co.....	17,965	May 27	51	1310
Condition-powders	Webb Manufacturing Company.....	17,959	May 27	51	1310
Condition-powders to cure hog-cholera	A. J. Van Syckle.....	18,690	Dec. 9	53	1412
Copper. Refined	Lewisohn Brothers.....	17,735	Apr. 8	51	160
Corn. Pulp of green	Forestville Canning Company.....	17,986	June 3	51	1472
Corn-starch	C. Morningstar & Co.....	18,150	July 8	52	164
Corsets	Aitken, Son & Co.....	18,309	Aug. 19	52	1066
Corsets	B. Altman.....	18,367	Sept. 2	52	1374
Corsets	B. Altman.....	18,368	Sept. 2	52	1374
Corsets	J. Beckel & Co.....	18,456	Sept. 23	52	1812
Corsets	H. P. F. Leprince.....	18,301	Aug. 12	52	908
Corsets	S. Lindauer & Co.....	17,998	June 3	51	1472
Corsets	Nnsbaum & Co.....	18,365	Aug. 26	52	1230
Corsets	S. W. Richards.....	17,940	May 20	51	1136
Corsets	L. Schiele & Co.....	18,695	Dec. 9	53	1412
Corsets	L. Schiele & Co.....	18,696	Dec. 9	53	1412
Corsets	L. Schiele & Co.....	18,772	Dec. 30	53	1890
Corsets	E. Schweinburg.....	17,907	May 13	51	972
Corsets	Stern Brothers.....	17,756	Apr. 8	51	160
Cosmetic and remedial cream	J. A. Curran.....	18,769	Dec. 30	53	1890
Cosmetics	C. H. Beers.....	18,006	June 10	51	1624
Cotton and wool fabrics	Bullene, Moore, Emery & Co.....	18,173	July 15	52	312
Cotton dress goods and draperies	Denny, Poor & Co.....	18,761	Dec. 30	53	1890
Cotton fabrics	Amoskeag Manufacturing Company ..	17,857	May 6	51	811
Cotton fabrics, including cotton printed, dyed, and woven in colors. Colored	J. W. Woods.....	18,275	Aug. 5	52	756
Cotton goods	D. Benlisa.....	18,075	June 24	51	1950
Cotton goods	Burton Bros. & Co.....	17,635	Mar. 11	50	1300
Cotton goods	Neuss, Hesslein & Co.....	18,426	Sept. 9	52	1542
Cotton goods	J. A. Robinson.....	17,522	Feb. 11	50	714
Cotton goods	J. A. Robinson.....	17,661	Mar. 11	50	1300
Cotton or wool and cotton and wool fabrics	Smith, Hogg & Gardner.....	17,714	Mar. 25	50	1596
Cotton or wool and cotton and wool fabrics	Smith, Hogg & Gardner.....	17,716	Mar. 25	50	1596
Cotton or wool and cotton and wool fabrics, except pile fabrics	Smith, Hogg & Gardner.....	17,715	Mar. 25	50	1596
Cotton-warp, silk-warp, and all-wool dress-goods	Stavert, Zigomala & Co.....	17,528	Feb. 11	50	714
Cough and kidney cure	Sylvan Remedy Co.....	18,529	Oct. 14	53	142
Cough remedies and blood-purifying compounds	F. V. D. Smith.....	18,045	June 17	51	1788
Cough-sirup	Murphy Bros.....	18,679	Dec. 9	53	1412
Crabs and crab-meat. Deviled	W. B. Smith.....	17,424	Jan. 21	50	308
Crackers and biscuits	Lone Star Cracker and Manufactur- ing Company.....	17,377	Jan. 7	50	2
Crackers and candies	Huggins Cracker and Candy Com- pany.....	18,092	July 1	52	2
Crackers or biscuits	Young & Larrabee.....	18,596	Nov. 4	53	606
Crockery, glass and plated ware	E. Lobe & Co.....	18,719	Dec. 23	53	1744
Cuff-fasteners	H. R. Wade.....	17,718	Mar. 25	50	1596
Cure for catarrh and lung and liver troubles	Tomlinson Dead Shot and Quick Re- lief Oil Co.....	18,625	Nov. 18	53	926
Cure for piles	H. Kephart.....	17,418	Jan. 21	50	308
Currents	C. F. Allen.....	18,741	Dec. 30	53	1890
Currents	Barff & Co.....	18,369	Sept. 2	52	1374
Cyclopedias of the manufactures and products of the United States.	Seeger & Guernsey Company.....	18,406	Sept. 9	52	1542
Dental goods and materials of all kinds	R. S. Williams.....	18,549	Oct. 21	53	280
Dental preparation	T. P. Morey.....	18,487	Oct. 7	53	2
Dental rubber	Excelsior Rubber Works.....	17,444	Jan. 28	50	440
Dental rubber	E. J. McCormick.....	18,339	Aug. 26	52	1230
Dentifrice	J. M. Coleord & Co.....	18,745	Dec. 30	53	1890
Deodorant. Toilet	B. V. Ludlum & Co.....	18,527	Oct. 14	53	142
Deodorizers, disinfectants, liniments, and ointments	Ellingwood & Co.....	18,034	June 17	51	1788
Deoxidized-bronze digesters for making sulphite fiber	De-Oxidized Metal Company.....	17,636	Mar. 11	50	1300
Deoxidized-bronze digesters for making sulphite fiber	De-Oxidized Metal Company.....	17,637	Mar. 11	50	1300

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Deoxidized-bronze digesters for making sulphite fiber	De-Oxidized Metal Company	17,638	Mar. 11	50	1300
Deoxidized-bronze digesters for making sulphite fiber	De-Oxidized Metal Company	17,639	Mar. 11	50	1300
Desks, seats, and similar articles of school, office, and business furniture.	F. W. Dickerman	17,899	May 13	51	972
Dictionaries	G. & C. Merriam & Co.	18,449	Sept. 23	52	1812
Disinfectant and insect-destroyer	Kern Brothers	18,526	Oct. 14	53	142
Disinfectants	Boston Chemical Company	17,474	Feb. 4	50	564
Disinfectants	A. J. Conner	17,703	Mar. 25	50	1596
Disinfectants	Schülke & Mayr	18,717	Dec. 16	53	1576
Distilled spirits	A. Woolner, Jr.	17,468	Jan. 28	50	440
Dog furnishings	Medford Fancy Goods Company	18,303	Aug. 12	52	908
Dolls, Dressed	R. Lisner	17,517	Feb. 11	50	714
Drawings and writings. Reproducing	Miliograph Co.	18,751	Dec. 30	53	1890
Dress-shields	E. C. Blum	17,582	Feb. 25	50	994
Dress-shields	E. C. Blum	18,252	Aug. 5	52	756
Dried fruits and vegetables	Cutting Packing Company	18,119	July 1	52	2
Drilling	Stavert, Zigomala & Co	17,504	Feb. 4	50	564
Dulcimer	J. A. Mackenzie	18,435	Sept. 16	52	1670
Dye for leather. Black	O. Hann	17,593	Feb. 25	50	994
Dye for leather. Black	O. Hann	17,594	Feb. 25	50	994
Dye-stuffs	Roesler & Hasslacher Chemical Company	18,522	Oct. 14	53	142
Dyes. Blue	L. Durand, Huguenin & Co.	18,108	July 1	52	2
Dyes. Coal-tar	H. Kohnstamm & Co.	17,488	Feb. 4	50	564
Dyes. Coal-tar	H. Kohnstamm & Co.	17,489	Feb. 4	50	564
Dyes. Coal-tar	H. Kohnstamm & Co.	17,490	Feb. 4	50	564
Dyes. Violet	L. Durand, Huguenin & Co.	18,107	July 1	52	2
Elastic shoe-web	J. H. Buckley & Son	18,458	Sept. 30	52	1954
Electric and telephonic wires. Coverings for	Boston Rubber Shoe Company	18,402	Sept. 9	52	1542
Electric batteries	Leclanché Battery Company	18,510	Oct. 7	53	2
Electric batteries	F. S. Terry	18,482	Sept. 30	52	1954
Electrical machines for curative purposes	J. E. Hetherington	17,396	Jan. 14	50	170
Electrical purposes. Wire for	Electrical Supply Company	17,564	Feb. 18	50	844
Embrocation	D. D. Tomlinson	17,740	Apr. 8	51	160
Emery-wheels, &c.	Tanite Company	17,884	May 6	51	811
Emery-wheels and grinding machinery in which they are used.	Tanite Company	17,764	Apr. 15	51	302
Emollient	W. Casler	18,261	Aug. 5	52	756
Emulsified preparations, throat and lung tablets, cough-mixtures, and lotions for the skin.	Diamond Laboratory Company	17,704	Mar. 25	50	1596
Emulsion of cod-liver oil	J. A. Magee	17,920	May 13	51	972
Engraved lumber	Pyrograve Company	17,951	May 27	51	1310
Ergot of rye. Liquid	Sharp & Dohme	18,197	July 22	52	462
Exercising-machines	D. L. Dowd	17,670	Mar. 18	50	1452
Extract and articles of food, confectionery, and beverages containing the same. Flavoring	A. J. Palmer	17,601	Feb. 25	50	994
Extracts, essences, oils, condiments, and pepper-sauce	E. R. Durkee & Co.	18,493	Oct. 7	53	2
Extracts. Fruit coloring and flavoring	Price Baking Powder Company	17,603	Feb. 25	50	994
Eye-lotions and cosmetics	Oculine Manufacturing Co.	18,721	Dec. 23	53	1744
Eyeglasses and spectacles	B. Mincer	17,829	Apr. 29	51	628
Face bleach or wash	M. Meyberg	17,678	Mar. 18	50	1452
Face-powder	A. L. V. Wood	17,389	Jan. 7	50	2
Farinaceous compound with fruit flavorings	W. P. Clotworthy	18,223	July 22	52	462
Farinaceous food	J. R. Neave & Co.	17,621	Mar. 4	50	1136
Fasteners for shades, maps, and like objects mounted on rollers.	Paterson Novelty Manufacturing Company	17,654	Mar. 11	50	1300
Fencing, agricultural implements, including picks and shovels, and vehicles.	Graham, Hinkley & Co.	18,613	Nov. 11	53	762
Fertilizers	Read Fertilizer Company	18,737	Dec. 23	53	1744
Fertilizers. Ammoniated superphosphate for	Miller, Lippincott & Co.	18,268	Aug. 5	52	756
Fertilizers. Artificial	Eureka Fertilizer Company	18,726	Dec. 23	53	1744
Fertilizers. Phosphate	Feddeman & Earle	17,734	Apr. 8	51	160
Fertilizing-phosphates	Marion Phosphate Company	18,209	July 22	52	462
Fertilizing-phosphates	Marion Phosphate Company	18,210	July 22	52	462
Fertilizing-phosphates	Marion Phosphate Company	18,384	Sept. 2	52	1374
Fertilizing-phosphates	Marion Phosphate Company	18,391	Sept. 2	52	1374
Files	G. L. Primrose	17,989	June 3	51	1472
Filing-hinders for bills and documents	Detre & Blackburn	18,418	Sept. 9	52	1542
Filing-boxes, pens, gum erasers, and writing-paper.	G. H. Dietz & Co.	18,138	July 8	52	164
Finger-rings	J. B. Bowden & Co.	18,562	Oct. 28	53	426
Fire-crackers	E. S. Hunt & Son	18,062	June 24	51	1950
Fishing-reels	I. J. Booth	18,004	June 10	51	1624
Fishing-tackle	A. G. Spalding & Bros.	17,685	Mar. 18	50	1452
Flavoring compound used by liquor-dealers	Huey & Christ	18,517	Oct. 14	53	142
Flavoring mixture for beverages	G. R. Ratto	18,428	Sept. 9	52	1542
Fleece, plush, stockinet, eider-down cloth, and flannels	H. H. Bell & Sons	18,336	Aug. 26	52	1230
Florida water	American Florida Water Co.	18,237	July 29	52	610
Flour	Fisher & Wise	18,095	July 1	52	2
Flour	G. K. Hubbard & Co.	18,246	July 29	52	610
Flour	G. W. M. Keller	18,535	Oct. 14	53	142
Flour	S. L. Marshall	17,492	Feb. 4	50	504
Flour	Mecke & Co.	17,954	May 27	51	1310
Flour	W. C. Quigley	18,488	Oct. 7	53	2
Flour	C. C. Washburn's Flouring Mills Company	17,689	Mar. 18	50	1452
Flour	C. C. Washburn's Flouring Mills Company	17,690	Mar. 18	50	1452
Flour	C. C. Washburn's Flouring Mills Company	17,691	Mar. 18	50	1452
Flour	C. C. Washburn's Flouring Mills Company	17,693	Mar. 18	50	1452
Flour	C. C. Washburn's Flouring Mills Company	17,694	Mar. 18	50	1452
Flour	C. C. Washburn's Flouring Mills Company	18,712	Dec. 16	53	1576

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Flour and other products from wheat.....	C. C. Washburn's Flouring Mills Company.....	17,692	Mar. 18	50	1452
Flour. Buckwheat.....	The Estate of G. V. Hecker.....	18,000	June 3	51	1472
Flour. Prepared.....	Star Manufacturing Company.....	17,627	Mar. 4	50	1136
Flour. Self-raising.....	Aunt Jemima Manufacturing Co.....	17,825	Apr. 29	51	628
Flour. Wheat.....	Buffalo Milling Co.....	18,685	Dec. 9	53	1412
Flour. Wheat.....	Duluth Imperial Mill Company.....	17,443	Jan. 28	50	440
Flour. Wheat.....	Eagle Roller Mill Co.....	18,520	Oct. 14	53	142
Flour. Wheat.....	C. A. Gambrell Manufacturing Company.....	18,638	Nov. 18	53	926
Flour. Wheat.....	T. C. Jenkins.....	18,462	Sept. 30	52	1954
Flour. Wheat.....	Minneapolis Flour Manufacturing Company.....	17,939	May 20	51	1136
Flour. Wheat.....	A. V. Ryder.....	18,639	Nov. 18	53	926
Flour. Wheat.....	Sessinghams Milling Company.....	18,669	Dec. 9	53	1412
Flour. Wheat.....	Sleepy Eye Roller Mill Co.....	18,547	Oct. 21	53	280
Flour. Wheat.....	Sweet Water Mill Company.....	17,687	Mar. 18	50	1452
Flour. Wheat.....	Sweet Water Mill Company.....	17,688	Mar. 18	50	1452
Flour. Wheat.....	Swift, Billings & Co.....	17,927	May 20	51	1136
Food for birds and fowls. Natural and prepared.....	E. R. Durkee & Co.....	17,772	Apr. 15	51	302
Food for stock. Medicated vegetable compound.....	Anglo-American Food Co.....	17,666	Mar. 25	50	1596
Food preparations of grain and other seeds, including starches, tapioca, and sago.....	E. R. Durkee & Co.....	18,492	Oct. 7	53	2
Food. Prepared seasoning for.....	A. J. Favier.....	18,746	Dec. 30	53	1890
Forks, spoons, ladles, and other flat-metal table-ware.....	The Holmes and Edwards Silver Company.....	18,163	July 8	52	164
Fruit flavors.....	McCormick & Co.....	18,356	Aug. 26	52	1230
Fruit puddings and fruit jellies.....	W. P. Clotworthy.....	17,745	Apr. 8	51	160
Fruits. Dried.....	J. M. Chapman.....	17,922	May 20	51	1136
Fumigating compound or pastiles.....	A. J. Ostheimer.....	17,382	Jan. 7	50	2
Furs and skins used for wearing-apparel.....	Rockwell Fur Company.....	18,773	Dec. 30	53	1890
Galvanic batteries.....	Crosby Electric Company.....	17,746	Apr. 8	51	160
Game consisting of a winding track and balls for rolling on the same.....	Smith & Peelle.....	18,014	June 10	51	1624
Game devices embodying a checkered board and movable men.....	M. Bradley Company.....	17,722	Apr. 1	51	2
Games and toys.....	G. F. Newland.....	17,753	Apr. 8	51	160
Games. Indoor.....	E. I. Horsman.....	18,155	July 8	52	164
Games. Parlor.....	Halma Company.....	18,089	June 24	51	1950
Games played with boards, dice, and counters.....	E. G. Selchow.....	17,924	May 20	51	1136
Gelatine.....	Crystal Gelatine Co.....	18,224	July 22	52	462
Germ and insect destroyers.....	S. Cabot.....	17,475	Feb. 4	50	502
Gin.....	Union Distilling Company.....	18,003	June 3	51	1472
Gin bitters.....	W. Murray.....	18,040	June 17	51	1788
Gin, whisky, and brandy.....	Holland & Company.....	17,484	Feb. 4	50	564
Ginger, mustard, allspice, cloves, pepper, and cinnamon.....	Tone Bros.....	17,558	Feb. 18	50	844
Ginghams.....	J. Farnum & Co.....	17,748	Apr. 8	51	160
Ginghams.....	J. Farnum & Co.....	17,844	May 6	51	810
Ginghams.....	J. Farnum & Co.....	17,845	May 6	51	810
Ginghams.....	J. Farnum & Co.....	17,846	May 6	51	810
Ginghams.....	J. Farnum & Co.....	17,847	May 6	51	810
Ginghams.....	J. Farnum & Co.....	17,848	May 6	51	810
Ginghams.....	J. Farnum & Co.....	17,849	May 6	51	810
Ginghams.....	J. Farnum & Co.....	17,850	May 6	51	810
Ginghams.....	J. Farnum & Co.....	17,851	May 6	51	810
Ginghams.....	J. Farnum & Co.....	18,078	June 24	51	1950
Ginghams.....	J. Farnum & Co.....	18,240	July 29	52	610
Ginghams.....	J. Farnum & Co.....	18,241	July 29	52	610
Ginghams.....	J. Farnum & Co.....	18,242	July 29	52	610
Ginghams.....	J. Farnum & Co.....	18,243	July 29	52	610
Ginghams.....	J. Farnum & Co.....	18,244	July 29	52	610
Ginghams.....	J. Farnum & Co.....	18,245	July 29	52	610
Glass, metals, and other hard substances. Composition for cleaning.....	F. K. Hay.....	18,446	Sept. 23	52	1812
Glassware and crockery.....	F. A. Mehlem.....	18,657	Dec. 2	53	1262
Gloves.....	H. Robitsek & Co.....	17,572	Feb. 18	50	844
Glucose.....	W. E. Krey.....	17,947	May 27	51	1310
Glue.....	G. Valette.....	18,393	Sept. 2	52	1374
Glue and mucilage. Liquid.....	Russia Cement Company.....	17,713	Mar. 25	50	1596
Glue, gelatine, and similar products.....	Michigan Carbon Works.....	18,571	Oct. 28	53	436
Glue. Solid.....	G. Valette.....	18,280	Aug. 5	52	756
Grain-drills.....	H. M. Kirkpatrick.....	18,247	July 29	52	610
Grapes.....	Chautauque Grape Growers' Shipping Association.....	17,409	Jan. 21	50	308
Grate. Fire-place.....	Miller Grate Company.....	17,828	Apr. 29	51	628
Grinding-wheels of white corundum.....	A. L. Bush.....	17,860	May 6	51	811
Guanos.....	R. A. Wooldridge & Co.....	17,429	Jan. 21	50	308
Gum and candies. Chewing.....	Sibley & Hohnwood.....	17,883	May 6	51	811
Gum, candy, and other confections. Chewing.....	H. D. Smith & Co.....	18,623	Nov. 18	53	926
Gum. Chewing.....	Adams & Sons.....	17,577	Feb. 25	50	994
Gum. Chewing.....	Adams & Sons.....	18,046	June 17	51	1738
Gum. Chewing.....	C. S. Burroughs.....	18,641	Nov. 18	53	926
Gum. Chewing.....	J. M. Clark & Co.....	17,898	May 13	51	972
Gum. Chewing.....	Cleveland Chewing Gum Company.....	17,958	May 27	51	1310
Gum. Chewing.....	Malena Co.....	17,378	Jan. 7	50	2
Gum. Chewing.....	W. W. Morris.....	17,380	Jan. 7	50	2
Gum. Chewing.....	Southern Pines Chewing Gum Co.....	18,475	Sept. 30	52	1954
Gum. Chewing.....	Yucca Manufacturing Co.....	17,910	May 13	51	972
Hair-carlers provided with a comb.....	E. L. Thompson.....	17,769	Apr. 15	51	302
Hair. Liquid toilet preparation for the.....	G. L. Couch.....	18,417	Sept. 9	52	1542
Hair. Preparations for the.....	D. C. Smith.....	17,835	Apr. 29	51	628
Hair-restorative.....	M. M. Snyder & Co.....	18,325	Aug. 19	52	1066
Hair-tonics.....	J. Grossman.....	18,061	June 24	51	1950
Hams.....	T. M. Sinclair & Co.....	17,527	Feb. 11	50	714
Hams, shoulders, bacon, and lard.....	Griffin & McElroy.....	18,096	July 1	52	2

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Hams, shoulders, rolls, bacon, and lard	T. M. Sinclair & Co.	17,524	Feb. 11	50	714
Hams, shoulders, rolls, bacon, and lard	T. M. Sinclair & Co.	17,526	Feb. 11	50	714
Hardware. Certain named articles of	Warner Manufacturing Company ..	17,814	Apr. 21	51	482
Hardware. Light or shelf	Morley Brothers	17,652	Mar. 11	50	1300
Hardware, tools, and materials. Manufacturers' and metal-workers'	C. H. Besly & Co.	17,859	May 6	51	811
Harmonicas	Blumenthal & Boas	18,553	Oct. 28	53	436
Harness	Gilliam Manufacturing Company ..	17,870	May 6	51	811
Harness-pads	H. L. Naramore	17,454	Jan. 28	50	440
Hats	Freeman Bros.	18,212	July 22	52	462
Hats and caps	C. F. Beatty	15,070	June 21	51	1950
Hats and caps	W. T. Walsh	18,658	Dec. 2	53	1262
Hats and caps	Young Brothers	17,695	Mar. 18	50	1452
Hats, caps, and helmets	J. J. Turner	18,774	Dec. 30	53	1890
Hats for men, women, and boys	C. B. Rutan & Co.	18,766	Dec. 30	53	1890
Hats. Men's	Brown & Co.	18,768	Dec. 30	53	1890
Hats. Men's	H. H. Roelofs & Co.	18,399	Sept. 2	52	1374
Hats or caps	Desbecker & Co.	17,587	Feb. 25	50	994
Hats. Soft-felt and wool	F. Pouratt	18,393	Nov. 4	53	606
Headache cure	Algosine Manufacturing Co.	18,756	Dec. 30	53	1890
Headache cure	Winkelmann & Brown Drug Company ..	17,467	Jan. 28	50	440
Headache. External application for the cure of	J. H. Lakin	18,686	Dec. 9	53	1412
Herb remedies for certain chronic diseases	G. C. Cooper	18,442	Sept. 23	52	1812
Herring. Salt	J. A. Meierdiecks & Sons ..	18,537	Oct. 14	53	142
Hog and beef products	North American Provision Company ..	18,387	Sept. 2	52	1374
Hog-cholera. Compound for the cure of	G. F. Eames	17,588	Feb. 25	50	994
Hominy	American Hominy Flake Company ..	18,573	Oct. 28	53	436
Hoof-stuffing	Atkins & Durbrow	17,921	May 20	51	1136
Horses. Body-wash in the form of tablets for	Buntin Drug Co.	17,768	Apr. 15	51	302
Hose and machine-beltting. Hydraulic	N. J. Car Spring and Rubber Company ..	17,710	Mar. 25	50	1596
Hose and machine beltting. Hydraulic	New Jersey Car Spring and Rubber Company ..	18,744	Dec. 30	53	1890
Hose and machine-beltting. Hydraulic fire-	New Jersey Car Spring and Rubber Company ..	18,706	Dec. 16	53	1576
Hose, belting, and packing	J. H. Cheever	17,511	Feb. 11	50	714
Hose. Garden, mill, fire, and steam	Boston Woven Hose Company	17,791	Apr. 22	51	482
Hose. Garden, mill, fire, and steam	Boston Woven Hose Company	17,792	Apr. 22	51	482
Hose, (rubber-lined, seamless, one-ply, and cotton-fabric.) Hydraulic	Eureka Fire Hose Company	17,641	Mar. 11	50	1300
Hose-supporters	G. Frost & Co.	17,614	Mar. 4	50	1136
Hosiery	A. L. Brown	17,434	Jan. 28	50	440
Hosiery	H. B. Claflin & Co.	17,364	Jan. 7	50	2
Hosiery	H. B. Claflin & Co.	17,365	Jan. 7	50	2
Hosiery	M. S. Esche	18,411	Sept. 9	52	1542
Hosiery	Lord & Taylor	18,099	July 1	52	2
Hosiery	J. Musser	18,720	Dec. 23	53	1744
Hosiery	Waukenhose Company	17,995	June 3	51	1472
Hosiery	A. Witting	17,469	Jan. 28	50	440
Hosiery	A. Witting	17,470	Jan. 28	50	440
Hosiery, shirts, drawers, corsets, and neck-wear	T. W. Stenmler & Co.	17,403	Jan. 14	50	170
Hot-air, steam, and hot-water heaters	S. S. Jewett & Co.	18,313	Aug. 19	25	1066
Household and kitchen articles. Certain	Dover Stamping Company	18,056	June 17	51	1788
India-rubber, gutta-percha, and other vulcanizable gums	G. A. Alden & Co.	18,239	July 29	52	610
Injections and lotions for venereal diseases	W. M. Ryals	18,044	June 17	51	1788
Inner soles for boots and shoes	W. R. Green & Co.	18,213	July 22	52	462
Insect-powder	H. M. Boardman	17,944	May 27	51	1310
Insect-powder	Fernoline Chemical Company	18,732	Dec. 23	53	1744
Insecticide	C. Delacre & Co.	17,440	Jan. 28	50	440
Insecticide	C. Delacre & Co.	17,441	Jan. 28	50	440
Insecticide	G. B. Rumph and L. J. Carlile ..	18,474	Sept. 30	52	1954
Insecticide	Searby, Zeilin & Co.	18,598	Nov. 4	53	606
Instruments or appliances for the cure of disease	H. Sanche	17,809	Apr. 22	51	482
Instruments or appliances for the cure of disease	H. Sanche	17,810	Apr. 22	51	482
Instruments or appliances for the cure of disease	H. Sanche	17,811	Apr. 22	51	482
Instruments or appliances for the cure of disease	H. Sanche	18,024	June 10	51	1624
Insulated conducting-wire	Simplex Electrical Co.	18,551	Oct. 28	53	436
Insulated conducting-wire	Simplex Electrical Co.	18,552	Oct. 28	53	436
Insulated electrical wire	Benedict & Burnham Manufacturing Company ..	18,340	Aug. 26	52	1230
Insulating against the escape of electricity. Material for	Roessler & Hasslacher Chemical Company ..	17,880	May 6	51	811
Insulating against the escape of electricity. Material for	Roessler & Hasslacher Chemical Company ..	18,017	June 10	51	1624
Insulators and other articles. Composition for electric	Roxite Company	17,459	Jan. 28	50	440
Jackets, shirts, drawers, and stockings	Augsburger Mechanische Trikotwaaren-Fabrik, vormals A. Koblenzer, Pforsee.	18,523	Oct. 14	53	142
Japans and varnishes	Davis & Co.	17,439	Jan. 28	50	440
Japans, varnishes, fillers, and finishes	C. H. Gillespie & Sons	18,577	Nov. 4	53	606
Jars. Glass fruit	C. N. Brady	17,583	Feb. 25	50	994
Jellies, relishes, saucers, condiments, and prepared foods	E. C. Rich Company	18,608	Nov. 11	53	762
Jewelry	R. R. Fogel	18,438	Sept. 16	52	1670
Jewelry and solid and plated gold and silver ware	E. A. Bliss Co.	18,479	Sept. 30	52	1954
Jewelry and watches	R. R. Fogel	18,293	Aug. 12	52	908
Jewelry, watches, silver and plated ware, bronzes, and opera-glasses.	C. W. Schumann & Sons	18,025	June 10	51	1624
Kerosene-oil	S. Samper & Co.	18,094	July 1	52	2
Kid. Glazed	F. S. Kaliske	17,750	Apr. 8	51	160
Kid. Glazed	F. S. Kaliske	17,875	May 6	51	811
Knives and steel implements. Butchers'	Cattaraugus Cutlery Company	17,700	Mar. 25	50	1596
Knives, forks, spoons, and other articles of flat ware	Rogers & Brother	17,693	Dec. 9	53	1412

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Title.	Name.	No.	Date.	Official Gazette.	
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Knives, forks, spoons, and other solid and plated ware	M. W. Galt, Bro. & Co	18,080	June 24	51	1950
Knives, forks, spoons, and other solid and plated ware	M. W. Galt, Bro. & Co	18,081	June 24	51	1950
Knives, scissors, shears, and razors	Hibbard, Spencer, Bartlett & Company.	18,317	Aug. 19	52	1066
Knives, scissors, shears, and razors	Krusius Brothers	17,392	Jan. 14	50	170
Lace-curtains	Wilkes-Barré Lace Manufacturing Company.	18,274	Aug. 5	52	756
Laces. Shoe	Whitcher & Emery	17,466	Jan. 28	50	440
Lacing hooks. Shoe	W. H. Smidt & Co	18,306	Aug. 12	52	908
Lamp-chimneys	W. G. Beach	17,509	Feb. 11	50	714
Lamp-chimneys	G. A. Macbeth & Co	17,453	Jan. 28	50	440
Lamp-chimneys	McKee & Brothers	18,345	Aug. 26	52	1230
Lamp-chimneys	McKee & Brothers	18,470	Sept. 30	52	1954
Lamps for burning kerosene-oil	Ditbridge & Co	17,263	May 6	51	811
Lamp-shades	W. S. Berg	17,431	Jan. 28	50	440
Lard	Armour & Co	17,580	Feb. 25	50	994
Lard	C. F. Ferrer	17,368	Jan. 7	50	2
Lard	Figge & Brother	18,020	June 10	51	1024
Lard	Hand Brothers	17,481	Feb. 4	50	564
Lard	Hand Brothers	17,545	Feb. 18	50	844
Lard	J. H. Michener & Co	17,736	Apr. 1	51	2
Lard	T. M. Sinclair & Co	17,503	Feb. 4	50	564
Lard and hog and beef products	Swift & Company	18,307	Aug. 12	52	908
Lard, bacon, hams, and cured and pickled meats	J. H. Michener & Co	17,549	Feb. 18	50	844
Lard. Hog	Armour & Co	17,551	Feb. 25	50	994
Lard. Refined hogs'	G. Cassard & Son	18,322	Aug. 12	52	908
Lard. Refined or leaf	G. Cassard & Son	18,281	Aug. 12	52	908
Laundry purposes. Certain fluid preparation for	Rieman & Co	17,555	Feb. 18	50	844
Laundry-tubs, sinks feed-mangers, and troughs	J. G. Bower and F. H. Miller	17,793	Apr. 22	51	482
Lawns, cottons, and woolen goods	T. G. Knight	18,149	July 8	52	164
Lead. White	Creighton & Burch	18,337	Aug. 26	52	1066
Lead. White	M. Lubelsky	18,397	Sept. 2	52	1374
Lead. White	Tach Brothers	17,731	Apr. 1	51	2
Leather	Western Paint Co	17,465	Jan. 28	50	440
Leather	H. Zöhr laut Leather Company	17,887	May 6	51	812
Leather and leather worked up into foot-wear. Uncut	J. C. Lappe & Sons	17,977	June 3	51	1472
Leather. Finishing	Pfister & Vogel Leather Company	17,681	Mar. 18	50	1452
Leather for boots, shoes, and harness	D. H. Collins	18,311	Aug. 19	52	1230
Leather. Harness	T. A. Mausfield	18,122	July 1	52	2
Lighting machinery. Incandescent	W. C. Kennett	18,463	Sept. 30	52	1954
	National Electric Manufacturing Company.	18,645	Nov. 18	53	926
Lime for building purposes. White	W. T. Leggett	18,762	Dec. 30	53	1890
Lime-water preparations	T. Metcalf & Co	18,716	Dec. 16	53	1576
Linen and hemp yarn and thread and piece goods, jute yarns and tissues, silk goods of all kinds, and yarns, cloths, and stuffs of wool, worsted, or hair.	J. Maddocks	18,448	Sept. 23	52	1812
Liniment	L. Conrad	18,329	Aug. 19	52	1066
Liniment	Fernolie Chemical Company	18,733	Dec. 23	53	1744
Liniment	Freure Bros.	18,485	Oct. 7	53	2
Liniment	W. H. Lynd	17,599	Feb. 25	50	994
Liniment	A. R. Olney and G. D. McDaid	18,361	Aug. 26	52	1230
Liniment	C. Schlayer	18,198	July 22	52	462
Liniment	W. M. Smith	17,573	Feb. 18	50	844
Liniment	W. W. Watkins	17,219	May 13	51	972
Liniment	Webb Manufacturing Company	18,752	Dec. 30	53	1890
Liniment for external and internal use	M. L. Whitney	17,886	May 6	51	811
Liniment for external treatment of rheumatism	O. F. Smith and W. Parr	18,287	Aug. 12	52	908
Liniments	Webb Manufacturing Company	17,955	May 27	51	1310
Liniments capable of use externally and internally	W. M. Bagley and R. W. Tilford	18,104	July 1	52	2
Liniments for external and internal use	G. W. Allaman	18,332	Aug. 26	52	1230
Liqueurs	Rheinstrom Brothers	18,187	July 15	52	312
Liquid-drier	C. H. Gillespie & Sons	18,632	Nov. 18	53	926
Liquors and fruit-juices	H. Kantorowicz	17,889	May 6	51	812
Liquors and wines. Distilled	E. R. Schneider	18,519	Oct. 14	53	142
Liquors. Malt	T. Salt & Co	18,093	July 1	52	2
Liquors. Malt	Union Brewing Company	18,298	Aug. 12	52	908
Lithia water	Londonderry Lithia Spring Water Company.	17,649	Mar. 11	50	1300
Lobsters, herring, mackerel, and clams	Hatheway & Co	17,776	Apr. 15	51	302
Locks	Beasley Supply Company	17,360	Jan. 7	50	2
Locks	Miller Lock Company	18,355	Aug. 26	52	1230
Locks and latches	Hopkins & Dickinson Manufacturing Company.	18,052	June 17	51	1788
Lotion. Healing	W. J. Findley	17,774	Apr. 15	51	302
Lubricating compound	B. L. Peck	18,750	Dec. 30	53	1890
Lug-straps	E. H. Jacobs Manufacturing Company.	18,308	Aug. 12	52	908
Malt beverages	W. Wirtz	18,558	Oct. 28	53	436
Malt, hops, and beer	E. F. Hoppe	17,724	Apr. 1	51	2
Malt liquors	E. F. Poulterer & Co	18,680	Dec. 9	53	1412
Maple-sirup	Towle Syrup Company	17,812	Apr. 22	51	482
Mattresses. Wire	F. A. Palmer	18,043	June 17	51	1788
Meal for live stock	Bowker Fertilizer Company	18,686	Dec. 9	53	1412
Meat. Liquid extract of	Liquor Carnis Company	18,541	Oct. 21	53	280
Meats. Smoked	East St. Louis Packing and Provision Company.	18,730	Dec. 23	53	1744
Meats. Smoked	East St. Louis Packing and Provision Company.	18,731	Dec. 23	53	1744
Medical appliance for the cure of catarrh	W. Northup	17,763	Apr. 15	51	302
Medical belt for the cure of disease	G. W. Angell	18,626	Nov. 18	53	926
Medical compound for liver and kidney troubles	E. L. Jacques	17,449	Jan. 28	50	440
Medical compound for liver diseases	J. L. Cooper	17,759	Apr. 15	51	302
Medical compound for the cure of certain named diseases	F. A. and C. B. Dicks.	17,963	May 27	51	1310

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Medical compound for the cure of cholera, asthma, bronchitis, consumption, dyspepsia, rheumatism, paralysis, diarrhea, and diseases of the blood.	C. R. King	17,374	Jan. 7	50	2
Medical compounds for antithermic, antirheumatic, and antiseptic uses.	F. von Heyden	18,647	Nov. 25	53	1096
Medical compounds for the cure of fevers	Mountain Sage Medicine Company	17,400	Jan. 14	50	170
Medical drugs	W. H. Schieffelin & Co.	17,917	May 13	51	972
Medical preparation for the cure of germ diseases	G. W. Dunn	17,477	Feb. 4	50	564
Medical preparations for lung diseases	F. Leitich	18,694	Dec. 9	53	1412
Medical preparations for veterinary purposes	E. H. Köhne	17,375	Jan. 7	50	2
Medical remedies. Certain named	J. A. W. Fernow	17,773	Apr. 15	51	302
Medical remedies. Certain named	W. G. Lewi	18,230	July 29	52	610
Medical remedies. Certain named	E. Schmidt & Co.	18,183	July 15	52	313
Medical substance in powdered form. Antiseptic	Farbenfabriken, vormals Fr. Bayer & Company.	17,869	May 6	51	811
Medical substance in powdered form. Antiseptic	Farbenfabriken, vormals Fr. Bayer & Company.	17,888	May 6	51	812
Medicated prune sirups	C. H. Klauenberg	18,408	Sept. 9	52	1542
Medicated tablets for female diseases	G. L. F. Hager	18,713	Dec. 16	53	1576
Medicinal bark known as Cascara Sagrada	S. L. Jones & Co.	18,111	July 1	52	2
Medicinal compound for headache, sleeplessness, &c.	Johnson, Glover & Company	17,781	Apr. 15	51	302
Medicinal compounds for the blood	E. Backus	17,971	June 3	51	1471
Medicinal cure for gonorrhea	B. D. Bell	18,677	Dec. 9	53	1412
Medicinal elixirs	C. Gulath	17,480	Feb. 4	50	564
Medicinal mixture for gonorrhœa, gleet, and all urinary troubles.	L. Spingarn	18,225	July 22	52	462
Medicinal remedies, as specified. Various	F. Eberlein	18,109	July 1	52	2
Medicinal remedy for sea-sickness and nausea	H. B. Watson	17,405	Jan. 14	50	170
Medicinal-spring water	Blackwood Company	17,634	Mar. 11	50	1300
Medicinal tablets	Sharp & Dohme	18,196	July 22	52	462
Medicinal tea	M. A. Sleight	17,894	Apr. 20	51	628
Medicinal tonic	W. Kalle	17,913	May 13	51	972
Medicinal tonic	W. Kalle	17,914	May 13	51	972
Medicinal tonic in pills, tablets, and suppositories	M. W. Snow	17,788	Apr. 15	51	302
Medicinal tonics	S. Peters	18,651	Nov. 25	53	1096
Medicinal wafers for bronchial troubles	H. A. Whitney	18,754	Dec. 30	53	1890
Medicine. Blood-purifying	A. N. Callaway and C. O. McClure	17,896	May 13	51	972
Medicine. Blood-purifying	J. T. Gillett	17,478	Feb. 4	50	564
Medicine for bronchial and pulmonary affections	Choate Drug and Chemical Company	17,563	Feb. 18	50	844
Medicine for catarrh. Powdered	J. T. Rosenheimer	18,158	July 8	52	164
Medicine for certain named diseases	J. V. Peabody	17,456	Jan. 28	50	440
Medicine for colds, coughs, and other throat and lung diseases	W. E. Bard, Jr.	17,390	Jan. 14	50	170
Medicine for curing diseases of the scalp	Clevenger Hair Balsam Co.	17,612	Mar. 4	50	1136
Medicine for curing diseases of the scalp	Clevenger Hair Balsam Co.	17,816	Apr. 29	51	628
Medicine for diseases of the liver and for chills	A. C. Simmons, Jr., Medicine Company.	18,624	Nov. 18	53	926
Medicine for external use on the skin and scalp	German Medicine Company	17,643	Mar. 11	50	1300
Medicine for headache, nervousness, sea-sickness, and nausea	H. de Windt	18,051	June 17	51	1788
Medicine for indigestion, liver complaint, and analogous diseases.	W. E. & E. H. Fogg & Co.	18,521	Oct. 14	53	142
Medicine for kidney and heart diseases	Knoll & Co.	17,904	May 13	51	972
Medicine for private use	H. W. Faber	18,486	Oct. 7	53	2
Medicine for purifying the blood	G. E. Moore	17,399	Jan. 14	50	170
Medicine for the cure of diseases of horses	Harthill & Anderson	18,134	July 8	52	164
Medicine for the cure of fistula	L. Ursem	17,813	Apr. 22	51	422
Medicine for the treatment of diarrhea	E. Baron	17,633	Mar. 11	50	1300
Medicine. Hypnotic	H. K. Wampole & Co	17,885	May 6	51	811
Medicine to cure rheumatism	R. Seftner	17,625	Mar. 4	50	1136
Medicine. Tonic and alterative	Renz & Henry	17,535	Feb. 11	50	714
Medicines. Anti-gonorrheic and adstringens	Farbenfabriken, vormals Fr. Bayer & Company.	17,868	May 6	51	811
Medicines. Certain named	A. P. and M. I. Partridge	17,916	May 13	51	972
Medicines. Certain named	J. L. Reed	17,712	Mar. 25	50	1596
Medicines. Compounded	Home Medication Company	18,216	July 22	52	462
Medicines compounded by prescription and official and pharmaceutical preparations, except bitters, and an herb tea.	J. F. Broderick	17,699	Mar. 25	50	1596
Medicines for certain diseases of men and animals	E. S. Sloan	18,234	July 29	52	610
Medicines, ointments, and lotions. Certain proprietary	E. G. C. Rozzelle	18,560	Oct. 28	53	436
Medicines, usually in the form of lozenges, tablets, or troches. Solid	Choate Drug and Chemical Company.	17,861	May 6	51	811
Metal. Babbitt	A. W. Spooner	17,662	Mar. 11	50	1300
Metal-polish	Borsum Bros.	17,510	Feb. 11	50	714
Metal-polish. Liquid	Borsum Bros.	17,537	Feb. 11	50	714
Metals. Polish for	J. C. Paul	18,703	Dec. 16	53	1576
Milk and artificial milk	A. Schnell	18,191	July 22	52	462
Milk and cream	F. F. Wood	17,502	Feb. 4	50	564
Milk. Condensed	New York Condensed Milk Company.	18,023	June 10	51	1624
Milk, butter, cheese, and similar articles	General Company of the Pure Milks.	17,937	May 20	51	1136
Mineral water	Bellbrook Magnetic Springs Company.	17,472	Feb. 4	50	564
Mineral water	Gourd & Tonrade	17,479	Feb. 4	50	564
Mineral water	L. János	18,461	Sept. 30	52	1954
Mineral water	Nee-Ska-Ra Mineral Spring Company.	18,330	Aug. 19	52	1066
Mineral water and ginger. Carbonated	Manitow Mineral Water Company	18,525	Oct. 14	53	142
Mineral water, fruit phosphate, ginger ale, birch beer, and seltzer water. Certain	G. E. Swan	17,729	Apr. 1	51	2
Mineral water. Natural	Coronado Water Company	18,105	July 1	52	2
Mineral water. Natural	Geneva Magnetic Water Company	18,277	Aug. 5	52	756
Mineral waters. Natural	Excelsior Springs Company	18,543	Oct. 21	53	280
Mortar or plaster compounds. Tinters for	Toch Brothers	18,415	Sept. 9	52	1542
Mowers. Lawn	Rogers Fence Company	17,881	May 6	51	811
Music-boxes	H. Gautschi	18,497	Oct. 7	53	2
Music-boxes	H. Gautschi	18,498	Oct. 7	53	2

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Music-boxes.....	H. Gautschi.....	18,499	Oct. 7	53	2
Muslin and other cotton goods.....	Albion Company.....	18,548	Oct. 21	53	280
Naphtha.....	Climax Gasolene Company.....	18,540	Oct. 21	53	280
Needles.....	S. Beissel Sel., Wwe. & Sohn.....	18,321	Aug. 19	52	1066
Needles.....	Blumenthal & Boas.....	18,152	July 8	52	164
Needles.....	T. H. Harper.....	18,036	June 17	51	1788
Needles. Sewing.....	S. Beissel Sel., Wwe. & Sohn.....	18,574	Nov. 4	53	606
Needles. Side-threading.....	J. Smith & Son.....	17,605	Feb. 25	50	994
Nerve foods or remedies for nervous exhaustion.....	Standard Medicine Company.....	18,392	Sept. 2	52	1374
Nets for horses. Fly.....	G. W. and S. F. Hauck.....	17,592	Feb. 25	50	994
Newspaper. Weekly.....	W. D. Boyce.....	18,457	Sept. 30	52	1954
Newspapers.....	O. Judd Company.....	17,950	May 27	51	1310
Newspapers.....	Phelps Publishing Company.....	18,031	June 17	51	1788
Newspapers.....	Phelps Publishing Company.....	18,032	June 17	51	1788
Night-robes.....	E. Rosenfeld & Co.....	18,453	Sept. 23	52	1812
Oat products.....	J. F. and E. K. Corle.....	17,818	Apr. 29	51	628
Oil and solidified cotton-oil. Cotton-seed.....	Cotton Oil Product Company.....	18,581	Nov. 4	53	606
Oil. Cod-liver.....	Scott & Bowne.....	17,960	May 27	51	1310
Oil for culinary purposes. Cotton-seed.....	Whitman Brothers.....	17,988	June 3	51	1472
Oil for illuminating and heating. Refined.....	Blue Flame Manufacturing Com- pany.....	18,001	June 3	51	1472
Oil. Harness.....	W. B. Davis.....	18,077	June 24	51	1950
Oil. Illuminating.....	Cleveland Refining Company.....	17,668	Mar. 18	50	1452
Oil. Illuminating.....	Devco Manufacturing Company.....	18,226	July 29	52	610
Oil. Illuminating.....	Seefeld, Shurmer & Teagle.....	18,233	July 29	52	610
Oil in all its forms. Cotton-seed.....	Cotton Oil Product Company.....	18,580	Nov. 4	53	606
Oil. Lubricating.....	Merchants Oil Co.....	18,194	July 22	52	462
Oil. Lubricating and machine.....	C. H. Besly.....	18,153	July 8	52	164
Oil. Medicinal quality of castor.....	Red Seal Castor Oil Company.....	17,672	Mar. 18	50	1452
Oil of bergamot.....	Dodge & Olcott.....	18,291	Aug. 12	52	908
Oil of lemon.....	Dodge & Olcott.....	18,290	Aug. 12	52	908
Oil of orange.....	Dodge & Olcott.....	18,292	Aug. 12	52	908
Oil. Olive.....	Brandenburg Frères.....	17,539	Feb. 18	50	843
Oil. Olive.....	C. Maspero.....	17,398	Jan. 14	50	170
Oil or drier.....	W. H. Magoffin.....	18,190	July 22	52	462
Oil, rape-seed oil, and other oils for burning and salad pur- poses. Olive.....	O. Tamagno.....	17,425	Jan. 21	50	308
Oil. Refined illuminating and heating.....	Blue Flame Manufacturing Com- pany.....	17,999	June 3	51	1472
Oil. Refined petroleum.....	Tide Water Oil Company.....	18,219	July 22	52	462
Oils and lubricating-grease. Lubricating and wool.....	Platt & Washburn Refining Com- pany.....	17,534	Feb. 11	50	714
Oils. Lubricating.....	Clarkson & Ford.....	17,974	June 3	51	1471
Oils. Lubricating.....	W. T. O'Mara.....	17,679	Mar. 18	50	1452
Oils. Lubricating.....	Swan & Finch.....	18,159	July 8	52	164
Oils. Lubricating.....	White Cycle Company.....	17,996	June 3	51	1472
Oilers.....	W. Vogel & Brothers.....	18,508	Oct. 7	53	2
Ointment.....	J. Adler.....	18,512	Oct. 14	53	142
Ointment.....	W. B. Eddy & Co.....	18,262	Aug. 5	52	756
Ointment. Face-bleaching.....	A. H. McDonnald.....	18,410	Sept. 9	52	1542
Ointment for chapped hands or roughness of the skin.....	Cheuey & Goulden.....	17,701	Mar. 25	50	1596
Ointment. Pile.....	Gassner & Gust.....	17,371	Jan. 7	50	2
Overalls.....	T. E. Omohundro.....	17,967	June 3	51	1471
Overalls, pantaloons, and shirts.....	J. A. Sommers Manufacturing Com- pany.....	18,130	July 1	52	2
Overalls, pantaloons, and shirts. Men's.....	T. E. Omohundro.....	18,211	July 22	52	462
Oysters, fruits, and vegetables.....	M. Wagner Company.....	17,960	June 3	51	1472
Ozone-water.....	Ozone Manufacturing Co.....	18,633	Nov. 18	53	926
Pails. Water.....	Chapman & Meehan.....	18,532	Oct. 14	53	142
Pails. Wood-pulp.....	New York Wood Fibre Company.....	18,090	June 24	51	1950
Paint. Enamel.....	Harrison Bros. & Co.....	18,597	Nov. 4	53	606
Paint for boat-bottoms. Anti-fouling.....	W. H. Weeks.....	18,424	Sept. 9	52	1542
Paint-oils and varnishes.....	Warren Linoline and Gasoline Works.....	18,666	Dec. 2	53	1262
Paints.....	C. T. Reynolds & Co.....	18,172	July 15	52	312
Paints and pigments.....	T. Hubbuck & Son.....	18,021	June 10	51	1624
Paints and varnishes.....	C. C. Phillips Co.....	17,945	May 27	51	1310
Paints, driers, white lead, stove-polish, and stove, furnace, and roofing cement.....	W. Connors.....	18,539	Oct. 21	53	280
Paints. Prepared.....	Western Paint Co.....	17,388	Jan. 7	50	2
Paints, stains, and similar preparations.....	Harrison Bros. & Co.....	18,600	Nov. 4	53	606
Paints, stains, and varnishes.....	C. C. Phillips Co.....	18,113	July 1	52	2
Paintings, drawings, and designs. Black and white repro- ductions of.....	Gravure Etching Company.....	18,444	Sept. 23	52	1812
Pantaloons, coats, vests, and overalls.....	R. M. Connable & Co.....	18,019	June 10	51	1624
Pantaloons for men and boys.....	Moses, Sohn & Oppenheimer.....	17,762	Apr. 15	51	302
Paper.....	J. R. Crompton & Brothers.....	17,476	Feb. 4	50	564
Paper and envelopes.....	Butler & Kelley.....	18,047	June 17	51	1788
Paper bags.....	Union Bag and Paper Company.....	18,388	Sept. 2	52	1374
Paper. Bond and note.....	W. G. Killmer.....	18,465	Sept. 30	52	1954
Paper. Bond, note, and flat.....	O. S. Greenleaf.....	18,049	June 17	51	1788
Paper. Book.....	Miller & Flinn.....	18,022	June 10	51	1624
Paper, envelopes, blotters, pens, pencils, sealing-wax, ink, and rubber bands.....	Perry & Company.....	18,702	Dec. 16	53	1576
Paper holders and cutters. Roll.....	American Roll Paper Company.....	17,630	Mar. 11	50	1300
Paper. Linen.....	J. B. Price.....	18,167	July 15	52	312
Paper. Pads or packages of.....	H. B. Lounsbury.....	18,606	Nov. 11	53	762
Paper. Printing and wrapping.....	Chicago Newspaper Union.....	18,376	Sept. 2	52	1374
Paper. Printing and wrapping.....	Chicago Newspaper Union.....	18,377	Sept. 2	52	1374
Paper-weights.....	Wilcox, Crittenden & Co.....	17,943	May 27	51	1310
Paper. Wood pulp for the manufacture of.....	Zellstoffabrik Waldhof.....	18,205	July 22	52	462
Paper. Writing.....	Italyoke Paper Company.....	18,319	Aug. 19	52	1066
Paper. Writing.....	Southworth Company.....	18,602	Nov. 4	53	606
Paper. Writing.....	W. W. White.....	17,720	Mar. 25	50	1596
Paper. Writing.....	Worthy Paper Company.....	17,559	Feb. 18	50	844

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Paper. Writing.....	Worthy Paper Company.....	17,560	Feb. 18	50	844
Paper. Writing and book.....	Whiting Paper Company.....	18,146	July 8	52	164
Paper. Writing and book.....	Whiting Paper Company.....	18,635	Nov. 18	53	926
Parchmentized fiber.....	Kartavert Manufacturing Company.....	17,902	May 13	51	972
Paste. Dry.....	J. H. Day.....	17,723	Apr. 1	51	2
Pens and like goods. Fountain.....	Harman & Strauss.....	17,546	Feb. 18	50	844
Pens. Metallic.....	Esterbrook Steel Pen Manufactur- ing Company.....	17,565	Feb. 18	50	844
Pens. Metallic.....	D. D. Merrill, Jr.....	18,503	Oct. 7	53	2
Perfumery.....	U. W. Becker.....	18,005	June 10	51	1624
Perfumery.....	J. L. Grossmith.....	18,214	July 22	52	462
Perfumery.....	J. J. Healy.....	17,372	Jan. 7	50	2
Perfumery.....	Ladd & Coffin.....	18,010	June 10	51	1624
Perfumery.....	G. Mandelbaum & Co.....	18,371	Sept. 2	52	1374
Perfumery.....	T. Metcalf & Co.....	18,011	June 10	51	1624
Perfumery.....	Ostheimer Brothers.....	17,738	Apr. 8	51	160
Perfumery.....	C. B. Woodworth & Sons.....	17,616	Mar. 4	50	1136
Perfumery.....	C. B. Woodworth & Sons.....	18,722	Dec. 23	53	1744
Perfumery. Liquid.....	French, Richards & Co.....	18,697	Dec. 16	53	1576
Perfumery. Liquid.....	French, Richards & Co.....	18,698	Dec. 16	53	1576
Perfumery, toilet-water, and flavoring extracts.....	M. Baker & Co.....	18,103	July 1	52	2
Perfumery, toilet-waters, sachet-powders, tooth-powders, and smelling-salts.....	Ladd & Coffin.....	18,383	Sept. 2	52	1374
Perfumery, toilet-waters, soap, sachet-powders, and smelling- salts.....	Ladd & Coffin.....	18,318	Aug. 19	52	1066
Perfumery, toilet-waters, soap, sachet-powders, and tooth- powders.....	Ladd & Coffin.....	17,890	May 6	51	812
Perfumes.....	Lehn & Fink.....	17,397	Jan. 14	50	170
Perfumes. Orchid flower.....	Seely Manufacturing Company.....	18,128	July 1	52	2
Perfumes, powders, cosmetics, and soaps. Toilet.....	F. R. Arnold & Co.....	18,249	July 29	52	610
Perfumes, toilet-soaps, and preparations for the hair, skin, and teeth.....	S. Palmer.....	17,680	Mar. 18	50	1452
Periodical trade-journal.....	J. L. Kendrick.....	18,029	June 10	51	1624
Peroxide of hydrogen.....	Drevet Manufacturing Company.....	18,273	Aug. 5	52	756
Petroleum. Refined.....	Arkell & Douglas.....	18,189	July 29	52	462
Petroleum. Refined.....	Arkell & Douglas.....	18,767	Dec. 30	53	1890
Petroleum. Refined.....	M. W. F. Gleisner.....	18,653	Nov. 25	53	1096
Piano-fortes.....	Decker Bros.....	18,389	Sept. 2	52	1374
Piauo-fortes.....	Kroeger & Sons.....	17,646	Mar. 11	50	1300
Pianos.....	Lindeman & Sons Piano Company.....	18,300	Aug. 12	52	908
Pianos.....	G. Steck.....	17,462	Jan. 28	50	440
Pianos.....	Webster Piano Company.....	18,610	Nov. 11	53	762
Pianos.....	Webster Piano Company.....	18,611	Nov. 11	53	762
Pickled meats.....	L. G. Davalos & Co.....	17,669	Mar. 18	50	1452
Pickles.....	W. Laznby.....	18,176	July 15	52	312
Pile fabrics, exclusive of carpets.....	G. L. Kilty & Co.....	18,112	July 1	52	2
Pills.....	Aphro Medicine Company.....	17,507	Feb. 11	50	714
Pills.....	Aphro Medicine Company.....	18,217	July 22	52	462
Pills.....	J. Fitzgerald.....	18,079	June 24	51	1950
Pills. Liver.....	Rogers & Irvin.....	17,787	Apr. 15	51	302
Pills, powders, and bitters.....	E. C. De Witt.....	17,819	Apr. 29	51	628
Pine essence for external use in disease.....	J. H. McKnight.....	17,979	June 3	51	1472
Pipe-couplings.....	G. & G. Stern.....	18,710	Dec. 16	53	1576
Pipe-couplings.....	I. B. Potts Pipe Fittings Co.....	17,831	Apr. 29	51	628
Pipe-couplings.....	I. B. Potts Pipe Fittings Co.....	17,832	Apr. 29	51	628
Pistols, rifles, and sporting-guns.....	Colt's Patent Fire Arms Manufac- turing Company.....	17,817	Apr. 29	51	628
Plaster-of-paris.....	J. B. King & Co.....	18,299	Aug. 12	52	908
Plaster-of-paris.....	J. B. King & Co.....	18,425	Sept. 9	52	1542
Plaster. Rheumatic and strengthening.....	C. Wright Medicine Company.....	18,184	July 15	52	312
Plastic compound for the manufacture of battery-jars, insu- lators, door-knobs, billiard-counters, cane-handles, and simi- lar articles.....	Fibronc Manufacturing Company.....	18,559	Oct. 28	53	436
Plows.....	B. F. Avery & Sons.....	18,595	Nov. 4	53	606
Plows.....	Hobson & Co.....	17,873	May 6	51	811
Plows and edge-tools.....	Collins Company.....	18,524	Oct. 14	53	142
Plows. Gang, sulky, and hand.....	Mast, Buford & Burwell Company.....	18,436	Sept. 16	52	1670
Plush coats or jackets.....	A. Black & Co.....	18,431	Sept. 16	52	1670
Poison for insects.....	W. Peterman.....	17,457	Jan. 28	50	440
Polish. Furniture.....	H. C. Watt.....	17,840	Apr. 29	51	628
Polishing woods, metals, and the like goods. Materials for.....	J. H. Piper.....	17,830	Apr. 29	51	628
Porcelain, crockery, earthenware, faience, and glass.....	G. Demartial & Co.....	18,533	Oct. 14	53	142
Porcelain, crockery, earthenware, faience, or glass.....	Société Anonyme la Céramique.....	17,717	Mar. 25	50	1596
Porcelain goods and pottery.....	Worcester Royal Porcelain Company.....	17,953	May 27	51	1310
Post-hole digger.....	W. R. Rhodes.....	18,136	July 8	52	164
Pottery. Useful and artistic.....	New York and Rudolstadt Pottery Company.....	18,473	Sept. 30	52	1954
Pottery-ware.....	M. L. Storer.....	17,575	Feb. 18	50	844
Preparation for bladder and kidney troubles and mucous and seminal discharges.....	A. Schoenheit.....	17,460	Jan. 28	50	440
Preserved foods, including desserts, fruits, and jellies for soups.....	R. F. S. Heath.....	17,373	Jan. 7	50	2
Preserved fruits.....	F. Reiset & Co.....	17,554	Feb. 18	50	844
Printed music and songs and works of fiction.....	L. J. Libbey.....	18,566	Oct. 28	53	436
Proof-sheets.....	Bacheller & Co.....	17,632	Mar. 11	50	1300
Propeller-wheels.....	S. L. Moore & Sons Company.....	17,520	Feb. 11	50	714
Prophylactic for use in microbian diseases.....	R. E. Woodward.....	18,180	July 15	52	362
Prunes. Dried.....	J. H. von Schröder.....	18,454	Sept. 23	52	1812
Pumps. Hydraulic.....	Irrigation Pump Company.....	17,596	Feb. 25	50	994
Puzzles.....	R. Gras.....	17,589	Feb. 25	50	994
Puzzles.....	A. W. Hanington and A. E. South- ward.....	17,591	Feb. 25	50	994
Puzzle. Wooden.....	C. R. Bailey.....	17,894	May 13	51	972
Quinine. Sirup of amorphous.....	Paris Medicine Company.....	18,195	July 22	52	462

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Razor strops, hones, steels, and the like	Electric Cutlery Company	17,864	May 6	51	811
Razors	Graef & Schmidt	18,007	June 10	51	1624
Razors	H. Keidel & Co	18,009	June 10	51	1624
Razors	Ransom & Randolph	17,942	May 27	51	1310
Razors	Ransom & Randolph	18,144	July 8	52	164
Refrigerators and ice-chests	A. N. Dukes	18,534	Oct. 14	53	142
Regulator for female complaints	Lion Drug Co	17,801	Apr. 22	51	482
Remedial compounds for nervous, blood, and other diseases ..	S. H. Timm	18,160	July 8	52	164
Remedies classified upon a temperamental standard. Line of	Occidental Chemical Co	18,621	Nov. 11	53	762
Remedies for diseases of the feet	J. F. Murphy	18,660	Dec. 2	53	1262
Remedies for diseases of the throat and lungs	T. V. Sords	18,288	Aug. 12	52	908
Remedies for dyspepsia and malaria	Whitehead Brothers	17,501	Feb. 4	50	564
Remedies for fever and ague and malarial affections	J. B. Davenport	17,438	Jan. 28	50	440
Remedies for nervous and sexual diseases	W. L. Helke	18,747	Dec. 30	53	1890
Remedies for skin diseases, burns, scalds, and similar ailments.	E. B. Hill	18,748	Dec. 30	53	1890
Remedy for blood and kidney diseases	S. P. Hite	18,447	Sept. 23	52	1812
Remedy for bronchial affections	J. Easton	18,667	Dec. 9	53	1412
Remedy for burns, scalds, and similar ailments, and for external use.	G. C. Mir	18,346	Aug. 26	52	1230
Remedy for cancerous sores and diseases of the blood	Rogers & Moore	18,143	July 8	52	164
Remedy for catarrh	J. Stackhouse	18,718	Dec. 16	53	1576
Remedy for catarrh and bronchial affections	Foster, Milburn & Co	18,515	Oct. 14	53	142
Remedy for catarrh and kidney and liver diseases	G. Doehrer	18,358	Aug. 26	52	1230
Remedy for certain named diseases	W. K. Hayden	18,669	Dec. 2	53	1262
Remedy for certain named diseases	S. E. Root	18,286	Aug. 12	52	908
Remedy for chills and fever and the like diseases. Tonic ..	A. B. Richards Medicine Co	17,622	Mar. 4	50	1136
Remedy for coughs and colds	E. Lawall	18,528	Oct. 14	53	142
Remedy for coughs, colds, and diseases of the stomach and liver.	C. H. Byerly	18,575	Nov. 4	53	606
Remedy for croup	H. Kephart	18,749	Dec. 30	53	1890
Remedy for diseases of the blood, liver, and kidneys	Dullam Bros	18,459	Sept. 30	52	1854
Remedy for diseases of the blood, liver, and kidneys	Peruvian Medicine Co	18,142	July 8	52	164
Remedy for diseases of the blood, stomach, and kidneys	Clark Johnson Medicine Company ..	18,683	Dec. 9	53	1412
Remedy for diseases of the brain, nerves, and muscles	Peruvian Medicine Co	18,087	June 24	51	1950
Remedy for diseases of the digestive organs	F. N. Class	18,228	July 29	52	610
Remedy for diseases of the eye. Liquid	E. H. Burnham	18,656	Dec. 2	53	1262
Remedy for diseases of the liver, kidneys, and stomach	J. W. Jones	18,098	July 1	52	2
Remedy for diseases of the liver, kidneys, and throat and female diseases.	R. B. Lamb	18,771	Dec. 30	53	1890
Remedy for diseases of the nervous and sexual system	C. S. Hardy	18,082	June 24	51	1950
Remedy for diseases of the stomach, liver, and kidneys	C. Kertell	18,770	Dec. 30	53	1890
Remedy for dyspepsia, catarrh of the stomach, ulcers, and other microbial diseases.	Drevet Manufacturing Company	18,218	July 22	52	462
Remedy for epilepsy and other nervous diseases	S. A. Richmond	18,714	Dec. 16	53	1576
Remedy for gonorrhea and gleet	E. A. Hall	17,590	Feb. 25	50	994
Remedy for hay-fever	G. L. Wilms	18,711	Dec. 16	53	1576
Remedy for headache, neuralgia, rheumatism, and analogous diseases.	Antikamnia Chemical Company	18,622	Nov. 11	53	762
Remedy for hog and chicken cholera	G. Riley	18,123	July 1	52	2
Remedy for infants' and children's diseases	A. Bridgman	18,590	Nov. 4	53	606
Remedy for liver and kidney complaint	Sierra Chemical Co	18,041	June 17	51	1788
Remedy for nervous diseases	S. A. Richmond	17,915	May 13	51	972
Remedy for neuralgia and rheumatic ailments	H. F. Campbell	17,972	June 3	51	1471
Remedy for piles	Howard Bros	18,015	June 10	51	1624
Remedy for piles	J. McGarity	18,480	Sept. 30	52	1954
Remedy for pulmonary diseases	A. M. Chase	17,911	May 13	51	972
Remedy for purifying the blood	C. A. Burgess & Co	18,589	Nov. 4	53	606
Remedy for rheumatism and similar ailments	M. E. Bates	17,471	Feb. 4	50	564
Remedy for rheumatism, gout, and neuralgia	E. Schnizler	18,531	Oct. 14	53	142
Remedy for the cure of blood diseases	E. Simington	18,505	Oct. 7	53	2
Remedy for the cure of corns and other callosities. Topical ..	Clark Johnson Medicine Company ..	18,682	Dec. 9	53	1412
Remedy for the cure of liver and kidney diseases	Livermore Falls Medicine Co	18,763	Dec. 30	53	1890
Remedy for the destruction of bacteria, microbes, and germs in the human system.	Drevet Manufacturing Company	18,236	July 29	52	610
Remedy for the small-pox	J. L. Suasnavar	18,715	Dec. 16	53	1576
Remedy for throat and lung diseases	P. R. Whitcomb and T. H. Sayre ..	18,489	Oct. 7	53	2
Remedy for throat and lung troubles	Eccles Drug Co	18,725	Dec. 23	53	1744
Remedy for whooping-cough	M. P. Purdy	17,571	Feb. 18	50	844
Remedy for wounds	Sommer Bros	18,248	July 29	52	610
Restorative preparation for diseased eyes	Bassett & Brumaghim	18,495	Oct. 7	53	2
Ribbons	A. & S. Blumenthal	17,933	May 20	51	1136
Ribbons	A. & S. Blumenthal	17,934	May 20	51	1136
Ribbons	A. & S. Blumenthal	17,935	May 20	51	1136
Ribbons	A. & S. Blumenthal	18,496	Oct. 7	53	2
Ribbons	Levy Bros	17,450	Jan. 28	50	440
Ribbons	Pioneer Silk Company	18,269	Aug. 5	52	756
Rice	Sheppard & Porcher	18,042	June 17	51	1788
Rifles	Merwin, Hulbert & Co	18,478	Sept. 30	52	1954
Rings. Solid gold	J. R. Wood & Sons	17,530	Feb. 11	50	714
Roach-powder	G. W. Collins	17,897	May 13	51	972
Roofing fabric	Silicon Textile Roofing Company ..	17,496	Feb. 4	50	564
Roofing-plate. Metal	Merchant & Co	17,737	Apr. 8	51	160
Roofing-plates	J. Leu & Sons	18,615	Nov. 11	53	762
Rubber belting, hose, packing, clothing, druggists' and stationers' sundries, surgical goods, and like articles.	Cleveland Rubber Company	18,491	Oct. 7	53	2
Rubber combs	Harburger Gummi-Kamm Co	18,170	July 15	52	312
Rubber combs	Harburger Gummi-Kamm Co	17,595	Feb. 25	50	994
Rubber. Foot-wear made wholly or partly of	Brook Haven Rubber Shoe Company ..	17,609	Mar. 4	50	1136
Rubber. Foot-wear made wholly or partly of	Brook Haven Rubber Shoe Company ..	17,610	Mar. 4	50	1136
Rubber from waste-rubber goods. Devulcanized	Philadelphia Rubber Works	18,692	Dec. 9	53	1412
Rubber goods	Boston Rubber Company	17,495	Feb. 4	50	564
Rubber, gutta-percha, and other vulcanized gums. India ..	G. A. Alden & Co	18,373	Sept. 2	52	1374

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Rubber hose, belting, packing, and mechanical rubber goods.	New York Belting and Packing Company.	18,673	Dec. 2	53	1262
Rubber overshoes	Boston Rubber Shoe Company	18,760	Dec. 30	53	1890
Rubber shoes.	Boston Rubber Shoe Company	18,568	Oct. 28	53	436
Rubber shoes.	Boston Rubber Shoe Company	18,569	Oct. 28	53	436
Rubber shoes.	Boston Rubber Shoe Company	18,599	Nov. 4	53	606
Rubber shoes.	Boston Rubber Shoe Company	18,671	Dec. 2	53	1262
Rubber shoes called "Footholds"	Boston Rubber Shoe Company	18,567	Oct. 28	53	436
Sago and tapioca.	Bassermann & Herschel	18,206	July 22	52	462
Salt	H. E. Falk	17,820	Apr. 29	51	628
Salt	A. Kerr, Bro. & Co.	17,826	Apr. 29	51	628
Salt	Lone Star Salt Company	17,568	Feb. 18	50	844
Salt	Nash, Whiton & Co.	18,066	June 24	51	1950
Salt. Digestive table.	G. & C. Stern	18,738	Dec. 23	53	1744
Salt. Table.	A. Kerr, Bro. & Co.	17,903	May 13	51	972
Salt. Table and other.	Genesee Salt Company	18,563	Oct. 28	53	436
Salve	W. H. Howard	18,439	Sept. 16	52	1670
Salve	N. O. Lawson	17,376	Jan. 7	50	2
Salve for piles and leucorrhœa.	F. Hankele	17,800	Apr. 22	51	482
Salve for the cure of skin diseases	Schneider & Bisdorf	17,684	Mar. 18	50	1452
Salve or ointment.	J. R. Colliver	17,437	Jan. 28	50	440
Sardines	J. A. Meierdiercks & Sons	18,536	Oct. 14	53	142
Sashes. Tennis and outing	R. Waterhouse	18,100	July 1	52	2
Sauce. Table.	J. Longfield	18,463	Sept. 30	52	1954
Sauce. Table.	Snook & Halbe	18,162	July 8	52	164
Saw guides. Band.	Goodell & Waters	17,975	June 3	51	1472
Saws	E. C. Atkins & Company	17,508	Feb. 11	50	714
Saws	E. C. Atkins & Company	17,666	Mar. 18	50	1452
Saws	E. C. Atkins & Company	17,858	May 6	51	811
Saws	E. C. Atkins & Company	18,030	June 17	51	1788
Saws.	E. C. Atkins & Company	18,200	July 22	52	462
Saws, saw-sets, and trowels	C. W. Boyd	17,962	May 27	51	1310
Scissors, knives, axes, and razors	F. A. Clanberg	17,542	Feb. 18	50	844
Scouring compound	Enoch Morgan's Sons Company	18,501	Oct. 7	53	2
Scouring compound	Enoch Morgan's Sons Company	18,502	Oct. 7	53	2
Screw-drivers	E. James	18,118	July 1	52	2
Seasickness. Preventive of	S. Getzler	17,798	Apr. 22	51	482
Seeds. Flower and vegetable	W. A. Barpee & Co.	18,260	Aug. 5	52	756
Seeds. Timothy.	Conklin & Mersereau	17,366	Jan. 7	50	2
Seeds. Timothy.	Conklin & Mersereau	17,367	Jan. 7	50	2
Serial.	C. A. Pearson	17,635	Mar. 11	50	1300
Sewing-machines	M. McGloin	17,600	Feb. 25	50	994
Sewing-machines	Singer Manufacturing Company	17,985	June 3	51	1472
Shades. Embossed-leather window.	Wilson & Fenimore	17,994	June 3	51	1472
Sheet-metal utensils. Enamelled	Lalance & Grosjean Manufacturing Company.	18,039	June 17	51	1788
Sheet-metal wares for culinary and household use. Enamelled	Stransky & Co.	18,203	July 22	52	462
Sheetings.	J. H. Walker & Co.	18,091	June 24	51	1950
Sheeting and like goods. Bleached.	Coventry Company	18,570	Oct. 28	53	436
Sheetings and drillings	G. L. Montgomery	18,616	Nov. 11	53	762
Sheetings and drillings	G. L. Montgomery	18,617	Nov. 11	53	762
Sheetings and drillings	G. L. Montgomery	18,618	Nov. 11	53	762
Sheetings and drillings	G. L. Montgomery	18,619	Nov. 11	53	762
Sheetings and drillings	G. L. Montgomery	18,620	Nov. 11	53	762
Shells and primers. Cartridge.	Union Metallic Cartridge Company.	18,251	July 29	52	610
Shirt-waists	A. H. Brinkmann	18,067	June 24	51	1950
Shirts	Hagedorn & Merz	18,605	Nov. 11	53	762
Shirts	V. H. Rothschild & Co.	17,623	Mar. 4	50	1136
Shirts, collars, and cuffs	Columbia Shirt Company	17,512	Feb. 11	50	714
Shirts. Men's	T. E. Omohundro	17,983	June 3	51	1472
Shirts. Men's	T. E. Omohundro	17,984	June 3	51	1472
Shirts, overalls, pantaloons, and working-jackets.	Gem Shirt Company	18,378	Sept. 2	52	1374
Shirts, waists, underwear, and furnishings	Hawley, Folsom & Ronimus	18,063	June 24	51	1950
Shoes	Canedy & Wilkinson	17,584	Feb. 25	50	994
Shoes. Children's	Bielefeld & Spahn	18,440	Sept. 23	52	1812
Shotguns	H. Boker & Co.	17,432	Jan. 28	50	440
Shotguns	H. Boker & Co.	17,433	Jan. 28	50	440
Shotguns	H. Boker & Co.	17,482	Feb. 4	50	564
Shotguns and rifles	H. Boker & Co.	17,483	Feb. 4	50	564
Silk and silk and cotton fabrics.	W. Skinner Manufacturing Company.	17,626	Mar. 4	50	1136
Silk and silk ribbons. Broad.	G. Mottin	17,964	May 27	51	1310
Silk plushes and silk seals.	Brigg, Neumann & Co.	17,361	Jan. 7	50	2
Silk ribbons and silk dress goods.	Unequaled Silk Manufacturing Company.	18,476	Sept. 30	52	1954
Silk threads, cords, and upholstery and drapery fabrics	Brainerd & Armstrong Company	18,192	July 22	52	462
Silk threads, cords, and upholstery and drapery fabrics	Brainerd & Armstrong Company	18,394	Sept. 2	52	1374
Silk, worsted, and mohair fabrics, braids, bindings, and trimmings.	Barnes Manufacturing Company.	17,430	Jan. 28	50	440
Silks and silk dress goods. Broad	Rettger, Allen Company	18,372	Sept. 2	52	1374
Silks and silk handkerchiefs	E. T. Mason & Co.	17,650	Mar. 11	50	1300
Silks. Raw	Bavier & Co.	18,333	Aug. 26	52	1230
Silks. Raw	Bavier & Co.	18,334	Aug. 26	52	1230
Silks. Raw	Bavier & Co.	18,335	Aug. 26	52	1230
Silks. Raw	Bavier & Co.	18,628	Nov. 18	53	926
Silks. Raw	Bavier & Co.	18,629	Nov. 18	53	926
Silks. Raw	Bavier & Co.	18,630	Nov. 18	53	926
Silks. Raw	Bavier & Co.	18,631	Nov. 18	53	926
Silver-ware. Sterling	Reed & Barton Corporation	18,232	July 29	52	610
Sirup. Bronchial	G. S. Hull	18,097	July 1	52	2
Sirup for soda-fountains. Flavoring.	E. T. Wills and D. B. Macdonald	17,721	Mar. 25	50	1596
Sirup for soda-water. Flavoring.	H. B. Mykrantz	18,208	July 22	52	462
Sirup. Rheumatic	C. Wright Medicine Company	18,169	July 15	52	312
Sirup. Soothing.	Kopp & Lichtenberger	18,037	June 17	51	1788

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Title.	Name.	No.	Date.	Official Gazette.	
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Skin-beautifier and wrinkle-eradicator	R. Lundy	17,736	Apr. 8	51	160
Skin. Preparation for rough	D. D. Harr.	18,445	Sept. 23	52	1812
Snuff. Catarrh-	F. C. Keith	17,675	Mar. 18	50	1452
Soap.	U. W. Becker	18,133	July 8	52	164
Soap.	B. Brooke & Company	17,391	Jan. 14	50	170
Soap.	H. K. Buck	18,071	June 24	51	1950
Soap.	H. K. Buck	18,072	June 24	51	1950
Soap.	H. K. Buck	18,073	June 24	51	1950
Soap.	H. K. Buck	18,074	June 24	51	1950
Soap.	Colgate & Co.	17,794	Apr. 22	51	482
Soap.	Cotton Oil Product Company	18,649	Nov. 25	53	1096
Soap.	N. K. Fairbank & Company	17,865	May 6	51	811
Soap.	Lantz Bros. & Co.	18,085	June 24	51	1950
Soap.	McGiffert & Wands.	18,709	Dec. 16	53	1576
Soap.	Procter & Gamble	17,420	Jan. 21	50	308
Soap.	Procter & Gamble	17,421	Jan. 21	50	308
Soap.	Procter & Gamble	17,550	Feb. 18	50	844
Soap.	Procter & Gamble	17,551	Feb. 18	50	844
Soap.	Procter & Gamble	17,552	Feb. 18	50	844
Soap.	Procter & Gamble	17,553	Feb. 18	50	844
Soap.	Procter & Gamble	17,657	Mar. 11	50	1300
Soap.	Procter & Gamble	17,658	Mar. 11	50	1300
Soap.	G. & G. Stern	17,557	Feb. 18	50	844
Soap.	B. B. Turner	18,423	Sept. 9	52	1542
Soap and a cleaning and polishing compound.	S. Greenebaum.	17,752	May 6	51	810
Soap and paste. Polishing	J. Pickering & Sons.	18,664	Dec. 2	53	1262
Soap and powder. Facial	Van Dyk Manufacturing Company.	18,609	Nov. 11	53	762
Soap and soap-powders for laundry and toilet purposes	T. Ross	18,271	Aug. 5	52	756
Soap. Bar.	J. Leser	17,853	May 6	51	810
Soap. Bar.	C. E. Marsh & Co.	18,086	June 24	51	1950
Soap. Bar and cake	N. K. Fairbank & Company	17,866	May 6	51	811
Soap. Cleaning and polishing	United Asbestos Company.	17,997	June 3	51	1472
Soap for laundry and general purposes	Procter & Gamble	17,796	Apr. 22	51	482
Soap for laundry and general purposes	Procter & Gamble	17,803	Apr. 22	51	482
Soap for laundry and general purposes	Procter & Gamble	17,804	Apr. 22	51	482
Soap for laundry and general purposes	Procter & Gamble	17,805	Apr. 22	51	482
Soap for laundry and general purposes	Procter & Gamble	17,806	Apr. 22	51	482
Soap for laundry and general purposes	Procter & Gamble	17,807	Apr. 22	51	482
Soap for laundry and general purposes	Procter & Gamble	17,808	Apr. 22	51	482
Soap for laundry and general purposes	Procter & Gamble	17,854	May 6	51	811
Soap for laundry and general purposes	Procter & Gamble	17,855	May 6	51	811
Soap for laundry and general purposes	Procter & Gamble	17,856	May 6	51	811
Soap for laundry and general purposes	Procter & Gamble	17,879	May 6	51	811
Soap. Hard	Velline Soap Manufacturing Company.	18,286	Aug. 22	52	908
Soap in cakes, bars, and chips	C. Lipps	18,314	Aug. 19	52	1066
Soap. Laundry.	Jimenes, Haustedt & Co	18,175	July 15	52	312
Soap. Laundry.	McGiffert & Wands	18,302	Aug. 12	52	908
Soap. Laundry.	Shaker Soap Company	17,497	Feb. 4	50	564
Soap. Laundry.	Shaker Soap Company	18,655	Nov. 25	53	1096
Soap. Laundry.	Shaker Soap Company	18,665	Dec. 2	53	1262
Soap. Laundry.	W. W. Wagner	18,477	Sept. 30	52	1954
Soap. Laundry and toilet	B. A. Lynde & Son Company	17,802	Apr. 22	51	482
Soap, perfumery, and other toilet articles	Colgate & Co.	17,956	May 27	51	1310
Soap. Polishing.	J. Pickering & Sons.	18,661	Dec. 2	53	1262
Soap. Polishing.	J. Pickering & Sons.	18,663	Dec. 2	53	1262
Soap-powder	Champion Soap Powder Co.	18,441	Sept. 23	52	1812
Soap-powder	H. S. Griggs	17,799	Apr. 22	51	482
Soap. Scouring.	B. Brooke & Company	17,540	Feb. 18	50	843
Soap, starch, bluing, and bleaching-powders	R. C. Scott	17,948	May 27	51	1310
Soapstone wash-tubs, griddles, and other articles for household use.	Albemarle Soapstone Company	18,147	July 8	52	164
Soap. Tooth-	E. L. Baldwin	17,790	Apr. 22	51	482
Soaps and cleansing and polishing powders.	Callastro Company	17,541	Feb. 18	50	843
Soaps, powders, cream, paste, and lotions for the toilet	Nonantum Worsted Company	17,878	May 6	51	811
Socks and stockings. Seamless	Powell & Bro	18,284	Aug. 12	52	908
Socks and stockings. Seamless	Powell & Bro	18,285	Aug. 12	52	908
Soda beverage. Prepared	Iron-Malt Chemical Co.	18,755	Dec. 30	53	1890
Soda-water	J. L. Billan	18,059	June 24	51	1950
Soporific	Eisner & Mendelson Company	18,375	Sept. 2	52	1374
Soups. French	Franco American Food Company	17,952	May 27	51	1310
Specific for affections of the throat, chest, and lungs	S. G. Cumberledge, J. U. Garver, and T. W. Deal.	18,401	Sept. 2	52	1374
Specific for rheumatism, gout, and allied affections.	H. K. Wampole & Co	17,839	Apr. 29	51	628
Specific for the cure of poisoning produced by poison-oak	J. T. Evans	18,576	Nov. 4	53	606
Spices, mustard, and bread-raising materials, including soda, cream of tartar, and baking-powder.	E. R. Durkee & Co.	17,532	Feb. 11	50	714
Starch and starch gum	F. Rose & Co	18,504	Oct. 7	53	2
Starch. Laundry.	Bee Hive Starch Co	18,728	Dec. 23	53	1744
Starch. Laundry.	Burns & Hunt	18,739	Dec. 23	53	1744
Starch. Laundry.	Celluloid Starch Co	18,220	July 22	52	462
Starch. Laundry.	Celluloid Starch Co	18,221	July 22	52	462
Starch. Laundry.	G. S. Graves	18,139	July 8	52	164
Starch. Laundry.	G. S. Graves	18,343	Aug. 26	52	1230
Starch-polish	Polline Manufacturing Co	18,398	Sept. 2	52	1374
Steel manufactures. Tempered.	J. B. Armstrong Manufacturing Company.	18,659	Dec. 2	53	1262
Stockings, socks, shirts, and drawers.	Carson, Pirie, Scott & Co.	18,050	June 17	51	1788
Stomach-bitters	J. Thielon	18,674	Dec. 2	53	1262
Stone. Basic cement forming artificial.	L. Enricht, A. A. Drake, W. S. Wilson, and R. F. M. Chase.	17,747	Apr. 8	51	160
Stove-polish	Buffalo Polish Company	17,767	Apr. 15	51	362
Stove-polish	H. W. Weeks	18,634	Nov. 18	53	926
Stoves and ranges. Ventilating	H. Howe.	17,674	Mar. 18	50	1452

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Stoves. Oil and gas	Blue Flame Manufacturing Company.	18,068	June 24	51	1950
Stoves. Oil and gas	Blue Flame Manufacturing Company.	18,069	June 24	51	1950
Stoves, ranges, and fuel-gas burners	Baldwin & Graham	18,256	Aug. 5	52	756
Stoves, ranges, and fuel-gas burners	Baldwin & Graham	18,257	Aug. 5	52	756
Suits, extra pantaloons, overcoats, and caps. Boys'	A. Levy & Bro.	18,338	Aug. 26	52	1230
Suppositories for curing female diseases and piles	D. M. Cooley	18,114	July 1	52	2
Suppositories for uterine diseases	Dr. J. Moffatt Medicine Co	18,421	Sept. 9	52	1542
Surgical instruments	Jetter & Scheerer	17,761	Apr. 15	51	302
Suspenders and braces	Wire Buckle Suspender Co	18,181	July 15	52	312
Sweat-pads for harness and the like	J. B. Schott Saddlery Co	17,833	Apr. 29	51	628
Tablets, blank-books, and the like goods	S. E. & M. Vernon	17,423	Jan. 21	50	308
Tacks, staples, and blind-staples. Double-pointed	Buffalo Specialty Manufacturing Company.	17,536	Feb. 11	50	714
Tar and its chemical products	Knuhnheim & Co	18,083	June 24	51	1950
Tea	H. C. Fisher	17,707	Mar. 25	50	1596
Tea	G. F. Gilman	18,735	Dec. 23	53	1744
Tea	G. T. Gould	18,541	Oct. 21	53	280
Tea	Kearley & Tonge	18,141	July 8	52	164
Tea	Lievre, Fricke & Co	17,928	May 20	51	1136
Tea	J. McEwan	18,283	Aug. 12	52	908
Tea	Photo Packet Pure Tea Co	17,656	Mar. 11	50	1300
Tea	Powell & Bennett	17,754	Apr. 8	51	160
Tea	Sherman Bros. & Co	17,384	Jan. 7	50	2
Tea	J. Tetley & Co	17,929	May 20	51	1136
Tea	J. Tetley & Co	17,930	May 20	51	1136
Tea	J. Tetley & Co	17,931	May 20	51	1136
Tea	J. Tetley & Co	17,932	May 20	51	1136
Tea, coffee, and spices	J. C. Barkley	18,727	Dec. 23	53	1744
Tea. Japan	G. W. Lane & Co	17,547	Feb. 18	50	844
Tea. Japan	G. W. Lane & Co	17,751	Apr. 8	51	160
Tea. Japan	G. W. Lane & Co	17,752	Apr. 8	51	160
Tea. Milled and sifted Indian	J. Lappin	18,681	Dec. 9	53	1412
Tea or coffee or preparations thereof	Santha Tea Company	17,755	Apr. 8	51	160
Teas	H. & G. B. Farrington & Co	18,594	Nov. 4	53	606
Teas	Lievre, Fricke & Co	18,546	Oct. 21	53	280
Teas	Lievre, Fricke & Co	18,654	Nov. 25	53	1096
Teas and coffees	Chase & Sanborn	17,741	Apr. 8	51	160
Teas and coffees	Chase & Sanborn	17,742	Apr. 8	51	160
Teas and coffees	Chase & Sanborn	17,743	Apr. 8	51	160
Teas and coffees	Chase & Sanborn	17,744	Apr. 8	51	160
Teas, coffees, spices, baking-powders, and flavoring extracts	Creelman, McCormick & Co	17,727	Apr. 1	51	2
Teas. Mixed	Carlton's Blended Tea Company	17,770	Apr. 15	51	302
Telegraph-instruments and parts thereof	E. S. Greeley & Company	17,871	May 6	51	811
Thermometers. Clinical	H. Hirschberg Optical Company	17,976	June 3	51	1472
Thread. Book-sewing	Willimantic Linen Company	17,765	Apr. 15	51	302
Thread. Book-sewing	Willimantic Linen Company	17,766	Apr. 15	51	302
Throat and lung balsam	M. L. Bullock	18,513	Oct. 14	53	142
Tiles	F. C. Ford	17,642	Mar. 11	50	1300
Tiles for flooring, &c. Encaustic	American Encaustic Tiling Company.	17,538	Feb. 18	50	843
Tinware. Certain named	Clifton Springs Manufacturing Company.	17,702	Mar. 25	50	1596
Tobacco and cigars. Smoking	Kappler & Becker	18,278	Aug. 5	52	756
Tobacco. Chewing	Fulton & Bro	18,404	Sept. 9	52	1542
Tobacco. Chewing	Sparger Brothers	18,506	Oct. 7	53	2
Tobacco, cigars, and cigarettes. Chewing and smoking	A. W. Turner	18,326	Aug. 19	52	1066
Tobacco, cigars, and cigarettes. Plug and twist chewing	T. L. Vaughn & Co	18,018	June 10	51	1624
Tobacco, cigars, and cigarettes. Smoking and chewing	J. G. Butler & Co	17,769	Apr. 15	51	302
Tobacco in packages, plugs, cigars, and cigarettes	Anchor Tobacco Works	17,631	Mar. 11	50	1300
Tobacco-pipes and cigars and cigarette tubes and holders	A. Frankan & Co	17,369	Jan. 7	50	2
Tobacco. Plug and chewing	Fulton & Bro	18,012	June 10	51	1624
Tobacco. Plug and twist chewing and smoking	B. F. Hanes	18,381	Sept. 2	52	1374
Tobacco. Plug chewing and smoking	Hodgin Bros. & Lunn	17,778	Apr. 15	51	302
Tobacco. Plug chewing and smoking	Hodgin Bros. & Lunn	17,779	Apr. 15	51	302
Tobacco. Plug chewing and smoking	Hodgin Bros. & Lunn	17,780	Apr. 15	51	302
Tobacco. Smoking	D. R. Carroll	17,562	Feb. 19	50	844
Tobacco. Smoking	J. L. English	17,900	May 13	51	972
Tobacco. Smoking	B. F. Weyman	18,430	Sept. 16	52	1670
Tobacco. Smoking and chewing	C. Smola	17,606	Feb. 25	50	994
Tobacco, smoking-tobacco, snuff, cigarettes, and cigars. Plug and twist	Gravely & Miller	18,229	July 29	52	610
Tobacco, snuff, cigars, and cigarettes	Gravely & Miller	18,264	Aug. 5	52	746
Toilet-deodorants	J. M. Ward and C. H. Darlington	17,993	June 3	51	1472
Toilet-essences and toilet-soap	Eastman & Bro	17,671	Mar. 18	50	1452
Toilet lotions	M. J. Pinault	18,324	Aug. 19	52	1066
Toilet-masks for the complexion	J. E. Hetherington	18,500	Oct. 7	53	2
Toilet-powder	Lazell, Dalley & Co	18,354	Aug. 26	52	1230
Toilet-powder. Infant	G. Mennen	17,620	Mar. 4	50	1136
Toilet preparations. Certain named	W. D. Harnist	17,395	Jan. 14	50	170
Toilet preparations for the face and hands, including soaps and cosmetics	W. H. Galbraith	17,566	Feb. 18	50	844
Tonic and blood-purifier	Kopp & Lichtenberger	18,038	June 17	51	1788
Tonic and general stimulant	Mellier Drug Company	17,764	Apr. 15	51	302
Tonic and remedy for asthma, bronchitis, and consumption	M. G. Dadrian	18,048	June 17	51	1788
Tonic and resolvent, alterative, and expectorant. Blood	A. B. C. Chemical Company	17,758	Apr. 15	51	302
Tonic bitters and remedy for nervousness	Richford Chemical Co	17,494	Feb. 4	50	564
Tonic for debility in females	Balm of Gilead Co	18,672	Dec. 2	53	1262
Tonic for the skin	A. Ruppert & Co	17,523	Feb. 11	50	714
Tonics and malt extracts	Broening Brothers	18,193	July 22	52	462
Tonics and other proprietary medicines	M. Riley	18,579	Nov. 4	53	606
Tonics and remedies for heart diseases. Cardiac	Sultan Drug Company	18,116	July 1	52	2
Tonics. Chill	Paris Medicine Company	18,362	Aug. 26	52	1250
Tooth-picks. Medicated or aromatic	E. E. Burson	18,227	July 29	52	610
Tooth-powder	F. A. Ewer	18,322	Aug. 19	52	1066
Tooth-powder and cosmetics	G. W. Koester	17,618	Mar. 4	50	1136

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Toy torpedoes	C. Nelson	18,065	June 24	51	1950
Toys and puzzles	M. Lyman	17,451	Jan. 28	50	440
Toys and puzzles	M. Lyman	17,452	Jan. 28	50	440
Toys for producing effects for optical illusions	M. Bradley Company	18,182	July 15	52	312
Trees. Nursery-grown peach	Albaugh Nursery and Orchard Company.	17,923	May 20	51	1136
Trimmings, as buttons, braids, linings, and buckles. Tailors'	Beckermann & Co	17,895	May 13	51	972
Trousers	M. Baum	17,422	Jan. 21	50	308
Trousers and overalls	I. Lesem & Co	18,064	June 24	51	1950
Trousers. Fasteners for waistbands of	I. Blum	18,055	June 17	51	1788
Trunks	F. J. Palica	18,157	July 8	52	164
Trusses, supporters, and the like. Hard-rubber	D. H. Hastings	17,448	Jan. 28	50	440
Turbine water-wheels	Holyoke Machine Company	17,874	May 6	51	811
Twines, marlines, cords, and ropes.	Ludlow Manufacturing Company	17,419	Jan. 21	50	308
Twist-drills	T. Hooker	18,166	July 15	52	312
Type-bars. Machines for producing	Mergenthaler Printing Company	18,297	Aug. 12	52	908
Type-writing machines.	Merritt Manufacturing Company	17,677	Mar. 18	50	1452
Umbrella and cane heads, thinbles, cups, table-ware, and napkin-rings.	Simons, Bro. & Co	17,987	June 3	51	1472
Umbrellas, parasols, and canes.	Namendorf Bros	18,472	Sept. 30	52	1954
Under-garments. Ladies' and children's	Sigsbee Manufacturing Company	18,145	July 8	52	164
Underwear	C. A. Brown	18,102	July 1	52	2
Underwear and clothing for men and boys	I. Lesem & Co	17,966	June 3	51	1471
Underwear and hosiery	G. V. Kranss	18,420	Sept. 9	52	1542
Underwear and overalls	Meyerhoff & Eichengrün	17,651	Mar. 11	50	1300
Underwear for men, women, and children	W. Benger Sons & Co.	18,555	Oct. 28	53	436
Valves for stoves and heaters	A. A. Griffling Iron Company	17,822	Apr. 29	51	628
Varnish or material for exterior finish of wood-work	E. M. Ezekiel	18,662	Dec. 2	53	1262
Varnishes	J. A. Shephard	18,518	Oct. 14	53	142
Varnishes, japans, fillers, and finishers.	C. H. Gillespie & Sons	18,564	Oct. 28	53	436
Vegetable compound, a remedy for Bright's disease, dyspepsia, and scrofula.	J. B. Anderson	17,561	Feb. 18	50	844
Vegetable compound for certain named diseases	C. A. Swanson	18,199	July 22	52	462
Vehicles. Adjustably-seated pleasure	A. N. Parry & Co.	18,481	Sept. 30	52	1954
Velocipedes	Banker & Campbell Company	18,348	Aug. 26	52	1230
Velocipedes	Banker & Campbell Company	18,349	Aug. 26	52	1230
Velvet. Cotton	R. F. Shaen	18,648	Nov. 25	53	1096
Velvets	T. Elson & Co.	18,035	June 17	51	1728
Velvets	W. Openhym & Sons	18,331	Aug. 19	52	1066
Velvets and velveteens.	W. Openhym & Sons	18,764	Dec. 30	53	1890
Velveteens	J. Dougan & Co.	18,207	July 22	52	462
Veterinary balsam	B. S. Osbon	17,401	Jan. 14	50	170
Veterinary remedies	Harbaugh Veterinary Remedy Company.	17,644	Mar. 11	50	1300
Veterinary remedies	E. G. King	17,598	Feb. 25	50	994
Veterinary remedies	F. G. Stewart	17,990	June 3	51	1472
Veterinary use. Medicated foods and condition-powders for	L. Van Norman	17,969	June 3	51	1471
Wagon. Farm and freight.	Cherry, Morrow & Co.	17,436	Jan. 28	50	440
Wall-coating	S. Edson & Co.	17,640	Mar. 11	50	1300
Wash-boards	Fuller Bros. Manufacturing Company.	17,797	Apr. 22	51	422
Wash-boards. Certain	Lapham-Dodge Company	18,667	Dec. 2	53	1262
Wash-tubs, and frames. Stationary solid white crockery	A. J. Stewart	17,574	Feb. 18	50	844
Wash-tubs. Stationary solid white crockery.	Stewart & Co	17,404	Jan. 14	50	170
Washing compound	Crystal Tablet Company	18,542	Oct. 21	53	280
Washing compounds	P. Riddle	17,785	Apr. 15	51	302
Washing-powder	Reymar & Co	18,414	Sept. 9	52	1542
Washing-powder	J. T. Reynolds	17,493	Feb. 4	50	564
Watch-cases	Essex Watch Case Company	18,174	July 15	52	312
Watch-cases	Essex Watch Case Company	18,126	July 15	52	312
Watch-cases	Essex Watch Case Company	18,366	Aug. 26	52	1230
Watch-cases	Essex Watch Case Company	18,509	Oct. 7	53	2
Watch-cases	Keystone Watch Case Company	18,464	Sept. 30	52	1954
Watch-cases	Metropolitan Watch Company	18,267	Aug. 5	52	756
Watch-cases	Metropolitan Watch Company	18,644	Nov. 18	53	926
Watch-cases. Composition	Dueber Watch Case Manufacturing Company.	18,320	Aug. 19	52	1066
Watch-cases. Double-stock screw-bezel	American Waltham Watch Company.	18,101	July 1	52	2
Watch-cases. Patent silver screw-bezel	American Waltham Watch Company.	17,579	Feb. 25	50	994
Watch-insulator	Metropolitan Watch Company	18,171	July 15	52	312
Watch-movements	American Waltham Watch Company.	17,406	Jan. 21	50	308
Watch-movements	American Waltham Watch Company.	17,838	Apr. 29	51	628
Watch-movements	H. Didisheim	18,514	Oct. 14	53	142
Watch-springs	L. Combremont	18,740	Dec. 23	53	1744
Watch-springs, pin-tongues, and case-springs	B. Allen	18,757	Dec. 30	53	1890
Watches	Illinois Watch Case Company	17,567	Feb. 18	50	844
Watches	Waterbury Watch Company	18,668	Dec. 2	53	1262
Watches. Balance-staffs for	G. Meiners	17,518	Feb. 11	50	714
Watches. Foot-wheels for	American Watch Tool Co	17,506	Feb. 11	50	714
Water-closets	T. G. Knight	18,643	Nov. 18	53	926
Water. Natural-spring	H. Hirter	18,758	Dec. 30	53	1890
Water-proof composition for dressing leather.	W. S. Wells	17,842	Apr. 29	51	628
Water-proof wearing-apparel and blankets.	Eckelsior Waterproof Co.	18,390	Sept. 2	52	1374
Wax and bleached-wax goods. White	Eckermann & Will	17,514	Feb. 11	50	714
Weights and similar exercising apparatus. Pulley.	J. E. Dowd	17,771	Apr. 15	51	302
Whips	American Whip Company	18,238	July 29	52	610
Whips	Standard Whip Company	18,455	Sept. 23	52	862
Whisky	E. Block & Sons	17,473	Feb. 4	50	514
Whisky	H. A. Dickinson & Co	18,165	July 15	52	312
Whisky	Du Vivier & Co	18,327	Aug. 19	52	1066

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Whisky	Edel Brothers	18,592	Nov. 4	53	606
Whisky	Edel Brothers	18,636	Nov. 18	53	926
Whisky	Fishel & Levy	18,263	Aug. 5	52	756
Whisky	F. Goetzmann & Co	18,642	Nov. 18	53	926
Whisky	Gottschalk Co	17,544	Feb. 18	50	844
Whisky	W. Lauahan & Son	17,647	Mar. 11	50	1300
Whisky	F. F. Lutz	17,569	Feb. 18	50	844
Whisky	M. Mathews	18,429	Sept. 9	52	1542
Whisky	A. E. Norris	18,177	July 15	52	312
Whisky	T. Pease Son & Co	18,572	Oct. 28	53	436
Whisky	C. M. Roof	18,168	July 15	52	312
Whisky	Roskam, Gerstley & Co	18,054	June 17	51	1788
Whisky	Schuetz, Renziehausen & Co	17,624	Mar. 4	50	1136
Whisky	J. Tharp	17,386	Jan. 7	50	2
Whisky. Bourbon	Meyer Brothers Drug Company	17,519	Feb. 11	50	714
Whisky. Rye	H. A. Bätjer & Co	18,395	Sept. 2	52	1374
Whisky. Rye and bourbon	J. Beck & Co	18,255	Aug. 5	52	756
Whisky, wines, and champagnes	Altmayer & Flatau	17,629	Mar. 11	50	1300
Wine	Delatfield, McGovern & Co	18,678	Dec. 9	53	1412
Wine	H. C. Webb	17,841	Apr. 29	51	628
Wine. Bordeaux	G. Preller & Co	18,427	Sept. 9	52	1542
Wine. Port	Feuerheerd, May & Co	18,342	Aug. 26	52	1230
Wine. Port	Feuerheerd, May & Co	18,351	Aug. 26	52	1230
Wine. Sherry	D. Hermanos	17,617	Mar. 4	50	1136
Wine. Sherry	Williams & Humbert	18,328	Aug. 19	52	1066
Wine. Vöslau	R. Schlumberger	18,124	July 1	52	2
Wine. Vöslau	R. Schlumberger	18,125	July 1	52	2
Wine. Vöslau	R. Schlumberger	18,126	July 1	52	2
Wine. Vöslau	R. Schlumberger	18,127	July 1	52	2
Wines and alcoholic liquors	H. S. Woodbury	18,027	June 10	51	1624
Wines and liquors	Café Savarin Company	18,556	Oct. 28	53	436
Wire and articles of personal wear made therefrom. Seamless plated filled	Burdon Seamless Filled Wire Company	18,364	Aug. 26	52	1230
Wire. Barbed	Freeman Wire and Iron Company	17,370	Jan. 7	50	2
Wire picture and sash cord and bonnet and flower wire	Tate & Co	17,385	Jan. 7	50	2
Wire used in electric manufactures	Electrical Supply Company	17,706	Mar. 25	50	1596
Wood and other substances. Liquid filler for	J. A. Althouse	17,578	Feb. 25	50	994
Wood. Packages and bundles of	Norwood Manufacturing Company	17,711	Mar. 25	50	1596
Woods. Dyed and stained	Auffermann & Co	18,627	Nov. 18	53	926
Woods. Foreign and domestic cabinet	H. T. Bartlett	18,554	Oct. 28	53	436
Woven cotton goods	Massachusetts Cotton Mills	17,981	June 3	51	1472
Woven cotton goods	Massachusetts Cotton Mills	17,982	June 3	51	1472
Woven fabric for shirtings, sheetings, underclothing, and dress goods. Special	J. J. Ashworth	18,222	July 22	52	462
Woven skirtings	W. Wood & Co	17,665	Mar. 11	50	1300
Yarns	A. J. Cameron & Co	17,497	Jan. 21	50	308
Yarns	A. J. Cameron & Co	17,498	Jan. 21	50	308
Yarns and threads of all descriptions	Finlayson, Bousfield & Co	17,515	Feb. 11	50	714
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,410	Jan. 21	50	308
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,411	Jan. 21	50	308
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,412	Jan. 21	50	308
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,413	Jan. 21	50	308
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,414	Jan. 21	50	308
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,415	Jan. 21	50	308
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,416	Jan. 21	50	308
Yarns and threads of all kinds	Finlayson, Bousfield & Co	17,516	Feb. 11	50	714
Yarns and threads of all kinds	Finlayson, Bousfield & Co	18,699	Dec. 16	53	1576
Yeast	Corner & Farnum	17,795	Apr. 22	51	482
Yeast-cakes. Dry compressed	Cameron Manufacturing Co	17,611	Mar. 4	50	1136
Yeast. Compressed	A. Woolner, Jr	18,652	Nov. 25	53	1096

ALPHABETICAL LIST OF LABELS.

Title.	Name.	No.	Date.	Official Gazette.	
				Volume.	Page.
"A Brand." (For sheathing paper)	M. E. Manahan	6,349	Oct. 21	53	280
"A Pure Gluten Food for Infants and Invalids"	Crystal Springs Manufacturing Company.	6,265	July 8	52	164
"A Remedial Lotion"	J. P. Greth	6,370	Nov. 11	53	762
"Absolute of mixed bass." (For ale)	A. M. Rickerby	6,398	Dec. 30	53	1890
"Absolute Parasite Exterminator." (For a remedy for poisonous blood diseases.)	S. E. Barron	6,351	Oct. 28	53	436
"Aconite." (For medical tinctures)	F. H. Hanrath	6,167	Apr. 15	51	302
"Almond Nut Cream." (For the skin)	M. E. Murray	6,305	Aug. 12	52	908
"Almond Nut Salve"	M. E. Murray	6,304	Aug. 12	52	908
"Andrae's Ever Green Ink"	H. Andrae	6,155	Apr. 1	51	2
"Anti-Chap Skin Soap"	F. W. Lyons and E. Ziegler	6,310	Aug. 26	52	1230
"Apis." (For medicinal tinctures)	F. R. Hanrath	6,197	May 6	51	812
"Apocynum." (For medicinal tinctures)	F. R. Hanrath	6,191	May 6	51	812
"Arnett's Hog Cholera Cure"	H. C. Sullivan, C. and W. T. Evans, E. Arnett, and G. Williams.	6,122	Feb. 11	50	714
"Arnett's Kentucky Horse and Cattle Powders"	E. Arnett, G. Williams, and D. W. Garred.	6,391	Dec. 9	53	1412
"Arnold's Chemical Writing Fluid"	C. E. Ogden	6,295	Aug. 5	52	756
"Asclepias." (For medicinal tincture)	F. R. Hanrath	6,329	Sept. 16	52	1670
"Baker's Shoe and Harness Grease"	P. Baker	6,118	Feb. 11	50	714
"Bangert's Tasteless Castor Oil"	G. Batten and L. Bangert	6,236	June 3	51	1472
"Banha de Porco." (For lard)	G. Cassard & Son	6,300	Aug. 12	52	908
"Baptisia." (For medicinal tinctures)	F. R. Hanrath	6,194	May 6	51	812
"Bass & Co., Pale Ale & Guinness's Extra Foreign Stout"	A. M. Rickerby	6,393	Dec. 16	53	1576
"Belladonna." (For medicinal tinctures)	F. R. Hanrath	6,203	May 6	51	812
"Bergmann's Screw Worm Ointment"	A. Bergmann	6,178	Apr. 29	51	628
"Bitter Sweet Salve"	E. P. Heck	6,106	Jan. 14	50	170
"Bitters Coca"	H. Kantorowicz	6,309	Aug. 26	52	1230
"Blood Purifier and Rheumatic Cure"	S. E. McCormick	6,225	May 27	51	1310
"Bold's Tooth Powder"	L. H. Bold and C. Jareckie	6,181	May 6	51	812
"Borsum's Putz Liquid Polish"	Borsum Bros.	6,119	Feb. 11	50	714
"Boston Crystal Gelatine"	Crystal Gelatine Co.	6,284	July 29	52	610
"Boston Drummer." (For bar soap)	J. Leser	6,206	May 6	51	812
"Brear's Extracts of Roots and Fruits." (For a remedy for rheumatism, &c.)	S. D. Brear	6,144	Mar. 11	50	1300
"Broom Makers Union No. 5131, American Federation of Labor." (For brooms.)	Broom Makers Union No. 5131	6,322	Sept. 9	52	1542
"Bryonia." (For medicinal tinctures)	F. R. Hanrath	6,195	May 6	51	812
"Budweiser Beer"	J. A. Medina	6,245	June 17	51	1788
"Bushee's Glass Polish"	Bushee Bros.	6,241	June 10	51	1624
"Bush's Liquid Beef"	A. P. Bush and E. A. Talbot	6,381	Nov. 25	53	1096
"Cactus." (For medicinal tinctures)	F. R. Hanrath	6,185	May 6	51	812
"Cactus Balm Hair Grower"	J. W. Smith	6,318	Sept. 2	52	1374
"Cactus Balm Skin Cure"	J. W. Smith	6,319	Sept. 2	52	1374
"California Ketchup"	K. Colburn	6,099	Jan. 7	50	2
"Calisaya Tonic Bitters"	A. C. Peckham's Sons	6,383	Nov. 25	53	1096
"Cannon's Lithiated Alkaline Elixir of Phytolacca." (For a cure for rheumatism.)	D. C. Cannon	6,264	July 8	52	164
"Carbo Veg." (For medicinal tinctures)	F. R. Hanrath	6,192	May 6	51	812
"Casey's." (For an adhesive plaster)	F. M. Casey	6,279	July 22	52	462
"Caulophyllum." (For medicinal tincture)	F. R. Hanrath	6,333	Sept. 16	52	1670
"Celery Cure or Nerve Food"	G. C. Hanford	6,363	Nov. 11	53	762
"Chelidonium." (For medicinal tinctures)	F. R. Hanrath	6,202	May 6	51	812
"Chemical & Vegetable Combination." (For an illuminating compound.)	G. T. Turner	6,219	May 20	51	1136
"Chemical and Vegetable Preparation." (For illuminating purposes.)	C. D. Fenstemaker	6,134	Feb. 25	50	994
"Chesapeake Terrapin Meat"	M. V. Smith	6,401	Dec. 30	53	1890
"Chionanthus." (For medicinal tincture)	F. R. Hanrath	6,331	Sept. 16	52	1670
"Cleveland's Superior Baking Powder"	Cleveland Baking Powder Company.	6,255	June 24	51	1950
"Clevenger's Indian Hair Balsam"	Clevenger Hair Balsam Co.	6,360	Nov. 4	53	606
"Coca-Glycerite Suppositories"	Goshen Pharmaceutical Company	6,323	Sept. 9	52	1542
"Cod Liver Oil with the Hypophosphites of Lime and Soda"	A. C. McBride	6,343	Oct. 14	53	142
"Collinsonia." (For medicinal tinctures)	F. R. Hanrath	6,204	May 6	51	812
"Conday's Extract of Wild Cherry. The American Cough Medicine."	P. Conday	6,126	Feb. 18	50	844
"Conday's Superior Extract of Root Beer"	P. Conday	6,109	Jan. 28	50	440
"Crane's Infallible Rheumatic Remedy"	O. Crane	6,388	Dec. 2	53	1262
"Cream of Almonds." (For the toilet)	Van Dyke Brothers	6,396	Dec. 16	53	1576
"Cuprum." (For medicinal tinctures)	F. R. Hanrath	6,190	May 6	51	812
"Curtis' Spruce Balsam." (For medicine)	G. S. Curtis	6,387	Dec. 2	53	1262
"Davenport's Bearsfoot and Sarsaparilla"	D. F. Davenport	6,145	Mar. 11	50	1300
"Davis' St Vitus Dance Specific"	G. H. Davis	6,280	July 22	52	462
"Day's Dyspepsia Disks." (For a medicine)	W. L. Day	6,222	May 27	51	1310
"Depurative Guardias"	E. Soler	6,339	Sept. 30	52	1954
"Diamond Brand." (For plaster-of-paris)	J. B. King & Co.	6,303	Aug. 12	52	908
"Digitalis." (For medicinal tincture)	F. R. Hanrath	6,332	Sept. 16	52	1670
"Discorea Vil." (For medicinal tincture)	F. R. Hanrath	6,338	Sept. 16	52	1670
"Dirksen's Dead Drops." (For insecticide and disinfectant)	L. Dirksen	6,180	Apr. 29	51	628
"Distemper Cure." (For medicine for horses)	D. Binkley	6,143	Mar. 11	50	1300

Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
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"Doc E. Ford's Stiffener".....	Richford Chemical Co.....	6,116	Feb. 4	50	564
"Dr. Aberle's Coffee Tonic".....	J. Aberle.....	6,377	Nov. 25	53	1096
"Dr. Bixler's Blood and Liver Regulator".....	S. H. C. Bixler.....	6,130	Feb. 18	50	844
"Dr. Buxton's Cough Syrup".....	F. E. Buxton.....	6,373	Nov. 18	53	926
"Dr. C. Linger's All Healing Oil".....	C. Linger.....	6,159	Apr. 1	51	2
"Dr. Hall's Cough Balsam".....	E. A. Hall.....	6,238	June 3	51	1472
"Dr. Hart's Family Pills".....	Hart Rheumatic Remedy Company.....	6,353	Oct. 28	53	436
"Dr. James' Cherry Tar Syrup".....	J. W. James & Co.....	6,211	May 13	51	972
"Dr. James' Soothing Syrup Cordial".....	J. W. James & Co.....	6,244	June 17	51	1788
"Dr. James' Stomach Bitters".....	J. W. James & Co.....	6,266	July 8	52	164
"Dr. King's Royal Germetuer." (For a medicine).....	C. R. King.....	6,100	Jan. 7	50	2
"Dr. L. E. Keeley's Double Chloride of Gold Cure for the Tobacco Habit.".....	L. E. Keeley Company.....	6,273	July 15	52	312
"Dr. Pearson's German Lung Tonic".....	J. D. Pearson.....	6,347	Oct. 14	53	142
"Dr. Pendlebury's Wonderful Pectoral Cough Cure".....	E. H. Merritt.....	6,379	Nov. 25	53	1096
"Dr. Pendlebury's Wonderful Pectoral Cough Cure".....	E. H. Merritt.....	6,380	Nov. 25	53	1096
"Dr. Price's Cream Baking Powder Most Perfect Made".....	Price Baking Powder Company.....	6,101	Jan. 7	50	2
"Dr. Price's Fruit Coloring".....	Price Baking Powder Company.....	6,102	Jan. 7	50	2
"Dr. Rowland's Rheumatic Cure".....	C. L. Cox & Co.....	6,237	June 3	51	1472
"Dr. Rush's Medicated Skin Powder".....	E. F. Rush.....	6,365	Nov. 11	53	762
"Dr. Stephens' Alternative".....	A. F. Stephens.....	6,350	Oct. 21	53	280
"Dr. Stephens' Buckeye Cough Cure".....	A. F. Stephens.....	6,386	Dec. 2	53	1262
"Dr. Swan's Lung and Cough Balsam".....	W. A. Oxnard.....	6,355	Nov. 4	53	606
"Dr. Trowbridge's Dandelion Pills".....	I. F. Wardwell and C. W. Hoyt.....	6,138	Feb. 25	50	994
"Dr. W. T. Rowsey's Never Failing Whooping Cough Remedy".....	H. F. Rowsey.....	6,296	Aug. 5	52	756
"Dr. Welch's Amalgam".....	Wilmington Dental Manufacturing Company.....	6,374	Nov. 18	53	926
"Dr. Welch's Gold and Platina Alloy." (For dental purposes.).....	Wilmington Dental Manufacturing Company.....	6,375	Nov. 18	53	926
"Draftsmen's Mucilage".....	C. M. Higgins.....	6,174	Apr. 22	51	482
"Draper's Improved Persian Cream".....	W. P. Draper.....	6,367	Nov. 11	53	762
"Drosera." (For medicinal tinctures).....	F. R. Hanrath.....	6,188	May 6	51	812
"Drown's Bleaching Kier and Process of Bleaching".....	F. E. Drown.....	6,306	Aug. 19	52	1066
"Dyke's American Agate Marbles".....	S. C. Dyke.....	6,123	Feb. 11	50	714
"Dyke's American Agate Marbles".....	S. C. Dyke.....	6,124	Feb. 11	50	714
"Dyke's Fancy Colored Marbles".....	S. C. Dyke.....	6,133	Feb. 25	50	994
"Ebony Sheathing." (For paper).....	M. E. Manahan.....	6,344	Oct. 14	53	142
"Economizer." (For apparatus for economically using steam for feed-water heaters, &c.).....	W. Webster & Co.....	6,213	May 13	51	972
"Eilers' Stomach Bitters".....	J. J. Eilers.....	6,397	Dec. 30	53	1890
"Emerald Green Ink".....	H. Antrae.....	6,112	Feb. 4	50	564
"Emley Teaherry Cordial".....	C. A. Emley.....	6,247	June 17	51	1788
"Emley's Liniment".....	C. A. Emley.....	6,261	July 1	52	2
"Emley's Mint Tonic".....	C. A. Emley.....	6,248	June 17	51	1788
"Epilobium." (For medicinal tincture).....	F. R. Hanrath.....	6,327	Sept. 16	52	1670
"Eryngium." (For medicinal tinctures).....	F. R. Hanrath.....	6,205	May 6	51	812
"Euonymus." (For medicinal tincture).....	F. R. Hanrath.....	6,326	Sept. 16	52	1670
"Exalgine." (For a certain chemical compound).....	J. McKesson, Jr.....	6,135	Feb. 25	50	994
"Extra Value Sheeting".....	J. Shillito Company.....	6,291	July 29	52	610
"Famous Fig Tonic".....	S. G. Cumberledge and J. U. Garver.....	6,148	Mar. 12	50	1452
"Ferro-Manganese Water".....	Excelsior Springs Company.....	6,335	Sept. 23	52	1812
"Follmer's Crystal Eye Medicine".....	H. Follmer.....	6,316	Sept. 2	52	1374
"French Liquid Soap Powder".....	F. Brown.....	6,275	July 15	52	312
"French Ultramarine Washblue".....	J. C. Kellogg.....	6,146	Mar. 11	50	1300
"Gardner's Hot Drops".....	L. Gardner.....	6,209	May 13	51	972
"Gelseminum." (For medicinal tinctures).....	F. R. Hanrath.....	6,193	May 6	51	812
"General Writing Ink".....	C. M. Higgins.....	6,173	Apr. 22	51	482
"Geneva Magnetic Mineral Springs".....	Geneva Magnetic Water Company.....	6,299	Aug. 5	52	756
"Geo. Wiedemann's Bohemian Beer".....	G. Wiedemann.....	6,177	Apr. 22	51	482
"Giant." (For overalls).....	T. E. Omohundro.....	6,324	Sept. 9	52	1542
"Glycerite of Menthol, Neuralgia, Headache, and Toothache Cure.".....	P. A. Turner and H. C. Ross.....	6,230	May 27	51	1310
"Glycozone." (For a medical remedy).....	Drevet Manufacturing Company.....	6,290	July 29	52	610
"Golden Liquid Metal Polish".....	Ochsner & Mcerman.....	6,260	July 1	52	2
"Graen's Dandruff Lotion".....	C. W. Graen & Co.....	6,105	Jan. 14	50	170
"Granite Finish." (For varnish).....	American Varnish Company.....	6,320	Sept. 2	53	1374
"Grass Bleached Tissue." (For paper).....	J. R. Crompton & Bros.....	6,132	Feb. 25	50	994
"Groff & Filbert's Cattle Cleaner or Lice Destroyer".....	W. S. Filbert and E. Groff.....	6,151	Mar. 25	50	1596
"Häkelgarn." (For yarn).....	C. M. Vom Baur.....	6,251	June 17	51	1788
"Häkelgarn." (For yarn).....	C. M. Vom Baur.....	6,252	June 17	51	1788
"Häkelgarn." (For yarn).....	C. M. Vom Baur.....	6,253	June 17	51	1788
"Häkelgarn." (For yarn).....	C. M. Vom Baur.....	6,254	June 17	51	1788
"Half Dollar Box of Chemicals".....	H. I. Corbit.....	6,286	July 29	52	610
"Hamamelis." (For medicinal tincture).....	F. R. Hanrath.....	6,330	Sept. 16	52	1670
"Hand Made, By Union Labor, Tinners' Union No. 2, Kansas City, Mo.".....	W. Leavy.....	6,336	Sept. 23	52	1812
"Hard Pressed." (For felt hats).....	G. W. Allen.....	6,340	Oct. 7	53	2
"Harriett M. Burnham's Rheumatic Cure".....	H. M. Burnham.....	6,263	July 8	52	164
"Henry's Mississippi Soap".....	G. C. Henry.....	6,127	Feb. 18	50	844
"Hibbard's Rheumatic and Strengthening Plaster".....	C. Wright Medicine Company.....	6,278	July 15	52	312
"Home Remedies for the Prevention and Cure of the Ills common to Man and Beast.".....	A. T. Young.....	6,402	Dec. 30	53	1890
"Homer's Egg-Shape Suppository Mould." (For medical purposes.).....	J. Homer.....	6,364	Nov. 11	53	762
"Honey Wine".....	St. Louis Honey Wine Co.....	6,389	Dec. 9	53	1412
"Hop Balsam." (For cough medicine).....	A. D. Rice & Sons.....	6,371	Nov. 11	53	762
"Hot Springs Eczema Powder".....	N. Lichty.....	6,285	July 29	52	610
"Howe's Diphtheria and Sore Throat Cure".....	F. C. Howe.....	6,359	Nov. 4	53	606
"Hunsaker's Liniment".....	A. J. Hunsaker.....	6,343	Oct. 21	53	280
"Improved Square." (For paper bags).....	Union Bag and Paper Company.....	6,321	Sept. 2	52	1374
"Instructions for Using M. J. Lawson's Safety Coin Mailing Case for Mailing all sums in Coin under One Dollar.".....	M. J. Lawson.....	6,384	Dec. 2	53	1262
"Ipecacuanha." (For medicinal tinctures).....	F. R. Hanrath.....	6,198	May 6	51	812
"J. Kahler and Co.'s Mineral Knife-Polish".....	J. Kahler.....	6,268	July 8	52	164

Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
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"J. O. & Co's." (For men's overalls, pantaloons, and shirts).	T. E. Omohundro	6,281	July 22	52	462
"Jas. Smith & Son, Fil-Tenax Side-Threading Needles"	J. Smith & Son	6,136	Feb. 25	50	994
"Jayne's Concentrated Sanative Pills"	D. Jayne & Son	6,256	June 24	51	1950
"Jersey Calf Cure for the Cure of Offensive Diarrhoea, Scours, Cholera or Dysentery."	G. W. H. Calver	6,163	Apr. 8	51	160
"Kaiser." (For beer)	Singer & Wheeler	6,139	Feb. 25	50	994
"Kennedy's Blood Medicine"	D. S. Kennedy	6,368	Nov. 11	53	762
"Kern's Safest and Best Hair Tonic and Invigorator"	E. Kern	6,115	Feb. 4	50	564
"Kincaid's Complexion Beautifier"	S. J. Kincaid	6,276	July 15	52	312
"Kister's New Process." (For fertilizers.)	B. J. Kister	6,141	Mar. 4	50	1136
"L'Amblée's Alphabet Puzzle"	J. H. L'Amblée	6,217	May 20	51	1136
"La Grippe Cough Drops"	J. H. Mulligan	6,153	Mar. 25	50	1596
"Lake Kenka Grapes"	R. Sanderson	6,366	Nov. 11	53	762
"Lamereaux' Antiseptic"	J. Lamereaux	6,385	Dec. 2	53	1282
"Lazell's Ly-co-dine Toilet Powder"	Lazell, Dalley & Co	6,311	Aug. 26	52	1230
"Leas' Stable Liniment"	S. Leas	6,158	Apr. 1	51	2
"Leipziger Burgunder Wein Bitter"	Hochstadter Co	6,298	Aug. 5	52	756
"Lesser Gardner's Cough Balsam"	L. Gardner	6,210	May 13	51	972
"Lobelia." (For medicinal tinctures)	F. R. Hanrath	6,182	May 6	51	812
"Longfield's Sauce"	J. Longfield	6,342	Oct. 14	53	142
"Louis M. Boucher's Cholera Cure"	L. M. Boucher and H. Gilbert	6,325	Sept. 16	52	1670
"M. Kline's Iowa Washing Powder"	M. Kline	6,147	Mar. 11	50	1300
"M. A. Curtis' Herb Ointment"	M. A. Curtis	6,179	Apr. 29	51	628
"M. A. Curtis' Herb Ointment"	M. A. Curtis	6,226	May 27	51	1310
"Macrotys." (For medicinal tinctures)	F. R. Hanrath	6,169	May 6	51	812
"Madame Webster's Cream." (For the complexion)	E. Webster	6,125	Feb. 11	50	714
"Magee's Emulsion of Pure Cod Liver Oil in Combination with Extract of Malt and Hypophosphites of Lime & Soda."	J. A. Magee	6,216	May 20	51	1136
"Magnesio Calcium Salts"	A. L. Williams, J. F. Hunter, and G. M. Stevenson	6,111	Jan. 28	50	440
"Maple Salve"	J. Schneider and P. Bisdorf	6,169	Apr. 15	51	302
"Marshmallow Cream." (For a medicinal preparation)	Diamond Laboratory Company	6,307	Aug. 19	52	1066
"Marshmallow Lotion." (For the skin)	Diamond Laboratory Company	6,228	May 27	51	1310
"Marshmallow Skin Soap"	Diamond Laboratory Company	6,317	Sept. 2	52	1374
"Marshmallow Throat and Lung Tablets"	Diamond Laboratory Company	6,227	May 27	51	1310
"Mason's Baking Powder"	W. S. Sammons	6,283	July 29	52	610
"Medicated Food"	J. Elliott	6,287	July 29	52	610
"Mellin's Food for Infants and Invalids"	Dolbier-Goodale Company	6,107	Jan. 21	50	308
"Mineralized Hydrocarbon & Vegetable Compound." (For lighting and heating purposes.)	G. W. Stanton	6,103	Jan. 7	50	2
"Mississippi Jeans Pants"	Marx & Haas	6,259	July 1	52	2
"Mound City Co's Combined Filler and Stain"	Mound City Paint & Color Co	6,108	Jan. 21	50	308
"Mrs. Brewster's Hair Grower and Dressing"	M. E. Brewster	6,140	Mar. 4	50	1136
"Mrs. L. Moyer's Pile Salve"	J. Moyer	6,110	Jan. 28	50	440
"Mrs. L. Schmidt & Cos. Healing Liniment"	Mrs. L. Schmidt & Co	6,301	Aug. 12	52	908
"Mrs. Schwarz' Salve"	J. Schwarz	6,165	Apr. 8	51	160
"Neilson's Diarrhoea Cure"	F. L. Jacobs	6,221	May 27	51	1310
"Nerve and Headache Salt"	Ashbridge & Co	6,229	June 3	51	1472
"New Uln Strong Bakers." (For flour)	Petersen Bros. & Co	6,160	Apr. 1	51	2
"Nicedemus' Liquid Yeast"	C. A. Nicedemus	6,233	June 3	51	1472
"Noyes' Granular Effervescent Magnesia Sulphate"	P. J. Noyes Manufacturing Company	6,395	Dec. 16	53	1576
"Nux Vomica." (For medicinal tinctures)	F. R. Hanrath	6,196	May 6	51	812
"O. J. Cannon's Cancer Cure"	O. J. Cannon	6,230	June 3	51	1472
"Oleine Carriage Oil"	Tough, Rutherford & Co	6,166	Apr. 8	51	160
"One Minute Toothache Cure"	L. F. Segrest	6,372	Nov. 18	53	926
"One Ream Containing 480 Sheets." (For paper)	J. R. Crompton & Bros	6,131	Feb. 25	50	994
"Only Those Bearing This Stamp Guaranteed." (For base balls.)	J. Carr	6,334	Sept. 23	52	1812
"Ozonos." (For disinfectants)	Boston Chemical Company	6,113	Feb. 4	50	564
"Paul Lenschner's Pure Norwegian Cod Liver Oil"	P. Lenschner	6,346	Oct. 14	53	142
"Peshalls' Remedy for Hay Fever"	G. L. Wilms	6,394	Dec. 16	53	1576
"Phéol Sodique"	Hance Brothers & White	6,120	Feb. 11	50	714
"Phytolacca." (For medicinal tinctures)	F. R. Hanrath	6,186	May 6	51	812
"Pius"	Lake View Printing Company	6,288	July 29	52	610
"Plows' Cake Frosting"	E. Plows	6,361	Nov. 4	53	606
"Podophyllum P." (For medicinal tinctures)	F. R. Hanrath	6,184	May 6	51	812
"Pollard's Engraved Headings"	F. E. Pollard	6,161	Apr. 1	51	2
"Pomeroy's Conminuted Celery"	H. R. Pomeroy and E. E. Stout	6,382	Nov. 25	53	1096
"Positivus Catarrh Remedy"	C. S. Ely	6,378	Nov. 25	53	1096
"Premium Stove Polish"	T. F. and H. F. Jungkurth	6,114	Feb. 4	50	564
"Prof. W. W. Camp's Hog Invigorating Powder and Cholera Preventive."	W. W. Camp	6,218	May 20	51	1136
"Pruitt's Liniment"	J. T. Pruitt, L. E. Hunter, and G. J. Peake	6,246	June 17	51	1788
"Pulsatilla." (For medicinal tinctures)	F. R. Hanrath	6,187	May 6	51	812
"Pure Rye Whisky"	Hannis Distilling Company	6,157	Apr. 1	51	2
"Red Liniment"	J. W. Johnson	6,121	Feb. 11	50	714
"Redditch." (For fish-hooks)	S. Alcock	6,162	Apr. 8	51	160
"Reinbold's China Drops"	S. Reinbold	6,129	Feb. 18	50	844
"Remedy for Rheumatism, Neuralgia and all Kindred Ailments."	R. B. Lincoln and J. K. Shattuck	6,231	June 3	51	1472
"Rhus." (For medicinal tinctures)	F. R. Hanrath	6,201	May 6	51	812
"Rochester Salve"	Rochester Medical Co	6,314	Aug. 26	52	1230
"Rockey & Baltzly's Compound Syrup of Wild Cherry & Tolu."	W. S. Rocky & A. B. Baltzly	6,352	Oct. 23	53	436
"S. A. Russ' Bleaching Blue for Clothes—The Best in Use"	S. A. Russ & Co	6,262	July 1	52	2
"Salt is not Salt"	Nash, Whiton & Co	6,257	June 24	51	1950
"Sanative Powder"	S. W. Rogers	6,168	Apr. 15	51	302
"Schreiber's Cough Balsam"	J. D. Schreiber	6,277	July 15	52	312
"Schreiber's Tonic"	J. D. Schreiber	6,289	July 29	52	610
"Side-Spring Tubular Lantern"	C. T. Ham Manufacturing Company	6,152	Mar. 25	50	1596
"Sloan's Chill and Fever Remedy"	E. S. Sloan	6,270	July 15	52	312
"Sloan's Condition Powders for Horses and Cattle"	E. S. Sloan	6,313	Aug. 26	52	1230

Alphabetical list of labels—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
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"Sloan's Hoof Ointment"	E. S. Sloan	6,312	Aug. 26	52	1230
"Sloan's Improved Green Ointment"	E. S. Sloan	6,356	Nov. 4	53	606
"Sloan's Nerve and Bone Liniment"	E. S. Sloan	6,271	July 15	52	312
"Sloan's Quick Cure for Saddle and Collar Galls"	E. S. Sloan	6,272	July 15	52	312
"Soluble French Soap"	F. Brown	6,274	July 15	52	312
"Stackhouse's Family Cough Syrup"	J. Stackhouse	6,212	May 13	51	972
"Stackhouse's Liver and Anti-Malaria Pills"	J. Stackhouse	6,215	May 20	51	1136
"Standard Gold Cylinders, Style O." (For dental purposes)	R. S. Williams	6,376	Nov. 13	53	926
"Stewart's Headache Powders"	Stewart Drug Company	6,249	June 17	51	1788
"Stewart's Healing Powder." (For veterinary use)	F. G. Stewart	6,240	June 3	51	1472
"Stewart's Hoof-Oil"	Stewart Drug Company	6,267	July 8	52	164
"Stewart's Stock Remedy"	Stewart Drug Company	6,250	June 17	51	1788
"Sticta." (For medicinal tinctures)	F. E. Hanrath	6,183	May 6	51	512
"Stuart's Bone and Nerve Liniment"	E. A. Stuart	6,315	Aug. 26	52	1230
"Sunmatz Gem." (For imitation diamonds)	A. Lorsch and A. Krower	6,149	Mar. 18	50	1452
"Swope's Peerless Cough Remedy"	G. E. Swope	6,400	Dec. 30	53	1890
"Syrup of Figs"	California Fig Syrup Company	6,297	Aug. 5	52	756
"Syrup of Figs." (For a medicine)	California Fig Syrup Company	6,292	July 29	52	610
"Syrup of Figs." (For a medicine)	California Fig Syrup Company	6,293	July 29	52	610
"Talcotts Mount." (For photographic and other pictures)	E. K. Talcott	6,170	Apr. 15	51	302
"The Anhaeuser Malt Tonic"	H. Anhaeuser	6,357	Nov. 4	53	606
"The Druid Hill." (For men's shirts)	T. E. Omohundro	6,234	June 3	51	1472
"The Druid Hill." (For men's shirts)	T. E. Omohundro	6,235	June 3	51	1472
"The Ellis Oil Filter"	D. R. Ellis	6,294	July 29	52	610
"The Geneva." (For grape-vines)	R. G. Chase & Co	6,358	Nov. 4	53	606
"The Lamont Combination Razor Strop"	Electric Cutlery Company	6,282	July 22	52	462
"The Practical Fruit and Vegetable Preserver." (Compound for preserving.)	C. H. Linney	6,302	Aug. 12	52	908
"The Standard Automatic Safety Punch." (For check-punching machines.)	W. F. Stark	6,137	Feb. 25	50	994
"The Superior." (For axle grease)	Galena Axle Grease Company	6,150	Mar. 25	50	1596
"Thepure Baking Powder"	F. A. Waterhouse	6,243	June 10	51	1624
"This Admiration Preparation." (For diseases of the urinary organs.)	J. R. Avera & Co	6,239	June 3	51	1472
"Thompson's Brazilian Belt Cement"	F. S. Thompson	6,104	Jan. 7	50	2
"Thompson's Wild Cherry Phosphate." (For a tonic)	A. G. Thompson	6,369	Nov. 11	53	762
"Toilet Embrocation"	A. C. McBride	6,142	Mar. 4	50	1136
"Tonique-Amer (de Savoie)"	T. Lamb	6,338	Sept. 30	52	1954
"Truitt's Vegetable Lozenge. The great cure for Dyspepsia"	J. F. Truitt	6,242	June 10	51	1624
"Two Bags of Blue and a Fine Dixon's Lead Pencil"	J. Inghram	6,164	Apr. 8	51	160
"Underhill's Eczema Ointment"	S. E. Underhill	6,354	Oct. 28	53	436
"Underwood's Black Copying Ink Ribbon"	J. Underwood & Co	6,399	Dec. 30	53	1890
"Underwood's Improved Compressed Duplicating Ink"	J. Underwood & Co	6,341	Oct. 7	53	2
"Unfermented Wine & Beef"	E. C. Dwelle	6,156	Apr. 1	51	2
"Unguentum Medic. et Chirurg"	P. J. Schreiber	6,154	Mar. 25	50	1596
"Utilizer." (For apparatus for utilizing exhaust-steam for feed-water heaters, &c.)	W. Webster & Co	6,214	May 13	51	972
"Valentine's Superfine Coach-Painters' Red"	Valentine & Company	6,171	Apr. 15	51	302
"Vaughan's Burn Cure"	J. S. Vaughan	6,176	Apr. 22	51	482
"Vegetable Canker Destroyer." (For a medicine)	A. C. Southworth	6,224	May 27	51	1310
"Veratrum." (For medicinal tinctures)	F. R. Hanrath	6,199	May 6	51	812
"Viburnum." (For medicinal tinctures)	F. R. Hanrath	6,200	May 6	51	812
"Violet." (For a toilet preparation for the face and hands)	H. B. Weaver	6,117	Feb. 4	50	564
"W. T. Lewis' The American Blue"	W. T. Lewis	6,232	June 3	51	1472
"Wafers." (For biscuits)	American Biscuit and Manufacturing Company	6,337	Sept. 30	52	1954
"Ward's Improved Back Band Hooks"	S. Ward	6,258	June 24	51	1950
"Washing Fluid"	E. R. Lowry	6,390	Dec. 9	53	1412
"Washington, D. C." (For silver and silver-plated ware)	E. S. Smith and E. J. Wardwell	6,203	May 6	51	812
"Washington, D. C., 1890." (For silver and silver-plated ware)	E. S. Smith and E. J. Wardwell	6,207	May 6	51	812
"White Musk." (For perfumery)	French, Richards & Co	6,392	Dec. 16	53	1576
"White Ointment Eye Salve"	B. J. Johnson	6,128	Feb. 18	50	844
"William Miller's Chicken and Turkey Cholera Remedy"	W. Miller	6,269	July 8	52	164
"Wise & Co's Premium Barley Coffee"	Wise & Co	6,172	Apr. 15	51	302
"Wm. J. Sliter's Celebrated Cancer Cure"	W. J. Sliter	6,345	Oct. 14	53	142
"Woman's Relief, The great Panacea for Diseases of Women"	A. F. Stephens	6,362	Nov. 4	53	606
"Wrapping Mucilage"	C. M. Higgins	6,175	Apr. 22	51	482
"Youngkin Brothers Screw Worm Exterminator"	J. A. and J. S. Youngkin	6,308	Aug. 19	52	1066
"Zymotic Specific No. 4"	W. W. Pugh	6,223	May 27	51	1310

DISCLAIMERS.

Invention.	Patentee.	No. of patent.	Date of patent.	Disclaimer filed.	Official Gazette.	
					Vol.	Page.
Cartridge shells. Machine for heading	Jabez H. Gill	241,962	May 24, 1881	May 24, 1890	51	1472
Coin-controlled hand-power testers	A. F. Martel	386,206	July 17, 1888	Oct. 6, 1890	53	280
Colloidion. Manufacturing solidified	I. S. and J. W. Hyatt	156,352	Oct. 27, 1874	Mar. 27, 1890	51	160
Multiple switch-board test-circuits	C. E. Scribner	374,907	Dec. 13, 1887	Dec. 9, 1890	53	1576
Whimbletree	W. A. Miller	417,573	Dec. 17, 1889	Jan. 27, 1890	50	714







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